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Assessment Performance of Individual Taxpayers and Experimental Method

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Abstract

This paper reports on the findings of a tax experiment conducted to assess salaried individual taxpayers' assessment performance in the context of early phase of self-assessment system (SAS) implementation in Malaysia. The change of taxpayers' responsibilities as a result of the introduction of SAS had triggered debates on whether taxpayers are able to perform the required tasks under the new system. This is because SAS demands taxpayers to perform the primary tasks that were previously handled by the tax authority, which emphasise on completing tax returns accurately, including computing the correct tax liabilities. In order to perform their responsibilities successfully, it is believed that taxpayers must achieve and possess certain states which intrinsically developed. Specifically, this paper presents part of the results of an investigation of the relationships between taxpayer's internal states as well as taxpayer assistance and assessment performance and simultaneously considered the moderating influence of taxpayer assistance. The data is collected using a quasi-experimental design known as posttest-only no-treatment control group design. The sample comprises of post-graduate students, who are actual taxpayers. Among the elements of the taxpayer's internal states considered in this study, tax knowledge was found to have significant relationship with assessment performance. However, taxpayer assistance did not have moderating effect on the relationships of taxpayer's internal states and assessment performance. The findings of this study have contributed to the body of knowledge because there is a general dearth of published research, particularly in Malaysia that investigates such relationships.

Keywords: Taxpayer, assessment performance, experiment, internal states

1. INTRODUCTION

The introduction of self-assessment system (SAS) for Malaysian individual taxpayers in the year 2004 places demands on taxpayers to perform the primary tasks that were previously handled by the tax authority i.e. the Inland Revenue Board of Malaysia (IRBM) (Mohd Hanefah, 1998). Thus, the implementation of SAS had triggered debates on whether taxpayers are able to perform the required tasks especially during the early phase of SAS era. This is due to the fact that under SAS, taxpayers are actually performing the tasks of a professional, since the taxpayers are expected to exercise a function that was previously performed by trained taxation personnel (Loo, McKerchar, & Hansford, 2005). Therefore, even though SAS had been introduced more than a decade ago, the assessment performance of the taxpayers is constantly significant to ensure successful implementation of SAS. Furthermore, taxpaying process involves a series of decisions and actions relating to economics transactions, records keeping and filing of forms (Carroll, 1987) which demands the taxpayers to be up to date with current knowledge and procedures. This is further complicate with the dynamic nature of taxation itself whereby existing knowledge become obsolete over a short time period.

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For the purpose of this study, assessment performance is referred to the performance of income assessment task by taxpayer which results in determining the correct amount of tax liability. Determining correct tax payment is crucial under SAS as it reflects the amount of revenue collected by the Government. On top of that, failure to perform the required tasks is non-compliance which is an offence under the tax law and subject to various penalties (Baldry & Kasipillai, 1996). Thus, the administration of SAS should be based on providing assistance and education to support taxpayers and enhance their assessment performance (Singh, 2005). In addition, in order to perform their responsibilities successfully, it is believed that taxpayers must achieve and possess certain internal states.

Among the elements of the taxpayer's internal states considered in this study, tax knowledge was found to have significant relationship with assessment performance while taxpayer assistance did not have moderating effect on the relationships of taxpayer's internal states and assessment performance. The findings of this study have contributed to the body of knowledge because there is a general dearth of published research, particularly in Malaysia that investigates such relationships. This paper continues with brief literature discussion on the independent and dependent variables of this study in section two. This is followed by an overview of the research design in section three. The findings are outlined in section four while conclusions, limitation and recommendation are drawn in the final section.

2. TAXPAYERS' INTERNAL STATES AND ASSESSMENT PERFORMANCE

There was not much discussion on performance of individual taxpayers in the taxpaying context as compared to individual performance as employees, auditors, tax professionals and students (Campbell, Gasser, & Oswald, 1996; Libby & Luft, 1993; Sonnentag & Frese, 2005). Whereas the performance of individuals to assess their income accurately is significant because it would affect the successful implementation of SAS and the amount of Government revenue. Assessment performance by taxpayers involve judgmental and evaluative process of decision making. Indeed, these processes are influenced by various internal and external factors (Sonnentag and Frese, 2005).

In accounting behavioural studies, the definition of internal states is very limited but in psychology, internal states refer to factors that influence the relationship between stimuli, sensations and post-stimuli perceptions of which the factors neither rooted outside the factors nor the time variable related to the factor (Elugardo, 1988). Thus, in taxpayer context, internal states can be referred as factors which are innate in an individual taxpayer that contribute to the performance of the required responsibilities. Nevertheless, internal states of an individual cannot be directly observed but their existence are reflected through the accuracy and speed on psychometric tests (Libby, 1995). In this study, individual taxpayer's internal states include tax knowledge, perceived complexity of the tax law, attitude towards paying tax, general problem-solving ability and experience. Among these five elements of internal states, tax knowledge is the main condition focused by researchers prior to the implementation of SAS in Malaysia (Bardai, 1992; Mohd Hanefah, 1997; Mat Udin, 2015). This is because they believed that taxpayers who did not possess adequate knowledge on personal tax matters lacked the competency to file own tax return forms (Loo & Ho, 2005) and unable to perform their responsibilities related to taxation (Martinez-Vazquez, Hardwood & Larkins, 1992; Palil, 2010).

Due to the change of responsibility from the tax authority to the taxpayers, perceived complexity of the tax law has become more important (James, Sawyer & Wallschutzky, 1998) as complexity would frustrate the taxpayers in their efforts to comply with the tax law (Carroll, 1987; Song & Yarbrough, 1978). Complexity is the situation when a taxpayer reported any difficulty in completing tax return form (McKerchar, 2003) and led to the increase in taxpayer uncertainty (Carroll, 1987). Saad, Mat Udin and Derashid (2014) reported that Malaysian tax legislation is complex and difficult to be comprehended by average taxpayers. Studies had reported a negative relationship between complexity and performance (Chang, Ho & Liao, 1997; Karlinsky & Koch, 1987; O'Donnell, Koch & Boone, 2005). Attitude of a person is another element of internal states that influences the individual's decision making (Mueller, 1986). Therefore, in the individual taxpaying context, taxpayer's attitude towards paying tax is viewed to have an impact on his or her decision to perform the necessary tasks relating to the tax paying process. Eagly and Chaiken (1993) suggested that people with positive attitudes would engage in behaviours that approach, support or enhance the attitude object, whereas people with negative attitudes would engage in behaviours that avoid, oppose or hinder the object. Besides attitude, previous studies found that general problem-solving ability of an individual also contribute to the individual's performance in the taxpaying contexts such as on the performance of tax professionals (Barrick & Spilker, 2003; Cloyd, 1997). Libby and Luft (1993) suggested that the strength of the effects of ability on performance depends on the nature of the tasks, or particularly on the environment where the tasks are performed. Since SAS emphasises on the performance of taxpayers in fulfilling their responsibilities, there was opportunity to examine general problem-solving ability in

taxpayer context. This is because the nature of the taxpayer's responsibilities deal with problem-solving type of activity (Carroll, 1987).

Besides tax knowledge, perceived complexity of the tax law and general problem-solving ability, experience is another element of taxpayers' internal states highlighted in this study. Christensen, Wehrich and Gerbing Newman (1994) urged future researchers to examine the effects of individuals' amount of prior tax filling experience. Researchers distinguished experienced from the less experienced individuals of which individuals who are less experienced lacked the basic organizational knowledge structures that are fundamental to the learning and retention process as compared to experienced individuals (Gibbins, 1984; Waller and Felix, 1984). Besides internal states, taxpayer assistance is another aspect that is emphasised under SAS. Wilt and Perng (1990) suggested that providing assistance to the taxpayers might improve the accuracy of their tax return forms. Alm, Cherry, Jones and McKee (2010) also agreed that the provision of information by the tax authority helps to reduce uncertainty situations faced by taxpayers and consequently assists the taxpayers to perform their responsibilities. Mohd Shukor (1994) stated that the objectives of providing taxpayer assistance is to provide all citizens with accurate and relevant information, and to assist them in complying with the tax law. Reading tax pamphlets and printed materials was the most popular way used by taxpayers to update information on tax matters (Madi et al., 2010).

3. EXPERIMENT OVERVIEW

The method of data collection of this study is known as post-test-only no-treatment control group design which is a type of quasi-experimental design (Thyer, 2010) consisting of the experimental and control groups. The experimental group was exposed to a treatment and the results were tested while the control group was not exposed to the treatment but the results were similarly tested. This design is also called static group design (Zikmund, 2003) as shown in Figure 1.

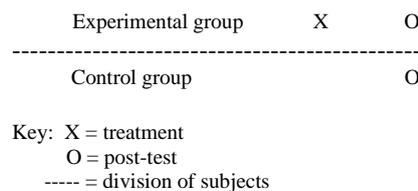


Figure 1 Diagram of Posttest-Only No-Treatment Control Group Design
 Source: Thyer (2010: 196)

This design allows for unequal number of subjects in the experimental and control groups. The experimental sessions were carried out in early 2008. The subjects were assigned to the experimental and control groups based on their scores in the pre-test knowledge. This way of assigning subjects reflected the reality of which it is impossible to achieve a balance population with equal number of people with high and low knowledge. However, even though the number of subjects was not equal but the background of subjects of this study was identical in terms of education level of which they were postgraduate students of Universiti Utara Malaysia earning income from similar source i.e. salary and they were actual taxpayers. Apart from carrying out the pilot test, the experimental procedures were emailed to an expert in experimental design study to seek his opinion and comments. Based on the feedback received, it was reasonable to proceed with the actual experimental session.

The experiment was carried out in two sessions. A total of 132 subjects who earned salary income qualified for the experiment attended the first session however, only 111 subjects turned-up for the second session. In the first session, after the introductory briefing, each subject received a white envelope containing the relevant materials. The subjects were required to answer the pre-knowledge test followed by the ability test and the demographic information section. The time taken to administer the questionnaire was approximately 40 minutes for both sessions as estimated in the pilot test. In the second session, each subject received the same white envelope that was submitted by each of them in the first session, bearing their own respective code number. The subjects were separated into two groups based on their scores in the pre-knowledge test. The median of the knowledge test was taken as the cut-off value. If a subject scored lower than the median, he/she was considered as possessing low tax knowledge and was assigned to the experimental group. A subject who scored above the median was considered as possessing high tax knowledge and placed in the control group. The materials received by subjects in experimental group were similar to the control group, but with an additional document i.e. Explanatory Note to BE form which is the treatment of the experiment. The subjects were asked to complete the BE form based on the information provided in the hypothetical case. Later, they were to indicate the level of complexity they perceived in relation to the items in the scenario case when completing the BE form. Consequently, the subjects completed

the questionnaire on attitudes towards paying tax. This was then followed by a tax knowledge quiz. After completing all the materials, the subjects submitted them to the experimenter.

4. ANALYSIS AND FINDINGS

Out of the total usable questionnaires, 27 represent the experimental group while the remaining 40 represent the control group. Sixty percent of the subjects were male while the balance were female. In terms of ethnicity, the majority of the samples (60 percent) consist of Malays while the rest are Chinese, Indians and others. Almost about two-third to four-fifth of the subjects in the sample fill in their own tax return forms while the others seek assistance from spouse, tax agent or friend. This situation is in line with the aim of the IRBM to encourage taxpayers to fill their own tax return forms under SAS. In terms of annual gross income, in the experimental group the highest number of subjects earned between RM24,000 to RM48,000, while in the control group the highest number earned between RM48,001 to RM72,000. Half of the subjects in the sample are from the age group of around 26 to 35 years old while around 33 to 35 percent of the subjects fall under the age group of 36 to 45 years old. The remaining subjects are either under 26 years old or above 46 years old. Taxpayer's characteristics i.e. gender, ethnicity and income level are treated as control variables in this study.

The results of regression analysis that predicted the relationships between taxpayer's internal states, taxpayer assistance and assessment performance are shown in Table 1.

Table 1. Taxpayer's Internal States and Assessment Performance (n=67)

Independent Variables	Model 1
TK	0.4350 (5.08)***
COMPLEX	-0.0095 (-0.11)
ATT	0.0823 (1.00)
ABILITY	0.0770 (1.17)
EXP	-0.0995 (-0.48)
ASSIST	-2.0187 (-0.74)
GEN	0.1320 (0.05)
ETHC	-2.5870 (-1.07)
INC	2.0474 (1.19)
Cons	26.8380 (2.85)***
R ²	0.5163
Adjusted R ²	0.4399
F-value	6.76***

Figures in parentheses represent t-statistics.
*** indicates significant at 1% level.

The results revealed that tax knowledge is significantly and positively related to assessment performance. It can be interpreted that taxpayers with higher tax knowledge exhibit higher assessment performance. If taxpayers are not equipped with the relevant and adequate tax knowledge, they would lack the competency to perform the required tasks (Loo & Ho, 2005). Hence, this finding consistently supported prior contentions relating to tax knowledge and SAS, whereby tax knowledge is a requirement for taxpayers to file correct tax return forms (Martinez-Vazquez, Hardwood & Larkins, 1992; Palil, 2010). Therefore, it can be concluded that the results of this study supported the hypotheses that predicts a positive relationship between tax knowledge and assessment performance. These finding also consistent with previous evidence reported by prior researchers on the importance of tax knowledge in the SAS context (Bardai, 1992; Mohd Hanefah, 1997). However, the results of the analysis are found not to be supportive of other hypotheses relating to other elements of taxpayer's internal states and assessment performance. This may be because this study took place at the early stage of SAS implementation whereby taxpayers might still be at the initial stage of the process of adapting themselves to their new responsibilities. These variables may have relationships with assessment performance at the later stage of SAS implementation when taxpayers are involved in tax planning processes (Carroll, 1987).

In addition to the above analyses, this study also carried out investigation relating to the moderating effect of taxpayer assistance on the relationship between taxpayer's internal states and assessment performance. The results in Table 2 are found not to be supportive of the stated hypotheses which implied that taxpayer assistance

is not a moderator to the relationship between taxpayer's internal states and assessment performance. In addition, it also may indicate that the taxpayer assistance was not tailored to the needs of the taxpayers in the performance of the assessment tasks.

Table 2. Moderating Effect of Taxpayer Assistance (n=67)

Independent Variables	Model 2
TK	0.4098 (3.68)***
TK_ASSIST	0.0884 (0.47)
COMPLEX	-0.0309 (-0.25)
COMPLEX_ASSIST	0.0380 (0.21)
ATT	0.0486 (0.46)
ATT_ASSIST	0.0984 (0.53)
ABILITY	0.0612 (0.60)
ABILITY_ASSIST	0.0230 (0.15)
EXP	-0.1268 (-0.47)
EXP_ASSIST	0.0335 (0.10)
ASSIST	-15.1457 (-0.79)
GEN	-0.0108 (-0.00)
ETHC	-2.8629 (-1.07)
INC	2.2938 (1.20)
Cons	32.0814 (2.46)**
R ²	0.5221
Adjusted R ²	0.3935
F-value	4.06***

Figures in parentheses represent t-statistics.

*** and ** indicate significant at 1% and 5% level respectively.

5. CONCLUSION, LIMITATION AND RECOMMENDATION

This study contributes to the existing knowledge by providing further evidence on the relationship between tax knowledge and assessment performance in SAS context. An experimental design study is limited in terms of the generalisability of the results of the study even though the study has been carefully planned and designed (Kerlinger, 1986). Despite that limitation, the findings of this study provide some motivations and indications for future studies. This study has suggested the internal states related to salaried taxpayers, thus, future studies could be carried out to incorporate and test this variable in other contexts, such as business taxpayers. In addition, since this study was conducted at the early stage of SAS implementation on individual taxpayers, therefore, to further investigate the relationship between taxpayer's internal states and assessment performance, future research could be conducted at some later stage, such as after a decade or more of SAS implementation. The results might be different, as at the early stage taxpayers are still at the initial process of adapting themselves to the requirements of the new assessment system. At this stage, taxpayers are also trying to make themselves familiar with the responsibilities which they have just taken over from the tax authority. However, at some later stage, taxpayers might be more involved in decisions making and tax planning processes thus, they are more equipped for their assessment performance.

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