The Effect of Gender, Seniority and Subject Matter on the Perceptions of Organizational Justice of Teachers: A Meta–Analytical Study

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Abstract

This study reveals the results of a meta-analysis conducted with the theses and research studies published in Turkey from 2005 to 2012 regarding organizational justice. The purpose of this paper is to determine the effects of gender, seniority and subject matter on the perceptions of organizational justice of teachers. Specific criteria were used to select which studies would be included in the meta-analysis. According to these criteria, 17 studies were included from the perspective of gender, 9 from seniority, and 6 from the perspective of subject matter. The study found that the variables of gender and subject matter had a very weak effect on the overall perception of organizational justice, as well as on the sub-dimensions of organizational justice. The research concluded that seniority had a very weak effect overall on the perception of organizational justice, and the organizational sub-dimensions of procedural justice, interactive justice and relationships with managers. The effect on distributive justice and the relationship between employees was weak, bordering on moderate. The study revealed that teachers with 10 years or under of experience had a more positive perception about organizational justice in the dimension of distributive justice, while teachers with 11 years or higher experience had a more positive perception regarding the relationship between employees. This study suggests new meta-analytical studies to determine the relationship of organizational justice with other variables. It also points out that researchers should be more careful in reporting statistics in their studies to allow for the implementation of meta-analyses in the future.

Keywords: Organizational justice • Gender • Seniority • Subject matter • Meta-analysis

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There is a significant increase in the number of research studies about organizational behavior in the area of educational administration. This increase is also due to the emergence of human-centered management theories within the framework of approaching human relations. These human-centered theories emphasize sensitivity to certain employee characteristics such as emotions, ideas, values, culture and needs (Yılmaz & Altınkurt, 2012a). In this regard, it can be seen that concepts like organizational justice, citizenship, trust, commitment, culture, values and emotions, aside from many others, are covered in research studies. Among such concepts, organizational justice attracts attention as one of the most important subjects in the literature on organizational behavior.

Adams' *Equality Theory* (1963) serves as the basis for studies on organizational justice. Research studies conducted over time have contributed to the development of the concept of organizational justice. A meta-analytical study published by Cohen-Charash and Spector in 2001 encompassed approximately 400 empirical and 200 theoretical studies published in the area of organizational justice. Among these, the number of studies conducted on educational institutions was relatively less. This number has increased, however, owing to measurement tools developed specifically for educational institutions (Donovan, Drasgow, & Munson, 1998; Hoy & Tarter, 2004; Niehoff & Moorman, 1993). In parallel, there has been a significant increase in the number of studies on organizational justice in the area of educational administration in Turkey since 2000.

One reason for the interest of researchers with organizational justice could be the relationship of organizational justice to several variables. The literature shows that organizational justice is related to such variables as *job satisfaction* (Clay-Warner, Reynolds, & Roman, 2005; Elma, 2013; Karaköse, Altınkurt, & Yılmaz, 2009; Yürür, 2008), *organizational citizenship behavior* (Farh, Earley, & Lin, 1997; Moorman, 1991; Niehoff & Moorman, 1993; Polat, 2007; Tansky, 1993; Yılmaz & Altınkurt, 2012b), *organizational trust* (Folger & Konovsky, 1989; Lind & Tyler, 1988; Özgan, 2011; Polat & Celep, 2008; Yılmaz & Altınkurt, 2012b), *motivation* (Folger & Cronpanzano, 1998; Lambert, 2003; Sökmen, Bilsel, & Erbil, 2013), *burnout* (Liljegren & Ekberg, 2009; Moliner, Martinez-Tur, Peiro, & Ramos, 2005), *organizational commitment* (Babaoğlan & Ertürk, 2013; Folger & Konovsky, 1989; Lind & Tyler, 1988; Moorman, Niehoff, &

Organ, 1993; Özgan, 2011), and *job performance* (Conlon, Meyer, & Nowakowski, 2005; Walumbwa, Cropanzano, & Hartnell, 2009). The meta-analytical study conducted by Colquitt, Conlon, Wesson, Porter, and Ng (2001) revealed a relationship between the sub-dimensions of organizational justice and job satisfaction, organizational commitment, organizational citizenship behavior, end of employment, performance, and assessment of authority. The perception of justice of employees is sometimes the cause of the aforementioned, whereas in other cases it is a result of them. Therefore, it can be stated that the perception of organizational justice is one of the classical subjects which attract the attention of literature on management.

The concept of organizational justice is related to the perception of employees regarding justice inside an organization (Eskew, 1993; Moorman, 1991). Employees set certain criteria when establishing this perception, and use these to determine whether they are treated fairly or not (Altınkurt & Yılmaz, 2010). The belief of employees in the justice and fairness of practices in an organization is one of the reasons that motivates them and supports their efforts (Töremen & Tan, 2010). Nonetheless, since justice is a relative subject it is almost impossible to establish a fully objective set of criteria for what is fair and what is not (Altınkurt, 2010). Therefore, studies conducted on this matter deal with organizational justice within various dimensions.

The concept of organizational justice was examined on the level of distributive justice (Lind & Tyler, 1988), procedural justice (De Cremer, 2005; Folger, 1987; Greenberg, 1987, 1990, 1996; Greenberg & Tyler, 1987; Roch & Shanock, 2006), and interactional justice (Bies & Moag, 1986; Cropanzano, Prehar, & Chen, 2002). The basis of this tendency is because it is considered impossible to distinguish between these dimensions (Colquitt, Greenberg, & Zapata-Phelan, 2005). In addition, there are research studies that distinguish organizational justice by looking at the relationships of employees with managers and the relationships between employees, in addition to the above mentioned dimensions. Below is a brief summary of distributive, procedural and interactional justice.

Distributive justice represents perceived fairness of an outcome. From this perspective, it is possible to say that distributive justice can determine the perceptions of employees about certain outcomes such as wages or promotion (İçerli, 2010). Distributive justice is a product of the proportionate idea of equality defined as providing everyone with

what they deserve. Accordingly, equals should be treated equally, those who are not equal should be treated differently, and thus everyone should get what they deserve (Güriz, 1994, 2005).

Procedural justice is related to the perception of fairness of the methods used to deliver outcomes, meaning the overall process (Folger & Cropanzano, 1998; Jawahar, 2002). Acceptance of the decision-making procedures as fair by employees is crucial in terms of employees being able to embrace these decisions. An acquisition for these individuals is not only important, but equally important is how these acquisitions are decided, which in turn influences their perception of justice (Karaeminoğulları, 2006).

Interactional justice is a concept that emphasizes the quality of the relationships among employees in an organization. Interactional justice involves such behaviors as valuing employees, being respectful, and announcing a decision considered as a social value to employees (İçerli, 2010). Interactional justice claims that individuals are not only interested in the fairness of the process in assessing justice, but they are also interested in the behavior of the people authorized to manage this process (Çakmak, 2005). From this perspective, interactive justice is defined as the perceived justice of interpersonal behaviors during the application of processes (Cohen-Charash & Spector, 2001). The classification of organizational justice by Donovan et al. (1998) approached it in two dimensions: The relationship of employees to managers and inter-employee relationships. This may also be considered within interactional justice as the items included in this scale overlap with the characteristics of interactional justice previously explained here.

Besides the above mentioned classifications regarding the dimensions of organizational justice, there have been many recent studies which tried to analyze organizational justice from a generic perspective (Yılmaz, 2010). Aside from this, several meta-analyses emphasized the failure to determine the relationships between the sub-dimensions of organizational justice in different studies (Colquitt et al., 2005).

There are several research studies conducted nationally and internationally on the area of organizational justice. In parallel, the international literature has conducted significant meta-analyses on organizational justice. The majority of these studies examined the relationship between organizational justice and other organizational variables (e.g. job satisfaction, organizational citizenship) (Colquitt et al., 2005; Hauenstein, McGonigle, & Flinder, 2002; Li & Cropanzano, 2009; Viswesvaran & Ones, 2002). On the other hand, there have been a few meta-analytical studies (Bauer, 1999; Cohen-Charash & Spector, 2001; Hang-yue, Foley, & Loi, 2006; Jepsen & Rodwell, 2007) that examined the effect of personal characteristics on organizational justice. These studies mainly dealt with gender as the personal variable. Nevertheless, no meta-analytical study has been found that particularly considers the context of educational organizations.

Most organizational justice studies conducted in Turkey examined if the perception of justice differs according to variables such as gender, seniority, and subject matter. However, there have been no meta-analytical studies conducted in Turkey in this area. In addition, there are relatively few meta-analytical studies in the area of organizational behavior (Aydın, Sarıer, & Uysal, 2011, 2013; Çoğaltay, 2014; Doğuyurt, 2013; Kış, 2013; Sarıer, 2013). In fact, scientific knowledge dynamically progresses in an accumulated manner. In particular, the main goal of quantitative research studies in parallel with the positivist paradigm is the ability to generalize these research findings. In this regard, it is very important to compile the findings of independent studies in a certain area of work, and reinterpret them through meta-analysis. Additionally, there have been criticisms that inter-cultural studies should use direct generalization of theories or knowledge acquired from other cultures (Aydın, Yılmaz, & Altınkurt, 2013). From this perspective, the compilation of produced knowledge in a culture through meta-analysis is also important in terms of revealing cultural differences. Within this framework, the current study aims to determine the effect the variables of gender, seniority and subject matter on the perceptions of organizational justice of teachers.

Method

This is a meta-analysis of the studies conducted in Turkey about organizational justice in order to determine the effect the variables of gender, seniority and subject matter on the perceptions of organizational justice of teachers.

Data Collection

Research data was collected during the autumn semester of the 2012-2013 academic year. Several databases, primarily those of ULAKBIM and the Higher Education Council's database of theses and dissertations were searched for relevant studies using

Table 1
Number and Sample Size of Studies Included in the Meta-Analysis

	Gender			Seniority			Subject Matter		
	n	Female	Male	n	≤10 years	≥11 years	n	Grade	Subject
Organizational Justice	17	4286	4262	9	1618	2223	6	1067	1269
Distributive Justice	7	2750	2548	4	1070	1283	2	298	262
Procedural Justice	8	2980	2741	4	1070	1281	3	431	478
Interactional Justice	8	2980	2741	4	1070	1281	3	431	478
Relationship with Managers	3	522	507	2	384	634	-	-	-
Inter-employee Relationship	3	522	507	2	384	634	-	-	-

n: Number of studies included in meta-analysis

the keywords of organizational justice and justice, in both English and Turkish. The search resulted in 26 articles and 19 theses focused on elementary and secondary education teachers. Two articles were omitted since they were reproduced from the theses already included in the current study. The criteria for studies included in the meta-analysis are: 1) research studies published between 2005-2012, 2) studies looking at determining the perception of organizational justice of basic, elementary, secondary or high school teachers, 3) the validity and reliability information of data collection tools were reported, 4) the research findings reported arithmetic mean and standard deviation values, or other values required for them to be calculated, and 5) the sample size values were reported.

Table 1 provides the number and sample size of the studies included in this research on the basis of the given criteria. Of these studies, 17 were included in the meta-analysis for the perspective of gender, nine for seniority, and six for subject matter. The total sample size of the studies included in the research for the perception of overall organizational justice is 8,548 for gender, 3,841 for seniority, and 2,336 for subject matter. Table 1 also provides sample sizes for each sub-dimension of organizational justice.

Data Analysis

First of all, a coding key was created to determine which studies to include in the meta-analysis and for facilitating data analysis. The coding key included data on the number of researches, research year, subject of the research, location, sample, sample size, data collection tool(s) used, developers of the data collection tool(s), whether there was validity and reliability proofs for the data collection tool(s), as well as arithmetic averages and standard deviations based on the variables of gender, seniority and subject matter. An overall assessment was made using descriptive statistics, and the results were then combined through meta-analysis.

Meta-analysis compiles findings from independent research studies on a specific subject in order to reach large-scale generalizations. Meta-analysis is a method used to predict the size of an effect by bringing together the results of several studies conducted at different times, different venues, and by different centers on the same subject. The effect value is an index that defines the size of the difference between groups (Cohen, 1988).

The Fixed Effects Model and Random Effects Model were used to calculate the effect values in the meta-analysis. The Fixed Effects Model is based on the assumption of homogeneity in the combined studies. Thus, this model accepts that each study acknowledges the same effect and that there is no variance between the studies. In cases where the assumptions of the Fixed Effects Model were not valid, the Random Effects Model was used. The Random Effects Model allows for an evaluation within studies as well as variations among those studies (Shelby & Vaske, 2008; Sutton, Abrams, Jones, Sheldon, & Song, 2000). Meta-analytical methods using this model include both the variance among studies and the variance within the study itself (Thompson & Sharp, 1999). This study used the Chi-square homogeneity test with a (k-1) level of freedom to assess whether there was homogeneity between the studies included in the meta-analysis as suggested by Cochrane (Cochrane, 1954 as cited in Erdoğan & Kanık, 2011). This is known as the Q test. The Q test is used to examine if two or more independent samples were selected from the same population. In the analysis, the null hypothesis is based on the assumption that samples were selected from the same population. This means that if the calculated X2 (Q) value is smaller than the $X2_{table}$ value selected on the basis of the degree of freedom and significance level, the H0 hypothesis shall be accepted and the condition of homogeneity is ensured. This study used the Fixed Effect Model where homogeneity was ensured, and used the Random Effects Model for the others.

Table 2
Descriptive Statistics of Studies Conducted on Organizational Justice

		Pre Meta-Analysis (f)	Included in Meta-Analysis		
			Gender (f)	Seniority (f)	Subject (f)
Type of Study	Article	24	6	4	2
	Thesis	19	11	4	4
Year of Study	2005	1	0	0	0
	2006	1	1	0	0
	2007	3	3	1	1
	2008	3	2	2	1
	2009	8	3	1	0
	2010	13	2	3	1
	2011	11	6	2	3
	2012	3	0	0	0
School Type	Elementary Education	18	9	5	4
	Secondary Education	13	5	4	0
	Elementary and Secondary Education	9	3	0	2
Data Collection Method	Quantitative	39	17	9	6
	Qualitative	1	0	0	0
	Theoretical	3	0	0	0
Geographical Region for Data Collection	1. Mediterranean	4	4	1	1
	2. Aegean	9	3	3	0
	3. Marmara	7	4	3	2
	4. Central Anatolia	7	4	3	1
	5. Black Sea	1	3	1	1
	6. Eastern Anatolia	4	4	3	1
	7. Southeastern Anatolia	2	1	1	0
	8. More than one region	5	1	1	0

The mean and standard deviations for the dimensions of gender, seniority and subject matter were used to calculate the effect value. One study included in the meta-analysis for determining the effect of gender on the perception of organizational justice did not reveal the total score obtained from the data collection tool, yet gave an item by item evaluation. In order to achieve a single effect-size value, each item's effect-size value was first determined, and then the average of these values was calculated accordingly. The same method was used for the other data provided at the dimensional level. Only after these processes were conducted to calculate the effect-size value for each study, was the average effect-size value (ES) calculated for overall justice and its sub-dimensions. All calculations regarding the effect value have a 95% confidence level. It is generally suggested that an absolute value of 0.20 or less for the effect size means a weak effect, whereas an absolute value between 0.21-0.80 means a medium effect and an absolute value of 0.81 or more means a strong effect (Cohen, Manion, & Morrison, 2007; Cohen, Welkowitz, & Ewen, 2000). This study used these criteria as a basis, and additionally considered an effect size value less than 0.10 as a very weak effect.

For the gender perspective, this study considered women as the experimental group and men as the control group. For the seniority perspective, teachers with teaching experience of 10 years or under were the experimental group, while those with more than 10 years teaching experience were the control group. For the perspective of subject matter, classroom teachers were taken as the experimental group and subject matter teachers as the control group. In all the groups, a positive effect size showed an effect advantage for the experimental group, while a negative effect size showed an effect advantage for the control group.

Findings

This research study primarily explained the descriptive characteristics of those studies conducted on organizational justice. This was followed by the findings of the meta-analytical study to determine the effect of the variables of gender, seniority and subject matter on the perceptions of teachers on organizational justice. Tables are presented to show the effect sizes of the studies, which were then compared on the basis

Table 3
Effect of Gender on the Perception of Organizational Justice

	ES	z	Q	X^2_{table}	S_{error}	ES_{low}	ES_{up}
Organizational Justice	-0.003	0.14	17.39	26.296	0.02	-0.044	0.043
Distributive Justice	-0.05	1.64	7.93	12.59	0.03	-0.055	0.053
Procedural Justice	-0.02	0.75	9.90	14.06	0.03	-0.053	0.052
Interactional Justice	-0.002	0.04	8,39	14.06	0.05	-0.095	0.095
Relationships with Managers	0.09	1.50	0.50	5.99	0.06	-0.118	0.130
Inter-Employee Relationships	0.08	1.33	2.71	5.99	0.06	-0.119	0.129

ES: Mean effect size, Q: Total heterogeneity level, ES_{low}-ES_{up}: ES lower and upper limit at 95% confidence level

of calculated effect-size values. In addition, the average effect size, total heterogeneity level, and confidence intervals were given on the basis of the Fixed and Random Effects Models to measure the effect of gender, seniority and subject matter on teachers' perceptions of organizational justice. Table 2 gives the descriptive statistics of studies conducted in Turkey on organizational justice.

Table 2 shows that a total of 19 theses (44%) and 24 articles (56%), a total of 43 studies, were written in Turkey between 2005 and 2012 to determine the organizational justice perceptions of elementary and secondary school teachers. The number of studies on organizational justice has increased since the year 2009. Thirty-nine (91%) of all studies were quantitative, one (2%) was qualitative, and three (7%) were theoretical. Of all the applied research, 18 studies collected data from elementary schools (45%), 13 from secondary schools (32.5%), and nine from both elementary and secondary schools (22.5%). From the perspective of the venue of the studies, they were conducted in all geographical regions of Turkey. The regions with the most number of studies were the Aegean (f = 9), Central Anatolian (f = 7) and Marmara (f = 7), while the regions with the least number of studies were the regions of the Black Sea (f = 1) and Southeastern Anatolia (f = 2).

Effect of Gender on Organizational Justice

The first goal of this research study was to determine the effect of gender on organizational justice. The meta-analysis was conducted on 17 studies for overall perceptions of organizational justice, on 7 studies for the dimension of distributive justice, on 8 for the dimension of procedural justice, on 8 for the dimension of interactional justice, and on 3 for the relationship with managers, and 3 for inter-employee relationships on the dimension of the perception of organizational justice. First and foremost, the homogeneity test (Q) was applied to decide which model would be used to calculate the

effect value. As a result of the Q test, the condition of homogeneity was ensured for the overall perception of organizational justice (Q = 17.32 < X^2_{table} = 26.29), distributive justice (Q = 7.93 < X^2_{table} = 12.59), procedural justice (Q = 9.90 < X^2_{table} = 14.06), relationships with managers (Q = 0.5 < X^2_{table} = 5.99), and inter-employee relationships (Q = 2.71 < X^2_{table} = 5.99). The effect value was calculated using the Fixed Effects Model. Since the homogeneity condition could not be ensured for interactional justice (Q = 21.48 > X^2_{table} = 14.06), the effect value was calculated using the Random Effects Model. Table 3 shows the findings obtained in regard to the effect of gender on the perception of organizational justice.

Table 3 shows that the effect size of gender was calculated at -0.003 for the overall perception of organizational justice, -0.05 for distributive justice, -0.02 for procedural justice, -0.002 for interactional justice, 0.09 for relationships with managers, and 0.08 for inter-employee relationships. Based on these effect sizes, male teachers had a more positive perception about overall organizational justice, distributive justice, procedural justice, and interactional justice, whereas female teachers had a more positive perception about organizational justice in the dimensions of relationships with managers and inter-employee relationships. Nevertheless, this difference was very weak based on the calculated effect size.

Effect of Seniority on Organizational Justice

This research study secondly examined the effect of seniority on organizational justice. The meta-analysis was conducted on nine studies for the overall perception of organizational justice; four studies each for the dimensions of distributive justice, procedural justice, and interactional justice, and two each for the dimensions of perception of organizational justice in relationships with managers and inter-employee relationships. As a result of the Q test applied for deciding which model

Table 4
Effect of Seniority on the Perception of Organizational Justice

	ES	z	Q	X^2_{table}	S_{error}	ES_{low}	ES_{up}
Organizational Justice	0.04	0.50	7.55	13.36	0.08	-0.150	0.156
Distributive Justice	0.14	1.56	3.66	7.81	0.09	-0.170	0.196
Procedural Justice	0.06	0.67	2.29	7.81	0.09	-0.178	0.188
Interactional Justice	0.07	0.78	2.48	7.81	0.09	-0.177	0.189
Relationships with Managers	0.02	0.11	1.68	5.99	0.18	-0.356	0.363
Inter-Employee Relationships	-0.17	0.79	1.72	5.99	0.22	-0.460	0.387

Table 5
Effect of Subject Matter on the Perception of Organizational Justice

	ES	z	Q	X^2_{table}	S_{error}	ES_{low}	ES_{up}
Organizational Justice	0.002	0.02	5.18	11.07	0.09	-0.180	0.180

to use for calculating the effect value, the condition of homogeneity could not be ensured for perception of overall organizational justice($Q = 37.76 > X^2_{table} = 15.50$, $z = 0.50$), distributive justice ($Q = 12.79 > X^2_{table} = 7.81$, $z = 2.60$), procedural justice ($Q = 11.59 > X^2_{table} = 7.81$, $z = 7.81$), interactional justice ($Q = 11.50 > X^2_{table} = 7.81$, $z = 1.20$), relationships with managers ($Q = 14.85 > X^2_{table} = 3.84$, $z = 0.79$), and inter-employee relationships ($Q = 20.51 > X^2_{table} = 3.84$, $z = 2.12$), hence the effect value was calculated using the Random Effects Model. Table 4 shows the findings obtained in regard to the effect of seniority on the perception of organizational justice.

Table 4 shows that the effect size of seniority was calculated at 0.04 for the overall perception of organizational justice, 0.14 for distributive justice, 0.06 for procedural justice, 0.07 for interactional justice, 0.02 for relationships with managers, and -0.17 for inter-employee relationships. Based on these effect sizes, teachers with 10 years teaching experience or under showed more positive perceptions of organizational justice regarding overall organizational justice, distributive justice, procedural justice, interactional justice and relationships with managers, whereas teachers with more than 10 years of experience had a more positive perception of organizational justice regarding inter-employee relationships. Calculated effect sizes revealed a weak level of effect with distributive justice and inter-employee relationships. The effect value was much weaker for overall organizational justice, procedural justice, interactional justice and relationships with managers.

Effect of Subject Matter on Organizational Justice

This research study finally examined the effect of subject matter on organizational justice. The meta-analysis was conducted on six studies for the overall perceptions of organizational justice. Since there have been few studies on the variations between the dimensions of organizational behaviors of citizens and subject matter, the meta-analysis was only conducted for the overall perception of organizational justice. As a result of the homogeneity test (Q), the homogeneity could not be ensured for the overall perception of organizational justice ($Q = 22.99 > X2_{table} = 11.07$, $z = 0.24$), therefore the effect value was calculated using the Random Effects Model. Table 5 shows the findings obtained in regard to the effect of subject matter on the perception of organizational justice.

Table 5 shows that the effect value of subject matter was calculated at 0.0002 for the overall perception of organizational justice. The calculated effect value revealed no effect of subject matter on the perception of justice.

Results, Discussion and Suggestions

This study aimed to meta-analyze studies which were conducted with regard to the perceptions of organizational justice of elementary and secondary school teachers in order to determine the effect of the variables of gender, seniority and subject matter on the perceptions of organizational justice. Specific criteria were used to select which studies to include in the meta-analysis, and according to these criteria, 17 studies were included in the meta-analysis for gender, 9 for seniority, and 6 for the subject matter in relation to the overall perspective of organizational justice. Although there were more articles determined to be acceptable prior to the meta-analysis, the number of masters' theses was more than the number of articles based on the selection criteria. The word limit for writing articles may be considered as the main reason for this finding. This study has revealed that the

number of studies conducted on organizational justice increased after 2009, and most of them were quantitative studies. From the perspective of the location of studies, the studies included in this meta-analysis from the perspectives of gender and seniority cover data collected from all the geographical regions in Turkey. This increases the ability to generalize the research findings in terms of variables. Nonetheless, there were no studies conducted on the perspective of subject matter from the Aegean and Southeastern Anatolian regions, which constitutes a limitation for this research study. The total sample size of the studies included in the research for the overall perception of organizational justice was 8,548 for gender, 3,841 for seniority, and 2,336 for subject matter.

At the end of the research study, it was found that gender had a very weak effect on the overall perception of organizational justice, since the dimensions of distributive justice, procedural justice, interactional justice, relationships with managers, and inter-employee relationships had an absolute value of effect size ranging between 0.003 and 0.9 in relation to the perception of organizational justice. These calculated effect sizes showed that male teachers had a more positive perception about overall organizational justice, distributive justice, procedural justice and interactional justice, whereas female teachers had a more positive perception about organizational justice in the dimensions of relationships with managers and inter-employee relationships. An individual review of each study under the meta-analysis did not reveal a difference for gender except for two studies (İmamoğlu, 2011; Polat, 2007), where the effect value was found to be weak as a result of the meta-analysis conducted on these two studies. Several other studies conducted in different cultures, as in Turkey, revealed differences for perceptions of organizational justice based on gender (Brockner & Adsit, 1986; Hang-yue et al., 2006; Leung & Lind, 1986). Nevertheless, meta-analytical studies conducted (Bauer, 1999; Cohen-Charash & Spector, 2001; Jepsen & Rodwell, 2007) resulted either in no effect or a very weak effect for gender. Thus, it is possible to say that gender does not have a significant effect on the perception of organizational justice.

At the end of the research study, it was found that seniority had a very weak effect on the overall perception of organizational justice as well as for the dimensions of procedural justice, interactional justice and relationships with managers. Regarding

the perception of organizational justice, it showed absolute values between 0.04 and 0.07; however, it had a weak but almost moderate effect on the dimensions of distributive justice (IV: 0.14) and inter-employee relationships (IV: -0.17). Teachers with 10 years or under of teaching experience showed more positive perceptions of organizational justice with distributive justice whereas teachers with over 10 years of experience had a more positive perception of organizational justice with inter-employee relationships. This study classified teachers' seniority under two groups: 10 years or under or more than 10 years of experience. Studies in the literature classified teacher seniority using various lengths of time, some studies showing different results (Cömert, Demirtaş, Üstüner, & Özer, 2008; Polat, 2007; Yılmaz, 2010) and others no difference (Açıkgöz, 2009; Çapraz, 2009; Çelik, 2011; İmamoğlu, 2011; Oğuz, 2011; Uğurlu, 2009) in the perception of organizational justice in regard to seniority. Yılmaz (2010) found a difference in the perceptions of organizational justice of teachers according to seniority. He stated that teachers with 6-10 years of experience had a negative perception in terms of organizational justice while Polat (2007) said teachers with 11-20 years of experience, and Cömert et al. (2008), teachers with 16–20 years of experience, had a negative perception of organizational justice. Nevertheless, the current meta-analysis determined that teacher seniority did not have an important effect on the perception of organizational justice. The perception of justice of teachers differed according to seniority only with distributive justice and inter-employee relationships. Distributive justice is about the expectations of employees to receive a fair distribution of tangible resources, such as money or assets, as well as all shared values like opportunities, roles, social status and appreciation (Alexander & Ruderman, 1987; Güriz, 2005). It is possible to explain that teachers with more than 10 years of experience perceived that resources as stated in this definition are not distributed fairly for various reasons. The current career stage of a teacher may be a reason for this perception. Bakioğlu (1996) states that teachers experience five career stages: the entry stage, stability stage, experimental stage, expert stage, and composure stage. Teachers with 10 or more years of experience may be considered to be in the experimental or expert stage. Bakioğlu (1996) and Bakioğlu and Asyalı (2005) state that teachers in this stage have a deeper interest in management and organization and do not wish to take on more responsibility, which may cause in-

house conflicts in the organizations. For this reason, school administrators with egalitarian or overly fair practices may cause the emergence of such a perception. School administrators can ensure a more positive perception towards justice by giving more responsibility to experienced teachers (e.g. program or project development).

The last finding of this research study is that subject matter has no effect on the perception of organizational justice of teachers. From the perspective of subject matter, this study classifies teachers as classroom teachers and subject matter teachers. Although some research studies conducted in secondary schools have revealed differences (Altınkurt & Yılmaz, 2010), perceptions of organizational justice do not differ according to the variable of subject matter (Çelik, 2011; Doğan, 2008; Kazancı, 2010; Kılıçlar, 2011; Oğuz, 2011). Upon overall evaluation of the research results, it may be said that personal characteristics do not have a significant effect on the perceptions of organizational justice. This also coincides with findings from the meta-analysis conducted by Cohen-Charash and Spector (2001).

The most important limitation of this study is the limited number of studies conducted in Turkey about the perceptions of organizational justice of teachers in terms of the relevant variables considered in the selection criteria. In addition, the failure of researchers to provide compact and full reporting of the statistics in their studies (e.g. arithmetic averages, standard deviations) makes it more difficult to conduct meta-analytical studies and also hinders the ability to generalize such studies. However, science is an accumulative process. Local meta-analytical studies are particularly important in certain areas of interest such as organizational behavior where cultural differences count. Therefore, more research studies are still needed for a better understanding of the organizational behaviors of employees in Turkey. Further meta-analytical studies are recommended to determine the relationship between organizational justice and other variables. It is also necessary to point out that researchers should be more careful in reporting statistics in their studies to allow for implementation of meta-analyses in the future.

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