# CHAPTER 4

# DATA ANALYSIS & RESULTS

## 4.0 Introduction

This chapter presents the preliminary results from the survey analysis before conducting the model assessment analyses. The chapter is divided into two main parts: the survey response analysis and the preliminary analysis. The discussions in the survey analysis part focus on the response rate, demographic background of survey respondents, response representativeness, and non-response bias. In the preliminary analysis, the explanations center on the data screening process, common method bias results, findings from the social desirability bias analysis, descriptive analysis, and finally, the results from the t-test analysis. The chapter concludes with a summary.

## 4.1 Survey response analysis

The survey response analysis discusses the response rate, demographic profile of the respondents, response representativeness and non-response bias analysis.

### 4.1.1 Response rate

The survey response rate is widely recognized as an important measure of data quality, as noted by Biemer and Lyberg (2003). It is defined as the ratio of the number of usable questionnaires to the total number of questionnaires sent out (Krishnan & Poulouse, 2016). A high response rate is desirable because it results in larger data samples and greater statistical power, which increase the likelihood that the sample is representative of the population (Baruch & Holtom, 2008). This, in turn, enhances the credibility and generalizability of the research findings. Conversely, smaller data samples decrease statistical power, increase confidence intervals, and limit the statistical techniques that can be used (Anseel et al., 2010; Rogelberg & Stanton, 2007).

However, even with a high response rate, potential errors may still exist, and non-response bias is not inevitable with low response rates (Cook et al., 2000; Rogelberg & Stanton, 2007). Therefore, response rate alone should not be the sole measure of the potential contribution of a study (Campion, 1993; Cook et al., 2000). Instead, it should be combined with information from the researcher about the efforts taken to increase response rates and address non-response bias (Krishnan & Poulouse, 2016). If systematic differences between respondents and non-respondents are observed, the study's findings may not be generalizable to the entire population.

Data collection for this study was conducted between April 2019 and June 2019. Initially, the data was collected through an online survey. The researcher emailed 1,000 questionnaires to potential respondents using email addresses from a

database that was developed by the researcher. The email contained information about the purpose of the survey and a link to the questionnaire. The database included the names, addresses, and email addresses of professionals. This was necessary because there was a lack of information on the list of professionals registered in Malaysia. From the database, the researcher used Research Randomizer software to generate a random sample of respondents. (Refer 3.6.2).

Out of the 1000 survey questionnaires that were mailed to the professionals, only 91 responded, resulting in a low response rate. In response to this, the researcher took additional measures to increase the response rate, including contacting the remaining respondents in person and providing a two-week period to complete the questionnaire. However, only 45 completed questionnaires were returned to the researcher. 10 questionnaires were returned blank with a note indicating that the respective professionals were either busy, out of town, or not interested in answering the questions. The remaining professionals did not respond despite the researcher's attempts to follow up with them five times.

The survey response rate is summarized as follows:

**Table 4.1**: Survey Response Rate

| Particulars | Quantity |
|---|---|
| Numbers of questionnaire mailed | 1000 |
| Number of responses received | 126 |
| Response rate (%) | 12.6% |

The response rate was determined by dividing the number of responses received by the total number of available questionnaires, resulting in a response rate of

only 1%. This is disappointing, as response rates for international tax studies are typically around 25% to 30% (Hijatullah Abdul Jabbar, 2009). However, it is not uncommon for tax studies to have low response rates. Tax researchers have noted that tax surveys consistently produce lower response rates (Walschutzky, 1996). For example, Chattopadhyay and Gupta's (2002) mail survey only achieved a 2% response rate, while Evans et al. (2014) obtained response rates ranging from 0.9% to 6.7% in a study of tax compliance costs in four countries. More recent studies by Khadijah Mohd Isa (2012) and Suhaila Abdul Hamid (2014) recorded response rates of 5% and 6.2%, respectively. Therefore, given the nature of the study, the response rate for the current study can be considered acceptable.

Although the response rate for the current study is still considered low, it is comparable to several tax studies conducted in the Asia Pacific region. These studies have reported response rates ranging from 14% to 26%. For instance, Wu and Chen (2005) obtained a response rate of only 12.9% in their study on the trust and technology acceptance model in online tax in Taiwan. In the case of Malaysian tax studies, several relevant studies have also reported similar response rates. For example, Hijatullah Abdul Jabbar (2009) recorded a 15.7% response rate, Loo Ern Chen (2006) reported a 14% response rate, and Sia (2008) obtained a 10% response rate.

In addition, a number of previous studies have recorded a low response rate when the focus group is among the professionals' group. A study by Baruch (1999), who conducted a comparative analysis of response rates in academic studies, found that the average response rate for a professional group in the Academy of Management Journal is 15%. This is supported by the study conducted by Hijatullah

Abdul Jabar (2009), in which the sample population comprised of professional accountant registered with the Malaysian Institute of Taxation, the study was only able to obtain 31 respondents from 300 samples which constitutes a 10.3% response rate.

There are several possible reasons contributing to the low response rates. This study utilized a combination of simple random sampling and snowball sampling. The snowball sampling required the professionals who were initially identified from the simple random sampling to disseminate the questionnaires to their colleagues. However, the researcher could not determine if the professionals either refused to distribute the other two survey packages to their colleagues or if the surveys were disseminated, but the professionals were not able to persuade their colleagues to participate, as this survey is voluntary. For instance, during the follow-up, some professionals mentioned that they had passed the survey packs to their colleagues, but they could not persuade their colleagues to participate. As a result, the actual number of surveys distributed and received by the potential respondents is unknown, possibly leading to the low response rate.

It is important to note that the professionals' busy schedules and time constraints may have contributed to the low response rate. Some professionals may have felt that they did not have the time to complete the survey, especially if they were over-committed with their daily tasks. For example, the researcher may have waited for some doctors and accountants in their offices for hours, but upon finally meeting them, the professionals may have been reluctant to answer the survey questions due to their busy schedules. This is a common challenge faced by researchers conducting surveys among busy professional groups, and may have contributed to the low response

rate in this study.

The issues explored in the survey could be another reason that led to the low response rate. The respondents may not feel comfortable answering the questions despite the researcher assuring them that participation is anonymous. There were instances where respondents were reluctant to open the survey package upon reading the survey title. Additionally, some respondents simply lacked interest in participating, without providing any further explanation for their refusal.

Nonetheless, the number of usable responses in this study is adequate for further analysis. The number of responses exceeds the requirement for PLS analysis based on the ten times rule of thumb suggested by Hair et al (2012). The ten times rule of thumb suggests that the minimum sample size should be ten times the number of path relationships directed to a particular construct in the structural model (Hair et al, 2012). In the current study, the maximum number of arrows pointing to a construct is 7; therefore, a minimum of 80 observations is needed to achieve a statistical power of 80% for detecting R2 values of at least 0.25 (with a 5% probability of error).

Furthermore, as mentioned in 3.6.1.2, this study also used the G*Power application to determine the minimum sample. With the use of alpha 0.05, a power of 0.80 and medium effect size of ($f_2$= 0.15), the desired sample size is 103.

All in all, the useable responses of 123 meet the suggestion of the ten timesrule by Cohen (1992) and G*Power application.

## 4.2 Demographic background

The demographic background of the respondents is tabulated in Table 4.2. Thesurvey respondents' profiles consist of information on age, gender, ethnic group, education level, annual income, profession and experience with tax filing.

### 4.2.1 Age

Most of the respondents are between 35 to 39 years old (27 percent), followed by 25 to 29 years old (23 percent), 30 to 34 years old (21.4 percent) and 40 to 44 yearsold (16.7 percent). There is also participation of respondents who are 55 years old (1.6percent) and above which is near to the retirement age.

**Table 4.2:** Age of the survey respondents

| Age (years) | Frequency | Percent |
|---|---|---|
| 25-29 | 29 | 23 |
| 30-34 | 27 | 21.4 |
| 35-39 | 34 | 27 |
| 40-44 | 21 | 16.7 |
| 45-49 | 8 | 6.3 |
| 50-54 | 5 | 4 |
| 55 and above | 2 | 1.6 |
| Total | 126 | 100 |

### 4.2.2 Gender

With reference to the gender of survey respondents, the distribution of maleover female respondents is quite balanced. Table 4.3 shows that there are 59 male respondents and 67 female respondents who participated in the study.

**Table 4.3:** Gender of survey respondents

| Gender | Frequency | Percentage |
|---|---|---|
| Male | 59 | 46.8 |
| Female | 67 | 53.2 |
| Total | 126 | 100 |

### 4.2.3 Ethnicity

With regards to ethnicity, a majority of the respondents are Malays with 107respondents (84.9 percent), followed by 13 Chinese and 6 Indian respondents.

**Table 4.4:** Ethnic of survey respondents

| Ethnicity | Frequency | Percentage |
|---|---|---|
| Malay | 107 | 84.9 |
| Chinese | 13 | 10.3 |
| Indian | 6 | 4.8 |
| Total | 126 | 100 |

### 4.2.4 Education

The majority of respondents are at least holders of a Bachelors' Degree at 65.9 percent, followed by a Masters' Degree and PhD holders at 22.2 percent and 11.9 percent respectively.

**Table 4.5:** Education of survey respondents

| Education | Frequency | Percentage |
|---|---|---|
| Degree | 83 | 65.9 |
| Masters | 28 | 22.2 |
| PhD | 15 | 11.9 |
| Total | 126 | 100 |

### 4.2.5 Annual Income

A majority of the respondents have an annual income bracket of RM80,000 and above (46.8 percent) followed by an income bracket of RM50,001 to RM60,000. Respondents who have annual income bracket of RM 40,000 to RM50,000 and RM60,000 to RM70,000 are equal which are 9.8 percent respectively.

**Table 4.6:** Annual income of survey respondents

| Annual Income | Frequency | Percentage |
|---|---|---|
| RM40,001 to RM50,000 | 12 | 9.5 |
| RM50,001 to RM60,000 | 31 | 24.6 |
| RM60,001 to RM70,000 | 12 | 9.5 |
| RM70,001 to RM80,000 | 8 | 6.3 |
| RM80,000 and above | 59 | 46.8 |
| Total | 122 | 96.8 |
| Missing | 4 | 3.2 |
| Total | 126 | 100 |

### 4.2.6 Profession

With reference to profession, a majority of the respondents are doctors (45 percent) followed by engineers (32 percent), lawyers (22 percent) and accountants(10 percent). There are also respondents who are architects (6 percent) and surveyors (3.2 percent).

**Table 4.7:** Profession of survey respondents

| Profession | Frequency | Percentage |
|---|---|---|
| **Lawyer** | 22 | 17.5 |
| **Doctor** | 45 | 35.7 |
| **Architect** | 6 | 4.8 |
| **Engineer** | 32 | 25.4 |
| **Accountant** | 17 | 13.5 |
| **Surveyor** | 4 | 3.2 |
| **Total** | 126 | 100 |

### 4.2.7 Filing Experience

It can be seen in Table 4.8 that most respondents have filed tax return forms more than five times, at 65.9 percent followed by two to five times 21.4 percent and once 5.6 percent. However, there are also respondents who have never filed tax return forms which is 7.1 percent. As the majority of the respondents have experience in filing tax returns more than five times, it is evident that their views and perceptions in this study come from a solid base.

**Table 4.8:** Filing experience of survey respondents

| Filing experience | Frequency | Percentage |
|---|---|---|
| **Never** | 9 | 7.1 |
| **Once** | 7 | 5.6 |
| **2-5 times** | 27 | 21.4 |
| **More than 5 times** | 83 | 65.9 |
| **Total** | 126 | 100 |

## 4.3 Response Representativeness

One method to determine response representativeness is by comparing the demographic background of the responses with the entire population (McInnis, 2006). In this study, the responses were compared on three criteria, gender, annual median income and ethnicity. Table 4.9 sets out the comparison between the survey responses and the total population of professionals in Malaysia. In terms of average monthly income, the average monthly income bracket of RM6666 and above is in comparison to RM7238in the population (Department of Statistics Malaysia, 2017). In terms of gender, the survey responses are comparable to the percentage of the population.

Unfortunately, the latest breakdown of registered professionals according to ethnicity is not available. The latest data is from the research by Maziah Mohamad (2005). Based on this information, it could be suggested that the Malays are overrepresented in the study.

In general, after reviewing both datasets from three selected criteria, namely average income, gender and ethnicity, there is a concern that the observed sampledoes not truly represent the population by which the ethnicity criteria did not reflectthe population. However, average monthly income and gender criteria reflect the totalpopulation. One possible reason those different ethnics have different levels of survey response rate (Lyness & Kropf,2007).

**Table 4.9:** Comparison between Population and Survey Responses Malaysia

| | Population | | Survey | |
|---|---|---|---|---|
| **Criteria** | **Number** | **Percent** | **Number** | **Percent** |
| **Average monthly income (MYR)** | RM7238[a] | | RM6666 | |
| ***Gender*[b]** | | | | |
| **Male** | 675,641 | 55.7 | 59 | 46.8 |
| **Women** | 537,359 | 44.3 | 67 | 53.2 |
| ***Ethnicity*[c]** | | | | |
| **Malay** | 35,043 | 37.2 | 107 | 84.9 |
| **Chinese** | 47,270 | 50.1 | 13 | 10.3 |
| **Indian** | 10,593 | 11.2 | 6 | 4.8 |
| **Others** | 125 | 1.1 | | |
| **Total** | | | 126 | 100 |

* Exclude sample of missing data

[a] This is the average monthly salaries and wages off full time paid employees obtained fromthe Department of Statistics Malaysia (Department of Statistics, 2017).

[b] This reported number for the population is extracted from Department of Statistics, 2019.

[c] The data is extracted from Malaysia Plan Documents 2000-2002

## 4.4 Non-response Bias

In order to examine the existence of non-response bias between those who participated in the study and those who refused to participate, the responses were divided into early and late responses, as explained in 4.8.2. The late respondents were used as substitutes of non-respondents (Armstrong & Overton, 1977). For this purpose, the difference of means of the early and late responses on all items was then compared to determine whether or not it was significant at $p \leq 0.05$ using independent *t*-test analysis.

The results from the independent t-test analysis between early and late responses are tabulated in Table 4.10 below. It consists of the mean, standard deviation, and the respective two-tailed p-values. The analysis suggests that non-response bias is not a serious threat to the study since both early and late respondents are similar to the survey. A majority of the items have p-values greater than 0.05, except for UI3 and OE3, which have p-values less than 0.05 but greater than 0.01. However, it is not completely guaranteed that there is no response bias in the study, given the small sample size.

**Table 4.10:** Mean and standard deviation for early and late responses

| | Response | N | Mean | Std Deviation | p-value 2 tailed |
|---|---|---|---|---|---|
| UI1 | Early | 47 | 4.85 | 2.146 | 0.619 |
| | Late | 76 | 4.65 | 1.990 | |
| UI2 | Early | 46 | 4.69 | 2.085 | 0.530 |
| | Late | 75 | 4.45 | 1.995 | |
| UI3 | Early | 47 | 4.48 | 1.943 | 0.087* |
| | Late | 76 | 3.90 | 1.729 | |
| OE1 | Early | 46 | 5.69 | 1.617 | 0.138 |
| | Late | 75 | 5.21 | 1.788 | |
| OE2 | Early | 47 | 5.85 | 1.573 | 0.342 |
| | Late | 76 | 5.56 | 1.635 | |
| OE3 | Early | 47 | 5.23 | 1.604 | 0.098* |
| | Late | 76 | 4.75 | 1.541 | |

## 4.5 Preliminary Analysis

The preliminary analysis involved several analyses namely a data screening process, common method bias analysis, social desirability analysis, descriptive analysis and *t*-test analysis.

### 4.5.1 Data Screening Process

The data screening process is a crucial stage to consider in social and management science research studies (Hair et al., 2013). Several studies have emphasized the importance of data screening, including those conducted by Badara & Zabedah (2014), Maiyaki & Mouktar (2011), and Gorondutse & Hilman (2014). Therefore, it is essential to identify and correct any possible errors in data entry and other potential mistakes during the screening process.

#### 4.5.1.1 Blank Response

The first step in data cleaning is to check for blank responses among the collected questionnaires, and Microsoft Excel was used to conduct this procedure. Cases with more than 25% blank responses on the independent variables or any blank response on the dependent variables are deleted from the sample. Using the formula COUNTBLANK (item1 to item), it was found that there were no blank responses in the data, confirming that all questions were answered by the respondents.

#### 4.5.1.2 Data Entry Error

In verifying the data errors, two methods were used: sampling checking and random case checking. For sampling checking, using SPSS 23, all fields were sorted in ascending or descending order to check for entry errors or any entries that were outside of the range of correct responses. In most cases, the incorrect value could be replaced with the correct value by rechecking the original survey responses. Next, the researcher conducted random case checking by randomly selecting 10% of the total cases.

#### 4.5.1.3 Missing Values

The next stage in data cleaning is to identify any missing part of the data set and missing data. According to Hair et al. (2017), missing data occurs when a respondent does not answer one or more questions, either intentionally or unintentionally (Hair et al., 2017). The effect of missing data is that it can diminish the statistical power of a study and may generate biased estimates that result in worthless conclusions (Kang, 2013). The gravity of missing data hinges on the configuration of missing data, the quantity of missing data, and the reason why it is missing.

Missing data is considered as a common problem in research. A check on the data revealed that all 126 responses received have less than 10 percent missing data. Hair et al., (2010) suggest that any remedies of missing data could be applied if the missing data is less than 10 percent. Following the recommendation of Hair et al

(2010), the Expectation Maximisation (EM) method was used to treat the missing data problem.

#### 4.5.1.4 Outliers

Outliers are extreme responses to particular questions or extreme responses to all questions (Hair et al., 2017). Outliers may occur due to errors in participants' responses, errors in data entry, poorly worded survey items, or incorrect specification of the population or sample (West, Finch & Curran, 1995). The assessment of outliers is crucial in a PLS-SEM analysis because they can have a significant effect on data analysis (Hair et al., 2014). In the SEM technique, extreme data points can hurt the estimate of the parameters. The outliers were diagnosed based on univariate and multivariate analysis.

It's important to note that the critical z-score value of 3.29 is typically used to identify potential extreme outliers for a standard normal distribution. However, if the distribution is not normal or if there are extreme outliers present, it may be necessary to use a different approach to identify univariate outliers. Additionally, it's important to consider the context of the data and the research question when determining the threshold for outlier designation.

For multivariate outliers, the Mahalanobis Distance (D2) was employed to analyze outliers. The Mahalanobis distance allows for significant testing at 0.05 and 0.01 levels (Hair et al., 2010). Both the univariate Z-value (3.29) outliers and the

multivariate Mahalanobis distance outliers detected only 3 cases, which were subsequently removed.

#### 4.5.1.5 Normality

The first assumption in multivariate analysis is normality, which is embodied by the normal distribution assumption in each item and all linear combinations of items (Tabachnick & Fidell, 2012). The normality of the data was checked by examining the skewness and kurtosis of the data distribution. Hair et al. (2017) and Cain et al. (2016) suggest that multivariate skewness and kurtosis can be measured using software available on statistical analysis websites. The results can be viewed at the following URL address:

https://webpower.psychstat.org/models/kurtosis/results.php?url=ed734a6632b0b4b26a 13f5881c2ce6a6.

The results show that the majority of the data fell within the acceptable range of +/- 2 for skewness and +/- 3 for kurtosis. This is consistent with the suggestion of Hair et al., (2017) where values of skewness range between -2 to 2 and for kurtosis ranges between -3 to 3 is normal.

#### 4.5.1.6 Common Method Variance

As the data collected in the study is from a single source, common method bias is a potential concern. Common method bias is defined as a systematic error variance that is shared among variables measured from the same sources or methods (Richardson et al., 2009). It is essential to test for the presence of common method bias when the data is collected via self-administered questionnaires, particularly when predictor and criterion variables are obtained from the same person (Podsakoff, MacKenzie, & Podsakoff, 2016). CMV can threaten the validity of the constructs and create systematic bias in a study (Tehseen, Ramayah, & Sajilan, 2017).

Apart from following suggestions by Podsakoff et al., (2003) and Conway and Lance (2010) to reduce common method bias in the study using procedural remedies, statistical remedies were also adopted in the study. Harmon's single factor test was also performed to assess the extent of common method bias in the study by forcing all indicators to load in a single factor (Podsakoff et al, 2003). The Harmon single factor test takes all items in the EFA including the dependent variable and checks for the unrotated 1st factor to ensure that the value is less than 50% (Podsakoff & Organ, 1986)or less than 40% (Babin & Zikmund, 2016; Guide & Ketokivi, 2015). A value lesser than 50% on all the observed indicators including the dependent variables indicate there are no issues with the common method bias. The extraction sum of squared loadings of the unrotated factor in this research is 18.831% which is less than 50% and more conservative 40% indicating that the common method bias is not an issue in the questionnaire.

#### 4.5.1.7 Social desirability bias

Social desirability bias may exist in self-report studies especially if the study involves sensitive issues (Bryman & Bell, 2011), such as in this study. Social desirability bias refers to the tendency of research subjects to give socially desirable responses instead of choosing responses that are reflective of their true feelings (Grimm, 2010). This kind of response bias may lead to inaccurate self-reports and erroneous study conclusions.

In order to determine the existence of social desirability bias in the study, the respondents were asked the possibility that they and their peers will perform the action as described in the overstating tax expenses scenario and understating income scenario.All responses were recorded using seven-point scales, fully anchored with a High/Low,with higher scales indicating a lower probability to perform the described behaviour in the scenarios. The findings from the paired *t*-test are presented in the following sub- sections.

The results from the paired t-test suggest that social desirability bias exists in the study for both the under-reporting income scenario ($t=4.362$, $p<0.01$) and the under-reporting income tax scenario ($t= -4.707$, $p<0.01$), as well as the over-claiming expenses scenario ($t=2.397$, $p<0.01$). The findings indicate that the survey respondents perceived themselves as more ethical compared to their peers. The findings are summarized in Table 4.11.

**Table 4.11:** Measures of social desirability bias

| | | Peero/Peeru[a] | | Selfo/Selfu[b] | | | |
|---|---|---|---|---|---|---|---|
| **Scenarios** | **N** | **Mean** | **Std.Dev** | **Mean** | **Std.Dev** | ***t*-value** | ***p-value (two tailed)*** |
| Understating income | 123 | 4.13 | 1.828 | 4.73 | 2.044 | 4.362 | 0.000 |
| Overstating expenses | 121 | 4.942 | 1.577 | 5.39 | 1.734 | 2.397 | 0.018 |

*Notes:* [a] If my friend is dealing with the same situation, my friend will..
[B] If I face with the same situation, I will…

All responses were rated with seven-point scales, fully anchored with High/Low with higher scores indicating low probability to perform the described behaviour.

#### 4.5.1.8 Descriptive Analysis

Descriptive analysis is frequently used to interpret basic features of the data. In this study, descriptive analysis was conducted to present the minimum, maximum, mean, and standard deviation for each item in the questionnaire. The measures for each item were also provided as per the outlined codes in the questionnaire.

##### 4.5.1.8.1 Compliance Behaviour

Table 4.12 provides an overview of taxpayers' compliance responses. The

respondents were asked to express their opinion on a non-compliant hypothetical scenario related to understating income and overclaiming expenditure. In the understating income scenario, the lower means reflect a greater possibility of complying with the tax law by not underreporting income of RM50,000. Overall, the respondents in the study were undecided about whether to be involved in underreporting income. The overall mean for underreporting income is 4.52.

In terms of overstating tax expenses, the respondents were asked to express their opinion on a non-compliant hypothetical scenario relating to overstating businessexpenses 10% more than the actual expenses. To interpret the data, higher mean values indicate higher compliance. Overall, the result suggests that the respondents in the study were less likely to overstate tax expenses in complying with the tax law. Overstating tax expenses recorded an overall mean of attitude of 5.34 implying that the respondents in the study have unfavourable perceptions towards overstating taxexpenses.

**Table 4.12:** Descriptive statistics on compliance behaviour (Scenario 1)

| Measures | Code | N | Min | Max | Mean | Std. Dev |
|---|---|---|---|---|---|---|
| **Understating income** | **UI0** | 126 | 1 | 7 | 4.52 | 1.971 |
| If face with the same situation, I will not declare my side income. * | UI1R | 126 | 1 | 7 | 4.77 | 2.043 |
| The probability that I will not declare the side income I earn is high* | UI2R | 126 | 1 | 7 | 4.61 | 2.023 |
| If my friend is dealing with the same situation, my friend will not even declare their side income. * | UI3R | 126 | 1 | 7 | 4.19 | 1.849 |
| **Overstating tax expenses** | **OE0** | 126 | 1 | 7 | 5.34 | 1.649 |
| If face with similar situation, I will claimmy travelling expenses more than 10% of the actual expense. * | OE1R | 126 | 1 | 7 | 5.37 | 1.765 |
| The probability that I will make travel | OE2R | 126 | 1 | 7 | 5.69 | 1.601 |

| | | | | | | |
|---|---|---|---|---|---|---|
| claims more than the actual travelling expenses is high. * | | | | | | |
| If face with the same situation my friends will claim their travelling expenses more than the actual travelling expenses. * | OE3R | 126 | 1 | 7 | 4.97 | 1.582 |

*Scores for the items were reverse coded.

#### 4.5.1.8.2 Motivation

As mentioned in sub section 3.6.2.2, the motivation construct is operationalized by two main components which are intrinsic motivation and extrinsic motivation. With regards to the construct of intrinsic motivation, the respondents were asked to express their opinion on a hypothetical scenario on the trustworthiness of the tax authorities. Table 4.13 provides an overview on motivation to comply with the tax law among professionals in Malaysia. Overall, the mean value of each item suggested that the respondents generally had positive motivation intrinsically. It implies that the respondents believed that the trustworthiness of tax authorities influences the respondent intrinsically to comply with the tax law.

On the other hand, regarding extrinsic motivation, the respondents were asked to express their views on several direct questions about the influence of rewards on tax compliance. Overall, the respondents agreed that rewards play an important role in motivating them to comply with the tax law. They were of the opinion that rewards do motivate them to comply with the tax law.

**Table 4.13:** Descriptive statistics on measures of motivation

| Measures | Code | N | Min | Max | Mean | Std. Dev |
|---|---|---|---|---|---|---|
| **Intrinsic motivation** | IM0 | 126 | 3 | 7 | 5.42 | 1.393 |
| | | | | | | |
| I feel that the authority in the described scenario is trustworthy. | IM1 | 126 | 1 | 7 | 5.43 | 1.494 |
| I would certainly declare tax money to the tax office | IM2 | 126 | 1 | 7 | 5.39 | 1.464 |
| Trust in tax authorities influences me to comply with the tax law | IM3 | 126 | 2 | 7 | 5.54 | 1.263 |
| Trust in tax authorities intrinsically motivates me to comply with the tax law | IM4 | 126 | 2 | 7 | 5.33 | 1.351 |
| | | | | | | |
| **Extrinsic motivation** | EM0 | 126 | 2.5 | 7 | 5.31 | |
| | | | | | | |
| I expect to receive monetary rewards as an incentive for complying with tax law | EM1 | 126 | 1 | 7 | 5.28 | 1.695 |
| I expect to receive an honour such as certificates that can be used as a credit for job promotion each time I successfully file a tax return | EM2 | 126 | 1 | 7 | 4.75 | 1.884 |
| I believe that more focus on positive approaches encourage me to comply with tax law | EM3 | 126 | 1 | 7 | 5.76 | 0.942 |
| I believe reward system is effective in increasing tax compliance (e.g monetary rewards, holiday package, acknowledgement in the workplace) | EM4 | 126 | 1 | 7 | 5.45 | 1.510 |

#### 4.5.1.8.3 Ability

As discussed in sub section 3.6.2.2.3, ability is operationalized by three components which are general knowledge, legal knowledge and technical knowledge. Descriptive statistics with regards to perceptions of the professional group of taxpayers, as presented in Table 4.14, generally indicate that respondents perceived themselves as having good knowledge of tax, except in terms of the technical knowledge indicator, which had mean values below 4.0, indicating that respondents have a low level of

technical tax knowledge. However, considering these items as one construct (technical knowledge) with a mean value of 4.10 showed slightly improved perceptions.

**Table 4.14:** Descriptive statistics on measures of ability

| Measures | Code | N | Min | Max | Mean | Std. Dev |
|---|---|---|---|---|---|---|
| **General knowledge** | GK0 | 123 | 1 | 7 | 4.59 | 1.619 |
| The income tax system is a way for the government to collect revenue to manage an economy. | GK1 | 123 | 1 | 7 | 5.65 | 1.364 |
| Individuals are subject to a single flat rate of income tax under the current tax system.* | GK2R | 123 | 1 | 7 | 3.53 | 1.874 |
| **Legal knowledge** | LK0 | 123 | 1 | 7 | 4.91 | 1.649 |
| As far as I am aware, non-compliant taxpayers can be imprisoned, if found guilty of evading tax. | LK1 | 123 | 1 | 7 | 5.10 | 1.586 |
| Similar to other criminal offences, individuals can also be prosecuted for not complying with the Malaysian income tax law | LK2 | 123 | 1 | 7 | 5.20 | 1.491 |
| I do not have to abide by the deadline for the submission of tax return form (s) (in case of having other income, such as rental and business income), as the deadline is only as a guideline and does not result in penalties.* | LK3R | 123 | 1 | 7 | 4.45 | 1.870 |
| **Technical knowledge** | TK0 | 123 | 1 | 7 | 4.12 | 1.627 |
| Everyone who earns income in this country is taxable, regardless of whether the person is resident or not. | TK1 | 123 | 1 | 7 | 5.46 | 1.500 |
| I can deduct all personal expenses in calculating my personal liability. * | TK2R | 123 | 1 | 7 | 3.34 | 1.679 |
| I have little idea about the deductions that I can claim as a taxpayer in the computation of my tax liability. * | TK3R | 123 | 1 | 7 | 3.56 | 1.704 |

*Scores for the items were reverse coded.

#### 4.5.1.8.4 Role perception

As mentioned in sub-section 3.6.2.2.4, role perception is measured through a hypothetical scenario. Table 4.15 summarizes the perceptions of respondents on their feelings of guilt over a scenario of overstating business expenses and understating income. Overall, respondents evaluated quite high either on the act of overstating business expenses or the act of understating income. The overall mean of role perception of 5.40 demonstrates that respondents feel guilty about the act of understating income of RM50,000 and overstating business expenses 10% more than the actual expenses. In addition, the respondents also feel that they have a great moral responsibility to the country to file taxes honestly.

**Table 4.15:** Descriptive statistics on measures of role perception

| Measures | Code | N | Min | Max | Mean | Std. Dev |
|---|---|---|---|---|---|---|
| **Role perception** | RP0 | 123 | 1 | 7 | 5.40 | 1.643 |
| If I face with the same situation, I would not feel guilty for not declaring the side income. * | RP1R | 123 | 1 | 7 | 5.11 | 1.847 |
| If I face with the same situation, I will not feel guilty of adding a 10% of the travelling expenses. * | RP2R | 123 | 1 | 7 | 5.75 | 1.598 |
| If I face with the same situation, I will not feel guilty for unintentionally fail to declare the side income. * | RP3R | 123 | 1 | 7 | 5.00 | 1.835 |
| If I face with the same situation, I would not feel guilty for unknowingly over claiming the travelling expenses. * | RP4R | 123 | 1 | 7 | 5.69 | 1.444 |
| Based on the scenario above, I have a great moral responsibility for the country to file tax honestly | RP5 | 122 | 1 | 7 | 5.48 | 1.495 |

*Scores for the items were reverse coded.

#### 4.5.1.8.5 Situational factor

As discussed in sub-section 3.6.2.2.5, situational factor is formed by two constructs which are financial strain and peer influence. In other words, financial strain and peer influence formed the situational factor construct which is the moderating variable of the framework. The respondents were asked to express their opinion on the influence of financial problems towards complying with the tax law. On the other hand, in terms of peer influence, the respondents were asked on their perceptions on the influence of friends and family over a non-compliance scenario.

With regards to financial constraints, overall, the respondents agree that their financial position does affect their decision-making process when it comes to filing their tax returns. However, despite financial constraints, the respondents reported that they would still file their taxes accurately. Additionally, the respondents expressed a level of satisfaction with their current financial position.

It seems that the respondents in the study do not perceive that their friends and relatives have a significant influence on their tax decision, with an overall mean of 3.00. Additionally, the respondents do not agree with the possibility of reducing their chargeable income due to influence from friends and relatives, with a mean of 2.81

**Table 4.16:** Descriptive statistics on measures of situational factors

| Measures | Code | N | Min | Max | Mean | Std. Dev |
|---|---|---|---|---|---|---|
| **Financial Constraints** | FC0 | 123 | 1 | 7 | 4.99 | 1.687 |
| Based on the scenario above, financial position affects my decision to complete the tax return | FC1R | 123 | 1 | 7 | 4.56 | 1.912 |
| The probability that I would file taxes accurately is high | FC2 | 123 | 1 | 7 | 5.33 | 1.512 |
| I am satisfied with the financial situation of my household | FC3 | 123 | 1 | 7 | 5.08 | 1.638 |
| | | | | | | |
| Peers Influence | PI0 | 123 | 1 | 7 | 3.00 | 1.768 |
| Based on the scenario above, I think friends and relatives influence my decisionon not declaring my side income. | PI1R | 123 | 1 | 7 | 3.10 | 1.775 |
| My friends and relatives strongly influence my life decision | PI2R | 123 | 1 | 7 | 3.09 | 1.859 |
| The probability that I would reduce my chargeable income because of peers and relative influence is high | PI3R | 123 | 1 | 7 | 2.81 | 1.672 |

*Scores for the items were reverse coded.

#### 4.5.1.8.6 Religiosity

Table 4.17 summarizes the perceptions of respondents on religion and tax compliance behaviour. The respondents were asked to express their perception on 5 direct questions on the influence of religion towards tax compliance behaviour. The overall results indicate that respondents agree that the religiosity variable does influence them in their tax decision. Respondents also agree that individuals who possess strong connection with religious institution are less likely to exhibit non-compliant behaviour.

**Table 4.17:** Descriptive statistics on measures of religion

| Measures | Code | N | Min | Max | Mean | Std. Dev |
|---|---|---|---|---|---|---|
| **Religion** | R0 | 123 | 1 | 7 | 4.79 | 1.659 |
| Religiosity appears to prevent deviant behaviour,including tax evasion | R1 | 123 | 1 | 7 | 4.96 | 1.685 |
| I believe that, if an individual possesses a strong emotional connection with religious institution (e.g mosque, church), the likelihood to involve in delinquent behaviour such as tax evasion is low | R2 | 123 | 1 | 7 | 4.63 | 1.832 |
| I believe that, if a person has clear motivationand life goals, the likelihood to engage in delinquent behaviour like tax evasion is low | R3 | 123 | 1 | 7 | 5.12 | 1.516 |
| Individuals who are involved in religious activities is expected to protect individuals from delinquent behaviour like tax evasion | R4 | 123 | 1 | 7 | 4.17 | 1.738 |
| Most of the religious belief encourages people to embrace the tenets of the religion with proscriptions against delinquent behaviour liketax evasion | R5 | 123 | 1 | 7 | 5.08 | 1.526 |

#### 4.5.1.8.7 Ethical sensitivity

Table 4.18 presents the perceptions of respondents on their ethical sensitivity based on four moral philosophies of MES in relation to a scenario of understating income and overstating business expenses. Overall, the respondents rated moderately on each moral dimension, with most of the means ranging between 4.04 and 4.50. The mean value of 4.39 for the equity dimension shows that respondents perceived overstating business expenses 10% more than the actual expenses as leaning more towards injustice and unfairness, and not morally right or acceptable to their family.

Regarding relativism, the respondents indicated that the act of overstating tax expense inclined more towards being traditionally and culturally unacceptable, with an overall mean value of 4.45. The mean value of 4.18 for the egoism dimension suggests that respondents perceived overstating tax expense as unethical because it promotes the well-being of oneself over others. Additionally, the act of overstating business expenses for tax purposes is perceived as not ethical since it does not produce the greatest utility for the greatest number of people or maximize benefits over harm to all parties involved. This is evident from the overall mean value of 4.15 for the utilitarianism dimension.

**Table 4.18:** Descriptive statistics on measures of ethical sensitivity

| Measures | Code | N | Min | Max | Mean | Std. Dev |
|---|---|---|---|---|---|---|
| Based on the above scenario, the action of not declaring the side income and over claiming expenses are: | | | | | | |
| | | | | | | |
| **Moral Equity** | ME0 | 123 | 1 | 7 | 4.39 | 2.074 |
| Justice | ES1 | 123 | 1 | 7 | 4.34 | 2.060 |
| Fair | ES2 | 123 | 1 | 7 | 4.26 | 2.091 |
| Morally right | ES3 | 123 | 1 | 7 | 4.49 | 2.186 |
| Acceptable to my family | ES4 | 123 | 1 | 7 | 4.50 | 1.962 |
| | | | | | | |
| **Relativism** | RE0 | 123 | 1 | 7 | 4.45 | 1.878 |
| Traditionally acceptable | ES5 | 123 | 1 | 7 | 4.48 | 1.887 |
| Culturally acceptable | ES6 | 123 | 1 | 7 | 4.42 | 1.869 |
| | | | | | | |
| **Egoism** | EG0 | 123 | 1 | 7 | 4.18 | 2015 |
| Not self-promoting for me* | ES7 | 123 | 1 | 7 | 4.24 | 2.057 |
| Personally, satisfies me | ES8 | 123 | 1 | 7 | 4.13 | 1.973 |
| | | | | | | |
| **Utilitarianism** | UT0 | 123 | 1 | 7 | 4.07 | 1.944 |
| Produce greatest utility | ES9 | 123 | 1 | 7 | 4.04 | 1.945 |
| Minimizing benefits and maximizing harms* | ES10 | 123 | 1 | 7 | 4.11 | 1.944 |

*Scores for the items were reverse coded.

## 4.6 Conclusion

In this chapter, the results from the preliminary analysis were discussed involving two main parts, which were survey response analysis and preliminary analysis. The survey response analysis covered findings on response rate, demographic background, response representativeness and nonresponse bias. The preliminary analysis part focused on data screening, common method bias, social desirability bias and descriptive statistics

It is important to note that the current study only obtained low response rates. However, the low response rates did not hinder further statistical analysis to be performed given that the number of samples fulfilled the requirement of the relevant statistical tests employed in the study.

As a result of low response rates and lack of representativeness of the sample, compared to total population, generalization of the findings from this study needs tobe treated with caution. Notwithstanding that, given the limited study on tax compliance among professional groups in Malaysia, the findings from this study are still beneficial in understanding the tax compliance behaviour among professional groups of taxpayers.

A test of nonresponse bias was also conducted between early and late respondents. The results indicate that nonresponse bias was not a serious threat in the study. The treatment for missing data using the EM method, checking for outliers and testing for normality were discussed in the data screening section.

The result from the common method bias in the study suggest that common method bias was not a serious issue. The results from the social desirability bias test, indicate that social desirability bias exists in the survey response which is common in ethics-based studies and thus generalization has to be performed with precaution. The descriptive statistics provide some overview of the perceptions of respondents on the selected factors analysed in this study. The next chapter explains the model assessment results using PLS analysis.