

Are We All Equally Persuaded by Procedural Justice? Measuring the ‘Invariance Thesis’ Using Panel Data and Random Effects



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Background: It is well documented that procedural justice exerts a positive influence on institutional legitimacy. However, recent studies have questioned the generalizability of such effect, showing different factors moderating the effectiveness procedural justice. Most of those studies have relied on the specification of interaction terms, which can only offer a partial overviews of the variability of the effect of procedural justice. Here we suggest a novel approach to explore this variability based on longitudinal data and mixed models.

Methods: We use the ‘Australian Tax System Surveys - Merged Panel Data 2000-2005’ and mixed effects Structural Equation Models (SEM) to simultaneously assess the within-person association between procedural justice and assessments of Australian Tax Office (ATO) legitimacy across the three time points, together with the average between-person effect of procedural justice on legitimacy. By allowing the within-person association to vary across participants we are able to directly test the invariance thesis, which we then model as a function of a range of individual characteristics. Our full model is outlined in Figure 1.

Results: We show that procedural justice has a strong effect on legitimacy, but that effect is not uniform. In spite of its strength, this effect is so variable that for approximately 12% of subjects it can become negative (see Figure 2). In addition, we identify that procedural justice is a more effective strategy to increase legitimacy when directed at citizens who have actively asked for further information to the tax authority (Table 1), but it can have a negative effect among those who have been previously audited by the tax authority.

Conclusion: Our findings refute Wolfe et al. (2016) ‘invariance hypothesis’, demonstrating that much of the variability of the effect of procedural justice has gone undetected due to the limitations of the methodological approaches used. Procedural justice can even have a negative for a significant proportion of the population should be taken into consideration. In the words of Murphy (2016, p.4) “*researchers should not be so quick to accept the conclusion that procedural justice will always be the panacea for dealing with problem behavior.*” The fact that some of this variability can be explained by previous contacts with the tax authority lends support to Braithwaite (2009) ‘motivational postures theory’. Lastly, the identification of individuals for whom procedural justice can be more or less effective offers useful insights to tax authorities in the design of protocols to enhance legitimacy.

References

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- Murphy, K. (2016). Turning defiance into compliance with procedural justice: Understanding reactions to regulatory encounters through motivational posturing. *Regulation & Governance* 10(1), 93–109.
- Wolfe, S. E., J. Nix, R. Kaminski, and J. Rojek (2016). Is the effect of procedural justice on police legitimacy invariant? Testing the generality of procedural justice and competing antecedents of legitimacy. *Journal of Quantitative Criminology* 32(2), 253–282.

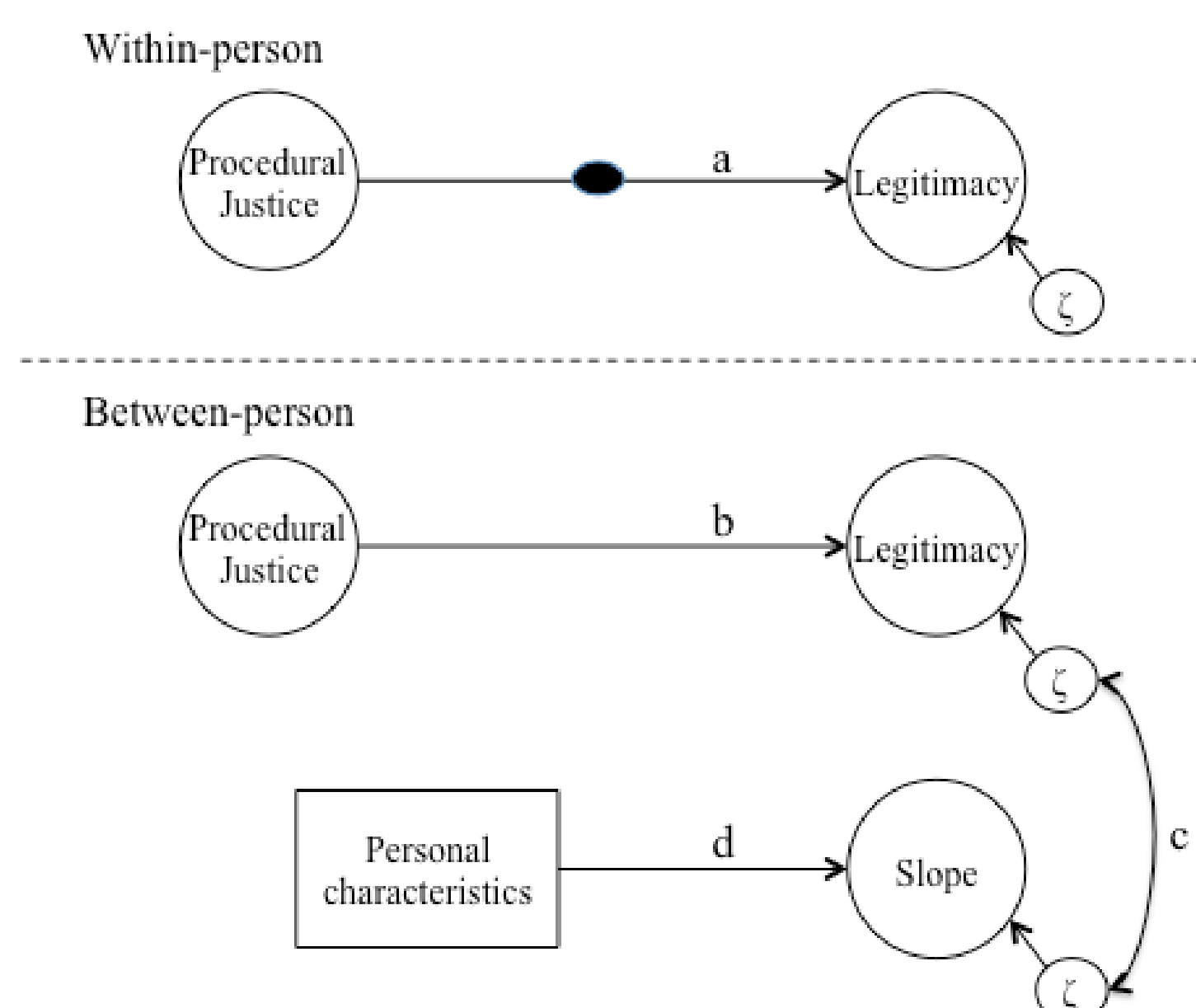


Figure 1: Mixed effects SEM examining the association between procedural justice and legitimacy

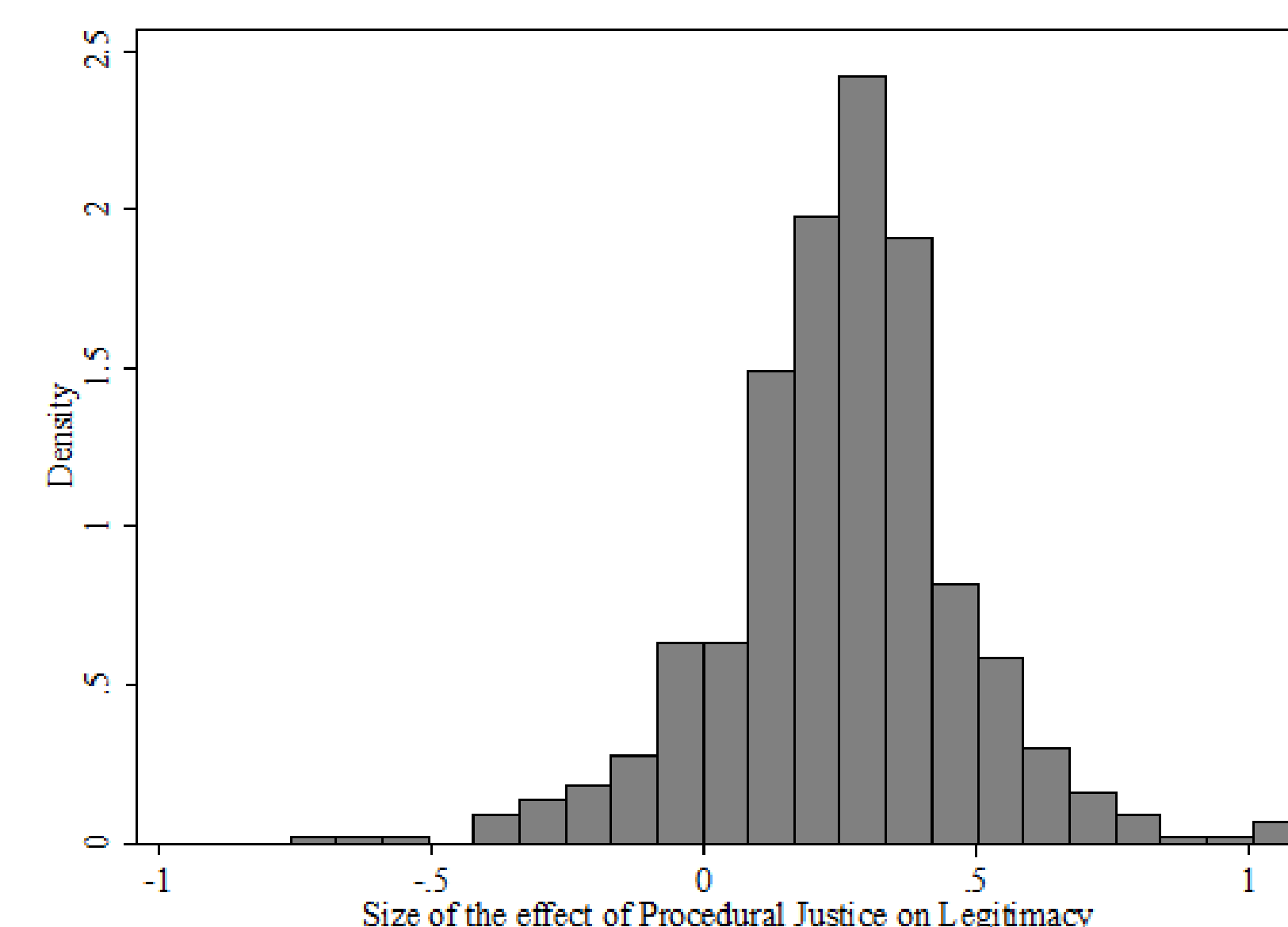


Figure 2: Histogram of the different random effects for the within subject effect of procedural justice on legitimacy across the 511 individuals in our sample

	Model 3: Random slope (with predictors of slope)			
	Mean	SD	2.5%	97.5%
<i>Fixed effects</i>				
Procedural justice (within)	0.47	0.13	0.23	0.74
Procedural justice (between)	0.82	0.08	0.67	0.99
<i>Slope on</i>				
Female	-0.23	0.13	-0.50	0.02
Age	0.00	0.01	-0.01	0.01
Education level	0.00	0.04	-0.07	0.08
Income	0.00	0.00	0.00	0.01
Foreign born	-0.02	0.14	-0.29	0.26
Marital status (ref: Married)				
Single	-0.18	0.18	-0.53	0.18
Widowed	-0.17	0.31	-0.81	0.44
Divorced	0.54	0.25	0.10	1.07
Polite	-0.07	0.08	-0.22	0.08
Patriotic	0.01	0.05	-0.09	0.10
Efficient	0.00	0.07	-0.14	0.15
Forgiving	-0.06	0.06	-0.18	0.07
Ambitious	0.09	0.05	-0.01	0.20
Knowledgeable	-0.10	0.08	-0.25	0.05
Trusting	0.11	0.06	-0.01	0.24
Disciplined	-0.05	0.08	-0.22	0.11
Generous	-0.04	0.07	-0.18	0.10
Reliable	0.05	0.09	-0.13	0.22
Competitive	0.01	0.05	-0.09	0.10
Understanding	0.10	0.08	-0.05	0.26
Helpful	0.01	0.09	-0.18	0.19
Cooperative	-0.01	0.10	-0.20	0.18
Ever audited	-0.38	0.16	-0.70	-0.10
Previous assessment contested	0.02	0.15	-0.28	0.33
Tax information requested	0.24	0.12	0.01	0.50
Likelihood of capture for tax fraud	0.01	0.05	-0.08	0.10
<i>Random effects</i>				
Procedural justice (within)	0.75	0.12	0.53	1.00
Procedural justice (between)	1.27	0.17	0.99	1.64
Random slope for PJ (Within)	0.28	0.10	0.14	0.54
Covariance - slope and intercept latent vars.	0.10	0.05	0.01	0.21
Legitimacy (within)	0.53	0.12	0.34	0.80
Legitimacy (between)	0.24	0.06	0.14	0.38

Table 1: Random coefficients model with predictors of latent slope