



Shared subjective views, intent to cooperate and tax compliance: Similarities between Australian taxpayers and tax officers

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Abstract

The present study investigates how taxation is represented in the minds of Australian taxpayers and tax officers and whether shared beliefs and evaluations are related to taxpayer compliance. Shared tax views are assumed to facilitate positive interaction, and mutual satisfactory interaction to enhance taxpayers' willingness to cooperate and comply. The sample comprised 292 compliant taxpayers, 547 non-compliant taxpayers identified by the Australian Tax Office (ATO), and 358 ATO officers who had direct contact with taxpayers. Shared perceptions were measured as similarity in beliefs and evaluations of tax law complexity, tax mentality, ethics and social norms, horizontal and vertical distributive fairness and fair exchange with the government, attitudes towards the government, and judgments of tax officers and tax preparers' support. The ATO reported non-compliance was found to be related to respondents' willingness to cooperate (i.e., filing timely and correctly) which, in turn, was related to respondents' beliefs and evaluation of tax issues and their shared views on these issues. Willingness to cooperate appears to function as a mediator between

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tax compliance and taxpayer's beliefs and evaluations as well as shared tax officials' and taxpayers' views.

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1. Introduction

Tax law is complex and sometimes its administration is ambiguous due to unclear regulations. Often taxpayers not only find it difficult to file their own tax returns correctly but also perceive tax law complexity and ambiguity as causes of tax avoidance. A tax system that ordinary taxpayers cannot comprehend due to complexity and ambiguity, which allows those who can afford it to receive expert advice on how to legally avoid taxes, and allows tax authorities to treat tax files inconsistently, has little legitimacy and reduced prospects of achieving voluntary compliance (e.g., Braithwaite, 2005; Owens & Hamilton, 2004; Slemrod, Blumenthal, & Christian, 2001).

Several countries (e.g., Australia, UK) have put particular effort into simplifying their tax law and enhancing the quality of interactions between tax officers and taxpayers, although with mixed success (Braithwaite, 2005). Increasing shadow economy activity and tax avoidance rates (Alm, Martinez-Vazquez, & Schneider, 2004), not only require fundamental reconsideration of the law, rather than the enactment of new rules, but also improvement in the interaction between tax officials and taxpayers, in order to support and improve cooperation and voluntary compliance. A major step towards improvement of the relationship between tax officials and taxpayers is the Compliance Model of the Australian Taxation Office (Braithwaite, 2003a, 2003b; Niemiowski, Baldwin, & Wearing, 2003) which emphasizes understanding taxpayer behaviour, and focuses on building community partnerships, increased flexibility in ATO operations to encourage and support cooperation, and compliance.

The quality of the partnership between tax authorities and taxpayers depends on the quality of their interaction which, in turn, is perceived to be shaped by the parties' mutual view of tax issues. According to psychological theories on social interaction (e.g., Bakeman & Gottman, 1997), the quality of interaction and cooperation depends on mutual understanding and acceptance. With regard to tax behaviour, the quality of interaction is a highly important aspect of procedural fairness which is a precondition of taxpayers' willingness to cooperate and comply (Murphy, 2003, 2004a, 2004b).

Quality of interaction depends on subjective sense making by interacting parties and shared representations. Cullis and Lewis (1997) highlight the importance of the social construction of taxation phenomena as a guideline for tax behaviour: "Talk about social constructionism is everywhere in the wind like pollen ... Following the social constructivist line the whole notion of tax compliance can be viewed as socially constructed by the principal actors. Tax 'enforcement' officers have beliefs about tax evaders, who they are, what they are like. Taxpayers (including evaders) likewise have notions about tax officers, their

beliefs and how they will behave. None of these beliefs need to be ‘true’ in any ‘objective’ sense but if the players in the game believe them to be (and act as if they do) then the reality is constructed. It follows from this that any analysis must examine these constructions ...” (p. 310). Almost half a century ago, [Schmölders \(1960, p. 38\)](#) wrote: “How is the nation state (government) represented in citizens’ minds? This is the question with which any investigation about citizens’ tax discipline, their aspirations to the government and their integration in civic affairs must start; consciousness about the government leads to citizens’ civic and tax ‘sentiments’ and to a fundamental attitude which they hold with regard to problems of ‘their’ government”. It should be added, that representations of government officers also needs to be studied, as well as similarities and differences in representations between representatives of the government on the one hand and their ‘clients’ on the other hand.

Improvement of the relationship between tax officials and taxpayers requires an understanding of taxpayer behaviour as well as taxpayer ‘social representations’ (cf. [Moscovici, 2001](#)) of taxation. Understanding taxpayers’ social representations, i.e., the shared knowledge of the tax environment and evaluations that are produced and communicated through social interaction facilitates supportive communication. Communication should improve if tax officers and taxpayers hold similar beliefs and evaluations of taxation. Shared representations lead to the perception of similarities between interacting parties which is related to empathy ([Cialdini, 1993](#)), and consequently that it should lead to perceived procedural fairness, acceptance of tax officials’ expert power ([French & Raven, 1959](#)), mutual trust and willingness to cooperate ([Murphy, 2004a, 2004b](#)).

This paper investigates tax officials’ and taxpayers’ subjective constructs of tax phenomena and the relationship between shared views and willingness to cooperate as well as tax compliance of Australian taxpayers. We assume that shared beliefs and evaluations in general are related to the intent to cooperate which is related to observed compliant behaviour. In other words, we assume that observed tax compliance depends on taxpayers’ willingness to cooperate which, in turn, depends on the similarity of tax officials’ and taxpayers’ views of tax related phenomena which were frequently identified as important in previous studies on tax behaviour. Such tax related phenomena – explicated below – are perceived complexity of tax law, tax avoidance mentality and tax ethics, social norms, evaluation of government activities and equitable exchange between taxpayers and the government, as well as an equitable tax burden of taxpayers as compared to the tax burden of other taxpayers. Moreover, evaluation of tax officials’ and tax preparers’ support is investigated.

1.1. Tax complexity

A high percentage of taxpayers perceive tax law to be too complex. Consequently, tax law and tax in general are evaluated negatively and willingness to comply suffers (e.g., [Lewis, 1982](#); [Niemirowski & Wearing, 2003](#)). The assumption of a positive relationship between subjective understanding and tax attitudes has received support in an Australian survey ([Niemirowski, Wearing, Baldwin, Leonard, & Mobbs, 2002](#)), and also in studies conducted by [Groenland and van Veldhoven \(1983\)](#), [Wahlund \(1992\)](#) and [Wärneryd and Walerud \(1982\)](#), and is acknowledged in the tax evasion model proposed by [Weigel, Helsing, and Elffers \(1987\)](#) (see also [Webley, Robben, Elffers, & Helsing, 1991](#)). Higher tax knowledge is also assumed to lead to higher compliance rates ([Carnes & Cuccia, 1996](#); [Webley et al., 1991](#)).

1.2. Tax avoidance mentality, social norms and tax ethics

The relevance of attitudes towards the government, fiscal policy, and acceptance of tax non-compliance as determinants of tax behaviour is recognized in empirical studies conducted in various countries, and from the beginning of psychological studies on taxation until the present (e.g., Berti & Kirchler, 2001; Chan, Troutman, & O'Bryan, 2000; Dornstein, 1976; Groenland & van Veldhoven, 1983; Kirchler, 1998; Niemirowski et al., 2002; Orviska & Hudson, 2002; Porcano, 1988; Trivedi, Shehata, & Mestelman, 2004; Vogel, 1974; Wahlund, 1992; Wallschutzky, 1984; Webley, Cole, & Eidjar, 2001). Also social norms are assumed to determine tax behaviour. Social norms are usually operationalised as a perceived prevalence or acceptance of tax evasion among a reference group (Wenzel, 2005). There is, however, considerable overlap between a person's fundamental values and tax ethics, defined as a belief that there is a moral imperative that one should deliberately comply. Besides tax avoidance mentality and social norms, strongly held tax ethics are also expected to lead to increased compliance.

1.3. Fairness judgments

Fairness was one of the most relevant psychological factors recognized by Andreoni, Erard, and Feinstein (1998) in their review on tax compliance. The concept of fairness is, however, complex, and different studies refer to different aspects of fairness, such as the distribution of benefits or costs, procedural aspects or retributive and restorative justice. Wenzel (2003) provides a taxonomy of various forms of fairness and equity. Distributive fairness regards one's own tax burden, either one's personal tax burden compared with that of similar others (horizontal fairness) or the tax burden across different taxpayer groups (vertical fairness). Evaluations of the relationship between taxes paid and government benefits and services that are offered in return, regard exchange fairness. Although the relationships between fairness perceptions and tax behaviour are highly complex (Wenzel, 2002, 2003), it is generally assumed that perceptions of fairness are positively related to tax compliance (e.g., Kinsey, Grasmick, & Smith, 1991; Moser, Evans, & Kim, 1995; Song & Yarbrough, 1978; Spicer & Becker, 1980).

1.4. Evaluation of tax officers and tax preparers

According to Blumenthal and Christian (2004) in the USA, the use of tax preparers by individual income taxpayers grew by 26.4% over the past decade, compared to an overall growth of 13.7% in the number of returns filed. Close to 60% of the completed individual income tax returns in the USA filed for tax in 2001 were signed off by a tax preparer. In Australia the overall rate is close to 75% (Braithwaite, 2005). Sakurai and Braithwaite (2003) found that the ideal tax practitioner is a low risk, no fuss practitioner who is honest and risk averse (see also Collins, Milliron, & Toy, 1990; Hite & Hasseldine, 2003; Hite & McGill, 1992; Murphy, 2003, 2004a). If taxpayers seek support from tax experts, a tax preparer or tax officer, their perceived quality of interaction and support will affect taxpayers' perceptions and evaluations of taxation in general. Positive experiences and evaluations should favour willingness to cooperate and comply.

We assume that similar views between taxpayers and tax officers on these tax related dimensions are related to a "willingness to cooperate" which will favour tax compliance.

Willingness to cooperate is assumed to be a mediator between shared views and tax behaviour. Although the sample of taxpayers analysed in the present study is not matched to individual tax officers, the sample of tax staff was selected because their primary role is direct taxpayer contact, client service. Taxpayers do not have continuous client interactions with the same tax officer. Therefore, the average view of all tax officers was compared with individual taxpayers' views. First, the average responses of all tax officers were computed, and then absolute differences between the average tax officers' answering profile and individual taxpayer responses were calculated. Besides investigating shared views, this study also aims to evaluate determinants that were frequently found to be related to compliance. We investigate whether subjective knowledge of basic taxation and beliefs regarding the complexity of the tax law, tax avoidance mentality, tax ethics, social norms, perceived horizontal and vertical fairness as well as exchange fairness, and the evaluation of interaction experiences with tax officers and tax preparers are related to willingness to cooperate. Willingness to cooperate should be related directly to observed compliance.

2. Method

2.1. Participants

The sample used in the present research comprised compliant taxpayers, non-compliant taxpayers, and ATO officers, who participated in the "Determinants of Australian Taxpayer Compliance Study" (Niemiowski et al., 2003). The selection of the taxpayers was based on five years of actual ATO recorded lodgement, debt and audit history of compliance. All potential taxpayer respondents were compliant in 1995 on all ATO based measures of compliance. Their actual compliance behaviour either remained compliant for the five years or was non-compliant for at least two of the five years for either lodgement, debt, audit or a combination of compliance risks.

For the 1995 tax financial year, approximately 6 000 000 Australian non-business taxpayers were potentially eligible for selection. To be eligible for selection, only taxpayers were chosen who aged 21–65 who were deemed totally compliant in 1995, and were Australian residents with no bankruptcy, and were still active taxpayers. The taxpayer research population was selected from this final pool.

Selection of the taxpayers was based on ATO's database, "reported" evidence of tax compliance or non-compliance. Tax compliance was defined by the ATO as "reporting all income and paying all taxes in accordance with the applicable laws, regulations, and court decisions". Non-compliance was any tax lodgement or debt behaviour that did not adhere to the definition of tax compliance. More concretely, the ATO's definitions of non-compliance used were non-lodgement, non-payment of debt, history of audits with risk probabilities identified as either low, medium, or high and a combination of at least two non-compliant risks.

A total sample of 2800 compliant (900) and non-compliant taxpayers (1900) was selected at random to receive invitations to participate in the survey, and 500 members from the total pool of ATO staff who had direct taxpayer client service contact. The response rate for taxpayers was 292 of 900 compliant taxpayers (32.4%), 547 of 1900 non-compliant taxpayers (27.85%), and 358 of 500 tax staff members (71.60%). Table 1 presents socio-demographic characteristics of the three sub-samples. No consistent significant differences between responding compliant and non-compliant taxpayers were found. However, with

Table 1
Socio-demographic characteristics of tax officers, compliant taxpayers and non-compliant taxpayers (percentages)

Variables	Tax officials	Compliant taxpayers	Non-compliant taxpayers
<i>N</i>	358	292	547
<i>Sex</i>			
Male	43.3	47.5	52.5
Female	56.7	52.5	47.5
<i>Age (years)</i>			
<20	0	0.4	0.8
21–30	17.0	19.8	15.3
31–40	35.2	28.3	26.1
41–50	28.7	24.4	30.9
51–60	18.5	22.6	20.5
61<	0.6	4.6	6.4
<i>Education</i>			
Primary	0.6	0.4	3.0
Secondary	40.5	47.7	46.3
Tertiary	52.2	39.1	41.5
Other	3.5	5.7	5.1
Missing	3.2	7.2	4.1
<i>Annual income (AS)</i>			
<5400	1.4	2.8	5.9
5401–20 700	6.6	16.5	18.0
20 701–38 000	50.0	35.9	33.9
38 001–50 000	25.9	25.0	22.0
50 001–100 000	15.8	17.3	16.5
100 001<	0.3	2.5	3.4
<i>Employment</i>			
Employed full time	86.0	57.6	49.0
Employed part time	13.4	18.1	14.9
Self employed	0	9.4	18.1
Retired	0	3.5	4.7
Student, full or part time	0.6	2.4	1.9
Unemployed	0	6.6	4.3
Home based work	0	0.7	1.7
Missing	0	1.7	5.3
<i>Marital status</i>			
Married	68.1	74.7	76.6
Divorced	11.5	7.4	11.0
Single	20.4	17.9	12.2
<i>Home owner</i>			
Home owner/buyer	71.5	79.0	72.8
Living at parents' home	7.1	5.2	4.3
Renting a home	21.2	15.9	22.5
Missing	0.3	0	0.4
<i>Use of tax-preparer</i>			
No (self-preparer)	–	2.1	3.2
Yes (tax-agent)	–	97.9	96.8

regard to employment, in the sample of non-compliant taxpayers the group of self employed (18.1%) was twice as high as in the group of compliant taxpayers (9.4%).

Selection of sample sizes and examination of representativeness were determined by the Australian Bureau of Statistics (ABS). An examination of the representativeness of the responding participants with the total mail out sample and whole ATO database taxpayer population yielded acceptable results.

2.2. Procedure

All selected taxpayers received questionnaires several weeks before their tax lodgement was due (31 October 2000) in order to promote both awareness of their obligations and potentially enhance response rates. A second copy of the questionnaire was sent out to all taxpayers with a reminder letter about three weeks later, and a final reminder letter was sent two weeks after that. Significant steps were undertaken to guarantee the privacy and confidentiality of respondents. This included multiple de-identification and coding, invitation to participate letters, advance information that individual tax return data would be accessed and matched to survey responses, that involvement was voluntary and no ATO initiated action would result. All survey responses were received by the end of January 2001. During the three month period of survey mail-out and collection, a 24h hotline number was available for taxpayer enquiries. Generally, respondents' main concern was privacy or possible ATO follow up action if they participated.

2.3. Questionnaire

Two of the current three authors developed the questionnaire in collaboration with key ATO officials. The questionnaire consisted of 93 items on behaviour, beliefs, attitudes and values (BBAV). Responses were measured using a 7 point Likert scale ranging from 1 = strongly disagree to 7 = strongly agree, (8 = do not know and 9 = not applicable). Moreover, socio-demographic details such as gender, age, income, education level, home ownership and occupation were collected. Draft survey questionnaires were developed and piloted during 1998 and 1999. A copy of the full questionnaire is available from the authors upon request.

For the purposes of the present study, 40 of the 93 items on tax knowledge and perceived tax law complexity, tax avoidance mentality and tax ethics, perceived social norm in terms of others' behaviour, horizontal and vertical fairness, fairness in the exchange with the government, attitudes towards government tax money spending, and judgments of supportiveness of tax officers and tax practitioners, as well as items on willingness to cooperate (i.e., willingness to lodge tax timely and correctly) were selected on the basis of their face validity. Aggregation of items to dimensions, reliability indices and means and standard deviations obtained in the groups of compliant and non-compliant taxpayers are presented in [Table 2](#). Due to the various purposes of the study, the number of items per dimension varies considerably. Reliability is acceptable, given that items were worded both positively and negatively.

3. Results

The aim of this study was to examine the similarity between taxpayers' views of tax related issues with tax officials' views and its relationship with willingness to cooperate which should function as a mediator of ATO observed behaviour. Shared tax orientation is

Table 2
Aggregation of items to dimensions

Dimension	Items (examples)	Cronbach alpha	Mean	SD
(a) Self reported knowledge (7 items)	<ul style="list-style-type: none"> • I know the tax laws well enough to prepare my own tax return 	0.79	3.11	1.09
(b) Complexity of tax law (1 item)	<ul style="list-style-type: none"> • The taxation law is straightforward and clear (reversed) 	–	2.94	1.15
(c) Tax mentality (5 items)	<ul style="list-style-type: none"> • It does not matter if people claim a little more in deductions than they are entitled to (reversed) 	0.71	2.63	0.95
(d) Tax ethics (1 item)	<ul style="list-style-type: none"> • It is everyone's responsibility to pay the correct amount of tax 	–	5.99	0.83
(e) Social norms (2 items)	<ul style="list-style-type: none"> • In Australia it is a widespread belief that smart people can avoid paying the correct amount of tax (reversed) 	0.61	3.88	1.12
(f) Horizontal and vertical fairness (2 items)	<ul style="list-style-type: none"> • Compared to business people, wage earners pay a greater share of their income in tax (reversed) 	0.63	4.20	0.65
(g) Fairness of exchange with the government (2 items)	<ul style="list-style-type: none"> • The federal tax law ensures that everyone pays the fair and correct amount of tax 	0.75	2.85	1.59
(h) Attitudes towards the government (3 items)	<ul style="list-style-type: none"> • The government spends all the money collected from taxes wisely 	0.43	3.94	0.98
(i) Perceived support of ATO staff (7 items)	<ul style="list-style-type: none"> • The ATO gives me accurate advice 	0.76	4.12	0.97
(j) Perceived support of tax preparers (4 items)	<ul style="list-style-type: none"> • Whenever I use a tax professional, I receive good advice 	0.64	5.65	1.03
(k) Willingness to lodge tax timely and correctly; 5 items)	<ul style="list-style-type: none"> • Even if I do not expect a refund, I lodge my tax return as soon as possible • Because it takes so much time, I put off completing my tax return (reversed) • Because it is uninteresting, I put off completing my tax return (reversed) • I put off my completing my tax return because I do not like dealing with government agencies (reversed) • When I do not expect a refund, I put off completing my tax return (reversed) 	0.79	4.73	1.29
(l) ATO observed tax behaviour	ATO observed and reported behaviour (0 = non-compliance, 1 = compliance)			

Reliabilities, means, standard deviations; $n = 825$ compliant and non-compliant taxpayers; scales ranging from 1 = disagreement to 7 = agreement; answers were reversed such that higher values indicate higher intensity of the respective dimensions.

measured via perceived tax law complexity, tax mentality, tax ethics, social norms, horizontal and vertical fairness and exchange fairness with the government, attitudes towards the government, perceived support from ATO staff and tax practitioners. Individual taxpayer views were compared with the average of all tax officers' views. Before testing the relationships with shared tax orientation, willingness to cooperate and observed compliance, mean responses to questions on determinants of tax compliance of tax officers and taxpayers are compared. Then, the relationship of these determinants with tax compliance is computed by linear and logistic (for observed tax behaviour) regression analyses.

3.1. Perception of tax related issues by tax officials, compliant and non-compliant taxpayers

First, mean responses regarding subjective tax knowledge, perceived tax law complexity, tax mentality, tax ethics, social norms, horizontal and vertical fairness and exchange fairness with the government, attitudes towards the government, perceived support by ATO staff and tax practitioners in the sub-samples of tax officers, compliant taxpayers and non-compliant taxpayers were computed and differences were tested in a multivariate analysis of variance with the tax officers, compliant and non-compliant taxpayers as independent factor and the ten tax dimensions and reported willingness to cooperate as dependent variables. The three groups differed significantly (Pillai's trace: $F(22, 2308) = 35.22$; $p < 0.001$; $\eta^2 = 0.25$). Univariate analyses revealed significant differences on all dimensions but horizontal and vertical fairness. Next linear contrasts were computed to differentiate between the three respondents groups. As Table 3 shows, there are more significant differences between tax officers and taxpayers generally than between the compliant and non-compliant taxpayer groups which may in part be due to the fact that ATO defines non-compliance broadly as non-lodgement, non-payment of debt, and history of audits with risk of non-compliance probability. Tax officers perceive themselves to have greater knowledge than taxpayers, have a more favourable tax mentality, higher tax ethics, they agree less that others evade taxes, hold more favourable attitudes towards the government in terms of equity in exchange and government tax money spending, they

Table 3

Mean responses on tax related dimensions by tax officers, compliant taxpayers and non-compliant taxpayers (scale ranging from 1 = disagree to 7 = disagree; answers were reversed such that higher values indicate higher intensity of the respective dimensions)

Dimension	Tax officers		Compliant taxpayers		Non-compliant taxpayers	
	Mean	SD	Mean	SD	Mean	SD
(a) Self reported knowledge	4.78 ^a	1.08	3.16 ^b	1.09	3.09 ^b	1.09
(b) Complexity of tax law	4.18 ^a	0.95	3.94 ^b	1.09	4.14 ^a	1.05
(c) Tax mentality	4.76 ^a	0.75	4.45 ^b	0.89	4.31 ^b	0.98
(d) Tax ethics	5.95 ^a	0.60	5.55 ^b	0.68	5.41 ^c	0.75
(e) Social norms	3.54 ^a	1.13	3.20 ^b	1.11	3.07 ^b	1.11
(f) Horizontal and vertical fairness	4.28 ^a	0.52	4.20 ^a	0.60	4.20 ^a	0.68
(g) Fair exchange with government	3.64 ^a	0.71	3.39 ^b	0.73	3.45 ^b	0.71
(h) Attitudes towards the government	2.62 ^a	1.41	2.51 ^a	1.39	2.43 ^b	1.43
(i) Perceived support of ATO staff	4.92 ^a	1.02	4.17 ^b	0.89	4.09 ^b	1.02
(j) Perceived tax preparers' support	3.79 ^a	1.35	5.67 ^b	1.03	5.63 ^b	1.03
(k) Willingness to cooperate	4.70 ^a	1.30	4.95 ^b	1.25	4.61 ^a	1.29

Note: Different superscripts ^a, ^b, and ^c indicate significantly different means ($p < 0.01$).

think they support taxpayers more than taxpayers themselves do. However, relative to the judgements of taxpayers they devalue the support which professional tax agents provide. Responses from compliant taxpayers and non-compliant taxpayers differ in perceived tax law complexity, tax ethics, and attitudes towards the government. Compliant taxpayers perceive tax law as being less complex and they hold more favourable ethical values and attitudes towards the government. They are also more willing to cooperate and to file their tax returns timely and correctly.

3.2. Willingness to cooperate as mediator for tax compliance

It is assumed that tax related dimensions are related to observed tax compliance, and are mediated by willingness to cooperate. This assumption was tested by linear and logistic regressions. Before computing the regression analyses, correlations between all variables were conducted (Table 4), showing relations between the ten tax related dimension and willingness to cooperate as well as observed behaviour.

First, the relation between ATO reported tax behaviour as dependent variable and all ten tax related dimensions was tested by a logistic regression. This regression yielded a significant Nagelkerkes $R^2 = 0.03$; $p = 0.03$.

Second, mediation was computed by a logistic regression with tax behaviour as dependent variable and willingness to cooperate in the first step, and the ten tax related dimension in the second step. Only willingness to cooperate reached significance (Nagelkerkes $R^2 = 0.03$; $p < 0.001$). Including the ten tax related dimensions yielded no significant

Table 4

Correlations between the 10 self reported dimensions, willingness to cooperate and observed tax behaviour ($n = 825$)

Dimension	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
(a) Self reported knowledge	0.27	0.07	-0.01	0.08	-0.09	0.14	0.10	0.26	-0.48	0.14	0.03
(b) Complexity of tax law		-0.01	-0.01	-0.06	-0.01	-0.43	-0.32	-0.38	0.01	-0.19	-0.10
(c) Tax mentality			0.34	-0.03	-0.04	0.00	0.18	0.12	0.03	0.24	0.06
(d) Tax ethics				0.13	0.08	0.04	0.26	0.15	0.07	0.14	0.06
(e) Social norms					0.02	0.07	0.16	0.13	0.02	0.03	0.05
(f) Horizontal and vertical fairness						-0.09	0.03	-0.06	0.07	0.11	-0.01
(g) Fair exchange with government							0.39	0.32	0.05	0.16	-0.01
(h) Attitudes towards the government								0.35	0.06	0.12	0.09
(i) Perceived support of ATO staff									-0.01	0.21	0.04
(j) Perceived tax preparers' support										0.09	0.03
(k) Willingness to cooperate											0.12
(l) ATO observed tax behaviour											

Note: After Bonferroni-corrections, correlations above 0.09 are significant at $p = 0.05$ level, and correlations above 0.11 are significant at $p = 0.01$ level.

improvement (Nagelkerkes $R^2 = 05$; $p = 0.12$). This result suggests a mediating effect of willingness to cooperate.

Third, the relation between willingness to cooperate as dependent variable and all ten tax related dimensions as predictors was tested by a linear regression, which yielded an adjusted $R^2 = 0.13$, $p < 0.001$ and the following B -values: B self reported knowledge = 0.16; $p = 0.001$; B complexity of tax law = -0.11 ; $p = 0.008$; B tax mentality = 0.26, $p < 0.001$; B tax ethics = 0.10, $p = 0.08$; B social norms = 0.01; $p = 0.93$; B horizontal and vertical fairness = 0.14; $p = 0.026$; B fair exchange with government = -0.06 ; $p = 0.05$; B attitudes towards the government = 0.08; $p = 0.09$; B perceived support of ATO staff = 0.13; $p = 0.009$; and B perceived tax preparers' support = 0.18; $p < 0.001$; constant = 3.21; $p < 0.001$. Almost all measured variables are significantly related to willingness to cooperate. Taxpayers' intent to report timely and correctly is higher if self reported tax knowledge is high and tax law is perceived as not too complex, if tax mentality and attitudes towards government spending are positive, if tax ethics are high, if horizontal and vertical fairness are perceived to be high, and if tax staff and tax preparers' support is perceived as high. Only social norms were not significantly related to willingness to cooperate which may be due to the significant correlation with attitudes towards the government. Willingness to cooperate appears to be a mediator between perceptions and evaluations and tax behaviour.

3.3. Tax officials' and taxpayers' views of tax related issues

The average responses of tax officials on tax related dimensions are used as the prototypical profile of perceptions and evaluations. Absolute differences between this profile and each individual taxpayer's views on the dimensions are computed and averaged to obtain an index of shared tax orientation. The average absolute difference on all ten tax related dimensions amounted to $M = 1.08$ ($SD = 0.30$). The mean response for willingness to cooperate is $M = 4.73$ ($SD = 1.29$). The relationship between shared views and observed tax behaviour, mediated by willingness to cooperate, was computed by logistic and linear regressions as in the former analyses.

First, the relation between ATO reported tax behaviour as dependent variable and mean difference in tax officials' and taxpayers' views was tested by a logistic regression. This regression yielded a Nagelkerkes $R^2 = 01$; $p = 0.03$.

Second, mediation was computed by a logistic regression with tax behaviour as dependent variable and willingness to cooperate in the first step, and mean difference in views in the second step. Only willingness to cooperate reached significance (Nagelkerkes $R^2 = 03$; $p < 0.001$). Including the ten tax related dimensions yielded no significant improvement (Nagelkerkes $R^2 = 03$; $p = 0.08$).

Third, the relation between willingness to cooperate as dependent variable and mean difference in views was computed by a linear regression, which yielded an adjusted $R^2 = 0.02$; $p < 0.01$; $B = -0.58$; $p < 0.01$. A mediating effect of willingness to cooperate can be assumed.

Finally, regression analyses were carried out with differences of tax officials' and taxpayers' views on nine tax related dimensions (absolute difference in tax knowledge were not included in the analysis). The first logistic regression with tax behaviour as dependent variable and differences on the nine dimensions yielded a Nagelkerkes $R^2 = 03$; $p < 0.03$. The second analyses with tax behaviour as dependent variable and willingness to cooperate in the first step, and mean differences in views in the second step, resulted in a significant

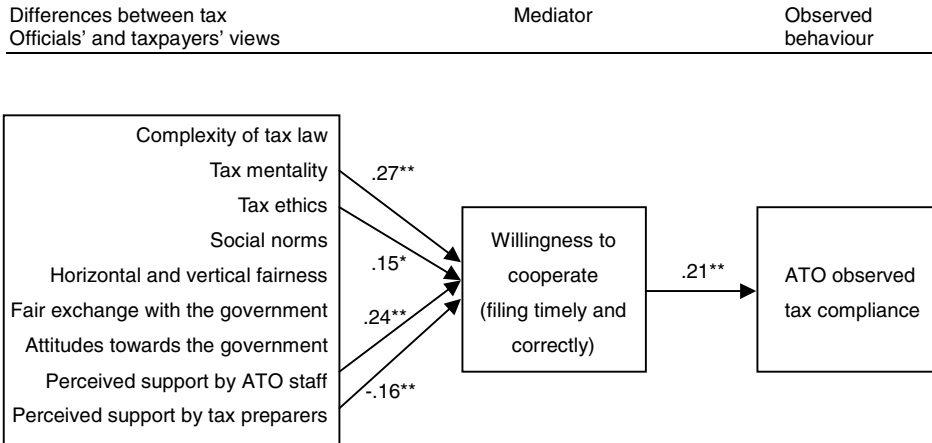


Fig. 1. Shared views between tax officials and taxpayers on nine tax related dimensions and their relationship with observed tax compliance, mediated by willingness to cooperate (B values, significant at $**p < 0.01$, $*p < 0.05$).

Nagelkerkes $R^2 = 0.03$; $p < 0.001$; and no significant increase in R^2 in the second step (Nagelkerkes $R^2 = 0.04$; $p = 0.14$). The final linear regression with willingness to cooperate as dependent variable and differences in nine tax related dimensions revealed a significant $R^2 = 0.07$; $p < 0.001$. As Fig. 1 shows, willingness to cooperate is significantly related to similar views on tax mentality ($B = -0.27$; $p < 0.001$), tax ethics ($B = -0.15$; $p = 0.04$), and evaluation of support provided by ATO staff ($B = -0.24$; $p < 0.001$). However, intent to correctly file one's tax returns seems to depend on dissimilar perceptions and evaluations of support provided by tax preparers ($B = -0.16$; $p < 0.01$). This latter result might be due to ingroup-biases in the sample of ATO officials, suggesting that ATO officials tend to judge support provided by them more positively than support provided by a competitive outgroup.

4. Discussion

The Compliance Model of the Australian Taxation Office emphasises their understanding of taxpayer behaviour and the building of a supportive relationship by treating taxpayers fairly and reasonably, explaining decisions and assisting with questions, providing reliable information, and keeping the taxpayers' compliance costs to a minimum (Braithwaite, 2003a, 2003b). It is argued that satisfactory interaction is based on better and mutual understanding that is facilitated by taxpayers' and tax officials' shared beliefs and evaluations of tax related issues. The aim of the present study is to investigate shared constructs of taxpayers and tax officers as representatives of the government and administrators of tax law, and their relation to taxpayers' willingness to cooperate and comply.

Taxpayers, identified as either compliant or non-compliant by the ATO, and ATO officers provided self reports on their tax knowledge, their perceptions of tax law complexity, their tax mentality, ethics and social norms, their perceived horizontal fairness, equity in the exchange with the government and attitudes towards government tax money spending, and evaluated tax officers' and tax preparers' support. While the first dimensions were included as frequently confirmed determinants of self reported tax behaviour, the latter

dimensions on interaction with tax personnel and preparers were included because the majority of taxpayers seek advice when filing their returns. Finally, willingness to cooperate was measured as self reported intent to file the tax return timely and correctly.

Following the tradition of most studies in tax psychology, the first data analyses focused on tax knowledge, perception of tax law complexity, tax mentality, ethics, social norms, perceived horizontal fairness, equity in the exchange with the government and attitudes towards government, as well as perception of procedural fairness, measured as evaluations of tax officers' and tax preparers' support as related to ATO reported behaviour, mediated by willingness to cooperate. The results showed that tax behaviour is not related directly to respondents' beliefs and evaluations. Beliefs and evaluations were found mediated by willingness to cooperate, which is significantly related to reported behaviour. Whereas the relationship between tax related dimensions and willingness to cooperate was found to be substantial, willingness to cooperate is significantly related to observed behaviour, however, the effect is quite small. This result is in line with findings in tax psychology, suggesting that actual behaviour is dissimilar to self reported behaviour intentions, such as willingness to cooperate, and is explained only to some extent by self reported beliefs and evaluations (e.g., Hessing, Elffers, & Weigel, 1988; Webley et al., 1991). Willingness to cooperate was found to be significantly related to most of the dimensions considered: the higher self reported tax knowledge and the less complex the tax law was judged, the higher was the intent to file tax returns timely and correctly. Several studies using education as a proxy for knowledge or measuring objective or subjective knowledge confirm the positive relationship between knowledge and willingness to cooperate or comply (Groenland & van Veldhoven, 1983; Kinsey & Grasmick, 1993; Niemiowski et al., 2002; Schmölders, 1960; Song & Yarbrough, 1978; Spicer & Lundstedt, 1976; Vogel, 1974; Wahlund, 1992; Wärnerud & Walerud, 1982). Also, tax mentality, and tax ethics were significantly related to willingness to cooperate. There was, however, no significant link with social norms and willingness to cooperate. The latter results are not surprising as the relationship between norms and justice is highly complex (e.g., Wenzel, 2002, 2003, 2004) and was measured in this study on a global level.

The assumption that shared beliefs and evaluations between tax officers and taxpayers are facilitators of willingness to cooperate was strongly supported. Willingness to cooperate was significantly related to shared tax mentality and tax ethics, as well as similar perceptions of tax officers' support. Regarding tax preparers, taxpayer compliance was found to be higher if their judgements of tax preparers' support differed from tax officers' views of tax preparers. This latter result mirrors ingroup favourability postulated in social categorization and identity theory (Turner & Onorato, 1997; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Tax officers evaluated the level of their support of taxpayers much higher than was perceived by taxpayers and devalued tax preparers' support considerably. If tax preparers are considered by tax officers to be a competitive outgroup, over-evaluation of ingroup and devaluation of outgroup members can be explained by ingroup favourability. From the perspective of advice seeking taxpayers, tax preparers are evaluated as experts on tax law who provide the required assistance, as are tax officers if taxpayers prefer them for advice. A high estimation of both groups of tax experts, and a high attributed expert status should facilitate interaction and cooperation. The results support the assumption that similar beliefs and evaluations of tax related issues are related to taxpayers' willingness to cooperate. The only exceptions are biases deriving from ingroup–outgroup dynamics in the sample of tax officers.

The relevance of shared tax mentality and tax ethics confirmed in the present study, demonstrates the importance of the relationship between shared representations of taxation and willingness to cooperate. If tax officers' representations of tax issues are similar to taxpayers' representations, tax officers may not only have more and a better understanding of taxpayers' concerns but also be able to communicate more effectively and provide the requested support, which leads to perceived procedural justice and trust (Murphy, 2004a, 2004b). Similarity in tax mentality and tax ethics can be a basis for mutual acceptance and sympathy (Cialdini, 1993), smoother interaction and higher willingness to cooperate and comply with tax law. A similar evaluation of tax officers' support signifies that taxpayers judge tax officers as highly as they do themselves. Taxpayers' positive evaluations signal respect and acknowledgement of their work, which is a prerequisite of supportive and effective cooperation.

In conclusion, this study demonstrates the relevance of similarity of views and mutual understanding of tax officials and taxpayers. On the side of tax officers and in concordance with the Compliance Model of the Australian Taxation Office emphasising understanding of taxpayer behaviour and building a supportive relationship (Braithwaite, 2003a, 2003b), the results indicate that similarities in the perception of tax issues, especially tax mentality and tax ethics, are relevant. Tax laws which can be understood by taxpayers and are readily administered by tax officers could lead to similar beliefs and evaluations. This as well as appreciation of tax officers' and tax preparers' support is a relevant prerequisite for perceived procedural fairness. Endeavours favouring high tax morale in terms of tax mentality and tax ethics are a necessary base for effectual cooperation as both parties, tax officials and taxpayers pursue the same goals. Finally, enabling, treating taxpayers fairly and reasonably, explaining rules and decisions, and providing reliable information and solutions to questions, will lead to improving the reputation of tax administrators and to perceived procedural fairness which may lead to an increased willingness to comply with the spirit of the law.

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