

The Structure and Determinants of Justice Criteria Importance

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The current analysis sought to extend the findings of Wendorf, Alexander, and Firestone (2002). People are shown to demonstrate four dimensions along which their judgments of justice criteria importance vary: Decision-Maker Procedural Fairness, Equitable/Consistency Concerns, Participation/Appeals Procedures, and Specialized Distributive Concerns. The analysis of several higher-order factor structures showed that these dimensions were not explained by general procedural and distributive justice factors. Furthermore, structural equation modeling showed that these dimensions were affected differentially by concerns about procedural justice, distributive justice, and outcome favorability. It is concluded that these dimensions are not isomorphic with the concepts of procedural and distributive justice, and that researchers confound their operationalization of justice by ignoring the multidimensional aspects.

Over the long history of the study of social justice (c.f., Tyler & Smith, 1998), research has highlighted several important aspects of people's reasoning about the outcomes they receive. First, the extant research on relative deprivation (c.f., Stouffer, Suchman, DeVinney, Star, & Williams, 1949) has demonstrated that people make social comparisons regarding the favorability of these outcomes. Second, people are also concerned about the fairness of these outcomes. For example, equity theory (Adams, 1965; Walster, Walster, & Berscheid, 1978) has demonstrated that distributive justice further predicts attitudes and future behavior. Finally, work on procedural justice (c.f., Thibaut & Walker, 1975; Tyler & Lind, 1992) has demonstrated that people are concerned with the fairness of the procedures used to determine their outcomes.

Recent research has emphasized the interrelations among these concerns (e.g., Brockner & Wiesenfeld, 1996; Folger, 1986; McFarlin & Sweeney, 1992; Van den Bos, Vermunt, & Wilke, 1997). Generally, research has found that concerns about procedural justice, distributive justice, and outcome favorability all tend to affect attitudinal variables. That is, it is not enough to address only one type of justice as a determinant of an attitude; rather, researchers must consider the influence of each.

Building on the data of Wendorf and Alexander (1999), the current analysis seeks to examine the relative influence of judgments regarding procedural justice, distributive justice, and outcome favorability. Unlike

studies which examine specific outcome variables like satisfaction or organizational commitment (e.g., McFarlin & Sweeney, 1992; Mossholder, Bennett, & Martin, 1998), the current study examined these influences as they impact the criteria by which justice judgments themselves are made.

Justice Criteria

Tyler and Smith (1998) noted that "people are seldom at a loss when asked whether or not an allocation, a procedure, or a punishment is fair" (p. 602). This implies that individuals hold and apply certain criteria that allow them to make judgments regarding the fairness of a given situation. Indeed, such criteria or rules for what constitutes justice have been proposed by several authors.

Concerning distributive justice, several rules or criteria can be outlined. Equity theory (Adams, 1965; Walster, Walster, & Berscheid, 1978) posits that equity is itself a criterion for justice (Tyler & Smith, 1998). Other authors (Deutsch, 1975, 1985; Lerner, 1974; Sampson, 1969, 1975) have argued that, when making judgments about the fairness of outcomes, people are also concerned with equal distributions and distributions based on need. Similarly, the equity principle can be further divided according to the type of input being assessed, whether it is ability, actual contributions, or status (see Sabbagh, Dar, & Resh, 1994; Tornblum & Jonsson, 1985).

It has been suggested that procedural justice judgments too are based on several criteria. Thibaut and Walker (1975) proposed that decision control and process control are important to judgments of fairness. That is, people are concerned with their opportunities to have a say in both the final decision made, and in the processes that determine that decision. Leventhal (1980) identified six additional procedural justice rules: consistency, bias suppression, accuracy, correctability, representativeness, and ethicality. The consistency rule states that fair procedures as those that are stable across persons and time. Bias suppression highlights the importance of a decision-

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maker being neutral. Accuracy implies that those who make decisions do so with both an informed opinion and with "minimal processing error" (Leventhal, 1980, p. 40). Correctability recognizes the importance of grievance and appeals procedures for correcting past wrongs. Representativeness involves the issues of participatory decision-making and representation in the decision-making process. Leventhal's ethicality rule asserts that fair procedures are those that do not violate an individual's personal standards. Finally, Tyler (1994) has shown that people are concerned about trust in the benevolence of a decision-maker and with status recognition (i.e., being treated with respect).

Ideological Dimensions of Justice Criteria

Tyler and Smith (1998) further noted that "people have moral frameworks that allow them to make justice judgments" (p. 602). This implies that individuals not only use criteria of justice to make judgments, but that these criteria are held by individuals in something akin to an ideology. Similarly, Wendorf, Alexander, and Firestone (2002) argued that people's criteria of justice define what they believe ought to happen in any given situation. Following this, they examined people's beliefs about which justice norms ought to be considered most important in solving moral dilemmas.

An exploratory factor analysis by Wendorf, Alexander, and Firestone (2002) demonstrated that beliefs about the ideological importance of the above-noted justice criteria follow four general concerns: Decision-Maker Procedural Fairness (DMPF), Participation/Appeals Procedures (PAPS), Equitable/Consistency Concerns (ECC), and Specialized Distributive Concerns (SDC). First, people believe that decision-makers ought to exhibit behaviors that follow standards of procedural fairness. Specifically, Accuracy, Trust, Ethicality, and Neutrality are important, presumably because they help insure fair proceedings. Second, people believe that there ought to exist appeals and participatory procedures. By assuring Correctability, Voice, Decision Control, and Respect, people can remain invested in the decision-making process and the legitimacy of the procedures can be insured. Third, people appear to hold a general concern about the consistency with which procedures and outcomes are applied. This emphasis on Equality and Consistency may be reflective of broad societal concerns about equality of opportunities. Finally, people believe that it is important to consider certain aspects of the individual affected by the decision. That is, it is important to consider an individual's Ability, Status, and Need in making an allocation or decision.

These factors are interesting because they are not isomorphic with procedural and distributive justice. That is, while these dimensions are based on proposed procedural and distributive justice rules, no factor by itself seems to completely represent a particular type of justice.

Rather, each dimension appears to represent some more focused aspect of justice. Indeed, Wendorf, Alexander, and Firestone (2002) found that these factors were only moderately correlated with participants' ideological preferences for procedural and distributive justice.

Research Questions

Despite these conceptual distinctions, the first three factors uncovered by Wendorf, Alexander, and Firestone (2002) seem to reflect broad procedural concerns, while the fourth factor is clearly concerned with the fairness of the outcome. The current analyses seek to delineate this observation, proceeding in two distinct phases.

The first analytic phase asks whether the four factors can be adequately explained by any higher-order factors. For example, it is possible that people do not distinguish among justice criteria (as suggested by Ryer, 1993), implying a single higher-order justice factor. Alternatively, the factors may reflect two higher-order factors of procedural and distributive justice. An inspection of the justice criteria suggests two possible higher order factor models; both of these models are depicted in Figure 1. The first model (referred to here as the "PAPS as Procedural") implies that procedural concerns drive the first three factors (DMPF, ECC, and PAPS) and that distributive concerns drive the last factor (SDC). The "PAPS as Distributive" model posits that PAPS is most related to concerns about the fairness of final distribution.

The second analytic phase addresses the influences of procedural justice, distributive justice, and outcome favorability on the criteria factor structure. To what extent does the overall importance given to procedural and distributive justice (and outcome favorability) influence the specific criteria of justice? Is the importance attached to participation, for example, determined only by peoples' beliefs about the importance of fair procedures, or do concerns about outcome favorability also play a role? The models implied by these questions are similar to that of the higher-order factor models. However, rather than the factors being predicted by higher-order factors, they are instead predicted by direct measures of procedural and distributive justice, imbued with all the meaning given to them by individuals. Additionally, the Phase II structural models incorporate a measure of outcome favorability as a potential predictor of each of the criteria dimensions. These conceptual models are presented in Figure 2.

These higher-order and structural models are intriguing because they highlight the validity of the justice criteria proposed in the extant literature. If the dimensions given by Wendorf, Alexander, and Firestone (2002) do not reduce simply to procedural and distributive justice, then perhaps researchers have been simplifying the study of social justice. If a particular criterion is affected by multiple concerns, then perhaps researchers have been confounding issues in a single measure.

Figure 1. Two hypothesized higher-order factor models of Wendorf, Alexander, and Firestone's (2002) dimensions of justice criteria: a) PAPS as Procedural, vs. b) PAPS as Distributive. Indicators of and correlations among the first-order factors have been omitted for clarity. DMPF = Decision-Maker Procedural Fairness; ECC = Equitable/Consistency Concerns; PAPS = Participation/ Appeals Procedures; SDC = Specialized Distributive Concerns.

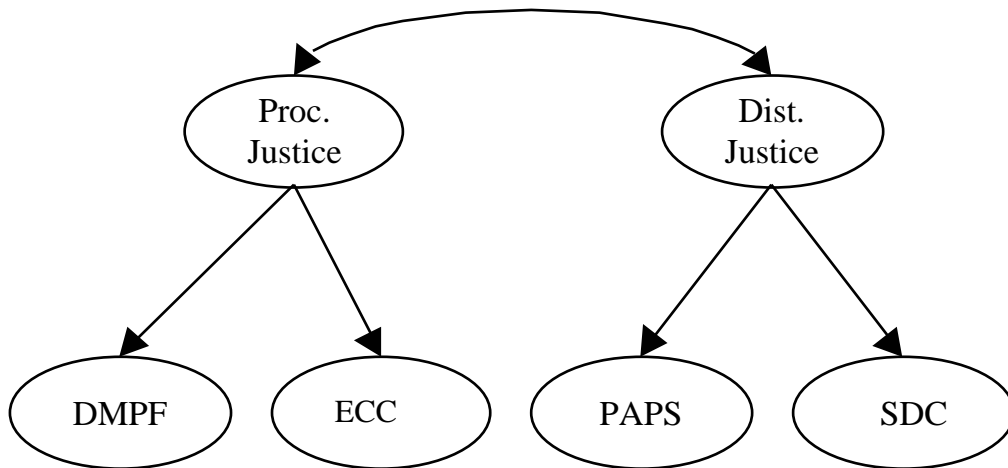
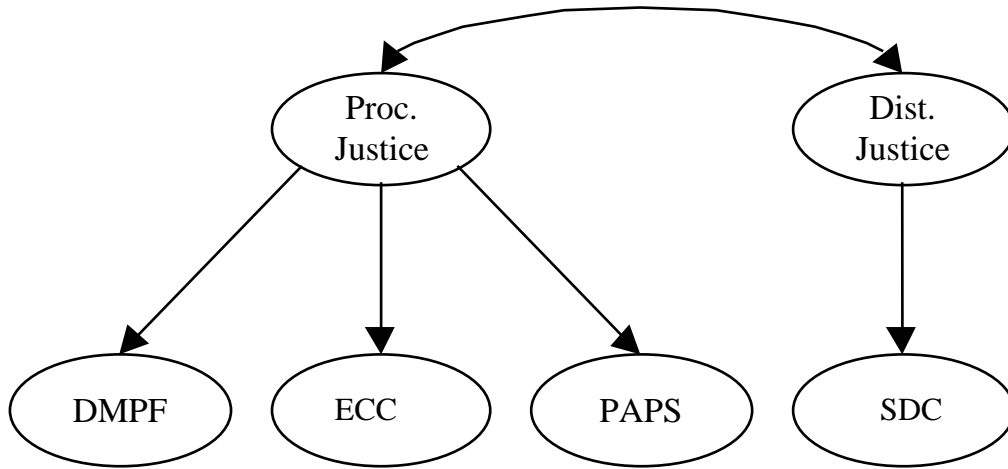
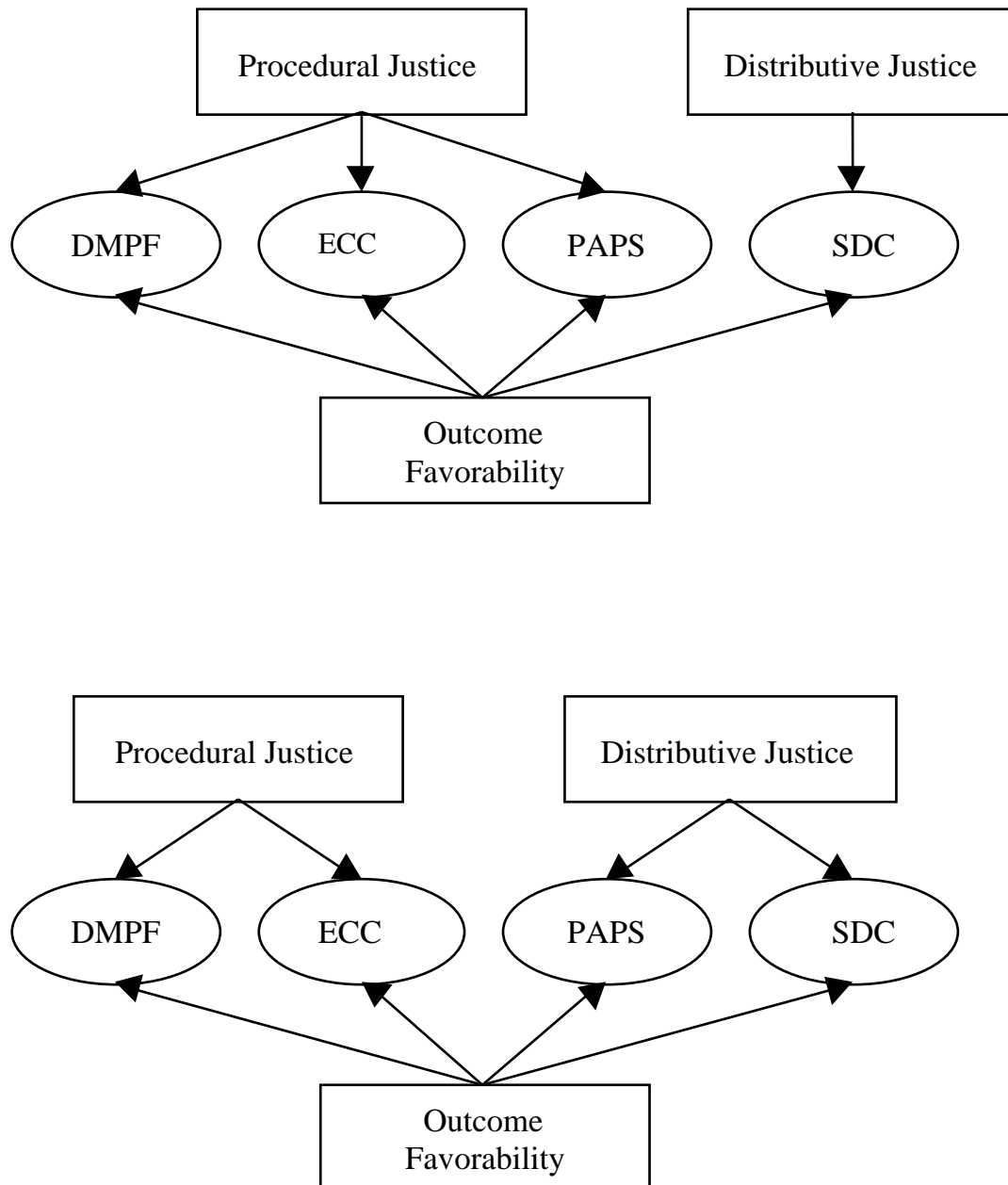


Figure 2. Two hypothesized prediction models of Wendorf, Alexander, and Firestone's (2002) dimensions of justice criteria: a) PAPS as Procedural, vs. b) PAPS as Distributive. All indicators, correlations among the criteria factors, and correlations among the global justice judgments have been omitted for clarity. DMPF = Decision-Maker Procedural Fairness; ECC = Equitable/Consistency Concerns; PAPS = Participation/ Appeals Procedures; SDC = Specialized Distributive Concerns.



Method

Participants

Participants' data for this study were drawn from a study by Wendorf, Alexander, and Firestone (2002). In the original study, 70.5% of the participants were female and 29.5% were male. Ages ranged from 18 to 52 ($M = 22.5$, $SD = 6.81$, Median = 20.00). Approximately 47.4% of the sample identified themselves as Caucasian-American and 29.5% as African-American. The remaining participants either belonged to other groups or did not provide ethnic group membership information.

Assessment Measures

Procedural and distributive items were divided in three main sections: 1) specific procedural justice rules, 2) specific distributive justice rules, and 3) global justice judgments. The specific justice rules were based on the criteria described earlier: Leventhal's (1980) six criteria of Consistency, Bias Suppression/ Neutrality, Accuracy, Correctability, Representativeness, and Ethicality; Thibaut and Walker's (1975) criteria of Voice/Process Control and Decision Control; and Tyler's (1994) criteria of Standing and Trust. The five distributive justice items asked whether Equity, Equality, Need, Status, and Ability are important in making a fair decision. The measures Procedural Justice, Distributive Justice, and Outcome Favorability were included in order to obtain overall evaluations of the importance of fair procedures, fair outcomes, and favorable outcomes. Examples of the items for these justice criteria for one moral dilemma (the Heinz dilemma) are given in Appendix A.

Procedure

Following reading a dilemma from Rest's (1979) Defining Issues Test, participants were asked to respond to the procedural rules, the distributive rules, and the global evaluations. All justice items were assessed in a similar format; participants were asked to rate each item on a 5-point importance scale and then to rank their top four distributive rules, their top four procedural rules, and finally the order of their global evaluations. This was repeated using two additional dilemmas from the Defining Issues Test.

Items within each section--the distributive justice judgments, the procedural justice judgments, and the global judgments--were randomized for each dilemma, but the same random order was maintained for all participants. This general format was followed for all 3 dilemmas.

Analytic Strategy

After listwise deletion of participants with missing data, one hundred sixty-seven participants were retained. Furthermore, only the importance ratings (and not the

rankings) were retained for current analyses. Scores for each justice criteria were obtained by taking the mean of the ratings across dilemmas on the relevant items. This resulted in cross-situational assessment of ten procedural justice variables (one corresponding to each of the criteria listed earlier) and five distributive justice criteria. Also, global evaluations representing the importance attached to procedural justice, distributive justice, and outcome favorability were produced.

Prior to Phase I, a confirmatory factor model of the individual justice criteria was estimated. While this analysis was performed for the same data on which the original factor structure was derived (Wendorf & Alexander, 1999), the goal here was to obtain a sound model upon which test the higher-order (Phase I) and structural models (Phase II). The model is that implied in the section on the ideological dimensions of justice criteria. This was followed by tests of the hypothesized higher-order factor structure and structural models.

All analyses were performed using LISREL 8.30 (Jöreskog & Sörbom, 1999), with maximum likelihood estimation on the covariance matrices. Nested comparisons (chi-square difference tests) were used to determine the viability of the hypothesized models, in comparison to their respective measurement models. The general approach in the testing of alternative models is similar to that of Anderson and Gerbing (1988). Model fit was also assessed using Bentler's (1990) comparative fit index (CFI), Bentler and Bonnett's (1980) non-normed fit index (NNFI), and the root mean square error of approximation (RMSEA). The covariance matrix upon which these analyses were conducted is available in Appendix B.

Results

Confirmatory Model of Justice Criteria Dimensions

The model of Wendorf, Alexander, and Firestone (2002) provided only marginal fit, $\chi^2 (59, N = 167) = 115.792$, $p < .001$, RMSEA = .072, NNFI = .872, CFI = .903. An inspection of the factor loadings and modification indices showed that Decision Control loaded sufficiently strong on all four of the factors. In the interest of obtaining a strong model for the sake of future comparisons, Decision Control was eliminated from the model. This does not deny that Decision Control remains an important aspect of justice, but merely that it confounds the factorial structure.

The model was re-estimated after eliminating Decision Control. This model demonstrated adequate fit, $\chi^2 (48, N = 167) = 83.871$, $p = .001$, RMSEA = .065, NNFI = .903, CFI = .930. (Direct comparison of this model to the previous model was not possible as they are not nested.) However, further examination of the residuals indicated that the errors of two indicators of the

Distributive Fairness factor--specifically Ability and Status--were strongly correlated. Both of these items reflect a common theme not present in the factorial structure; namely, the items are written as to reflect concerns about a person's contributions to society. Because of this, all future models allowed the errors of the two indicators to correlate.

The final model produced good fit, χ^2 (47, N = 167) =

74.516, $p = .007$, RMSEA = .056, NNFI = .924, CFI = .946. Importantly, this model showed a significant improvement over its predecessor to explain covariation among the justice criteria, $\Delta\chi^2$ (1, N = 167) = 9.355, $p < .05$. This model was retained as best representing the first-order factor structure of the justice criteria and has been labeled the Modified Confirmatory Model. Construct loadings for the justice criteria are presented in Table 1.

Table 1
Construct Loadings from the Modified Confirmatory Measurement Model

Justice Rule	DMPF	ECC	PAPS	SDC
Accuracy	.223			
<u>SE</u>	.027			
<u>t</u>	8.174**			
Trust	.533			
<u>SE</u>	.062			
<u>t</u>	8.591**			
Ethicality	.328			
<u>SE</u>	.040			
<u>t</u>	8.107**			
Neutrality	.332			
<u>SE</u>	.038			
<u>t</u>	8.781**			
Equality		.242		
<u>SE</u>		.055		
<u>t</u>		4.395**		
Consistency		.436		
<u>SE</u>		.077		
<u>t</u>		5.689**		
Correctability			.618	
<u>SE</u>			.084	
<u>t</u>			7.387**	
Voice			.430	
<u>SE</u>			.049	
<u>t</u>			8.754**	
Respect			.554	
<u>SE</u>			.082	
<u>t</u>			6.731**	
Ability				.643
<u>SE</u>				.076
<u>t</u>				8.439**
Status				.735
<u>SE</u>				.103
<u>t</u>				7.147**
Need				.539
<u>SE</u>				.057
<u>t</u>				9.506**

Note. For identification purposes, construct variances were fixed at 1. DMPF = Decision-Maker Procedural Fairness; ECC = Equitable/Consistency Concerns; PAPS = Participation/Appeals Procedures; SDC = Specialized Distributive Concerns. * $p < .05$ ** $p < .01$

Phase I: The Higher-Order Factor Structure of Justice Criteria

Given the similarities among the first-order factors, it was of interest to determine if they could be parsimoniously represented by higher order factors. Specifically, it was of interest to test the two models given in Figure 1. Alternatively, the first-order factors could be best explained by one higher-order justice factor. The fit of each of these models is given in Table 2.

Similarly, differences in fit between each of these models and the modified confirmatory model are given in Table 2. On the basis of the chi-square differences, each of the higher-order models fits significantly worse than the first-order model. Similarly, an inspection of the NNFI, the CFI, and the RMSEA for each of the higher-order models demonstrated that each model failed to explain the covariation among the first-order factors; that is, they had poor fit. Thus, it was concluded that the dimensions of justice criteria given by Wendorf, Alexander, and Firestone (2002) are not easily explained by one or two higher factors of justice.

Phase II: Prediction of Justice Factors from Global Evaluations

Because the modified confirmatory model demonstrated the best fit in Phase I, it was retained as the basis of the measurement model for Phase II. However, as Phase II involved the incorporation of three additional variables (the three global evaluations of the importance of Procedural Justice, Distributive Justice, and Outcome Favorability), it was necessary to re-estimate the measurement with these variables included.

The inclusion of these three variables necessitated the identification of three new "latent" variables. As each of these latent constructs is defined by only one indicator, the loadings for each indicator were fixed to 1 and the error of each indicator fixed to 0. For the measurement model, no paths among the six latent variables were included; rather, all latent constructs were allowed to freely correlate. This model demonstrated good fit, $\chi^2(71, N = 167) = 105.887$, $p = .007$, RMSEA = .050, NNFI = .926, CFI = .950. This model was used as the basis of comparison for each of the hypothesized prediction models.

The first prediction model tested was the "PAPS as Procedural" model. This model specified that the factors DMPF, ECC, and PAPS are predicted by concerns about Procedural Justice, while the factor SDC is predicted by concerns about Distributive Justice. Additionally, each of the four factors (DMPF, ECC, PAPS, and SDC) were expected to be influenced by concerns about Outcome Favorability. DMPF, ECC, PAPS, and SDC were allowed to freely correlate, as were the predictors (Procedural Justice, Distributive Justice, and Outcome Favorability). As can be seen in Table 3, this model did not accurately

reproduce the covariation among the justice criteria dimensions.

The "PAPS as Distributive" model was highly similar to the preceding model, except that PAPS was predicted by Distributive Justice rather than Procedural Justice. All other aspects of the model were identical. This model also differed significantly from the measurement model (see Table 3), failing to reproduce the covariation among the justice criteria dimensions.

An inspection of the estimates from both of the above models showed that a hybrid of the two models might best explain the factors. Thus, a third model (titled "Hybrid Prediction Model" in Figure 3 and Table 3) was specified that combined the two models. In this model, the importance of Participation/Appeals Procedures was significantly predicted by concerns about *both* Procedural Justice and Distributive Justice. This model had good fit, $\chi^2(74, N = 167) = 112.901$, $p < .05$, RMSEA = .051, NNFI = .921, CFI = .944.

All paths in the combined model were significant except for the prediction of DMPF and ECC by Outcome Favorability. These paths were eliminated, yielding the final prediction model (see Figure 3). This model too had good fit, $\chi^2(76, N = 167) = 113.108$, $p < .05$, RMSEA = .049, NNFI = .926, CFI = .947. Importantly, this model did not significantly differ from the measurement model, $\Delta\chi^2(5, N = 167) = 7.221$, $p > .05$. Thus, this model was deemed to accurately explain the influence of procedural and outcome concerns on the justice criteria dimensions.

The estimates of these influences of the global justice judgments on the justice criteria dimensions are given in Table 4. Additionally, the attenuated correlations among the justice criteria dimensions are given in Table 5. In general, all of the factors of justice criteria were significantly inter-related.

Discussion

This analysis sought to extend the work of Wendorf, Alexander, and Firestone (2002) by examining the influence of procedural and outcome concerns on the criteria typically used to evaluate justice. There is a general similarity between these analyses and that of Tyler (1994), but they differ in one fundamental way: Tyler regarded distributive and procedural justice as concerns to be predicted by various justice criteria, whereas the current analyses treated them in reverse. Here it is argued that people's specific concerns about morally appropriate considerations are influenced by their more general concerns about procedures and outcomes.

Like Wendorf, Alexander, and Firestone (2002), here too it is believed that people attach importance to certain criteria because these criteria reflect what people believe ought to happen. In general, these proposed criteria for procedural and distributive justice vary along four dimensions: concerns about the actions of the decision-

Table 2
Nested Comparisons of Model Fit for Higher-Order Justice Criteria Factor Structures

Model	χ^2	df	RMSEA	NNFI	CFI	$\Delta\chi^2$	Δ df	Δ RMSEA	Δ NNFI	Δ CFI
Modified Confirmatory	74.516	47	.056	.924	.946	--	--	--	--	--
One Higher-Order Factor	222.901	53	.155	.584	.666	148.385 **	6	.099	.340	.280
Two Higher-Order Factors (PAPS as Procedural)	164.415	52	.119	.719	.779	89.899 **	5	.063	.205	.167
Two Higher-Order Factors (PAPS as Distributive)	126.181	52	.094	.815	.854	51.665 **	5	.038	.109	.092

Note. N = 167; NNFI = non-normed fit index; CFI = comparative fit index; RMSEA = root mean square error of approximation. All change statistics are computed as differences from the modified confirmatory model. See text for a discussion of the models.

* $p < .05$ ** $p < .01$

Table 3
Nested Comparisons of Model Fit for Prediction Models

Model	χ^2	df	RMSEA	NNFI	CFI	$\Delta\chi^2$	Δ df	Δ RMSEA	Δ NNFI	Δ CFI
Measurement Model	105.887	71	.050	.926	.950	--	--	--	--	--
Prediction Model (PAPS as Procedural)	123.398	75	.057	.903	.931	17.511 **	4	.007	.023	.019
Prediction Model (PAPS as Distributive)	118.661	75	.053	.912	.937	12.774 **	4	.003	.014	.013
Combined Prediction Models	112.901	74	.051	.921	.944	7.014 *	3	.001	.005	.006
Final Prediction Model	113.108	76	.049	.926	.947	7.221	5	.001	.000	.003

Note. N = 167; NNFI = non-normed fit index; CFI = comparative fit index; RMSEA = root mean square error of approximation. All change statistics are computed as differences from the measurement model. See text for a discussion of the models.

* $p < .05$ ** $p < .01$

Figure 3. Two derived prediction models of Wendorf and Alexander's (1999) dimensions of justice criteria: a) a hybrid of the "PAPS as Procedural" and "PAPS as Distributive" models, and b) the final obtained model. All indicators, correlations among the criteria factors, and correlations among the global justice judgments have been omitted for clarity. DMPF = Decision-Maker Procedural Fairness; ECC = Equitable/Consistency Concerns; PAPS = Participation/ Appeals Procedures; SDC = Specialized Distributive Concerns.

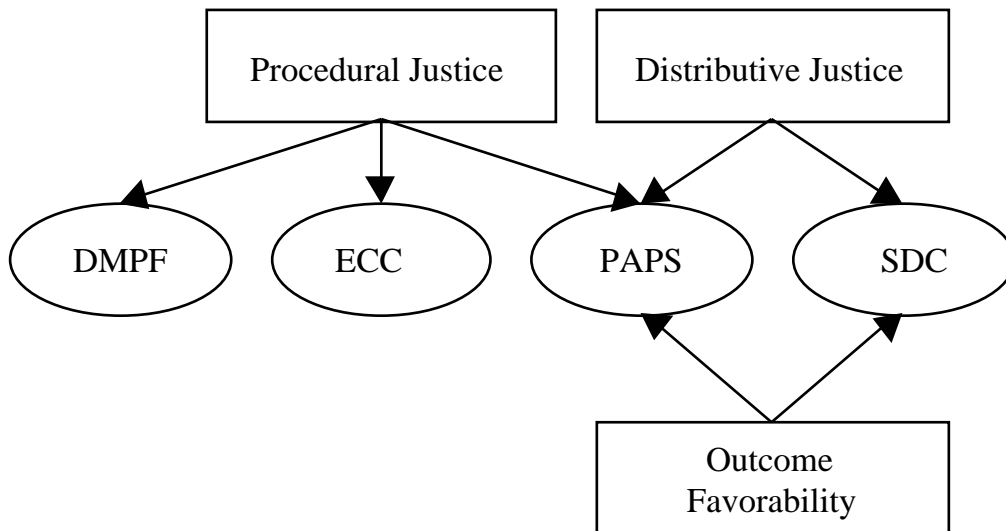
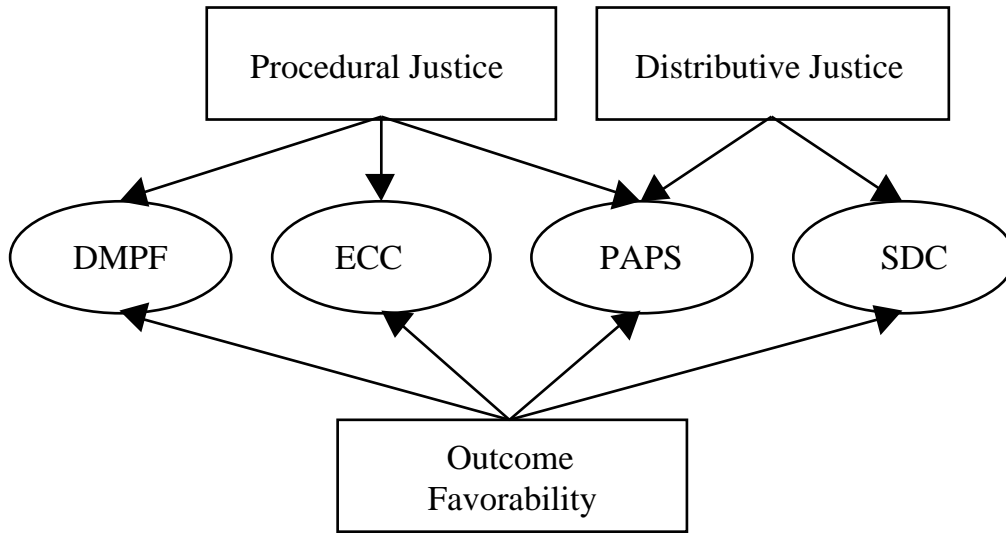


Table 4
Unstandardized Parameter Estimates Predicting Justice Criteria Factors from Global Justice Importance Ratings

Global Justice Judgment	Justice Criteria Dimension/Factor			
	DMPF	ECC	PAPS	SDC
Procedural Justice	.266	.168	.128	--
<u>SE</u>	.049	.049	.053	--
<u>t</u>	5.393**	3.462**	2.410*	--
Distributive Justice	--	--	.179	.143
<u>SE</u>	--	--	.057	.048
<u>t</u>	--	--	3.133**	2.968**
Outcome Favorability	--	--	.210	.403
<u>SE</u>	--	--	.058	.060
<u>t</u>	--	--	3.594**	6.710**
R ²	.277	.158	.329	.564

Note. Blank cells represent parameters that were not estimated in the final model. DMPF = Decision-Maker Procedural Fairness; ECC = Equitable/Consistency Concerns; PAPS = Participation/ Appeals Procedures; SDC = Specialized Distributive Concerns.

* $p < .05$ ** $p < .01$

maker, concerns about the consistency of outcomes and their relevant procedures, concerns about the existence of participation and appeals procedures, and concerns about the operationalization of specialized individual exceptions.

While these resultant dimensions are based upon criteria proposed to be representative of procedural and distributive justice, analyses showed that they are not

adequately explained by any higher-order factors. Specifically, the procedural criteria of justice can not be unidimensionally explained by a latent procedural justice factor. This is notable because it suggests that past studies have failed to be concerned with the multidimensional aspects of procedural justice.

Table 5
Attenuated Intercorrelations among Latent Justice Criteria Dimensions and Global Justice Judgments in the Final Prediction Model

Dimension/Judgment	1	2	3	4	5	6	7
1. DMPF (Criteria)	--	.149	.560	.723	.526	.109	-.095
2. ECC (Criteria)		--	.721	-.235	-.068	.468	.722
3. PAPS (Criteria)			--	.436	.210	.471	.421
4. SDC (Criteria)				--	.398	.082	-.072
5. PJ (Global)					--	.207	-.180
6. DJ (Global)						--	.381
7. OF (Global)							--

Note. DMPF = Decision-Maker Procedural Fairness; ECC = Equitable/Consistency Concerns; PAPS = Participation/ Appeals Procedures; SDC = Specialized Distributive Concerns; PJ = Procedural Justice; DJ = Distributive Justice; OF = Outcome Favorability.

Similarly, the analyses showed that the dimensions noted above serve different ends. That is, people are concerned with each dimension for different reasons. For example, people focus on distributions based on ability, need, and status because they are concerned about fair outcomes as well as favorable outcomes. The final obtained model also suggests that people are concerned with participation and appeals procedures for a wide variety of reasons. Concerns about the availability of participatory and appeal procedures combine people's belief in the importance of fair procedures in addition to fair and favorable outcomes. Concerns about decision-maker actions and distributive and procedural consistency were much more closely associated with people's beliefs about the importance of procedural justice; these dimensions were not affected by the importance attached to fair or favorable outcomes.

Furthermore, the analyses suggest that a large portion of the variance in the decision-maker procedural fairness and consistency dimensions remains unexplained relative to the other two dimensions. Perhaps this is suggestive of the need for researchers to be concerned with the importance of procedural favorability. Whereas the distributive criteria are affected by concerns about fair and favorable outcomes, procedural criteria may too be affected by concerns about both fairness and favorability.

Since each of the justice criteria are affected by multiple concerns, then perhaps researchers have been confounding procedural and outcome issues in measures based on these justice norms. This suggests that researchers need to attend to the individual and joint affects of the gamut of people's ideological justice concerns.

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Appendix A

Decision-Maker Procedural Fairness (DMPF)

Accuracy: Whether the judge uses the most accurate information he can get when deciding Heinz's case.

Trust: Is the judge trustworthy in the way he makes decisions?

Ethicality: Does the judge act in an ethical way when he makes his decision about Heinz?

Bias Suppression/Neutrality: Whether the judge is unbiased and impartial in making decisions.

Participation/Appeals Procedures (PAPS)

Correctability: Whether Heinz has the opportunity to appeal to the judge to change the decision if he feels he is being treated unfairly.

Voice/Process Control: Whether Heinz is allowed to fully explain to the judge his reasons for stealing the drug.

Standing/Respect: Does the judge show respect for Heinz as a person?

Decision Control: Whether Heinz has a direct influence over the final decision made by the judge?

Equitable/Consistency Concerns (ECC)

Consistency: Whether the judge treats all defendants in the same way.

Equality: Would the judge make the same decision for anyone else who might steal the drug?

Specialized Distributive Concerns (SDC)

Ability: Should the judge's decision be influenced by Heinz's ability to contribute to society?

Status: Should Heinz's position in the community be considered by the judge?

Need: Should the judge's decision be influenced by the fact that Heinz's wife really needs the drug?

Global Justice Judgments

Procedural Justice: Are the rules and procedures used by the judge fair overall?

Distributive Justice: Is the judge's final decision fair to Heinz?

Outcome Favorability: Is the final decision of the judge favorable to Heinz?

Appendix B: Covariance Matrix of Justice Norm Importance Ratings

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Accuracy	.12														
2. Trust	.13	.63													
3. Ethicality	.08	.18	.26												
4. Neutrality	.07	.15	.12	.24											
5. Ability	.03	.06	.05	.06	.87										
6. Status	.01	.08	.04	.04	.74	1.48									
7. Need	-.02	.02	.02	.01	.34	.43	.49								
8. Correctability	.02	.15	.08	.11	.33	.22	.21	1.07							
9. Voice	.06	.16	.07	.08	.22	.21	.18	.29	.38						
10. Respect	.07	.25	.12	.11	.32	.34	.13	.35	.21	1.01					
11. Consistency	.05	.16	.06	.14	-.05	-.07	-.10	.17	.03	.18	.47				
12. Equality	.06	.06	.06	.09	-.01	.01	-.03	.07	.03	.09	.11	.35			
13. Procedural Justice	.03	.05	.04	.05	-.01	-.06	-.03	.01	.03	.01	.04	.03	.06		
14. Distributive Justice	.04	.06	.03	.07	.24	.22	.18	.17	.17	.25	.04	.06	.04	.51	
15. Outcome Favorability	-.04	-.02	-.04	-.07	.59	.78	.54	.45	.20	.30	-.08	-.02	-.06	.37	1.86