

A Letter from the Tax Office: Compliance Effects of Informational and Interpersonal Justice

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It has been argued that authorities attract greater compliance when they treat people according to principles of interactional and procedural justice. Set in the context of taxation, the present research investigates the effects on behavioral compliance of reminder letters adopting principles of informational and interpersonal fairness compared with a standard reminder notice. Study 1 with 199 students confirmed that both fairness letters were regarded as fairer than the standard letter. In Study 2, a field experiment, 2052 Australian taxpayers who had an obligation to file a tax declaration but failed to file on time were randomly sent one of the three reminder letters. The two fairness letters yielded a significantly greater compliance rate than the control letter.

KEY WORDS: fairness; procedural justice; interactional justice; compliance; regulation; taxation.

INTRODUCTION

Letters and written notices are probably the most frequent means of government authorities and regulatory institutions to communicate with their clientele. Often they are used as reminders and explicitly encourage compliance from clients who have failed to be compliant. In fact, there are good reasons for such an approach. Letters are relatively cheap; they can be prepared, quality-checked, and standardized; and the mailing of letters can be automated. As the downside of standardization, reminder letters are often regarded as formal, unfriendly, and unsympathetic. In general,

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however, government authorities do not seem to be concerned about these issues and, in fact, seem to regard a short, brisk, and authoritarian message as effective communication. The underlying reason appears to be their widespread adoption of a deterrence model of regulation (see Paternoster, 1987).

However, there are alternative views on regulation and the basis of compliance. For instance, there is evidence that people who feel treated *fairly* by an authority are more inclined to accept its decisions and follow its directions (Lind and Tyler, 1988; Tyler, 1990; Tyler and Huo, 2002). Tyler and Lind (1992) argue that people who feel treated fairly by their representatives regard their leadership and authority status as more legitimate. Perceiving them as legitimate authorities, people are generally more likely to follow and accept their decision, regardless of the favorability of the decision outcome. Obviously, this view differs fundamentally from the aforementioned deterrence perspective so common among authorities and regulators. From the latter point of view, it could be argued that fairness, politeness, and respect for clients would lead to the impression that the authority is soft on rule-breakers, lacking the will or means to detect and punish noncompliance. In particular for reminder notices, which alert clients to their failure to comply and the possible consequences, it might be argued such a soft approach is bound to be exploited.

The present research will investigate this question empirically. It will test the effects of an authority's fairness, specifically as demonstrated in its written reminder notices to clients, on perceptions of fairness and actual compliance. If reminder letters that adopt fairness principles were seen to be fairer and more respectful, this in itself would be a worthwhile outcome, as it has been posited that people have a natural right to be treated with respect (Bies, 2001). Further, evidence that people would change their behavior and more happily comply with those letters, would not only indicate that such fairer communications constitute a win-win situation for authorities and their clientele. It would also demonstrate that those fairness perceptions are not merely superficial but rather affect people more deeply and make them rethink their relationship to the authority (Tyler and Huo, 2002).

The present research involves a rare occasion in which the effects of fairness on actual behavior could be tested with an unambiguous, experimental design in a real-life situation using unobtrusive measures (see also Gilliland *et al.*, 2001; Greenberg, 1990). The research is set in the context of taxation in Australia and was conducted in cooperation with the Australian Taxation Office (ATO). Two alternative reminder letters that implemented fairness principles were tested and the compliance outcomes were compared with those from a standard ATO letter.

FORMS OF FAIRNESS

Fairness is a multifaceted concept (Colquitt, 2001; Wenzel, 2003) and in many or all of its facets it may be relevant to the interactions between authorities and their clientele. To use an example relevant to the present research, taxpayers who have a legal obligation to file a tax declaration but fail to do so on time may be contacted by the tax authority, demanding that they file the declaration or otherwise face penalties. First, there is the issue of outcome, or distributive, justice (Törnblom, 1992; Wenzel, 2004). People may dispute that they legally have such an obligation and regard the letter as unjustified; or, they may accept that there is a law detailing such an obligation but they dispute the legitimacy of that law. Second, taxpayers may feel the tax authority did not consult with them, for example to determine why they failed to file the declaration. This is an aspect of procedural unfairness: a lack of control about decision process and outcome (Thibaut and Walker, 1975). Third, taxpayers may regard the letter as a form of penalty they do not consider appropriate, perhaps because they feel they are not to blame for the failure to file the declaration. Or, they may think that penalties referred to in the letter, and used by the authority as a deterrent, are excessive. These are examples of retributive injustice, that is, the perceived unfairness of responses to rule-breaking (Vidmar, 2001).

According to anecdotal evidence, however, people most often react negatively to letters from tax authorities (and possibly other regulatory agencies) because of their disrespectful tone, harshness, and apparent supposition that one deliberately and selfishly disregarded one's obligations (Murphy, 2003). Likewise, such letters are often found to be overly authoritarian in seeking obedience without necessarily explaining the reasons and context of those decisions. These perceptions refer to the quality of interpersonal treatment that Bies and Moag (1986) called interactional justice; Tyler and colleagues regard them as aspects of a more comprehensive procedural justice concept (e.g., Tyler, 1989, 1994). Whether or not quality of treatment should be thought of as a separate category of justice or rather as another aspect of procedural justice remains a contentious issue (Bies, 2001; Blader and Tyler, 2003; Bobocel and Holmvall, 2001), but this is not central to the present research. Rather, it is important that the perceived quality of treatment consistently affects people's perceptions of fairness and their attitudes toward, trust in, and cooperation with authorities and the groups or organizations they represent (Bies, 2001; Tyler and Bies, 1990; Tyler and Lind, 1992).

Quality of treatment itself comprises several aspects (Bies, 2001). The two aspects that attracted most research attention so far are what Greenberg (1993) termed, *informational* and *interpersonal justice*. Informational justice refers to the principle that authorities should provide those affected by their

decisions with sufficient information and explanations (Greenberg, 1993; see also Tyler and Bies, 1990). Such conduct could increase perceptions of fairness for several reasons. First, it might convey the impression that the authority made an informed decision, took all necessary information into account, and acted in a reasonable and unbiased way (*accuracy*; Leventhal, 1980; *neutrality*; Tyler, 1989). Second, such information could persuade people that the decision outcome is fair, linking this aspect to issues of distributive justice. Third, the demonstrated transparency of the authority's decisions treats people as emancipated citizens who are not patronized but respected as equals.

Interpersonal justice refers to the principle that authorities should be respectful and polite to those affected by their decisions, show concern for their plight, and possibly offer apologies and regret for the negative consequences of their decisions (Greenberg, 1993; see also Bies, 1987). Such conduct could increase perceptions of fairness because, first, people might feel that any unfavorable consequences of the authority's decisions do not reflect maliciousness and intention to harm; rather, the authority remains to be seen as benevolent and trustworthy (*trustworthiness*; Tyler, 1989). Second, respect and politeness acknowledge a basic human right to personal integrity and express regard for people's worth and status as members of the human community represented by the authority (*standing*; Tyler, 1989).

FAIRNESS AND COMPLIANCE

The realization of informational and interpersonal justice principles should increase perceptions of fairness and, as a consequence, increase support for authorities and compliance with their decisions. Indeed, Greenberg (1990) found in an ingenious field experiment that temporary pay cuts (which a company was forced to introduce in some of its plants) led to lower rates of company theft and turnover when these were explained in detail and in a respectful way. In a laboratory experiment (Greenberg, 1993), informational and interpersonal justice principles were manipulated independently from each other and additively reduced participants' tendencies to steal from the experimenter to compensate for underpayment.

Even more pertinent to the present research is another study by Greenberg (1994), because it included principles of informational and interpersonal justice in an appeal to comply with a decision. In that field experiment, a company's decision to introduce a corporate smoking ban was announced either with detailed information about the reasons or with little information and, manipulated orthogonally to this, with either more or less sensitivity for employees' feelings. The results showed that adherence to both informational and interpersonal justice principles additively increased

employees' acceptance of the smoking ban-in particular among heavier smokers who were more severely affected by the decision.

In Greenberg's study, management basically acted as a regulator, regulating smoking behavior on company premises and seeking employees' compliance. We could extrapolate that regulatory institutions in general should be able to regulate more effectively when they adhere to principles of informational and interpersonal justice, explain clearly their decisions to affected clients, and treat them with respect and sensitivity. In fact, Tyler (Tyler, 2001; Tyler and Huo, 2002) argues that regulation is more costly and less effective if it focuses purely on command and control strategies, enforcement, and deterrence. Rather, regulators should seek the consent and cooperation of the regulated-voluntary compliance with what people see as legitimate decisions and legitimate authority. Legitimacy could be achieved through procedural fairness, which in Tyler's conception includes the neutrality and informedness of decision-making as well as respect for people and their rights.

FAIRNESS IN REMINDER LETTERS

The present research investigates whether impersonal brief reminder letters, explicitly encouraging people to comply, can also be designed to increase perceptions of fairness and compliance. In Greenberg's (1994) study, the announcement of a smoking ban implied an appeal to comply, but the announcement was made in person and effects were measured only for employees' self-reported acceptance of the decision. The present research will investigate effects of informational and interpersonal fairness on behavioral compliance.

The study is set in the context of the Australian taxation system, where businesses are required to file quarterly (or monthly, depending on turnover) an Activity Statement (AS) that reports on their tax obligations and entitlements to the tax office. For the system to function, it is of course vital that taxpayers file these tax declarations on time. When a deadline is missed, the ATO first contacts nonfilers with a reminder letter. The standard ATO letter is brief and straightforward, referring to penalties in a conventional deterrence manner. The present research evaluates the effects on perceived fairness (Study 1) and actual compliance (Study 2) of two alternative letters based on principles of informational and interpersonal justice.

STUDY 1

For this research, it was essential to develop reminder letters that followed principles of interactional fairness while at the same time being

consistent with the tax office's general guidelines for communicating with taxpayers. Because of its degree of public exposure, the tax office is generally concerned about adverse public reaction. Therefore, a cautious and conservative approach had to be taken. One important restriction on the design of new letters was that they had to be short and concise, in line with the tax office's service standards of efficiency and minimization of compliance costs. Taxpayers may well expect that the tax office communicates with them economically and efficiently, and that it honors its promises and conforms to its own service standards. In fact, in this particular context, it is possible that taxpayers value the *conciseness* of a letter as much as its fairness; and they could even regard the conciseness of a communication as an element of procedural fairness in this situation. First, to control for this, we included measures of perceived conciseness in this first study. Second, because the new letters needed to maintain the typical tax office "brand," we strove to keep them as succinct and concise as possible. This clearly meant that the degrees of freedom for formulating alternative reminder letters were considerably reduced. Yet, it was important that the alternative letters realized the fairness principles sufficiently so as to be noticed.

For the present research, two alternative reminder letters were designed that were thought to embody the principles of *informational* and *interpersonal justice*, respectively. A first study was conducted to ascertain whether the two letters were indeed perceived in line with those principles and regarded as being fairer than the standard letter. This was all the more important because the later field-experimental design of Study 2 would not allow inclusion of individual perceptions and information processing measures. The interpretation of its findings would have to rely on the evidence from Study 1.

Method

One hundred and ninety-nine first-year and third-year economics students participated in the study; they were between 18 and 38 years old ($M = 21$); 90 were female and 101 male (eight respondents did not indicate their sex). Participants were randomly allocated to one of three letter conditions (informational, interpersonal, control). Participants were asked to imagine they owned a small business, had not filed their business AS on time, and received a reminder letter from the ATO. They then read one of the three letters and responded to questions.

In the *control* condition, participants received and evaluated the letter actually used by the ATO. This letter had also been the reference point for the formulation of the two treatment letters, in that these included the same information as the standard letter. In addition, however, the *informational*

letter provided explanations concerning three issues. "Why are we sending you this letter?" informed about the ATO's task of collecting revenue used to fund community services. "Why can't we provide more assistance in this letter?" explained the general style of the letter and the need for further information to provide more specific help. "Why do we impose penalties?" explained the necessity of a penalty system for the greater goal of maintaining the integrity of the tax system. Similarly, the *interpersonal* letter provided the same basic information as the standard letter but addressed three further issues. "We believe in your honesty" assured that the reminder did not mean the ATO suspected the taxpayer to be deliberately dishonest. "We acknowledge that times can be difficult" expressed understanding for the possibility that situational constraints were responsible for not filing. "We would regret causing any stress or strain" expressed sympathy for the negative consequences that threat and imposition of penalties might have.

Three scales measured the presumed distinctive characteristics of the three letters (all items used 7-point scales; 1 = *disagree*, 7 = *agree*). Perceived *informational justice* was measured by three items: "The letter tries to justify the actions taken"; "The letter is open about the reasons of conduct"; and "The letter provides accounts for the procedures" ($\alpha = 0.75$). Perceived *interpersonal justice* was measured by three items: "The letter shows consideration for the circumstances I could be in"; "The letter expresses regret for possible negative effects on me"; and "The letter is very polite" ($\alpha = 0.82$). Alternatively, it was possible that respondents valued the conciseness and economy of the control letter positively. Perceived *conciseness* was therefore also measured by three items: "The letter is long-winded" (reverse-coded); "The letter is plain and comprehensible"; and "The letter is to the point" ($\alpha = 0.67$). A factor analysis confirmed, based on a scree test, the distinction of three factors that explained 68% of variance (Eigenvalues before rotation: 3.51, 1.69, and 0.91; explained variance after Varimax rotation: 24%, 23%, and 20%, respectively). All items loaded as expected on their designated factors (loadings > 0.62). Factor scores (rather than average scores) were calculated to represent the three scales because, using orthogonal rotation, the factor scores had the advantage of being unrelated. This allowed for a clearer test of the distinctive features of the three letters.

Next to these specific dimensions, another four items measured the perceived *overall fairness* of the letters ($\alpha = 0.77$). These included one direct fairness item ("Would you feel treated fairly?"), and three items that tapped each of the three procedural fairness dimensions suggested by Tyler (1989), namely respect ("The letter suggests that the tax office respects me"), trustworthiness ("The letter suggests that the tax office can be trusted"), and neutrality or lack of bias ("The letter suggests that the tax office is biased against me", reverse-coded). A factor analysis over these four items confirmed the existence of a single factor that explained 60% of variance

(Eigenvalue: 2.40). All items loaded substantially on this factor (loadings > 0.63). To be consistent with the earlier measures, factor scores were also used to represent this scale (however, simple scale score averages will also be reported).

Results

Analyses of variance were used to test for perceived differences between the letters. Table I shows the means (for the factor scores used in these analyses, as well as average scale scores). First, for perceived informational justice, there was a significant effect of letter, $F(2, 187) = 8.01$, $p < 0.001$, partial $\eta^2 = 0.08$. Post-hoc Bonferroni tests showed that the informational letter scored significantly higher on informational justice than the control letter did ($d = 0.68$), but it did not differ significantly from the interpersonal letter. The interpersonal letter was also perceived to be informationally fairer than the control letter ($d = 0.61$). Second, overall, the three letters also differed significantly in terms of perceived interpersonal justice, $F(2, 187) = 17.03$, $p < 0.001$, partial $\eta^2 = 0.15$. Post-hoc tests showed that, as expected, the interpersonal letter scored higher on this dimension than either the control letter ($d = 1.09$) or the informational letter ($d = 0.61$). The informational letter, however, also scored higher on interpersonal fairness than the control letter ($d = 0.42$). Third, the three letters differed overall in terms of perceived conciseness, $F(2, 187) = 19.79$, $p < 0.001$, partial $\eta^2 = 0.18$. The control letter was regarded as more concise than both the informational letter ($d = 0.96$) and interpersonal letter ($d = 1.09$). The latter two did not differ significantly in terms of perceived conciseness. Fourth, the three letters differed significantly in terms of overall fairness, $F(2, 187) = 4.88$, $p = 0.009$, partial $\eta^2 = 0.05$. According to post-hoc tests, both the informational letter ($d = 0.44$) and the interpersonal letter ($d = 0.56$) were perceived to be significantly fairer than the control letter but

Table I. Mean Ratings for the Three Different Letters: Factor Scores (Average Scale Scores in Brackets)

Variable	Letter		
	Informational ($n = 70$)	Interpersonal ($n = 65$)	Control ($n = 64$)
Informational fairness	0.21 ^a (4.79)	0.16 ^a (4.90)	-0.42 ^b (4.00)
Interpersonal fairness	-0.08 ^b (4.31)	0.51 ^a (5.02)	-0.46 ^c (3.60)
Conciseness	-0.25 ^b (4.48)	-0.31 ^b (4.50)	0.63 ^a (5.34)
Overall fairness	0.10 ^a (4.54)	0.20 ^a (4.65)	-0.32 ^b (4.09)

Note: Means with different superscripts differ at $p < 0.05$, according to Bonferroni post-hoc tests.

did not differ significantly from each other. Based on the raw scale averages (see Table I), it can be seen that the perceived fairness of the control letter ($M = 4.09$) did not differ significantly from the midpoint (4) of the scale, $t(63)$, *ns*, whereas both the informational letter ($M = 4.54$) and the interpersonal letter ($M = 4.65$), were significantly beyond the midpoint, towards the fairness end of the scale, $t(69) = 3.57$, $p < 0.001$, and $t(64) = 4.42$, $p < 0.001$.

Further, it was investigated how the three specific dimensions (informational justice, interpersonal justice, and conciseness) were related to the overall fairness rating. A regression analysis showed that all three dimensions contributed significantly to the explanation of variance in overall fairness, $F(3, 181) = 84.04$, $p < 0.001$, $R^2 = 0.58$. Interpersonal justice was most strongly related to overall fairness ($\beta = 0.63$, $p < 0.001$), then informational justice ($\beta = 0.34$, $p < 0.001$) and conciseness ($\beta = 0.25$, $p < 0.001$).

Discussion

Study 1 confirmed that the two experimental letters were perceived to be fairer than the existing ATO standard letter. However, it proved difficult to manipulate the two specific fairness dimensions (informational and interpersonal justice) independently from each other. Both experimental letters were considered to be fairer on both dimensions than the control letter. While the interpersonal letter was perceived to be interpersonally fairer than the informational letter, the informational letter was not perceived to be informationally fairer than the interpersonal letter. Perhaps these results are not surprising. To be interpersonally fair and to communicate respect, a letter needs to give more information. Conversely, while it may be possible to give information and accounts without being very polite and respectful, the very act of providing the information may already be considered more respectful of taxpayers than the control letter. In fact, further attempts to redesign the letters, so that they would be more clearly different in terms of the two fairness aspects, failed. For the present research, this means that the two experimental letters should not be regarded as instantiations of two independent aspects of fairness, but rather as two instantiations and alternative manipulations of interactional (or procedural) justice. (I will continue to refer to the two letters as informational versus interpersonal letters).

While perceived interpersonal justice seemed most important to perceptions of fairness, perceived conciseness also contributed to perceived overall fairness. It cannot be answered here whether this is a specific feature of the tax context, where taxpayers might expect the tax office to communicate efficiently and where the ATO is committed to service standards such as keeping compliance costs as low as possible (Australian

Taxation Office, 2003). Despite the fact that the two experimental letters were not perceived to be as concise as the control letter, their greater informational and interpersonal fairness more than compensated for this: they were overall considered fairer than the control letter. However, it appears there could be a trade-off between different aspects of fairness, between conciseness on the one hand and informational or interpersonal justice on the other hand. A balance might need to be struck: at some point any further provision of information, or further expression of respect, might not add as much to the perception of fairness as the lack of conciseness subtracts from it.

STUDY 2

In cooperation with the ATO, the two fairness letters were evaluated in a real-life situation and compared with the ATO standard letter in terms of effects on compliance. Individual small business owners who had an obligation to file an AS but failed to do so on time were sent one of the three reminder letters. After a certain deadline, the ATO checked its records to see whether taxpayers had complied with the letter and filed the tax declaration. Compared to other compliance issues in the tax arena, filing compliance has the advantage of being clearly defined: there is a definite deadline by which taxpayers have to file their tax declaration and if they do not meet that deadline they are considered to be noncompliant.

Method

Participants

For this study, 2,219 individuals were randomly selected from the population of taxpayers who, according to ATO records, were expected to file, but had not filed, a quarterly AS for the third quarter of 2001. These clients had not yet been contacted by the ATO regarding their outstanding AS. Because we believed it was likely that the style of reminder letters mattered more when taxpayers themselves, rather than their professional preparers, received the letter, the study focused on taxpayers who were not registered with a tax agent or accountant for the handling of their AS.¹ Note, however, that taxpayers could be registered with a tax preparer for other tax

¹ In Australia, taxpayers who use the services of professional tax preparers need to register with that preparer and notify the tax office. All communications from the tax office are then sent to the tax preparer rather than the taxpayer.

purposes (e.g., their income tax returns). Further sampling restrictions were meant to avoid confusions about the obligation to which the reminder letter referred: (a) clients had only ever had quarterly obligations; (b) clients had no other AS outstanding; and (c) clients had only one known concurrent AS obligation.

The data showed that 10 reminder letters were returned to sender unclaimed. Also, 157 taxpayers filed their AS before they received the reminder letter, due to a natural delay between sampling and issuing the letters, leaving 2,052 valid cases.

Design and Procedure

Participants were due to receive a reminder letter encouraging them to file their third-quarter AS and to make respective payments if necessary. They were randomly assigned to one of three letter conditions and received either an informational letter, an interpersonal letter, or the ATO standard control letter. The letters were identical to those used in Study 1 except for some minor amendments. Specifically, the ATO had in the meantime restructured its standard letter, and the experimental letters were adjusted to this new base letter. Also, in the interpersonal letter the third headline was reworded (now: “We do not want to make things more difficult for you”), but the paragraph still expressed understanding for the hardship that penalties could cause and it sought understanding for the use of penalties. Details of the letters are shown in the Appendix.

To reduce strain on ATO staff (e.g., due to taxpayers calling and making requests), the letters were randomly sent out in two batches. Half of the letters were sent out about six weeks after the filing deadline, the other half were sent out a week later. A single deadline was applied to all cases, which means taxpayers in the first batch had one more week to comply than taxpayers in the second batch. This could impact on compliance rates and was therefore controlled statistically. However, because assignment to the two batches was random and, thus, the three letter conditions were equally represented in the two batches, $\chi^2(2) = 0.32$, *ns*, there could be no interference with the effect of the letters. The ATO accessed its records for filing status and other relevant taxpaying data for the two batches about 5 and 4 weeks after issuing the reminder letters, respectively.

Compliance

Taxpayers who did not file their third-quarter AS by the deadline, either their original AS or a replacement AS (e.g., when the original AS was

reported lost) were defined as *noncompliant*. In contrast, taxpayers who filed their (original or replacement) AS by the deadline, or whose AS was discontinued (e.g., taxpayers informed the Tax Office that their business had ceased), were defined as *compliant*.

Control Data

Other variables were controlled statistically to increase the power of the analyses. In particular, taxpayers' filing history might account for a considerable amount of the variance in filing compliance. Taxpayers' history of compliance in filing AS referred to the two preceding quarters. *First-quarter compliance* and *second-quarter compliance* were categorical variables with four categories: (1) the client had *no obligation* to file for that period (3.9% and 0.5%, respectively); (2) the client filed *on time*, that is on or before the due date (54.3% and 52.2%); (3) the client filed *within 7 days* after the due date (6.9% and 8.0%); or (4) the client filed *late*, that is 8 or more days after the due date (34.8% and 39.3%).

Most clients with AS obligations also had income tax obligations, for which they could have an extra "role" in the tax office's records. While taxpayers were not registered with a professional tax preparer for the purpose of their AS obligations, most participants (88.5%) were registered with a tax preparer for income tax purposes. As it is possible that advice they received in that function impacted on their compliance with their AS obligations, this variable was also controlled for in the present analyses. Other variables included as controls were participants' gender (77.6% male) and age ($M = 41$ years).

Results

A logistic regression analysis was conducted to test for the letters' differential effects on compliance, that is, filing of the third-quarter tax declaration. In a first block of the analysis the following control variables were included: compliance history in terms of first- and second-quarter compliance (no obligation, on time, within 7 days, late), registration with a tax preparer for income tax purposes (yes, no), gender (male, female), age (in years) and batch (first, second). A second block added the experimental factor (informational, interpersonal, control). The findings are presented in Table II.

First, relative to the constant-only model, the inclusion of background variables significantly improved the goodness of fit, $\chi^2(10) = 120.37$, $p < 0.001$, Nagelkerke $R^2 = 0.076$. Wald tests for individual variables

Table II. Logistic Regression for Filing Compliance (Full Model)

Predictors	<i>B</i>	SE	Wald	df	<i>p</i>	Odds ratio
First-quarter compliance			29.69	3	0.000	
No obligation	0.16	0.25	0.40	1	0.530	1.17
On time	0.52	0.11	24.70	1	0.000	1.69
Within 7 days	0.67	0.19	12.54	1	0.000	1.95
Second-quarter compliance			20.14	3	0.000	
No obligation	-1.25	0.82	2.30	1	0.129	0.29
On time	0.42	0.10	16.50	1	0.000	1.52
Within 7 days	0.22	0.18	1.48	1	0.224	1.24
Batch (first)	0.35	0.09	14.56	1	0.000	1.42
Tax preparer (yes)	0.32	0.14	5.03	1	0.025	1.38
Gender (male)	-0.30	0.11	7.26	1	0.007	0.74
Age	0.02	0.00	17.96	1	0.000	1.02
Letter			4.88	2	0.087	
Informational	0.20	0.11	3.19	1	0.074	1.22
Interpersonal	0.23	0.11	4.10	1	0.043	1.25
Constant	-1.66	0.26	41.71	1	0.000	0.19

indicated that, in fact, all background variables had significant effects. Participants who had had an AS tax obligation for the first quarter and had filed on time or within seven days were more likely to comply with the reminder letter than those who had filed the first-quarter AS late. No difference emerged between participants who had had no AS tax obligation for the first quarter and those who had filed late. Similar effects emerged for filing history in terms of second-quarter tax declarations, except that here the difference between participants who had filed within seven days and those who had filed late was not significant. Further, taxpayers who received the reminder letter with the first batch showed a greater compliance rate than participants who received the letter with the second batch. Taxpayers who were registered with a tax agent for income purposes complied with the reminder letter more often than those who were not. Female participants complied more regularly than males, and older taxpayers complied more often than younger people.

The experimental factor letter, entered in a second block, improved the overall model only marginally, $v^2(2) = 4.89$, $p = 0.087$, Nagelkerke $\delta R^2 = 0.003$. Compared to the control letter, compliance was marginally greater for the informational letter, Wald (1) = 3.19, $p = 0.074$, and significantly greater for the interpersonal letter, Wald (1) = 4.10, $p = 0.043$. The compliance rates for the two experimental letters did not differ significantly from each other, Wald (1) = 0.02, *ns*. Given that there was no difference between the two fairness letters and no difference was expected, a more focused test combined the two and tested them jointly against the control letter. The experimental letters yielded a significantly greater level of compliance than the control letter, Wald (1) = 4.82, $p = 0.028$.

The odds ratios for both experimental letters indicated that the likelihood of compliance following the informational letter was 1.22 times greater, and with the interpersonal letter 1.25 times greater, than for the control letter. Put differently, the compliance rate for the control letter was about 45.8%, but for the interpersonal letter it was about 51.4%, and thus 5.6 percentage points higher.

Discussion

In this study, reminder letters that implemented principles of fairness yielded greater levels of compliance. Their joint effect on compliance, relative to a control letter, was statistically reliable. The separate effect of interpersonal fairness was statistically significant, while the effect of informational fairness was marginally significant. The results indicate that adherence to fairness principles can be beneficial for seeking cooperation and voluntary compliance (Tyler, 2001).

The background variables in this study had generally plausible effects on filing compliance. The results for the demographic variables of gender and age are in line with much previous research where females and older respondents usually showed greater levels of tax compliance than males and younger people (e.g., Wenzel, 2002; see Jackson and Milliron, 1986; Roth *et al.*, 1989). The positive effects of professional tax preparers may be surprising from the view that they, as taxpayer advocates, would push for more aggressive tax positions (e.g., Erard, 1993). Alternatively, it has been argued that tax preparers have a dual role for tax compliance, searching for the best position for their clients when tax law is ambiguous but helping taxpayers to comply where the law is unambiguous (Klepper *et al.*, 1991). Because filing compliance is a rather clear-cut issue, tax preparers might have had positive effects in the present study. However, the correlational finding also allows for alternative explanations in terms of unmeasured third variables.

The results for compliance history indicate that the compliance behavior in this study was relatively stable (Wenzel, 2005). It is not clear whether that stability is due to a relatively fixed moral or immoral character, some relatively enduring attitudes about the tax system, general or tax-specific (in)competence in organizing oneself and one's business, or continuing business circumstances that make it more or less difficult to comply. It is clear, however, that in this study compliance history was the single most important factor in predicting compliance. While such relative stability in compliance behavior makes it harder for any intervention to have a great impact, it needs to be said that the background variables still left a large amount of variance to be explained.

From this perspective, the experimental reminder letters had a rather modest impact on compliance levels in terms of variance explained. However, those small effects would still be of considerable practical significance where they are multiplied by substantial numbers. This would be true for contexts such as tax administration where letter communications are used for large numbers of clients. The interpersonal letter, for example, increased the odds of taxpayers complying with the reminder notice by about 25%, thus increasing the rate of compliance relative to the control letter by about 5%. This means, potentially out of thousands of cases, 5% fewer cases would have to be followed up with further actions such as second reminder notices, phone calls, or even more expensive actions.

CONCLUSIONS

The findings show that even short and business-like communications such as reminder letters from a tax authority can implement principles of interactional or procedural fairness. Letters that provided explanations for the actions taken (informational justice) or showed respect and sensitivity for those affected by them (interpersonal justice) were considered to be significantly fairer than the standard letter. Moreover, in a real-life situation reminder letters that followed these fairness principles yielded significantly more compliant responses. Using an experimental design in a real-life setting, guaranteeing a maximum level of internal and external validity, the demonstration of fairness effects on actual behavior is the major strength of this research. It provides further evidence for the view that interactional or procedural justice matters to people and affects the way they perceive their relationship to authorities.

It is a limitation of this research that it did not contain data on mediating processes. We can therefore not be sure, on the basis of the present study, how exactly the fairness letters elicited greater levels of compliance. For instance, it is possible that the letters operated on the basis of some simple influence principles such as reciprocity or liking (Cialdini, 1997). Taxpayers might have felt obliged to repay the tax office for its kindness, openness, or ethicality; or they simply felt warmer towards the tax authority. Alternatively, while taxpayers might have regarded the brisk, enforcing tone of the standard letter as a curtailment of their freedom, motivating them to withhold their compliance, the fairness letters might have alleviated this psychological reactance (Brehm and Brehm, 1981). However, there is an impressive body of research that supports the interpretation preferred here. It is that people who feel treated fairly by authorities tend to attribute greater legitimacy and trustworthiness to them; and perceiving authorities as legitimate and trustworthy, they are more willing to comply voluntarily (Tyler

and Lind, 1992; Tyler and Huo, 2002). Or, as Tyler and Blader (2000, 2003) recently extended the argument, people who feel treated fairly by representatives of their group (e.g., Australians) feel respect and pride as members of their group, identify more strongly with their group, and engage in more cooperative group behavior (e.g., taxpaying). In any case, the findings are consistent with the view that deterrence alone is too limited a model for effective regulation and can only be one element in a more comprehensive and responsive strategy—a strategy that might primarily aim at maintaining a cooperative relationship between the parties (e.g., Braithwaite, 2002; Tyler, 2001).

The present research has some other limitations. The fact that the field design of Study 2 could not include measures of how people perceived the different letters means that the interpretation had to rely here on the findings from Study 1. Moreover, Study 1 involved a student sample for whom the tax scenario was rather hypothetical. However, there is no obvious reason why the students should have perceived the letters differently compared to taxpayers in the main study. Another limitation is the failure to manipulate informational and interpersonal fairness independently from each other. The measures used in Study 1 showed that either treatment letter differed from the control letter in both fairness aspects. Hence, it is possible that only one of the fairness principles was responsible for the compliance effects in the field study, or that both principles had additive or interactive effects (but see Greenberg, 1993, 1994).

As to the practical and ethical implications of the findings, it could be objected that these invite regulators to manipulate their clientele in an even more devious way than through open deterrence. While researchers have argued that demonstrations of fairness would fail to have positive effects when people question their sincerity and underlying motives (e.g., Greenberg, 2001), cynics could maintain that regulators would only have to be even more sophisticated in their manipulative use of interactional or procedural fairness. However, this concern would be based on the same negative premise as the deterrence approach, namely that people are generally unwilling to comply and cooperate with regulations that limit their individual outcomes. In many contexts, however, people may actually be well-disposed towards the wider collective goals and values of certain regulations (e.g., a functioning tax system that funds valuable public goods). It might be the *lack* of fairness in their treatment that prompts them to resist the authority and disengage from their group, out of protest (see Wenzel, 2000). In adopting principles of fairness, authorities might not manipulate people into doing something they actually do not want to do, but rather free them from feelings of resentment and allow them to do what they otherwise believe in. At least, both cynical and positive perspectives should be given careful consideration.

Common wisdom (and much academic writing) has it that taxation is an area largely dominated by economic self-interest. The findings of the present research, therefore, seem all the more forceful. A regulating agency that builds its communications on principles of interactional or procedural justice not only increases a sense of fairness among its clientele, but might also encourage more compliant behavior.

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APPENDIX: MAIN ELEMENTS OF THE REMINDER LETTERS USED IN THE FIELD STUDY

Control Letter

Your Activity Statement is Now Overdue

Our records show that you have not lodged your completed activity statement for the period: XXXX to XXXX

By now you should have completed and returned your activity statement by the due date (shown on the top right-hand corner of your activity statement) and paid any amount owing.

There are penalties for not lodging on time, and you may be liable for interest charges if you have payments outstanding. The *Activity Statement Instructions* booklet explains the different ways to pay any amounts due.

[It followed information about contact details, including the dot-points in the letters below.]

Informational Letter

[Same as before and then continued:]

Why are we sending you this letter?

It is our responsibility to collect tax payable under the law. Taxes fund community services and support for all Australians. We have to ensure that everyone meets their obligations under the tax laws so that those who

correctly lodge their returns and pay their taxes are not disadvantaged by those who do not.

Why can't we be more specific in this letter?

We do not know why you have not lodged your activity statement so we cannot give you more specific information in this letter. However if you:

- need to make alternative arrangements to pay any amount owing,
- lodged and paid more than five working days ago, or
- think you do not need to complete the activity statement and do not owe any amount, please call us on XXXXXXXXX, and have your tax file number and activity statement handy.

Why do we impose penalties?

Without taxes, our society could not afford essential services such as roads, health and education. While most people readily comply with the tax laws, a penalty system needs to be in place for cases where a willingness to comply is missing.

[Further information about contact details followed.]

Interpersonal Letter

[Same as for control letter before and then continued:]

We believe in your honesty

We assume you try to deal honestly with your tax affairs, and understand that you may have good reasons for not lodging your activity statement. However, if you:

- need to make alternative arrangements to pay any amount owing,
- lodged and paid more than five working days ago, or
- think you do not need to complete the activity statement and do not owe any amount, please call us on XXXXXXXXX, and have your tax file number and activity statement handy.

We acknowledge that times can be difficult

We realise that it is not always easy to fulfil your tax obligations, and there may be some reason why this is a difficult time for you. We also understand that you may have simply forgotten to complete or lodge your activity statement. However, we need to ensure that everyone meets their obligations under the tax laws, and would like to remind you that you lodge your activity statement as soon as possible.

We do not want to make things more difficult for you

There are penalties for not lodging on time, and you may be liable for interest charges if you have payments outstanding. We are sorry if penalties add to any difficulties you may already be experiencing, but we trust you will understand the need for such a penalty system.

[Further information about contact details followed.]

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