ALTERING NORM PERCEPTIONS TO INCREASE TAX COMPLIANCE

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THE CENTRE FOR TAX SYSTEM INTEGRITY WORKING PAPERS

The Centre for Tax System Integrity (CTSI) is a specialised research unit set up as a partnership between the Australian National University (ANU) and the Australian Taxation Office (Tax Office) to extend our understanding of how and why cooperation and contestation occur within the tax system.

This series of working papers is designed to bring the research of the Centre for Tax System Integrity to as wide an audience as possible and to promote discussion among researchers, academics and practitioners both nationally and internationally on taxation compliance.

The working papers are selected with three criteria in mind: (1) to share knowledge, experience and preliminary findings from research projects; (2) to provide an outlet for policy focused research and discussion papers; and (3) to give ready access to previews of papers destined for publication in academic journals, edited collections, or research monographs.

Abstract

This study tested the effects of an intervention designed to increase compliance and honesty in work-related expenses (WRE) and other deduction claims. The research follows on from earlier work documented in Centre for Tax System Integrity (CTSI) Working Papers No. 7 and 8. Overall, the research adds further empirical support to the usefulness of such a norm-based approach to increase tax compliance, identifies possible limiting and facilitating conditions and encourages further attempts to apply such a strategy more broadly.

The intervention was based on the assumption that taxpayers overestimate the level of endorsement of tax cheating among Australian taxpayers. People tend to think they themselves have more ethical views about taxpaying than they think most others have. Given the possibility that taxpayers are influenced by what they consider to be the social norm, such an overestimation of tax evasion and its endorsement by fellow Australians could lead to a decline in tax compliance. Therefore, the intervention tested in this study aimed to correct people's misperception of the social norm and thus increase compliance in tax deduction claims.

In this study, 2250 individual taxpayers were randomly assigned to three different experimental conditions. In the *norm feedback* condition, taxpayers received a letter that informed them about recent survey findings, indicating that people think most others accept tax cheating more than they actually do. Then taxpayers were asked to participate in a survey asking further questions on this finding. The two other conditions served as control groups. In the *survey only* condition, taxpayers did not receive any information about the previous research findings and were only asked to participate in the survey. In the *no survey* condition, taxpayers were not contacted at all; no survey data was available. Actual *tax return data* were compared between all three groups to investigate the effects of the intervention on levels of deduction claims.

The survey data showed that the norm feedback had some effects in altering people's perceptions of the social norm, but these depended on participants' level of income and their degree of identification as Australians. The tax return data showed that WRE claims were significantly lower in the norm feedback condition than in the two control conditions, which in turn did not differ from each other. This effect was not further moderated by income level. In contrast, other deduction claims (gifts/donations and dividends/interest) showed no differences between all three conditions.

Altering Norm Perceptions to Increase Tax Compliance

Michael Wenzel

Introduction

Many studies on taxpaying behaviour have suggested that social norms significantly affect tax evasion decisions. In his classic comparative studies, Schmölders (1970) argued that various European countries differed in terms of their taxpaying mentality, being in part a consequence of their different fiscal enforcement regimes. He strongly argued for the impact of social norms on compliance and contended that these norms were influenced by tax policies. In a similar vein, Alm, Sanchez and DeJuan (1995) conducted laboratory experiments in the US and Spain that simulated taxpaying situations. They found overall a lower level of compliance for Spanish participants, which the authors took as evidence for the impact of social norms. While these would be instances of nation-wide norms, other authors argue that different professions also have their distinct taxpaying norms. For instance, Sigala (1999; Sigala, Burgoyne & Webley, 1999) found that the acceptance of cash-in-hand payments was greater in some professions, while in others, there appeared to be pressures against cash-in-hand payments, as reflected in the conviction that these could negatively affect one's professional reputation. Moreover, in addition to national and professional groups, there is also evidence that peer groups, friends and family have normative influence on taxpayers. For instance, in a study by Wallschutzky (1984), convicted evaders estimated the number of evaders among people known to them to be higher than a control group estimated this number to be. This finding seems to suggest that people evade tax because they think tax evasion is common, accepted and normative among their peer group (see also Bosco & Mittone, 1997; DeJuan, Lasheros & Mayo, 1994; Kaplan & Reckers, 1985; Webley, Cole & Eidjar, 2000).

However, the evidence so far is only of correlational nature and thus susceptible to alternative interpretations. Take Wallschutzky's study as an example. We do not know whether tax evaders indeed evaded tax because they conformed with what they saw as prevailing norms; or, whether they perceived norms as rather accepting of evasion, because they themselves tended to do so and therefore they evaded tax. In fact, there are good

arguments for the view that perceived social norms not only influence behaviour but are also themselves influenced by people's own beliefs and behaviours.

First, the so-called *false consensus effect* is a robust social-psychological phenomenon (Ross, Green & House, 1977). People who have chosen a behavioural option x (rather than y) tend to think that more others would also choose x, compared to people who have chosen behavioural option y. Although there are a number of possible explanations for this phenomenon (Krueger, 1998; Marks & Miller, 1987), one possibility is that people tend to believe in the consensus of others because it validates their choice and supports their self-esteem. So, it could be that people who choose to evade tax wrongly believe that many other people do the same, perhaps because they would be less deviant and could feel better about themselves.

Second, a likewise robust social-psychological phenomenon is the so-called *false uniqueness effect* (Snyder & Fromkin, 1980). This effect refers to the tendency to think of oneself as positively distinct from other people; again, perhaps because this provides oneself with greater gains in self-esteem. Thus, it could be that people who think of themselves as very honest taxpayers and believe that one should pay one's taxes truthfully wrongly believe that many other people cheat on their taxes. They might hold this belief because it makes them positively distinct from others and contributes to their positive self-esteem.

Third, a related phenomenon is the so-called *pluralistic ignorance* effect (Allport, 1924; O'Gorman & Garry, 1976; Miller & McFarland, 1987). This effect is a combination of perceptions of similarity and difference; namely the perceived similarity of one's own and others' behaviour is interpreted differently. People fail to notice that the same situational pressures that brought about their own behaviour could also account for others' behaviour; instead, others' behaviour is often attributed internally as being consistent with their beliefs (see Jones & Nisbett, 1971). So, in conversations with friends and colleagues, one might hear others boast about their tax tricks and one might join in and boast about one's recent defiance against the tax collector. However, while one tends to think that others are boasting about their acts because they think evading tax is the right thing to do, one might

think that ideally everybody should honestly pay their taxes. However, one does not say so because others surely would not agree. That means, one acknowledges the social pressure to voice defiance against the Tax Office, but one fails to note that the opinion others voice could be equally influenced by social pressure.

The pluralistic ignorance effect is particularly precarious because, here, behaviour and its misattribution reinforce themselves (Bicchieri & Fukui, 1999; Miller & McFarland, 1987). For instance, one may observe others boasting about their tax evasion and attribute this to their belief that tax evasion is right. This makes me conform to the norm and boast about my own act of tax cheating, despite me actually thinking that tax evasion is wrong. However, my own boasting is what other people observe and probably misattribute to my underlying beliefs, and so on.

Hence, there are several arguments for the view that taxpayers could systematically misperceive other people's taxpaying beliefs and behaviours. Taxpayers may want to excuse or 'normalise' their own tax cheating, by arguing that many others are doing it (and much more seriously so). They may want to accentuate positively their relative tax honesty, by arguing that many others are tax cheats. Or, they may simply misinterpret others' acceptance of tax evasion as reflecting true convictions, rather than also being the outcome of social pressure. In any case, taxpayers might tend to think they themselves hold more ethical beliefs and are more honest, when it comes to paying tax, than most other people. What most other people believe one should do constitutes an *injunctive* social norm, whereas what most other people actually do constitutes a *descriptive* social norm (Cialdini, Kallgren & Reno, 1991). In either case, most people would paradoxically think that they are more ethical than most other people. Because social norms, as stated at the beginning of the paper, are likely to affect people's taxpaying behaviour, this norm misperception could lead to greater tax evasion. Conversely, a promising avenue to reduce tax evasion could be the reduction or correction of the norm misperception (for an application to another issue, that is the reduction of alcohol use among students, see Schroeder & Prentice, 1998).

Previously, I tested this approach in a questionnaire scenario study with a student sample (Wenzel, 2001a) and in a real-life study with actual taxpayers and actual tax return data (Wenzel, 2001b). The student study yielded support for the approach, but the real-life application was certainly the more interesting study. The study was conducted in cooperation with the Australian Taxation Office (Tax Office). A random sample of 2000 taxpayers was assigned to four different experimental conditions: injunctive norm feedback, descriptive norm feedback, survey only/no feedback, and no survey/no feedback. In the first three conditions taxpayers were asked to participate in a survey which asked them about their own and others' taxpaying beliefs and behaviours, specifically concerning work-related expenses and other deduction claims. In the first two conditions, participants were given feedback about aspects of the findings, namely the result that respondents thought they themselves held more honest taxpaying attitudes than most other people (injunctive norm feedback); or that they reported being more honest with regard to their taxes than they thought most other people were (descriptive norm). The survey only/no feedback condition served as control group, controlling for the effects of being contacted by the Tax Office and being sent a survey. The no survey/no feedback was another, absolute control group.

The survey indeed revealed the expected divergence between people's own ethical beliefs and (self-reported) taxpaying behaviours and the perceived beliefs and behaviours of others. People thought they held more ethical beliefs and more honestly paid their tax than they thought others did. Controlling for a number of demographic variables, income and previous deduction claims, the feedback intervention did not have any significant impact on work-related expenses claims. However, other deduction claims (gifts and donations, as well as interest and dividends) showed a significant effect. Taxpayers in the injunctive norm feedback condition claimed significantly less deductions than in the no survey/no feedback condition, and marginally significantly less deductions than in the survey only condition. Deduction claims in the descriptive norm feedback condition were in between, not differing significantly from any of the other conditions.

Study

The present research is a replication and extension of this earlier work and addressed a number of questions. First, of course, the findings of the previous study were not clear-cut and it was of interest whether they could be replicated or clarified. The present study, however, focused only on the injunctive norm feedback manipulation, which had yielded the more promising results in the previous study. Second, the new study improved the sampling procedure and also stratified the sample according to income, in order to test for income level as a moderator of intervention effects. Third, a more economical approach was used in that the Tax Office contacted taxpayers only once, namely to give them information about the previous survey results. While more economical, this means that taxpayers only received feedback about an earlier survey in which they had not participated themselves, and it was interesting to know whether such less self-involving information still had effects. Fourth, the previous study did not contain any perceptual measures that would indicate whether the feedback intervention actually changed people's norm perceptions. That is, there was no information about whether the manipulation worked as intended. In the present study, participants were given details about the earlier survey findings and then asked to return a survey where they should indicate their own perceptions and opinions on that issue. This also allowed for the measurement of other variables that could shed further light on the processes involved.

Specifically, it was predicted that social identification with Australians, that is, the group of people to whom the taxpaying beliefs and social norms were attributed, would have a double effect. First, if people identified as Australians they might be more concerned about a positive image and a positive social identity of Australians (Tajfel & Turner, 1986). As a consequence, they should be more receptive for information that reflects positively on Australians and characterises them as more ethical and cooperative. It was thus predicted that respondents who identified strongly as Australians would be more strongly influenced by the feedback manipulation than those respondents whose identification as Australians was weaker. Second, consistent with theories of social influence (Turner, 1991), respondents who identified strongly as Australians would align their own ethical views to a greater extent with the perceived social norm of other Australians, compared to

respondents whose identification as Australians was weaker (Wenzel, in press). Disregarding identification, however, it was predicted that the norm feedback would overall increase the perception that social norms were favourable to tax honesty and, as a consequence, lead to a decrease in deduction claims compared to the two control groups.

Method

Participants and Design

A sample of 2250 taxpayers was drawn from the population of taxpayers who fulfilled the following criteria. They were individual clients, not registered with a tax agent (that is, self-preparers), who had lodged their 2000 tax return with a salary/wage income greater than \$0, had claimed work-related expenses or other deductions (gifts/donations or interest/dividends) on their previous tax return, had no audit activity in 1999 or 2000 (so that they would not feel 'targeted' or harassed), had not yet lodged their 2001 tax return and had lodged their previous tax return in the 18th lodgment week or earlier (so that they were likely to lodge before the deadline for data collection).

Moreover, the sample was stratified according to wage/salary income reported in the previous year. Namely, 750 participants had income of less than \$25 000; another 750 participants had income greater than or equal to \$25 000 and less than \$50 000; a third sample of 750 participants had income greater than or equal to \$50 000. Each sub-sample was randomly assigned to one of three conditions: (injunctive) norm feedback, survey only/no feedback, no survey/no feedback. In the *norm feedback* condition, participants received a letter that provided information about a survey result showing that people tend to underestimate other people's ethical beliefs about paying taxes and, specifically, claiming truthful deductions. Attached to this information was a survey with questions related to this finding. In the *survey only* condition, participants received only the survey, without any information about previous survey results. In the *no survey* condition, participants were not contacted at all and received neither any information nor were asked to participate in a survey.

The total sample was aged between 16 and 85, with a mean age of 38; 53.8% were male and 46.2% were female.

Feedback

In the middle of the lodgment period for self-preparers, taxpayers were sent a letter under a combined letterhead of the Tax Office and the Research Centre. The letter informed participants about some previous research conducted by the Research Centre and asked them to participate in a survey to explore the issue further. The body of the letter contained a brief summary of the research findings:

The CTSI recently asked a group of taxpayers some questions about the role of the tax system in our society. One of the most interesting findings was that people underestimate other people's honesty and morality in tax matters. For example:

- when asked whether it was acceptable to overstate tax deductions in their tax return, most people said that it was not acceptable, but *thought* most other people would find it more acceptable;
- when asked whether they felt obliged to be truthful in claiming work-related expenses, most people said they did, but *thought* most other people would not.

On another page, this finding was explained further and illustrated by a bar graph. The section concluded with the statement:

Overall, these results indicate that we tend to think most people accept tax cheating and exaggerations in tax deductions. However, the truth is that most people think we should be honest with our tax statements and claim only those deductions that are allowable.

Survey

The two-page survey began with some more generic questions; among them measures of national *identification*: 'I feel a sense of pride in being a member of the Australian community'; 'Being a member of the Australian community is important to me'; and 'I

identify with Australia'(1 = strongly disagree; 7 = strongly agree). Scale scores were computed by averaging responses across items ($\alpha = 0.90$).

A second set of questions asked respondents about their perceptions of the (injunctive) *social norm* of tax honesty: 'Most people think it is acceptable to overstate deductions in one's tax return' (recoded); 'Most people think it is OK to reduce one's high load of taxes by exaggerating deductions in one's tax return' (recoded); 'Most people think there is a moral obligation to be truthful in one's claims for work-related expenses in a tax return' (1 = strongly disagree, 7 = strongly agree). Again, scale scores were computed by averaging responses across items ($\alpha = 0.78$).

In a third set of questions, respondents were asked about their *personal ethics* when it comes to paying tax: 'Under certain circumstances, it is OK not to be entirely correct with one's tax deductions' (recoded); 'Some degree of exaggeration in deduction claims can be tolerated' (recoded); 'I do not condone people cheating on their deduction claims' ($1 = strongly \ disagree$, $7 = strongly \ agree$). Once again, scale scores were computed by averaging responses across items ($\alpha = 0.58$).

Finally, participants were asked to indicate their *age* and *sex*. Also, it should be pointed out that the survey was marked with regard to the *income level* from which the respondent was sampled.

Tax Data

Shortly after the deadline for lodgment of tax returns from self-preparers, the Tax Office accessed taxpayer records and provided the researchers with de-identified anonymous data from the participants' current and previous tax returns. The main dependent variable was the amount of deductions claimed. Because the survey and the feedback letters explicitly mentioned work-related expenses as a category of deductions, deductions claimed for *work-related expenses* (WRE) were added up across the five relevant labels (that is, work-related car expenses, work-related travel expenses, work-related expenses for uniforms and so on). As a measure for *other deductions*, claims for the other two major labels were

added up, namely interest/dividend deductions and gifts or donations. Furthermore, the *previous claims* of WRE and Other Deductions were used as covariates, as were *current income* in terms of wage/salary income reported in the current tax return, *age*, *sex* and *client type* (self-preparer vs. tax agent case). The latter is relevant because, even though participants were sampled as self-preparers based on previous records, some of them might have decided to register with a tax agent or accountant for their current tax dealings.

Results

Survey

Out of the 1500 cases in the two survey conditions (norm feedback and survey only), 362 returned their questionnaire before the end of lodgment time for self-preparers, the deadline set for data extraction. Taking into account 44 unclaimed letters that were returned to sender, this corresponds to a response rate of 25%. Respondents who returned their survey were on average 42 years old. Testing the proportions of respondents aged below, or equal to, the overall median age of 37 versus the proportions of those older than the median, survey respondents were significantly older than non-respondents, $\chi^2(1) = 21.67$, p < 0.001. Of those survey respondents who indicated their sex (9 respondents did not) 51.3% were male and 48.7% were female; these gender proportions did not differ significantly from non-respondents, $\chi^2(1) = 1.06$, *ns*. Moreover, 27% of survey respondents were from the lowest income level and 28% were from the medium income level; however, 45% of respondents, and thus a significantly higher proportion, $\chi^2(2) = 23.36$, p < 0.001, were from the highest income level. Finally, 55% of survey respondents were from the norm feedback condition, while 45% were from the survey only condition, but this difference was not statistically significant, $\chi^2(2) = 3.19$, *ns*.

Effects of norm feedback. To test whether the information about previous survey results significantly changed respondents' perceptions of social taxpaying norms, the perceived *social norm* was subjected to an analysis of variance with the factors *condition* (norm feedback vs. survey only), *income level* (low, medium, high) and *identification* (low, high). For this purpose, the measure of identification was dichotomised by median-split. Respondents with an identification score lower than, or equal to, the median were given a

value of 1; respondents with a score higher than the median were given a value of 2.¹ In an initial analysis, sex and age were also included as covariates, however they did not have any significant effects and were dropped.

The analysis of variance yielded four significant effects. First, the crucial main effect of experimental condition failed to be significant, F(1, 348) = 1.75, ns. Identification had the only significant main effect, F(1, 348) = 4.11, p = 0.043. Strongly identified respondents perceived social norms to reflect greater tax honesty than the less strongly identified did (Ms = 4.17 vs. 3.88). Second, there were two significant two-way interaction effects. As predicted, identification moderated the effects of condition, F(1, 348) = 10.84, p = 0.001. For respondents strongly identified as Australians, the norm feedback increased the perception that most others held strong tax ethics, compared to the survey only control group, t(157) = 3.11, p = 0.002 (Ms = 4.50 vs. 3.84). However, there was no significant difference for the less strongly identified, t(199) = -0.79, ns (Ms = 3.74 vs. 4.02). Further, income level also moderated the effects of condition, F(2, 348) = 4.58, p = 0.011. The norm feedback had the expected effect on perceived social norms for high-income respondents, t(161) = 2.39, p = 0.018 (feedback: M = 4.28; control: M = 3.79). This effect was not significant for medium-income respondents, t(98) = 1.65, ns (Ms = 4.20 vs. 3.75), but one needs to consider the smaller sample size and lower statistical power for this subsample. More important, the effect was significantly reversed for low-income respondents, t(95) = -2.04, p = 0.044 (Ms = 3.70 vs. 4.26). Hence, the norm feedback failed to have an overall main effect, because the effects for high and medium-income respondents were cancelled out by an unexpected reverse effect for low-income respondents.

Finally, there was a significant three-way interaction effect of condition, income level and identification, F(2, 348) = 5.79, p = 0.032. To clarify the meaning of this interaction, analyses of variance with condition and identification were run separately for the three

¹ The distribution of the identification variable was highly skewed, with most respondents having the highest possible score of 7 and the median being 6.67. The median-split procedure therefore hardly distinguished low and high levels of identification in an absolute sense. Alternative procedures such as splitting at the midpoint of the scale would have led to too small sample sizes for low identifiers. While the median-split is suboptimal, it nonetheless defines groups that differ significantly in their levels of identification (Ms = 5.67 vs 7.00, p < 0.001). Furthermore, the findings were largely the same when a regression model was tested that

income levels (see also Figure 1). For the low income level, the norm feedback effect was significantly moderated by level of identification, F(1, 93) = 13.34, p < 0.001; the feedback had an unexpected reverse effect when identification was relatively weak, t(53) = -4.17, p < 0.001, while the effect was as expected but not significant when identification was strong, t(40) = -1.27, *ns*. For the medium income level, there was the expected feedback main effect, but only marginally significant, F(1, 96) = 3.09, p = 0.082, whereas this effect was significant for the high income level, F(1, 159) = 6.70, p = 0.011.

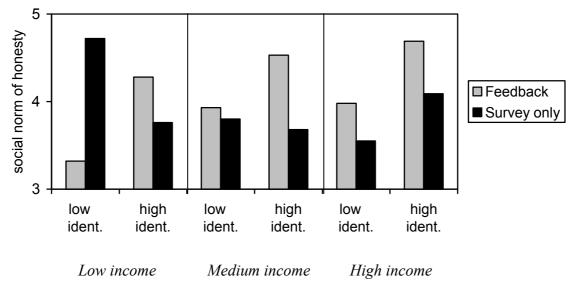


Figure 1: Perceived social norm of tax honesty (1 = weak; 7 = strong) as a function of experimental condition, income level and identification

Social norms and personal ethics. I have argued that the changes in perceived social norms, elicited by the norm feedback, should affect people's own taxpaying behaviour. Because the survey was completely anonymous and thus survey responses could not be linked with tax return data, this process could not be tested directly. However, the survey also asked respondents about their personal taxpaying ethics, and this can be considered an indicator or proxy of how they would behave. It was predicted that perceived social norms would be more strongly related to personal ethics for people who identified strongly with Australians, that is the group to whom the social norms were attributed. To test this

included the original identification measure as a continuous variable and all its interactions with the experimental factors.

prediction, personal ethics were regressed on social norms, identification and, in a second step, the interaction term of both variables (the variables were standardised before building the product term; Aiken & West, 1991).

The addition of the interaction term significantly increased the variance explained, R^2 change = 0.016, F(1, 353) = 5.97, p = 0.015, and we therefore need to focus on the second step of the model, $R^2 = 0.079$, F(3, 353) = 10.03, p < 0.001. Both variables had 'average' effects (Aiken & West, 1991) across levels of the respective other variable. Levels of identification were significantly related to personal ethics, $\beta = 0.15$, p = 0.004; the more strongly respondents identified with their nation, the more ethical were their taxpaying attitudes. Likewise, perceived social norms were significantly related to personal ethics, $\beta = 0.19$, p < 0.001; the more ethical the beliefs respondents thought most other people held, the more ethical and honest were their own attitudes. The significant two-way interaction, however, moderated these effects. Simple slope analysis showed that for low levels of identification (-1 standard deviation), there was no significant relationship between social norms and personal ethics, $\beta = 0.07$, ns. In contrast, for high levels of identification (+1 standard deviation), perceived social norms were significantly related to personal taxpaying ethics, $\beta = 0.31$, p < 0.001. The more honest and ethical the social norm respondents attributed to other people, the more honest and ethical were their own taxpaying attitudes.

Tax Return Data

Out of the total of 2250 cases sampled, 1883 (83.7%) lodged their return by the lodgment deadline for self-preparers, shortly after which the tax return data were accessed. The proportion of lodgers did not differ between experimental conditions (between 623 and 631 cases). However, the proportion of lodgers differed between the three income levels, with a lower number of lodgers among low-income participants (78.4%) than among medium or high-income participants (85.6% and 87.1%, respectively). A trivial explanation could be that previous low-income taxpayers are more likely to earn in another year no income at all and are not obliged (or do not feel obliged) to lodge a tax return.

Because parametrical statistical approaches were used to test for effects of the norm feedback intervention, certain precautions as to the quality of the data had to be taken. First, the monetary variables, current income and deduction claims, were severely skewed. To improve distributions, square root transformations were applied to the income variables, while logarithmic transformations proved superior for deduction claims. Second, monetary variables are often characterised by extreme cases and outliers that could have undue effects on statistical results. Therefore, all those cases were excluded where either the current income or the relevant deduction variables had values greater than four standard deviations; only six cases were affected. Third, multiple regression analyses were used as initial test for effects of the experimental conditions. Outliers that did not fit the regression models and deviated from it by more than four standard deviations were also excluded from further analyses. For analyses of WRE claims no cases were affected, while for analyses of other deduction claims three more cases were excluded on this basis.

For the regression analyses, used in a first step, the factor *condition* was transformed into two dummy variables, one representing the norm feedback condition in contrast to the no survey control condition; the other representing the survey only condition in contrast to the no survey control condition. Further, the analyses included as control variables sex, age, client type, current year income and the relevant deduction claims (WRE or other) of the previous year.

Work-related expenses. The regression results for WRE claims are displayed in the two left-hand columns of Table 1. Beginning with the control variables, previous WRE claims were significantly positively related to current claims. Also, participants who had greater wage/salary income made greater WRE claims. Respondents registered with tax agents made higher claims than self-preparers did. Age was also significantly related to WRE claims, with older people claiming less WRE, while sex had no significant effect. Controlling for all these variables, the norm feedback intervention significantly reduced WRE claims relative to the absolute control group. In contrast, the survey only, which controlled for the fact that participants were contacted by the Tax Office, did not significantly reduce WRE claims.

	Work-Related Expenses		Other Deductions	
	β	t	β	t
Previous Claims	0.51***	27.02	0.69***	41.42
Current Income	0.21***	9.86	0.10***	5.50
Client Type	0.13***	7.09	-0.05**	-3.09
Age	-0.05**	-2.64	0.06**	3.29
Sex	0.02	1.12	0.06***	3.33
Feedback vs. No survey	-0.05*	-2.16	0.01	0.65
Survey only vs. No survey	-0.02	-0.72	-0.02	-0.87
	F(7, 1869) = 142.66		F(7, 1866) = 331.26	
	$R^2 =$	0.35	$R^2 =$	0.55

Table 1: Regression analyses for claims of WRE and other deductions

Note. Client type is coded as 1 = self-preparer and 2 = registered with a tax agent. Sex is coded as 1 = male versus 2 = female. Feedback vs. No survey is a dummy variable for the norm feedback condition, and Survey only vs. No survey is a dummy variable for the survey only condition, while the no survey condition is the omitted contrasting control group. *** p < 0.001, **p < 0.01, *p < 0.05

To complement this analysis, an analysis of covariance was performed with *condition* and *income level* as factors and sex, age, client type and previous WRE claims as covariates. This analysis allowed for tests of the moderating effects of income level, parallel to the analysis applied to the survey data; and it allowed for tests of specific contrasts between the feedback treatment and the two control conditions together as well as separately. The results are displayed in Table 2. Similar to the regression findings, there were effects of previous claims, income level, client type and age. Income level did not significantly moderate the effect of condition. The overall effect of condition was only marginally significant, because the comparison was less specific than in the regression. For this reason, the specific contrasts are of greater interest (see also Figure 2). These showed that the norm feedback differed significantly from both control conditions together, F(1, 1864) = 4.74, p = 0.030. While the two control conditions (survey only and no survey) did not differ from each other, F(1, 1864) = 0.52, ns, the norm feedback condition differed significantly from the no survey, absolute control condition, F(1, 1864) = 5.06, p = 0.025, but it did not differ significantly from the survey only condition, F(1, 1864) = 2.31, ns.

Source	df	F	р
Previous claims	1	729.52	0.000
Client type	1	46.18	0.000
Age	1	3.88	0.049
Sex	1	0.03	0.856
Income level (A)	2	14.21	0.000
Condition (B)	2	2.64	0.072
A × B	4	0.85	0.492
Error	1864	(0.66)	
Planned Contrasts:			
Feedback vs. (Survey only and No survey)	1	4.74	0.030
Feedback vs. No survey	1	5.06	0.025
Feedback vs. Survey only	1	2.31	0.129
Survey only vs. No survey	1	0.52	0.470

Table 2: Covariance analyses and planned contrasts for WRE claims

Note. The value enclosed in parentheses represents mean square errors.

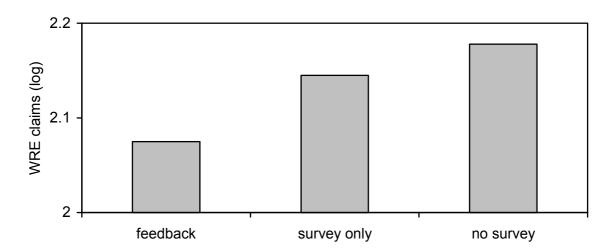


Figure 2: Marginal means of WRE claims (logarithmically transformed) for the three experimental conditions

Other deductions. The same analytic steps were taken for other deduction claims. The regression results are displayed in the two right-hand columns of Table 1. Similar to the analysis for WRE, previous deduction claims were significantly positively related to current claims; also, participants who had greater wage/salary income made greater claims. Different from the analysis for WRE, however, respondents registered with tax agents claimed less other deductions than self-preparers did; age was positively related to deduction claims, with older people claiming more other deductions; and female taxpayers claimed higher other deductions than male taxpayers. Beyond these control variables, the norm feedback intervention did not differ significantly from the no survey control condition; neither did the survey only condition. The analysis of covariance did not add anything to this picture and need not be detailed here. The control variables had similar effects; income level did not moderate the effects of condition; all specific contrasts between feedback and control conditions were not significant.

Discussion

The present research was based on the premise that taxpayers, for various reasons and motivations, tend to misperceive the taxpaying ethics attributed to the majority of fellow citizens. In fact, earlier research (Wenzel, 2001b) indicated that most taxpayers believe that one should honestly pay one's taxes, however most (other) taxpayers are believed to hold such ethical views to a lesser degree. If, as often argued (Schmölders, 1970; Wenzel, in press), social norms affect people's taxpaying behaviour, then the misperception of these norms could lower people's tax honesty and increase evasion. The present study tested the effects of an intervention that tried to correct the norm misperception by informing people about the social norm and the paradox that most people claim to hold better taxpaying ethics than most people. A previous study (Wenzel, 2001b) provided some evidence for the approach, and the present research was designed to clarify the situation further.

First, the study used a questionnaire to measure whether the norm feedback information changed respondents' perception of general taxpaying ethics, that is, others' injunctive norms about being honest in one's tax dealings and, specifically, deduction claims. The results showed that the feedback improved perceptions of the social norm for high and, to

some extent, medium-income respondents. However, the feedback apparently worsened norm perceptions of low-income respondents, specifically when they did not identify highly with Australians. Although a moderation of the feedback effect by level of identification as Australians was predicted, the finding that this held only for low-income respondents was not. Nor was it anticipated that the feedback information would actually backfire for low-income respondents who identified less strongly. We can only speculate on the reasons here. Low-income taxpayers, in particular when they feel alienated from their country and do not identify as Australians, might feel particularly disadvantaged by the tax system and feel that they have to shoulder the lion's share of the tax burden, partly, because the more affluent taxpayer groups can more easily evade and minimise their tax. If this is their worldview, then they are likely to resist information that contradicts their view and apparently legitimises their disadvantaged fate and the tax system as a whole.

In any case, the survey findings suggested that an effect of the intervention on actual taxpaying behaviour was unlikely to occur across all taxpayer groups. Indeed, however, the tax return data showed a significant intervention effect on WRE claims that was not further moderated by level of income. As predicted, the social norm feedback led to lower WRE claims compared to the two control conditions together. The two control conditions did not differ from each other, suggesting that the mere contact by the Tax Office had no effect through implying surveillance or through deterrence. However, the results were somewhat ambiguous on this issue, because the feedback condition differed significantly from the no survey control group, but it failed to differ from the survey only condition. Hence, there might have been some additive effects of mere contact and the content of the feedback information. The fact that the survey findings showed a qualification by income level, whereas the later tax return data did not, could be interpreted as a 'sleeper effect' (see Eagly & Chaiken, 1993). Low income taxpayers' initial resistance could have declined over time, while the information and its persuasive effects persisted (Pratkanis, Greenwald & Leippe, 1988).

While the present study did not allow testing this directly, the survey data suggests that the feedback intervention may be more effective with taxpayers who identify strongly with their nation and fellow citizens. When respondents identified strongly as Australians, there

was a significant relationship between perceived social norms and personal taxpaying ethics. This is consistent with the view that people feel more committed to, and are more strongly influenced by, social norms of groups that they consider themselves to be part of and that they consider important for their social self-definition (Turner, 1987, 1991; Wenzel, in press). An implication for further work would be that the norm feedback intervention could potentially be made more effective when it is combined with measures that increase people's sense of belonging to the Australian community and their Australian identity. Although certainly not easy to achieve, in particular with long-term effects, such measures could, for instance, try to appeal to the positive aspects of the Australian identity and the pride people can draw from it. Not only could an increased identity enhance the effects of the norm feedback, but also, as the survey data showed, identification in itself may be positively related to compliance and cooperation (for example, Brewer & Schneider, 1990).

While the norm feedback proved effective with regard to WRE claims, there were no effects for other deduction claims. Because the feedback information explicitly mentioned WRE claims and thus possibly drew attention on this issue, this finding may not surprise. However, in an earlier study (Wenzel, 2001b) that used a similar norm feedback intervention the findings were indeed reversed; the injunctive norm feedback decreased other deduction claims compared to control groups, but not WRE claims. It is not clear how to reconcile these findings; but, in contrast to earlier speculations (Wenzel, 2001b), the reason does not seem to lie in specific, stable properties of WRE versus other deduction claims. One possibility is that the earlier study provided feedback without any strong rationale (except perhaps as a courtesy and appreciation of people's participation in the earlier study). In contrast, in the present study, the feedback was necessary for people to answer the survey. Without a strong rationale, respondents in the earlier study might have questioned the intentions and suspected that it was an attempt to influence them. They might have resisted that influence on the core issue, WRE claims, but the intervention might have had an indirect effect on a more peripheral issue, that is other deduction claims (see Saltzstein & Sandberg, 1975). In contrast, in the present study, there was a convincing rationale for giving the information and the influence might have been less obvious.

While both the present and the earlier study yielded some empirical support for an approach based on providing information about social norms, a recent study by Blumenthal, Christian and Slemrod (2001) did not find any effects of a similar intervention. Specifically, these authors tested the effects of 'moral appeal' letters from a state tax authority in an experimental design. One of their letters tried to correct the perception of widespread cheating on tax returns by pointing out that "IRS audits show that 'people who file tax returns report correctly and pay voluntarily 93 percent of the income taxes they owe'" (Blumenthal et al., 2001, p. 129). The authors did not find any overall effect of the letter intervention on taxable income reported, and only inconsistent effects for subgroups with various tax return characteristics. Why did the present research, in contrast, yield empirical support for my approach?

There are different possible reasons. First, Blumenthal et al. (2001) used a more generic appeal letter that did not address a certain tax issue; as a consequence, they tested for effects on the overall taxable income reported, which of course is made up of numerous tax labels. In the present studies, the norm feedback message focussed on the specific issue of deductions and its effects on deduction claims were tested. It is possible that a specific norm information is more likely to elicit corresponding behaviour than a rather vague norm. Second, Blumenthal et al. (2001) referred to a descriptive norm, that is, to the fact of what most people do rather than think one should do. In this sense, their finding is consistent with my earlier study (Wenzel, 2001b) that also did not show any significant effects for the descriptive norm feedback. Third, Blumenthal et al. (2001, p. 129) concluded their message with the statement that 'although some taxpayers owe money because of minor errors, a small number of taxpayers who deliberately cheat owe the bulk of unpaid taxes'. This statement, indeed, could have undermined any ethical implications the descriptive norm message was supposed to have. It suggests a severe unfairness in that some people make their money at the expense of others who carry their tax burden, and there is no mention of a social (injunctive) norm that condemns such behaviour. Fourth, and possibly most importantly, in the study by Blumenthal et al. (2001, p. 128) the appeal message was incorporated in a letter from the tax authorities that explicitly admonished taxpayers 'to carefully report all income and to take only the appropriate deductions'. The normative appeal therefore was clearly to be seen as an influence attempt to which tax

authorities resorted as part of their role, with ulterior motives, possibly lack of credibility, and coming from an adversary rather than reference group.

Different from Blumenthal et al.'s (2001, p. 135) conclusion, the present research shows that with the necessary sophistication, references to social norms of tax honesty can be successful in increasing tax compliance. My research suggests that such normative approaches are more likely to be effective when (1) they refer to *injunctive* rather than descriptive social norms, (2) taxpayers *strongly identify* with the reference groups to which the norms are attributed, (3) the norms relate to *specific* taxpaying behaviour (for example, deductions) rather than tax honesty in the abstract, and (4) the norm information is given in a 'disguised' form rather than in a blatant influence attempt. The fourth point means that the approach has to make, as it were, the relevant reference group itself speak through the normative information, rather than the information coming from, and possibly being filtered by, the tax authority. The tax authority is often considered an adversary and outgroup and is as such unlikely to have influence or persuasiveness (Turner, 1991). For example, in the present research, the normative information was given in the form of an *objective* research finding of an *independent* university research group, presenting a *cognitive* paradox that people might have felt the need to resolve for themselves.

While the present study yielded effects of the norm feedback intervention on WRE claims, their practical value was concealed by the necessary transformation of deduction variables. To get a proximate figure of the relative monetary value of the treatment effect, the covariance analysis was repeated with untransformed variables. The pattern of estimated marginal means was very similar to the one for transformed variables. If this approximation is valid, the norm feedback reduced WRE claims by about 10%. This is a substantial figure, in particular when considering the number of cases that were or, importantly, could be subjected to this intervention.

To conclude, the present data provided evidence that sophisticated references to supportive social norms can indeed increase taxpayer compliance. Further creativity is required for a wider application of such an approach, because, clearly, the dissemination of normative information by sending a survey to millions of taxpayers is not very practical and repeated

application could undermine its effects. Importantly, however, the present research not only provided evidence for the particular approach used but, more generally, yielded support for the underlying theorising. The theoretical insights can be used to develop other applications and wider strategies, such as guidelines for media messages and the design of a more proactive use of the media by tax authorities (see Mason & Mason, 1992).

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