Taxpayers’ compliance by procedural and interactional fairness perceptions and social identity

Martina Hartner, Andrea Poschalko, Silvia Rechberger, and Erich Kirchler

University of Vienna

Abstract
The study’s focus is on tax behavior and its relationship with social identity, social norms as well as procedural and interactional fairness. Social identity is understood in terms of social identification with Austrians and with self-employed people. Regarding the investigation of social norms, the descriptive social norms of Austrians or self-employed people were studied and encompass the perception of their actual behavior. Procedural fairness refers to the fairness of the decision-making processes based on Leventhal’s rules whereas interactional fairness deals with the fair treatment of authorities.

Results from structural equation modeling using Amos Basic 5 showed that procedural fairness ($r=.24^{**}$), but not interactional fairness ($r=.18$) were related to social identification with Austrians. Moreover, social identification had a positive relationship with the descriptive social norms of Austrians ($r=.35^{***}$). Neither procedural ($r=-.11$) nor interactional fairness ($r=.18$) were significantly related to social identification with self-employed persons. However, social identification with the self-employed people was associated with the descriptive social norms of self-employed people ($r=.31^{***}$). Tax compliance, used as a dependent variable, was only related to procedural fairness ($r=.21^{*}$) and to social identification with being self-employed ($r=-.21^{*}$).

Key words: Tax Compliance – Social Identity – Procedural Fairness – Interactional Fairness

Acknowledgments
This study was supported by a grant to Erich Kirchler from the Austrian Science Fund, project number AP1992511.
1. Introduction

Tax evasion is (to a greater or lesser extent) a worldwide phenomenon and can do substantial financial harm (Braithwaite, Schneider, Reinhart, & Murphy, 2003). That is why it is in the governments’ interest, and on the long run also in the citizens’ interest, to keep tax evasion as low as possible and to implement measures strengthening tax compliance. Several ways to obtain this aim have been discussed in literature. In traditional economic tax research, the focus of investigating tax compliance was on audits and sanctions because taxpayers were considered as mostly self-interested rational actors (cf., Allingham & Sandmo, 1972; Srinivasan, 1973). However, in current research, tax compliance is rather seen as the result of a psychological tax contract representing a complex interaction between taxpayers and the government establishing a fair, reciprocal exchange relationship (Feld & Fehr, 2007). Therefore, from a psychological perspective, the focus of investigation should be more on fairness rather than on sanctions (for a review, see Kirchler, 2007). Along with fairness issues, social norms (Wenzel, 2002) and social identity aspects (Braithwaite & Wenzel, 2008; Taylor, 2003; Wenzel, 2002, 2004, 2007) have also been studied as potential predictors for tax compliance since taxpayers are part of a larger social group which may influence their behavior by social norms rather than being isolated. Based on these findings, the current study deals with procedural fairness, social norms, and their interplay with social identity when influencing tax compliance.

Perceived procedural fairness shapes the opinions towards the tax-authorities (Murphy, 2003; Murphy, Tyler and Curtis, 2009) and has been researched in the tax context by several researchers recently (Wenzel, 2002, Murphy, 2003, Hartner, Rechberger, Kirchler & Schabmann, 2008). It was originally seen as the perceived fairness of procedures in connection with process control issues, i.e., in terms of the possibility to take influence on the decision-making process (cf., Thibaut and Walker, 1975). Porcano (1988) investigated this aspect of procedural fairness in the context of tax compliance, but did not find any significant effects.
Leventhal (1980) formulated the following six rules which have gained tremendous popularity since that time: (i) The consistency rule means that procedures should be consistent across people and time, nobody should be favored or disadvantaged, (ii) bias suppression rule points out that egoistic intentions and prejudice on the part of the decision-makers should be avoided, (iii) accuracy rule says that all relevant sources of information should be exhausted, in order that decisions are based on well-founded information, (iv) correctability rule refers to the possibility of the adjustment or revision from decisions made, (v) representativeness rule means that the opinions and interests of all parties should be considered, and finally, (vi) ethicality rule emphasizes that procedures should be in accord with the prevailing moral and ethical values. Worsham (1996) investigated two of these rules in the tax context (i.e., consistency and accuracy). In his study, higher tax evasion was not yielded by violation of the procedural fairness rules as expected. However, when unfair procedures were applied to other people, tax noncompliance increased. Thus, a significant indirect effect was observed, but no direct effect of procedural fairness.

Leventhal’s rules deal with the decision-making process. However, Bies and Moag (1986) emphasized the importance of considering interpersonal interactions for procedures to be perceived fairly. People want to be treated friendly and in a respectful manner. They termed this aspect of quality of interpersonal communication and treatment by the authorities as interactional fairness. Wenzel (2006) studied the influence of interactional fairness on tax compliance and showed that compliance rate was significantly higher among taxpayers receiving a reminder letter considering interactional fairness aspects in comparison with a standard letter or an informative letter.

Furthermore, Bies (1985, cited in Bies & Moag, 1986, p. 52) showed that evaluations of interactional fairness only increase when the experience of fairness is ascribed to the whole system and not to individual persons. The group’s perspective when studying fairness issues was also integrated in the group engagement model (Blader and Tyler, 2009; Tyler and Blader, 2000, 2003) through incorporating the social identity (Tajfel & Turner, 1979, 1986) which refers to the individuals’ feelings of belongingness to a social group or category (Turner, 1982). Tests of the group engagement model in
the tax context (Hartner, Rechberger, Kirchler and Schabmann, 2008; Rechberger, Hartner, &
Kirchler, subm.) demonstrated that procedural justice had a positive relation to identity judgments,
which had a positive relation to motivations of tax defiance and a negative relation to motivation of
tax deference. Relations between these motivational postures (Braithwaite, 2003) and reported tax
behavior were also found.

The basic assumption of the group engagement model (Blader and Tyler, 2009; Tyler and Blader,
2000, 2003) is that people want to be treated fairly by members and authorities of a group they refer to
because the interpersonal relation compromises information about their own standing in the group.
The authorities, as representatives of a group, communicate information about the personal status in
the group. Thus, fair treatment implies respect from group-members, which in turn strengthens the
self-esteem and, furthermore, the willingness to cooperate and to accept even unfavorable decisions of
the authorities. On the other hand, unfair treatment on the part of the authorities implies exclusion and
disregard. Procedural fairness (here in terms of neutrality, trustworthiness and standing) becomes more
important when people identify themselves stronger with the relevant group (Lind & Tyler, 1988).
Wenzel (2002) demonstrated with Australian taxpayers that those taxpayers, who were highly
identified with the nation, were more tax compliant when being treated fairly than less identified
people, who set a higher value on favorable outcomes. However, this effect was only observed for two
(i.e., deductions and extra income) out of four types of tax compliance (i.e., deductions, extra income,
pay income reporting and tax minimization).

Based on these findings, it can be derived that for understanding tax behavior it is important to look
how people perceive themselves in terms of their membership to the social groups or categories people
identify with (i.e., social identity). When the social identity is salient, the social norms and values
shared with other group members (even if they are unbenefticial for the self) may influence behavior
(e.g., Taylor, 2003; Turner, 1999; Wenzel, 2004).
Social norms are behaviors and shared ethical beliefs attributed to others (Schwartz, 1977). Cialdini, Kallgren and Reno (1991) differed injunctive or prescriptive social norms from descriptive social norms. Injunctive social norms are rules or values approved by most people (the norms of “ought”) whereas descriptive social norms describe the actual behavior shown by most people (the norms of “is”). The higher the number of people to whom tax evasion is attributed, the more people are willing to admit tax evasion themselves (Porcano, 1988; Spicer & Lundstedt, 1976; Tittle & Welch, 1983), the more probable it is to evade in the future (Spicer & Lundstedt, 1976) and the higher is the probability for hypothetical tax evasion (Porcano, 1988).

Wenzel (2004) showed that social norms predict tax evasion in case of high identification with the group to whom the norms of taxpaying behavior are attributed. This is explained by internalization of group goals and values. The group membership is integrated in the self-concept, and consequently, the group’s goals and needs are perceived as the individual’s goals and needs in case of high identification with the social group or category (Taylor, 2003; Turner, 1982; Turner, 1999).

Which groups are relevant for the tax context? In several studies, identification with the nation has been shown to be a relevant predictor for tax behavior (Braithwaite & Wenzel, 2008; Taylor, 2003; Wenzel, 2002, 2004, 2007). However, other groups could also be of special interest in regard to taxpaying behavior like the income group or the occupational group (Wenzel, 2007). Another group which has been treated with particular attention in this context is the group of self-employed people (e.g., Kirchler & Berger, 1998; Kirchler, 1999). Instead of tax payments made by the employers, self-employed people are obliged to pay their taxes out-of-pocket. Along with this psychological difference of paying money which has been earned first, self-employed people have more opportunities than employees to reduce tax by legal or illegal means. Thus, it was decided to put special emphasize on the categorization of being self-employed in the current study.
Based on the described findings, we made the following assumptions for the current study: First, we separated the two aspects of procedural fairness and investigated their effect on tax compliance. It is predicted that procedural fairness (H1a) and interactional fairness (H1b) are related to social identification and have an influence on self-reported tax compliance. Second, we predict that the descriptive social norms of the social identities Austrians (H2a) and self-employed people (H2b) are related to the degree of social identification and to self-reported tax compliance.

2. Research methods

2.1. Sample

In total, 194 participants took part in an online survey about tax behavior. After deletion of invalid cases 143 cases remained, which consisted of 72 females (50%) and 71 males (50%). Regarding age (20-30 years: 39%, 31-40 years: 36%, 41-50 years: 15%, 51-60 years: 10%) and yearly income (<10000 €: 26%; 10001-25000 €: 31%; 25001-51000: 27%, > 51000: 17%) the sample was rather balanced. However, people with higher education holding a high school degree or more were overrepresented (88%). Furthermore, a high amount of self-employed people (64%) participated in the survey as recruitment focused mainly on self-employed people in order to be able to make statements regarding the effect of the identification with being self-employed. 79 participants (55%) mandated a tax advisor for their tax returns.

2.2. Measures

2.2.1. Social identities “Austrians” and “self-employed people”

Two forms of identities have been identified as being relevant for the current study, namely the national identity (i.e., Austrian) as well as the lower-level identity of being self-employed. The same three items (e.g. “I am proud being an Austrian [self-employed/a freelancer/an entrepreneur]”) on a
5-point-Likert-scale were used for measuring the extent of identification with Austria or with being self-employed (see appendix for all items). For both scores, the internal reliability was high with Cronbach alpha being .88.

2.2.2. Descriptive social norms of Austrians and self-employed individuals

Complementary to the degree of identification, it was aimed to integrate the meaning of the respective social identities. More specifically, the perceived descriptive social norms were investigated and analyzed. Descriptive social norms stand for the actions people think others are actually carrying out. From a pre-test, several aspects of the two social identities (i.e., self-employment and Austrian) were obtained using open response format. These answers served as basis for 16 bipolar items which were used for investigating the meaning of the social identities. Because of semantic considerations (most of the mentioned attributes were not related to the context of taxation) and reliability analyses only the two bipolar items “honest – dishonest” and “responsible-minded – irresponsible” were used in the current study. Cronbach alpha of the items were .80 regarding the attributes for Austrians and .74 regarding the attributes for self-employed people.

2.2.3. Procedural and interactional fairness

In contrast to previous studies in the tax context but in line with research on organizational behavior, procedural and interactional fairness perceptions were measured separately. Procedural fairness is understood here as the perceived fairness of the applied processes and procedures whereas interactional fairness focuses on the perceived fairness regarding the interactions with the authorities. Procedural fairness was operationalized with an overall item for perceived fairness regarding the decision-making process of the tax authority (e.g., “The tax office’s decisions are fair”) and the application of Leventhal’s rules (i.e., consistency, bias suppression, accuracy, correctability, representativeness, and ethicality). Items regarding bias suppression and ethicality rule had to be excluded due to reliability reasons. The remaining items obtained a reliability coefficient of .79 for Cronbach alpha. The items for interactional fairness (e.g., “The tax office treats me with respect”) refer
to the treatment by the tax authorities. Cronbach alpha of the five items used was .88 (for single items see appendix).

2.2.4. Tax compliance

Tax compliance was measured by six items (see appendix) dealing with strategies for tax minimization in terms of using loopholes and grey areas of the tax law, exaggerated deductions and under-declared income (e.g., “I declare ALL my income in my tax return”). The items were re-coded, so that a high score stands for a high degree of tax compliance. Cronbach alpha of the items reached .74.

3. Results

Structural equation modeling (SEM) using Amos Basic 5 was opted for testing the proposed relations. A special case of SEM known as path analysis was applied due to the model’s complexity and the sample size (cf., Bryan, Schmiege, & Broaddus, 2007). For path analyses every variable in the model is directly measured or observed and no latent variables are used.

Four criteria were utilized for the evaluation of the overall model fit: $\chi^2$ Test, the Comparative Fit Index (CFI; Bentler, 1990), the Goodness of Fit Index (GFI, Jöreskog & Sörbom, 1984) and the Root Mean Squared Error of Approximation (RMSEA; Brown & Cudeck, 1993). Non-significant $\chi^2$ values indicate good model fit. The smaller the $\chi^2$ value, the better the model. CFI and GFI range from 0 to 1 with values close to 1 indicating a very good fit and above .90 a good fit. RMSEA ranges from 0 to $\infty$, with values below .05 indicating very good fit and below .08 a reasonably good fit.

Overall, the tested model showed a good model fit with $\chi^2 (7, N=143) = 12.99, p=.07$; CFI = .94, GFI = .98, RMSEA = .08. Therefore, no adjustments of the model had to be made to improve the model fit. In Figure 1 the tested model including the standardized regression weights for each path is depicted.

[Figure 1 about here]
3.1. *Fairness, social identification, and tax compliance*

Regarding the relations between fairness, social identification and tax compliance the results showed that procedural fairness relates with social identification with Austrians ($r=.24^{**}$) as well as with tax compliance ($r=.21^*$), but not with the social identification with being self-employed ($r=-.11$). In other words, the more people perceive the decision processes of the tax office to be fair, the more they identify with Austrians and the more compliant they are with their tax payments. Regarding interactional fairness neither a significant relationship with both forms of social identification nor with tax compliance was found. Contrary to the results concerning procedural fairness, interactional fairness would rather be related negatively with tax compliance ($r=-.10$). In terms of social identification and tax compliance, the identification with being self-employed showed a negative association ($r=-.21^*$). The more people identify with being self-employed, the less they comply with tax law.

Wenzel (2002) reported a moderator effect of social identification with the nation (i.e., Australia) in regard to the relationship between procedural fairness and different forms of tax compliance. A moderator variable strengthens or reduces an effect between two other variables. He (Wenzel, 2002) showed that only highly identified Australians had a positive relation between procedural fairness and tax compliance (at least for one kind of tax compliance), but not low identified Australians. This moderator effect with social identification was also tested in the current study. The interaction terms of the variables were built by centering the two relevant variables and subsequently multiplying them (Aiken & West, 1991). Each moderator (i.e., identification with Austria and with self-employment) was calculated separately for procedural and interactional fairness resulting in four analyses. The achieved overall model fits were satisfactory, but the investigated interaction effects were not significant ($p=.67/.14/.51/.88$).

---

1 $^*p < 0.05; **p < 0.01, ***p < 0.001$

2 Social identification (SI) Austria & procedural fairness: $\chi^2(85, N=143) = 121.03, p=.01; \text{CFI}=.94, \text{GFI}=.90, \text{RMSEA}=.06$

SI Austria & interactional fairness: $\chi^2(85, N=143) = 101.20, p=.11; \text{CFI}=.98, \text{GFI}=.92, \text{RMSEA}=.04$

SI self-employment & procedural fairness: $\chi^2(85, N=143) = 115.63, p=.02; \text{CFI}=.95, \text{GFI}=.91, \text{RMSEA}=.05$

SI self-employment & interactional fairness: $\chi^2(85, N=143) = 128.61, p<.01; \text{CFI}=.95, \text{GFI}=.90, \text{RMSEA}=.06$
3.2.2 Descriptive social norms, social identification, and tax compliance

In terms of the interplay between social norms, social identification and tax compliance, the identification with Austrians related to the descriptive social norms (r=.35***). Nevertheless, these norms showed no effect on tax compliance. In terms of identification with self-employed people, identification had an effect on the descriptive social norms of self-employed people (r=.31***), but again, no statistically significant effect on tax compliance was obtained.

Similar to the fairness dimensions, it was checked whether there is an interaction effect between social norms and social identification on tax compliance as reported by Wenzel (2004). The same procedure as above was applied. Analogous, the model fits for the interaction effects were very good, but none of the interactions did reach any significance (p=.18 or .17). However, the link between the descriptive social norms of self-employed people and tax compliance reached nearly significance with p=.06 and r=.25. This indicates that the behavior attributed to self-employed people affects the own behavior. By looking at only one item (i.e., honesty) instead of the two-item scale (i.e., honesty and responsible mindedness) for social norms, the effect was clearly significant (p=.02, r=.24). Taxpayers, who perceived self-employed people as more honest, consequently declare their taxes more honestly themselves. However, although the $\chi^2$ value of the latter model (i.e., norms in terms of honesty) was smaller with $\chi^2 (40, N=143) = 49.27$ indicating a better fit, the difference of the two model fits ($\Delta\chi^2 = 5.73, \Delta df=9, p=0.77$) was statistically non-significant and thus, the two models are considered as equally good.

4. Discussion

Generalization and extrapolatability of the obtained results is limited due to the restricted sample, particularly in terms of sample size. Considering the limited access to self-employed taxpayers, the

\[ \text{SI Austria} & \text{ norms Austria: } \chi^2(49, N=143) = 58.13, p=.17; \ CFI = 0.98, \ GFI = 0.94, \ RMSEA = 0.04 \\
\text{SI self-employed & norms self-employed: } \chi^2(49, N=143) = 55.00, p=.26; \ CFI = 0.99, \ GFI = 0.94, \ RMSEA = 0.03 \]
number of participants is judged big enough to make first assumptions about the proposed relations studied here. Because of the applied snow-ball technique of the online-study it is impossible to indicate the number of total invitations to the study. Approximately 700 persons have been contacted directly and individually by the authors. About 500 people accessed the study, whereof 300 people quit before sending the data. In regard to the sensibility of this topic (i.e., criminal behavior in terms of tax non-compliance) and online studies in general, this drop-out rate of about 60% is considered within the expected range.

Furthermore, due to the cross-sectional nature of the study, the observed data set does not provide strong evidence of causation but rather give account of correlative relations between the variables (Bryan, Schmiege, & Broaddus, 2007). Even if the relations found are in line with theoretical assumptions, it may also be possible that the assumed directions of associations go the opposite way. For example, when identification with the nation is high, tax procedures are perceived as fair because people want to evaluate their own group positively. Otherwise, it could conflict with the positive image of the own group. However, model fit as well as theoretical explanations of the group engagement model imply that fairness perceptions influence the social identity.

One of the study’s main outcomes is the separation of interactional and procedural fairness. This separation is even more important in the tax context as many people indicated that they are mandating a tax advisor, which makes it hard to judge whether the tax officers treat their clients in a fair manner (i.e., interactional fairness). Procedural fairness, however, does not necessarily require direct contact with the tax office because it focuses on the decision-making process which can be judged in a more abstract manner than interpersonal relations. In line with that, different results regarding interactional and procedural fairness were obtained. Only perceived procedural fairness, but not interactional fairness, was (positively) related to social identification with Austrians as well as to tax compliance.

In terms of the identification with self-employed people no statistically significant relationship with procedural or interactional fairness was obtained. This might be due to the fact that based on
Leventhal’s consistency rule, procedures should be consistent across people and time and nobody (even not self-employed people) should be favored or disadvantaged by the authorities or be treated in a different way.

Furthermore, the study sheds new light on the results of Wenzel (2002). In his study, procedural fairness encompassed respect, trustworthiness, and neutrality which could be argued as being represented here as interactional fairness. Wenzel received a negative effect of procedural fairness on tax compliance. In the current analysis, this effect was also obtained – however statistically non-significant. A possible interpretation of this result might be that tax officers being too nice to their clients would provoke deviant behavior because of the lacking threat of penalties. Procedural fairness, on the other hand, related positively to tax compliance which shows that taxpayers are grateful in terms of compliant behavior for procedures which are applied in a consistent, accurate, correctable, bias suppressed, representative, and ethical manner (cf., Leventhal, 1980).

Wenzel (2002) reported a moderator effect saying that procedural fairness is predictive for tax compliance only for people highly identified with the nation. This moderating effect of social identification was not found for both fairness dimensions. However, due to the fact that the grand majority identified rather highly with the nation, the moderating effect cannot be fully denied.

Further results showed that people highly identified with the nation or with self-employment thought positively of their members in terms of honesty and responsible-mindedness (i.e., descriptive social norms). When the group members are honest and responsible-minded, the whole group benefits on the long run. Thus, if the group is important to oneself, it is important also that the others are acting according to the group’s values and principles. However, no general link between the descriptive social norms and tax compliance was obtained. However, when looking at only one dimension of the social norms, i.e., honesty, a clear relationship with tax compliance was shown.

Implications drawn from this study are that fair decision making processes in terms of consistent, accurate, correctable and ethical procedures are essential for improving identification with the nation.
and tax compliance. Furthermore, people who are highly identified with self-employment are inclined to evade taxes rather than those who are highly identified with their nation. Possibly, the social identity in terms of the nation should be made salient for all taxpayers, also for the self-employed taxpayers. Then, people are reminded of their civic duty as Austrians to contribute to the national tax revenue which benefits all Austrians on the long run. Based on research on dual identity (e.g., Crisp, Stone & Hall, 2006), we argue that the sole emphasis on the superordinate category (i.e., Austria) could also backfire. Consequently, the salience of the dual identity (i.e., the social identity of being Austrian and self-employed at the same time) may even have more favorable effects. This could be realized for example by emphasizing the important role self-employed people have for the welfare of the nation.
5. References


Appendix

Social identities “Austrian” and “self-employed person”

Being Austrian is important to me.
I am proud being Austrian.
I feel connected to other Austrians.

Being self-employed/freelancer/entrepreneur is relevant for me.
I am proud being self-employed/a freelancer/an entrepreneur.
I feel connected to other self-employed people/freelancers/entrepreneurs.

Descriptive social norms of “Austrians” and of “self-employed individuals”

Please mark one of the circles between these pairs of attributes which applies most likely for you.

<table>
<thead>
<tr>
<th></th>
<th>honest</th>
<th></th>
<th>dishonest</th>
<th>responsible-minded</th>
<th>irresponsible</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>●●●●●●</td>
<td>●●●●●●</td>
<td>●●●●●●●●</td>
<td>●●●●●●●●</td>
<td>●●●●●●●●</td>
</tr>
</tbody>
</table>

Procedural fairness

The tax office's decisions are fair.
The rules and approaches applied by the tax office treat all taxpayers equally.
The tax office's decisions reflect mainly its own stakes [reverse-coding].
The tax office's decisions are mainly based on facts and not on opinions.
Changes or adaptations will be applied in case the decisions made by the tax office are found to be
wrong or bad.

Interactional fairness

The tax office treats me with respect.
The clerks at the tax office treat me friendly and respectfully.
The clerks at the tax office take me seriously.
The clerks at the tax office treat me without prejudice.
I receive honest advice from the clerks in the tax office.

Tax compliance

I declare ALL my income in my tax return.
Some business expenses declared in my tax return are not literally connected to my business.
It could happen that I do not declare some of my cash receipts in my tax return.
I try to capitalize on gray areas in my tax return in the best possible way.
It could happen that I adopt tax dodges which are not entirely legal and cannot be detected in case of a
tax audit (e.g. manipulating the driver's log, postponing cash receipts beyond the closing date, etc...).
It could happen that I illicitly employ someone.
**Figure 1:** Overall model of investigation

Note: *p < 0.05; **p < 0.01, ***p < 0.001