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# Reward-Allocation Judgments in Romania: A Factorial Survey Approach

Carmen BUZEA<sup>1</sup>, Luiza MESESAN-SCHMITZ<sup>2</sup>, Fons J.R. van de VIJVER<sup>3</sup>

## Abstract

We investigated reward-allocation judgments when positive outcomes (monetary rewards) were distributed and the allocator was not a co-recipient, in a sample of 200 Romanian students. Within a full factorial survey design, seven factors, selected to affect the allocation decision, were orthogonally varied. The factors reflect individual characteristics of the recipients (gender, age, contribution, need, work experience) and situational characteristics (future work interaction and task routineness). Romanian students preferred to allocate rewards applying an equity-based distribution model. Work experience and task routineness were also significant, yet less important. The recipient gender has no effect on allocation judgments. In terms of between-respondents variability, we found that students' gender, work experience, and age do not have an impact on reward-allocation judgments. We discuss implications of our findings for organizations and practitioners.

*Keywords:* reward allocation; normative judgments; factorial survey; Romania; norms.

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## Introduction

Distributive justice research suggests numerous allocation norms<sup>4</sup>, but only three have received systematic attention from researchers: norms based on equity (Adams, 1963; Walster, Berscheid, & Walster 1973), equality, and need (Leventhal 1976; Mikula, 1980). The equity (or proportionality) norm states that the just allocation of rewards should be according to each individual's contribution or input. The need-based norm states that rewards should be distributed according to individual or group needs, whereas the equality norm prescribes the equal distribution of resources. Recently, the seniority rule, which involves both tenure and age, has been more systematically investigated (Fischer, 2008; Rusbult, Insko, & Lin, 1995).

A lot of effort has been invested in identifying cultural and national differences in reward-distribution preferences. A meta-analysis by Fischer and Smith (2003) showed that the cross-cultural research on reward distribution has mainly focused on comparisons between the United States (21 out of 25 comparisons mentioned by Fischer and Smith involved the US) and Asian countries (17 out of the 25 comparisons involved China, Japan, Hong Kong, South Korea, Taiwan, or Indonesia). From Eastern Europe, only Russia was included in their meta-analysis, with one article. Our review of distributive justice research, whether cross-cultural or focused on a single culture, leads to the same conclusion: few empirical studies have been conducted in Eastern Europe (e.g., Cohn, White, & Sanders, 2000; Giacobbe-Miller, Miller, & Victorov, 1998) and therefore, little is known about the norms preferred by Eastern Europeans. Given the importance of reward-allocation judgments, for both social policy and organizations (Cojocaru & Bragaru, 2012), the present study set out to contribute to filling this gap, reporting the results of a study conducted at the beginning of 2012, in Romania, a post-communist Eastern European country. We investigated the reward-allocation judgments of young Romanians, aiming to answer three questions: (1) Which reward-allocation pattern is favored? (2) Which factors affect allocation judgments? (3) What weights do these factors have in a distribution judgment? The focus was on fair allocation (normative judgment or third-party observer) when positive outcomes (monetary reward) are distributed, and the allocator is not a co-recipient. The normative judgments are defined as the result of the assessment of a lay judge who establishes what "ought to be" a fair distribution of rewards (Jasso, 2006).

Romania is a collectivistic country with a large power distance, moderate level of femininity and high uncertainty avoidance (Hofstede, 2001; Luca, 2005).

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<sup>4</sup> We are using the terms norm and rule interchangeably, following the Leventhal definition (1976, p. 94): "An allocation norm can be defined as a social rule which specifies criteria that define certain distribution of rewards and resources as fair and just."

Gallagher (2005: 93) suggested the dominance of egalitarian norms in allocating rewards: “Opinion polls after 1989 when the communist regime fell found that Romanian citizens still had a strongly egalitarian outlook. Between 70 and 74% believed that income levels should be almost equal for all [...]” More recently, the World Values Survey (2008) showed that 53% of Romanians believe that income should be more equal, but only 22.5% of respondents under 25 believe the same. About 84% of respondents under 25 and 82% over 25 years appreciate that is fair to pay an employee better who is “quicker, more efficient, and more reliable” than other employees with the same job and age. The orientation of young Romanians toward a contribution-based model is also suggested by a Gallup study that applied the Hofstede cultural framework. People less than 25 years scored higher in individualism and lower in power distance than older people (Luca, 2005). These results suggest that egalitarian values have dissolved in the Romanian generation born after the end of the communist regime. Consequently, in our study we expected that the equity norm would be more salient for young Romanians, and accordingly, that the contribution would be the strongest predictor of allocation judgments. The factorial survey method was employed, an approach designed to uncover “shared and idiosyncratic principles of judgments” (Rossi & Nock, 1982: 10).

### **Factors Affecting Reward-Distribution Judgments**

Liebig (2001) differentiates between impartial justice judgments, grounded in moral and ethical principles, and justice attitudes, guided by subjective preferences and expressed as social norms. On a similar basis, we analyzed the social components of allocation judgments, not absolute moral views on justice.

To measure social reward-distribution judgments, the first step is the selection of the variables thought to affect the allocation decision. Jasso’s (2006: 342) recommendation was followed; we chose “[...] variables suggested by prior theory and research, extra-theoretical reasonings, and conventional wisdom. Note the critical importance of including variables popularly thought to be determinants, even if working scientists believe they are irrelevant.” Therefore, we selected variables from two sources: previous research on reward-distribution judgments, and Romanian folk theories about fair allocation of rewards. In the last three years, we collected folk (or lay) theories (Hong, Levy, & Chiu, 2001); we have conducted interviews, focus groups, and online content analysis to gather intuitive or common sense constructs about Romanian fairness values and work culture. From the literature and from the Romanian folk theory on fair distribution of resources, two types of factors that are believed to affect the normative allocation judgments were selected. The factors reflect: (1) recipient characteristics: gender, age, contribution, need, and work experience; (2) situational or contextual

characteristics: recipient's future interaction with coworkers, and task routineness (routine versus nonroutine task). Below, previous findings on these factors employed in our research design are briefly discussed.

### **Individual Factors**

*Recipient gender and age.* The gender income gap has been investigated by scholars in a broad range of disciplines, but the effect of recipient gender on reward-distribution norms has only received scant attention. U.S. college students were gender sensitive when allocating reward using an equity rule, in the direction of a fairer allocation to males than to females (Olejnik, Tompkins, & Heinbuck, 1982; Thomson & Jones, 2005). Other studies have generated mixed results (Jasso & Meyersson Milgrom, 2008; Meeker & Elliott, 1996). Alongside tenure, age is an inherent component of seniority. The seniority principle is frequently used in organizational settings where rewarding preferences are affected by national culture, organization type (public or private) and employees' ethical values surrounding work and reward, and organizational culture (e.g., Chen, 1995; Fischer, 2008). In our study, the effect of recipient age was measured independent of organizational environment, with eight levels of variation (from 25 to 60 years, in increments of five years).

*Contribution.* Contribution is the variable most commonly used in social justice research, distribution according to inputs showing preference for equity. Contribution has been operationalized in different ways: degree of work performance or productivity (Kim, Park, & Suzuki, 1990; Murphy-Berman, Berman, & Çukur 2012), good or bad work record (Cohn et al. 2000), or general statements about performance (Fischer, 2004). In our study, we measure contribution *per se*, with three levels of variation: low, average, and high.

*Need.* Recipient need has been operationalized as financial difficulties and illness in the family (Fischer, 2004; Murphy-Berman, Berman, & Çukur 2012), as ratio of salaries to dependents (Giacobbe-Miller et al., 1998), or as a large family to support (Cohn et al., 2000). In our study, need was operationalised as the ratio of the number of salaries to the number of dependents: 1:1 for low need (not married and no dependents), 2:4 for average need (two salaries for two adults and two dependent children) and 1:4 for high need (one salary for two adults and two dependent children).

*Work experience.* In Western employment systems, tenure is a common concept and the difference between its forms (for instance, the difference between job tenure and organizational tenure) is easily understood. In Romania, in contrast, tenure is a fuzzy concept. We chose to consider recipient work experience as

equivalent to job tenure. We used a phrasing that is equivalent to “years of professional experience in the field”.

### **Situational Factors**

*Task routineness: Routine task versus nonroutine task.* Hysom and Fişek (2011), in their equity–equality equilibrium model of distributive justice, expected to find that allocators will weigh equity more heavily on nonroutine than on routine tasks, but their result was contrary to this expectation. They found that this factor affects the equity–equality balance in interaction with other variables. Similar to Hysom and Fişek, we measured task routine by the creative effort required by the job, with two variation levels: the job does/does not require creative effort.

*Future interaction.* The expectation to cooperate with the recipient in the future affects reward-distribution decisions (Sagan, Pondel, & Witting, 1981; Zhang, 2001). Both equity and equality principles were preferred by respondents when this variable was manipulated. Moreover, there was an interaction effect between future relationship and other variables, such as gender, contribution, task performance, or type of relationship. In the present study, the future-interaction variable is operationalized as continuity versus end of the work relationship.

### **Allocator Characteristics**

In addition to input variables, we used three respondent (lay-judge allocator) characteristics: gender, age, and work experience. No consistent gender differences have been found when the allocator is not a co-recipient, although the assumption was that men prefer the equity principle while women prefer equality (for reviews see Major & Deaux, 1982, and Törnblom, 1992). Mixed support has been found for the hypothesis that adults prefer other rules than children or adolescents (Kenward & Dahl, 2011; McGillicuddy-De Lisi, De Lisi, & Van Gulik, 2008).

### **Method**

Reward-allocation decisions have usually been measured by scenario and role-playing approaches (e.g., Chen, 1995; Conlon et al., 2004). However, other authors have used questionnaires, criticizing the verbal scenarios for the artificial behavior presented in them and their lack of realism (Fischer, 2008). Our study employed the factorial survey (FS) method, an approach particularly suitable to measure multiple factors that affect normative judgment and to decompose their unique

effects. FS was pioneered by Rossi and associates (Rossi & Anderson, 1982; Rossi & Nock, 1982), and has been further developed mostly by Jasso (2006). Currently, this method is tested for application in general population samples (Sauer et al., 2011). The factorial survey method has been applied to a range of topics, from criminal justice to childcare and professional judgments (a review of FS studies can be found in Wallander, 2009). In justice research, since an early stage of methodological development, FS has been employed to examine earnings and income fairness (e.g., Jasso & Meyersson Milgrom, 2008; Jasso & Rossi, 1977). The significant advantage of FS lies in its design, which maximizes external and internal validity by bringing together orthogonality from the experimental method and realism and complexity from the survey approach (Wallander, 2009).

The FS design has four components: (1) respondent sample, (2) dimensions and levels, (3) vignette universe and vignette sample, and (4) rating task. The procedure formulated by Rossi and associates (1982) and the unified framework for studying normative judgments developed by Jasso (2006) were followed.

### **Participants**

Two hundred students (128 senior undergraduates and 72 master's students) enrolled in social sciences courses at a large state university in Romania participated in the study. The mean age of respondents was 22.96 years ( $SD = 4.84$ ), and mean work experience was 2.29 years ( $SD = 4.35$ ). Corresponding to the university's population of social sciences students, there was an unbalanced gender composition: 23.5% male and 76.5% female.

### **Dimensions and Levels**

Dimensions are the independent variables or input factors believed to influence the judgment of fair reward allocation. The levels are the specific values that each dimension may take. *Table 1* presents the dimensions, associated levels, and wordings for each level. For two dimensions (task routineness and future interaction), we used a null level, indicating the absence from the variable-description vignettes.

Table 1. *Reward-Distribution Factorial Survey Dimensions, Levels, and Wording*

<b>Dimensions and levels</b>	<b>Wording</b>
1. Gender	
a. Male	a. a male employee
b. Female <sup>a</sup>	b. a female employee
2. Age	
eight increments of five years, from 25 to 60 years old	25 years old to 60 years old
3. Contribution	
a. High	a. made a big contribution to the project
b. Average	b. made an average contribution to the project
c. Low <sup>a</sup>	c. made a small contribution to the project
4. Need	
a. High	a. has two dependent children, and his/her wife/husband does not have a job
b. Average	b. has two dependent children, and his/her wife/husband has a job
c. Low <sup>a</sup>	c. is not married and has no dependents
5. Work experience	
a. High	a. has eight years professional experience in the field
b. Average	b. has five years professional experience in the field
c. Low <sup>a</sup>	c. has one year professional experience in the field
6. Future interaction	
a. With future interaction	a. in the near future will work with the same colleagues on another project
b. Without future interaction	b. in the near future will not work with the same colleagues on another project
c. [Blank] <sup>ab</sup>	
7. Task routineness	
a. Routine	a. His/her job does not require creative effort.
b. Nonroutine	b. His/her job requires creative effort.
c. [Blank] <sup>ab</sup>	

<sup>a</sup>This level was reference category in the analyses. <sup>b</sup>When blank, no mention of this dimension was included in the vignette.



## **Vignette Universe and Vignette Sample**

Specific to factorial survey, a vignette represents both the unit being judged and the basic unit of analysis. Although there are common aspects, vignettes as used in the factorial survey method are different from the vignettes defined as a methodological tool, which are extensively used in a variety of disciplines (Collett & Childs, 2011). Vignettes are composed of descriptions of employees who may be considered for a salary increase; each vignette contains a unique combination between levels. A vignette universe consists of a full population of unique vignettes, obtained by generating all possible combinations of levels. The full-factorial vignette population - in other words, the Cartesian product of all levels, was generated using a computer program and resulted in 3,888 unique vignettes ( $2 \times 8 \times 3 \times 3 \times 3 \times 3$ ). All vignettes were plausible and logically possible, and none was eliminated. A deck of 40 vignettes was deemed sufficiently large to estimate a respondent's regression equation (Dülmer, 2007). From the vignette universe we drew randomly (simple random with replacement) 200 decks with 40 vignettes each. So, a total of 8000 vignettes were sample. Applying this procedure, the dimensions are orthogonal and there are zero intercorrelations among them, since each level in a dimension appears with the same frequency in the vignette population (Rossi & Anderson, 1982). As a consequence, the distribution of levels along dimensions is rectangular. The full factorial design was applied for three purposes: to eliminate multicollinearity, to disentangle the unique effect of each factor (normally highly correlated in the real-world setting), and to preserve the realism of the real-life situation (via the vignette content).

## **Rating Task**

Each respondent judged 40 vignettes; the ratings generated the dependent variable. An adapted number-matching scale was applied; it “gives respondents maximal freedom to map the subjective justice continuum onto numbers” (Jasso & Meyersson Milgrom, 2008, p. 129). The respondents were asked to allocate a just pay rise on a continuum starting from zero to 100 for 40 imagined employees of an IT company.

Table 2. *Vignette, Instructions for Respondents, and Rating Task*

<p><b><u>Instructions for respondents</u></b></p> <p>This pack contains brief descriptions of 40 employees being considered by a manager of an IT company for a possible raise. In the last two years, these employees have worked together on an important project with several phases: design, testing, and implementation. The manager is not sure if she/he will increase all employees' wages, or only some of them. Currently, all employees have the same salary. We want to know your opinion on the percentage that you think is fair to increase the salary of each employee.</p> <p>You may rate the 40 descriptions in any order you want.</p> <p>You may change the answer, even if you have already completed it.</p> <p>Your responses are confidential.</p> <p><b><u>Vignette</u></b></p> <p>A [male] employee is [50 years old] and has [eight years professional experience in the field].</p> <p>He made a [big contribution] to the project.</p> <p>[He has two dependent children, and his wife has a job.]</p> <p>His job does not require creative effort.</p> <p>In the near future he [will not work with the same colleagues on another project].</p> <p><b><u>Rating task</u></b></p> <p>What percentage do you think it would be just to raise this employee's salary?</p> <p>You can choose any number between 0 and 100.</p> <p>You can use any real number, with decimals or fractions if you want.</p> <p>Please fill in the answer in the space below.</p> <p>Percentage of increase _____%</p>
--

*Note.* Text between brackets represents part of the item that varies across vignettes, depending on the level of each vignette characteristic that applied.

The rating scale gives the respondents maximum freedom to express their judgments and overcome limitations imposed by restricted sets of ordered categories. Table 2 presents the rating instructions, a vignette (with the levels in square brackets), and the rating task. Pretesting of the rating task and vignette content showed that the situation described in the vignettes is familiar for Romanian students and realistic in the context of their employment and life experiences.

The students evaluated the vignettes at the beginning of several courses. No student refused to participate and no course credit was received. The protocol for interaction with respondents in a factorial survey (Jasso, 2006; Jasso & Meyersson Milgrom, 2008) was followed: (1) each respondent received a pack with 40

vignettes and written instructions; (2) the instructions were read aloud and examples were given; (3) questions were answered at the beginning and during the rating; and (4) the specification was included that the vignettes could be rated in any order.

## Results

Of the 200 respondents, two gave the same score for all vignettes, a situation defined as zero variance or the absence of a norm. Since we had only two cases, we removed them from the analysis. In addition, six ratings were missing since they had not been assessed due to an unsystematic error (pages stuck). Consequently, the analysis was done for  $n = 7914$  vignettes. The rating scale was designed following the assumption of Nock (1982) that some respondents may rate all vignettes higher or lower than others, but still apply the same rating principles. Therefore, the analysis was conducted with the dependent variable (ratings) converted into a new variable which kept the continuum properties but removed the differences resulting from the different numbers chosen by respondents to represent the same judgment (e.g., some respondents used 3 as the lowest score for salary increase while others used 15 but applied the same principle and agree on what was a fair reward).

A correlation analysis between vignette characteristics confirmed the zero intercorrelations assumed by the factorial survey design. The distribution of the judgment shows that 50% of vignettes received wage increases up to 50% (median 50), the average rating was 48.12, and the standard deviation was 29.42. In FS data analysis, simple OLS regression equation (fixed-effects model) was traditionally employed, few studies applying multilevel modeling or hierarchical linear models (Wallander, 2009). As Hox, Kreft, and Hermkens (1991: 499) pointed out, “factorial survey data are, by definition, hierarchically nested”; as a consequence, hierarchical multilevel modeling can be fruitfully applied to FS data (e.g., Degenholtz et al., 1999; Van de Vijver, Van Hemert, & Poortinga, 2008).

Since each student rated multiple vignettes, the OLS assumption of statistical independence of errors could be violated. To model the impact of students’ judgments on vignettes characteristics, while coping with intrarater correlation, we first computed a multilevel model with random slopes and random intercepts. The unconditional intraclass correlation coefficient (with no predictors in the equation; the “null model”) showed that 80.33% of the variability in rating occurs within respondents, while 19.67% occurred between respondents’ intercepts (the intercept variation is statistically significant,  $p < .001$ ). This large between-participant effect size justifies the use of multilevel modeling. Since no significant slope variance was found, our analysis was based on a random intercept – fixed slope model. So, we observed the same linear relationship between rating and

vignettes’ characteristics across students (i.e. students have similar judgment patterns), but there is a variance among the respondents in the average levels of their judgments (Wallander, 2009).

Table 3. *Main Effect of Vignette Characteristics on Reward Allocation*

Dimensions	Numerator df	Denominator df	F	Rank <sup>a</sup>
Age	1	7722.760	17.878*	6
Work experience	2	7723.692	288.241*	2
Contribution	2	7720.795	3810.776*	1
Task routineness	2	7721.713	207.541*	3
Need	2	7724.675	58.064*	4
Future interaction	2	7721.804	21.737*	5
Intercept	1	273.953	2362.709*	

<sup>a</sup>The rank of dimensions according to their effect in overall rating.

\* $p < .001$ .

Gender did not have an impact on effect on reward distribution for any of the seven factors employed in our study ( $p > .05$ ). This result showed that the recipient’s gender was not a factor that affected the fair allocation of rewards, irrespective of the justice principle employed. As shown in Table 3, the remaining six vignettes’ characteristics have a significant effect in allocation judgments. It can be seen that contribution revealed the most important effect in the fair distribution of rewards. This result confirms our expectation, showing that Romanian students prefer an equity-based allocation pattern. Work experience and the task routineness are the second-most important dimensions. The remaining important dimensions – need, future interaction and age – had approximately similar values. The ranking of dimensions according to their effect in the overall rating presented in last column of Table 3. It can be noted that the situational factors (future interaction with coworkers and task routineness) had a smaller effect on fair reward allocation compared with the individual factors (age, contribution, need, and work experience).

The results presented in Table 4 show the extent to which judgments are determined by the presence in the vignette of a particular level, compared to the reference level (for categorical variables). For instance, if the high contribution level appeared in the vignette, then the rating increased by 43.449 compared with the case where *low contribution* appeared (low contribution is the reference level in this example). Higher rewards were allocated when: (1) the recipient’s contribution was high, (2) the recipient’s work experience was long, (3) the recipient’s need was high, (4) future interaction with the recipient was expected, (5) the task required creativity (it is nonroutine), and (6) the recipient was younger. In addition,

we computed the  $R_1^2$  (a measure conceptually similar to the conventional  $R^2$  from OLS regression) to identify the proportional reduction in errors of prediction when our model is compared with the null model (Bickel, 2007). As Table 4 shows, including the vignettes' characteristics in our random intercept model reduced errors in predictions of ratings by 43%.

Table 4. *Fair Reward by Vignette Dimensions: Random Intercept Model*

Dimensions and levels	Estimate	SE
Age	-.379*	.089
Contribution		
High	43.449*	.500
Average	17.235*	.501
Low <sup>a</sup>	0.00	0.00
Need		
High	5.423*	.505
Average	2.227*	.502
Low <sup>a</sup>	0.00	0.00
Work experience		
High	11.711*	.504
Average	8.496*	.504
Low <sup>a</sup>	0.00	0.00
Future interaction		
With future interaction	1.726*	.502
Without future interaction	-1.609*	.502
Blank <sup>a</sup>	0.00	0.00
Task routineness		
Routine	-3.716*	.503
Nonroutine	6.406*	.504
Blank <sup>a</sup>	0.00	0.00
Intercept	19.733*	1.217
$R^2 = 43\%$		

<sup>a</sup>Reference category.

\*  $p < .001$ .

To test if the intercept variance was influenced by respondents' characteristics recorded in our study, we transformed the random intercept regression model into a multilevel model by introducing three contextual variables: respondent gender, age, and work experience. Age and work experience were coded as dummy variable (under 30 years old and over 30 years old; without work experience and with work experience). The results suggest that these three variables do not have an impact on the fair reward-allocation. Accordingly, we concluded that men and women weigh the vignettes' dimensions in similar ways. The multilevel analysis also suggests that: (1) students over 30 years old give the same rewards as those under 30, and (2) respondents with work experience and respondents who have never work apply similar distribution pattern.

## Discussion

The aim of this study was to examine normative reward-allocation judgments among young Romanians. Seven factors expected to affect the allocation decisions were systematically varied within a full factorial survey design. In the study participated 200 Romanian students, 7,994 vignettes being rated. As expected, it was found that the equity-based model described the general allocation pattern of young Romanians. Romanian students consider that a fair distribution of rewards should be done according to contribution or input. Alongside contribution, other individual factors (age, work experience, and need) affect the allocation judgments. A smaller effect on allocation decisions was due to situational factors (task routineness and future interaction). Our data suggest that variation in responses by participants across vignettes was rather successfully predicted by vignette characteristics; so, our manipulation was successful. The model presented in this paper reduces errors in predicting reward allocation by 43%, which confirm our expectation regarding the effects of input factors on reward-allocation judgments.

In equity theory (Walster et al., 1973: 3-4), “equity is in the eye of the beholder,” and inputs are defined as “the participant’s contribution to the exchange.” In our model, both “contribution” and “work experience” are individual characteristics that may be included under the generic term *input* following the conceptual framework of equity theory. Furthermore, the nonroutine task, or one requiring creativity, is an important component of the reward-allocation judgment, third in importance after contribution and work experience. Individuals performing creative tasks received more rewards than those who perform routine tasks. In our study, task creativity was a situational characteristic, defining working context, not employee performance. Like contribution and work experience, nonroutine task fulfillment can be considered as related to equity. Thus, contributions, work experience, and nonroutine tasks are the main social components, which explain the variation of reward-allocation decisions.

Need is seen by our respondents as a component of fair allocation judgments. Recipients with greater need receive higher rewards; yet, need is far less important than contribution. It can be concluded that Romanian college students do not consider need as an important principle to allocate rewards.

Romanian students consider that both younger and more experienced employees should receive higher rewards. This result is discordant with the seniority principle, which treats tenure and age as related components. Our result can be explained by the strong orientation of young Romanians toward competitive and meritocratic principles. As Luca (2005: 86) noted: “the segment under 25 years old has an increased *masculine* characteristic, which would account for a higher desire for career opportunities and increased competition” *emphasis in original*

Recipient gender did not affect the reward-distribution decision. This finding is consistent with previous research (Jasso & Meyerson Milgrom, 2008; Meeker & Elliot, 1996). Moreover, in terms of between-respondents variance, it was found that female and male respondents have similar judgment patterns. The absence of gender-related allocation patterns is also consistent with a pattern of small or negligible effect sizes (Törnblom, 1992). The results presented in this paper might be informative for organizations conducting or being interested in operating business in Romania. As Fein, Vasiliu, & Tziner (2011: 519) pointed out, "Romania is a country currently in transition from a communist, centrally controlled economic model to a free-market system. In 1990, there were practically no private enterprises and about 1,100 state owned enterprises in Romania. Today, Romania has over 400,000 enterprises and most of these are private." In this context, our results might be useful for practitioners interested in rewarding or in attracting and maintaining young talents. The allocation pattern recorded in our study might be informative for developing or altering reward systems in Romanian organizations.

Although the factorial survey method is particularly suitable for studying the components of allocation decisions, the method has certain limits, which also apply to this study. The factorial survey method had been criticized from an early stage for the use of fictitious descriptions with an unknown or even questionable ecological validity. The pioneers of the factorial survey approach claimed that the method reveals respondents' true principles of judgment, but they also call for continuous attention to realism of results (Wallander, 2009). Moreover, this method is not widely known, and has been consistently applied only by a relatively small group of researchers. Romania is considered a Collectivistic country with large Power Distance (Hofstede, 2001), and in this respect is similar to other former communist nations, including Bulgaria, Russia, Slovenia, Serbia, Croatia, and Albania. The present study suggests that egalitarian values may become less salient among young Romanians. Since allocation behaviors have rarely been studied in Eastern Europe, future research could explore whether the equity-based allocation model is particular to Romanian youth or is common to young people from other former communist countries.

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## References

- Adams, J. S. (1963). Toward an understanding of inequity. *Journal of Abnormal and Social Psychology*, *67*, 422–436.
- Bickel, R. (2007). *Multilevel analysis for applied research: It's just regression!* New York, NY: The Guildford Press.
- Chen, C. C. (1995). New trends in reward allocation preferences: A Sino-U.S. comparison. *The Academy of Management Journal*, *38*, 408–428.
- Cohn, E. S., White, O. S., & Sanders, J. (2000). Distributive and procedural justice in seven nations. *Law and Human Behavior*, *5*, 553–579.
- Cojocaru, S. & Bragaru, C. (2012). Using Appreciative Inquiry to Change Perceptions Concerning the Satisfaction of Organization Members' Needs. *Transylvanian Review of Administrative Sciences*, *35E*, 62-77.
- Collett, J. L., & Childs, E. (2011). Minding the gap: Meaning, affect, and the potential shortcomings of vignettes. *Social Science Research*, *40*, 513–522.
- Conlon, D. E., Porter, C. O. L. H., & McLean Parks, J. (2004). The fairness of decision rules. *Journal of Management*, *30*, 329–349.
- Degenholtz, H. B., Kane, R. A., Kane, R. L., Finch, M. D. (1999). Long-term care case managers' out-of-home placement decisions: an application of hierarchical logistic regression. *Research on Aging*, *21*, 240–274.
- Dülmer, H. (2007). Experimental plans in factorial surveys: Random or quota design? *Sociological Methods & Research*, *35*, 382–409.
- EVS. (2011). European Values Study 1981-2008, Longitudinal Data File. GESIS Data Archive, Cologne, Germany, ZA4804 Data File Version 2.0.0 2011-12-30
- Fein, E. C., Vasiliu, C., & Tziner, A. (2011). Individual values and preferred leadership behaviors: A study of Romanian managers. *Journal of Applied Social Psychology*, *41*, 515–535.
- Fischer, R. (2004). Organizational reward allocation: A comparison of British and German organizations. *International Journal for Intercultural Relations*, *28*, 151–164.
- Fischer, R. (2008). Rewarding seniority: Exploring cultural and organizational predictors of seniority allocations. *The Journal of Social Psychology*, *148*, 167–186.
- Fischer, R., & Smith, P. B. (2003). Reward allocation and culture: A meta-analysis. *Journal of Cross-Cultural Psychology*, *34*, 251–268.
- Gallagher, T. (2005). *Theft of a nation: Romania since communism*. London, United Kingdom: C. Hurst & Co.
- Giacobbe-Miller, J. K., Miller, D. J., & Victorov, V. I. (1998). A comparison of Russian and U.S. pay allocation decisions, distributive justice judgments, and productivity under different payment conditions. *Personnel Psychology*, *51*, 137–163.
- Giacobbe-Miller, J. K., Miller, D. J., & Zhang, W. (1997). Equity, equality and need as determinants of pay allocations: A comparative study of Chinese and US managers. *Employee Relations*, *19*, 309–320.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage.
- Hong, Y., Levy, S. R., & Chiu, C. (2001). The contribution of the lay theories approach to the study of groups. *Personality and Social Psychology Review*, *5*, 98–106.



- Hox, J. J., Kreft, G. G., & Hermkens, P. L. J. (1991). The analysis of factorial surveys. *Sociological Methods & Research*, 19, 493- 510.
- Hysom, S. J., & Fişek, H. M. (2011). Situational determinants of reward allocation: The equity–equality equilibrium model. *Social Science Research*, 40, 1263–1285.
- Jasso, G. (2006). Factorial survey methods for studying beliefs and judgments. *Sociological Methods Research*, 34, 334–423.
- Jasso, G., & Meyersson Milgrom, E. M. (2008). Distributive justice and CEO compensation. *Acta Sociologica*, 51, 123–143.
- Jasso, G., & Rossi, P. H. (1977). Distributive justice and earned income. *American Sociological Review*, 42, 639–651.
- Kenward, B., & Dahl, M. (2011). Preschoolers distribute scarce resources according to the moral valence of recipients' previous actions. *Developmental Psychology*, 47, 1054–1064.
- Kim, Ken I., Hun-Joon Park, and Nori Suzuki. 1990. Reward allocations in the United States, Japan, and Korea: A comparison of individualistic and collectivistic cultures. *Academy of Management Journal*, 33,188–198.
- Leventhal, G. S. (1976). The distribution of rewards and resources in groups and organizations. In L. Berkowitz & E. Walster (Eds.), *Advances in experimental social psychology* (pp. 91–131). New York, NY: Academic Press.
- Liebig, S. (2001). Lessons from philosophy? Interdisciplinary justice research and two classes of justice judgments. *Social Justice Research*, 14, 265–286.
- Luca, A. (2005). *Employees. Brief description of the Romanian employee: A cross cultural perspective on management in Romania*. Bucharest, Romania: România Pur și Simplu.
- Major, B. M., & Deaux, K. (1982). Individual differences in justice behavior. In J. Greenberg & R. L. Cohen (Eds.), *Equity and justice in social behavior* (pp. 43–76). New York, NY: Academic Press.
- McGillicuddy-De Lisi, A. V., De Lisi, R., & Van Gulik, K. (2008). The effects of grade level, context, and family type on male and female adolescents' distributive justice reasoning. *Journal of Adolescence*, 31, 107–124.
- Meeker, B. F., & Elliott, C. G. (1966). Reward allocations, gender, and task performance. *Social Psychology Quarterly*, 59, 294–301.
- Mikula, G. (1980). On the role of justice in allocation decisions. In G. Mikula (Ed.), *Justice and social interaction. Experimental and theoretical contributions from psychological research* (pp. 127–166). New York, NY: Springer-Verlag.
- Murphy-Berman, V. A., & Berman, J. J., & Çukur. Ç. S. (2012). Cross-Cultural Differences in Distributive Justice: A Comparison of Turkey and the U.S. *The Journal of Social Psychology*, 152, 359–369.
- Nock, S. L. (1982). Family social status: Consensus on characteristics. In P. H. Rossi, & S. L. Nock (Eds.), *Measuring social judgments: The factorial survey approach* (pp. 95–118). Beverly Hills, CA: Sage.
- Olejnik, A. B., Tompkins, B., & Heinbuck, C. (1982). Sex differences, sex role orientation, and reward allocations. *Sex Roles*, 8, 711–719.
- Rossi, P. H., & Anderson, A. B. (1982). The factorial survey approach: An introduction. In P. H. Rossi & S. L. Nock (Eds.), *Measuring social judgments: The factorial survey approach* (pp. 15–67). Beverly Hills, CA: Sage.

- Rossi, P. H., & Nock, S. L. (1982). Preface. In P. H. Rossi & S. L. Nock (Eds.), *Measuring social judgments: The factorial survey approach* (pp. 9–13). Beverly Hills, CA: Sage.
- Rusbult, C. E., Insko, C. C., & Lin, Y-H. W. (1995). Seniority-based reward allocation in the United States and Taiwan. *Social Psychology Quarterly*, 58, 13–30.
- Sagan, K., Pondel, M., & Wittig, M. A. (1981). The effect of anticipated future interaction on reward allocation in same- and opposite-sex dyads. *Journal of Personality*, 49, 438–448.
- Sauer, C., Auspurg, K., Hinz, T., & Liebig, S. (2011). The application of factorial surveys in general population samples: The effects of respondent age and education on response times and response consistency. *Survey Research Methods*, 5, 89–102.
- Taylor, B. J. (2006). Factorial surveys: Using vignettes to study professional judgment. *British Journal of Social Work*, 36, 1187–1207.
- Thomson, N. R., & Jones, E. F. (2005). Children's, adolescents', and young adults' reward allocations to hypothetical siblings and fairness judgments: Effects of actor gender, character type, and allocation pattern. *The Journal of Psychology*, 139, 349–367.
- Törnblom, K. Y. (1992). The social psychology of distributive justice. In K. Scherer (Ed.), *Justice: Interdisciplinary perspectives* (pp. 175–236). Cambridge, United Kingdom: Cambridge University Press.
- Van de Vijver, F. J. R., Van Hemert, D. A., & Poortinga, Y. H. (Eds.). (2008). *Multilevel analysis of individuals and cultures*. New York, NY: Erlbaum
- Wallander, L. (2009). 25 years of factorial surveys in Sociology: A review. *Social Science Research*, 38, 505–520.
- Walster, E., Berscheid, E., & Walster, G. W. (1973). New directions in equity research. *Journal of Personality and Social Psychology*, 25, 151–176.
- WVS 2009. World Value Survey 1981–2008 official aggregate v.20090902, 2009. World Values Survey Association [www.worldvaluessurvey.org](http://www.worldvaluessurvey.org). Aggregate File Producer: ASEP/JDS Data Archive, Madrid, Spain.
- Zhang, Z.-X. (2001). The effects of frequency of social interaction and relationship closeness on reward allocation. *Journal of Psychology*, 135, 154–164.