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**The Role of Ethical Beliefs, Perceptions of Taxation, and Knowledge of Tax Laws on Restaurant Servers’ Tip Reporting Intentions**

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Abstract

Tax evasion is a serious and growing problem in the United States.  From 2008 through 2010, the Internal Revenue Service estimated underreported taxes at $264 billion. Servers, who receive a large portion of their income through tips, do not always comply with tax laws when reporting their tip income. In some cases, this is intentional and in others, unintentional with servers lacking a proper understanding of tip reporting laws.

This study examines the role of the servers’ ethical beliefs, perceptions of underreporting income, overall perceptions of taxation, perceptions of taxation of tips, and knowledge of tax laws in relation to their tip reporting intent. Additionally, the relation of the type of tip, cash or credit card is examined.  Using hierarchical regression, these variables are evaluated in a predictive model of tip reporting intent. The study found that the type of tips, the servers’ perception of taxation of tips, knowledge of tax laws, and positive perceptions of underreporting and negative perceptions of overall taxation were significant predictors of tip reporting compliance.

This study adds to the existing literature with information that can be used to create better training programs geared to increase compliance with tip reporting tax laws.

**Keywords:** Tip Reporting, Tax Compliance, Tax Evasion, Accounting Ethics

1. **Introduction and Background**

Restaurants in the United States (U.S.) and around the world are a major employer in many cities and urban areas. According to the U.S. Bureau of Labor Statistics, restaurants employed more than 2.5 million servers in 2015 (U.S. Bureau of Labor, 2015).  Many of these employees work as waiters and waitresses, now referred to as servers, who receive a guaranteed hourly rate significantly less than minimum wage. This is permitted because their wages are supplemented by tips (gratuities) provided by customers. In the U.S., customers tip servers based on their dining experience equal to a percentage of the total check (e.g., 15% or 20% of the total tab). The government requires servers be paid a wage of only $2.13 per hour, but if wages and tips do not equal the federal minimum wage of $7.25 an hour, then the employer must increase wages to compensate for the difference (U.S. Dept. of Labor, 2013).  In fact, tipping is customary in many countries in the world, unless a service charge is added to the bill. Tips generally range from 5 – 15% for good service (Earls, 2014).

The Internal Revenue Service (IRS), the U.S. government agency for tax collection and enforcement, has long established that tips are not gifts, but rather payments for services performed and subject to taxation in the same manner as other wages or salaries (26 USC §61). When servers receive cash tips, however, there is an opportunity for them to underreport their income for a variety of reasons ranging from intentional, viewing tips as “free money” not traceable by their employers, to unintentional, a misunderstanding of tax laws related to the reporting of income. In some countries, however, the receipt of tips is treated as self-employed income. This money is still required to be reported as taxable income, but is subject to different reporting rules and tax regulations than the money earned as wages (Margalioth, 2010).

The IRS has issued guidelines that restaurants need to report a minimum required amount of 8% of gross receipts as tip income for each server (U.S. Dept. of Treasury, 2015). When restaurants communicate this information to their servers, the minimum amount is sometimes misinterpreted to equal the total amount required to be reported.  This misunderstanding can lead some servers to unintentionally underreport their income and corresponding tax liabilities.

Some servers, however, intentionally underreport their income (Anderson & Bodvarsson, 2005).  When cash tips are left for servers, employers often do not know the amount of the tips received, thus they cannot ensure that the entire tip amounts are reported as taxable income.  In Canada, there is a similar concern about the lack of compliance and reporting of tip income. Because the process of paying taxes in Canada is based on voluntary compliance (like the U.S.), there are limited assurances that taxpayers are reporting all of their earned income (Flexman, 1997; Margalioth, 2010). In these cases, servers may make a conscious decision to underreport tips due to numerous factors including their ethical beliefs, perception of the harm caused by underreporting income, overall perception of the taxation, perception of tip reporting laws, and knowledge of tax laws.  In order to increase tip reporting compliance to employers, the researchers believe it is vital to understand the factors that contribute to the server’s willingness to learn and comply with tax laws. Alternatively, understanding the reasons that why servers engage in tax evasion, either willfully or unintentionally, can also lead to developing education programs designed to increase tip reporting at restaurants.

This study focuses on the tip reporting intentions in the U.S. The study was not conducted in foreign countries for several reasons. First, different countries use different tax structures and treat tip income differently from the U.S. (McGee, 1999; McGee, 2006). Second, the cultural tipping norms in other countries differ from the U.S. Third, non-English speaking servers might have difficulty in understanding a survey created for servers in the U.S. Just because this paper focuses on tip reporting intentions in the U.S., however, some of its conclusions might help other countries understand some of the antecedents to tip reporting compliance.

The intention of this study is to develop a model for predicting the factors most relevant to the reporting of tips as income.  Researchers collected data through the use of online surveys that were completed by current or former servers who received a portion of their income through tips.  Researchers then developed a predictive model using hierarchical (forward stepwise) regression techniques. The results of the study partially support the hypothesized predictions about the relations between numerous individual variables and the servers’ intentions to report tips as taxable income.

The model found that the variables – negative perception of taxation, positive perception of underreporting tips, perception of taxation of tips, and the knowledge of tip reporting laws – were significantly predictive of a server’s intent to report tips as taxable income. In addition, the ethical position of the individual was less significant than the perception of the taxing structure and the perceived ability to pay tax. This study’s findings also contribute to the tax evasion and ethical position literature base by developing a conceptual understanding the variables that influence a server’s decision making processes.  Because of the vast number of taxpayers who receive a tips as a portion of their income, education programs designed to increase tax compliance could also lead to increased tax revenues for the U.S. government.

The remainder of the study is organized in the following sections. First, researchers examine the literature related to tip reporting. Next, they develop testable hypotheses based on this review.  Third, researchers discuss the methodology used in the study as well as the results found through hierarchical regression techniques.  Last, they discuss the contributions and limitations of the study as well as give suggestions for future research.

1. **Literature Review and Hypotheses Development**
   1. ***Tax Evasion and Tip Reporting Requirements***

Income earned in the U.S. is subject to federal taxation unless the source of the income has been specifically identified as exempt by Section 61(a) of the Internal Revenue Code (IRC).  Because tip income is not identified as a tax exempt source of income, tips are taxable income for individuals.  The IRS has long established that tips are not considered gifts, but are recognized as payment for services performed, subject to taxation in the same manner as other wages or salaries (U.S. Dept. of Treasury, 2015).

The IRS has issued guidelines that a minimum 8% of gross receipts must be reported as tip income for each server. Some servers mistakenly believe, however, that they must only report 8% of their total sales as tip income rather than 100% of tips received, which is often greater than the 8% figure. If this occurs across the restaurant industry, based on the size of the industry, the amounts of unreported income and subsequent underpayments of tax could be significant.

Presently, some servers (and other taxpayers) reduce their tax liability by either excluding a portion of their income or by overstating deductible items.  From 2008 through 2010, the IRS estimated that annual underreporting of individual income resulted in approximately $264 billion in lost tax revenues (U.S. Dept. of Treasury, 2016).  The magnitude of this problem extends far beyond the scope of the foodservice industry, but given that reported tips hit $14 billion in 1999, the underreporting of tips from this industry segment could be significant (Vicini, 2002).

Because of POS (point of sale) technology, restaurants can easily track the sales and credit card tips of servers, and calculate the appropriate minimum tip income to report (8%). POS systems, however, cannot readily or reliably track the amount of cash tips received by each server. Therefore, the use of POS systems drastically reduces the likelihood of underreporting of credit card tips, but there is no monitoring system when it comes to reporting cash tips. The tip reporting of cash is left to the discretion of the server, except under certain circumstances where extremely large parties (typically eight individuals or more on a single check) are charged a standard service charge of 15% to 20%.

The IRS has implemented three voluntary tip reporting compliance programs that restaurants can enroll in. These programs are called the Tip Reporting Alternative Commitment (TRDA) in 1993, the Tip Rate Determination Agreement (TRAC) in 1995, and the Employer-designated Tip Reporting Alternative Commitment (EmTRAC) in 2005 (U.S. Dept. of Treasury, April, 2016). The TRDA requires the IRS to work with restaurants to arrive at an agreed upon tip rate and 75% of employees must also agree to report tips at the agreed upon rate. The TRAC program does not require employers to determine a tip rate, but rather employers must establish monthly reporting requirements and develop education programs to ensure the proper reporting of tips. Finally, the EMTRA agreement gives latitude to restauranteurs to establish their own reporting procedures and education programs as long as certain guidelines are met (U.S. Dept. of Treasury, 2016). If a restaurant participates in one of these programs, the IRS agrees not to audit the restaurant for tip compliance during that time period.

The IRS also requires restaurants with tipped employees to file Form 9027 (Appendix A) on which employers must report total charged tips, total charge receipts, total service charges, gross receipts, and the 8% minimum. This form allows the IRS to evaluate the tip rate percentages of the restaurant for reasonableness and potential audit. In fact, the U.S. Supreme Court ruled that the IRS can use aggregate estimates to calculate taxes owed due to underreported tip income (Fior D’Italia, Inc. v. U.S., 2002). In the Fior D’Italia case, employees reported total tips that were significantly less than the tips that appeared on its credit card charge slips. The IRS conducted a compliance audit and calculated a credit card tip rate of 14%, and charged the restaurant additional taxes and penalties based on that estimate.

Because of the power given to the IRS by the Supreme Court ruling, it is even more critical for employees to accurately report their cash tips, or else restaurants and employees are at risk for audit and penalties. Thus, a study on tip compliance about what influences tip reporting compliance among servers can help both the IRS and employers design education programs that could lead to increased tip reporting compliance.

In addition to the compliance efforts put forth by the U.S. government, other countries have stepped up efforts to ensure that all tip income is reported to the government. For example, in 2015, the Romanian tax authority proposed new legislation which would require the restaurants to issue receipts for all tips received (Mihaela & Corina, 2015). While this paper focuses on the U.S. tax system, it can have implications for societies that tip outside the U.S.

Following are a series of hypotheses to address the issues of a servers’ intention to report tips. Given our discussion about the reasons why servers underreport cash tips over credit tips, the first hypotheses are:

**Hypothesis 1:** Credit tips will be reported as taxable income at a higher frequency than cash tips or non-monetary tips.

***2.2 Ethical Position***

Ethical beliefs have been documented through survey research to be a significant motivator regarding a server’s intention to comply with rules and laws or to behave in a socially ethical manner (Barnett et al., 1994; Forsyth, 1992; Reckers et al., 1994; Stead et al., 1990.)  While these studies have indicated that ethics can drive an individual’s behavior, the ethical behaviors of society may change over time and can even differ from person to person. This inconsistency in determining what is ethical or moral is a result of fact that people have different beliefs and backgrounds. The country or culture in which a person lives can also impact the ethical or moral norms (Douglas et al., 2007; McGee, 1999; McGee, 2006; Schlenker & Forsyth, 1977).  Prior studies conducted by Forsyth (1980, 1992) determined that an individual’s moral judgments are influenced by his/her different ethical beliefs.  Thus, individuals’ ethical belief systems can be expected to influence their tip reporting compliance decisions.

These ethical beliefs can be placed on a continuum with two end points: idealism and relativism.  Individuals who score as highly idealistic are those who are strongly concerned with the welfare of others and understand the relation between their moral actions and the effect of those actions on others (Forsyth, 1992).  A person with a strong idealistic position deems that actions that are morally right will always have positive results and morally wrong actions will have negative results.  Alternatively, individuals with a less idealistic position believe that their actions, regardless of whether they are moral or immoral, can have both positive and negative results.  While a highly idealistic individual believes in a positive correlation between moral actions and results for one’s self and others; a person with a low idealistic position believes that the proper moral decision is the one that has the most positive impact on the one’s self, regardless of the impact on others (Hastings & Finegan, 2011).  This understanding of the ethical position leads to the following hypothesis:

**Hypothesis 2:** Servers with a high idealistic position will be more likely report all their tips than servers with a less idealistic position.

On the opposite end of the spectrum, a highly relativistic person believes that the idea of morally correct actions is not constant, but changes based on each situation (Forsyth, 1992). Thus, a person with a higher relativistic ethical position will make decisions based on the specific situation being evaluated. On the other hand, a person with a lower relativistic ethical position believes that there are universal rules that must be applied consistently and without exception.

A person who is highly relativistic may be more willing to rationalize their behavior to protect or enhance personal success (Barnett et al., 1994). Because the risk for discovery of underreporting cash tips by tax authorities or restaurant management is significantly lower for cash tips than credit card tips, high relativists may be more likely to underreport cash tips than credit card tips.  These assertions related to a more relativistic individual’s behavior leads to the following hypothesis:

**Hypothesis 3:** Servers with a high relativistic position will be less likely to report all their tip income than servers with a low relativistic position.

***2.3 Perception of Underreporting Tip Income***

In addition to the ethical position of an individual, servers may have different perceptions of the consequences or impact of underreporting income. These perceptions will likely impact their reporting behaviors.

Servers who believe the underreporting of tips is either immoral or a bad thing for themselves or society are considered to have a negative perception of underreporting the tips. These servers might also view underreporting as limiting the funds available to support governmental programs that provide for the needy (Skinner & Slemrod, 1985; Slemrod, 2007; Usher, 1986). Because of this viewpoint, these servers may report more of their income than those who do not see the harm in underreporting tips. On the other hand, other servers may simply have a negative perception because they fear the consequences of underreporting such as termination from employment, ineligibility to collect unemployment benefits, potential fines, and in rare cases, prison (Alm & Torgler, 2011; Blanthorne & Kaplan, 2008; Eisenhauer, 2008; Finn et al., 1988).

Prior studies have shown that taxpayers who are fearful of the repercussions of illegal or immoral actions, comply with requirements to avoid the consequences (Kirchler et al., 2003; Mason & Calvin, 1984; Orviska & Hudson, 2003; Scholz & Pinney, 1995). The impact of the potential negative perception of underreporting either for ethical reasons or from fear of repercussions leads to the following hypothesis:

**Hypothesis 4:** The Negative Perception of Underreporting will be positively related to the amount of tips reported.

On the other hand, some servers might view underreporting of income as a positive action. They will pay less tax and retain more of the income that they earned. The action of underreporting the income could also be seen by others as a justified social action. Some servers might feel that underreporting income and underpaying taxes is a positive action that counters government overspending and/or an unfair tax system (Chang & Lai, 2004; McGee, 1999; McGee, 2006a; McGee, 2006b, Reckers et al., 1994). Based on these assertions, the following hypothesis is proposed:

**Hypothesis 5:** Positive Perception of Underreporting will be negatively related the amount of tips reported.

***2.4 Overall Perception of Taxation***

While most people want to minimize their tax liabilities, an individual’s overall perception of taxation can impact their reporting behaviors (Blaufus, et al., 2013; Cowell, 1992; Fochmann & Hemmerich, 2014; McGee 2006a; McGee, 2006b; Wahlund, 1989). McGee (2006) and others have seen that tax perceptions vary across different cultures and circumstances. In certain circumstances, the avoidance of tax and the non-compliance with established laws may be seen as the correct ethical behavior (Alm & Torgler, 2006; McGee, 1999a; McGee, 1999b; McGee 2006a; McGee 2006b).

In the U.S., however, some people disagree with governmental actions and spending. Others believe the government is corrupt and those in positions of power or authority cannot be trusted (Cook & Gronke, 2005; Dyck, 2009; Frederickson & Frederickson, 1995). In these circumstances, it is likely that the individual’s perception of taxation is negative. They see no benefit to themselves or to society by complying with the income tax reporting requirements. They may even see compliance with rules that they consider unjust as an unethical action.

Prior studies have shown that those individuals who perceive certain behaviors as inherently unfair or unethical are less likely to participate in those behaviors (McGee, 1999; McGee, 2006a; McGee, 2006b, Reckers et al., 1994). Thus, a taxpayer who does not want to pay taxes or is opposed to paying taxes will try to find ways to reduce his/her tax liability. Those who are opposed to taxation either as a general concept or with the specific application of the rules and methods currently employed by the U.S. Government will likely be more aggressive and report less of their tip income.

**Hypothesis 6:** An Overall Negative Perception of Taxation will be negatively related to the amount of tips reported.

While some people are opposed to taxation, others see paying taxes as a moral duty or one of the responsibilities of being a U.S. citizen.  These people may not always agree with how the government spends money or the methodology used to collect the monies, but they believe paying taxes help support important government programs (e.g. military services, police, firefighters, emergency services, schools, roads, etc.) and those in need. (Alm & Torgler, 2011; Blanthorne & Kaplan, 2008; Eisenhauer, 2008; Finn et al., 1988; Orviska & Hudson, 2003; Scholz & Pinney, 1995). These people likely view taxation as a civic duty needed to preserve the standard of living to which they are accustomed to. This perception of taxation is positive and indicates taxpayers’ willingness to pay their required amount or fair share of taxes. Similarly, others may simply follow the rules and requirements because of their ethical beliefs.

Compliance with the laws may be related to one’s ethics or perceptions of the acceptability of taxation as a means to support government services. Because of the perception of taxation as a positive (or perhaps merely as something other than a negative), these servers would be more likely to report their tip income as a component of their taxable income.

**Hypothesis 7:** An Overall Positive Perception of Taxation will be positively related to the amount of tips reported.

***2.5 Perception of Taxation of Tips***

An individual’s perception of taxation as a general concept and specific application may be positive or negative, but that same person may have a different interpretation of a specific component of taxation (Bartels, 2005; Batchelder et al., 2006; Benshalom, 2010; Lupia et al., 2007; Schisler, 1994). Specifically, the inclusion of tip income as a part of total taxable income may be perceived differently than the more generalized responsibility to pay taxes (Anderson & Bodvarsson, 2005). This change in perception may be caused by numerous factors. Some of the factors include the relatively low wages, the receipt of unrecorded cash tips, and the idea that tips are actually gifts as discussed below.

Servers are paid at a rate that is significantly lower than minimum wage.  While they earn more through tip income, servers are not normally thought of as exceptionally wealthy people (U.S. Dept. of Labor, 2013).  Restaurants are also the largest employer of teenagers often working their way through school (either high school or college) (National Restaurant Association, 2015). For others, restaurant work is a second job to pick up extra income. These groups often struggle financially to support their families and/or themselves and may feel their meager wages should not be subject to taxation.

These groups might also underreport taxes for three reasons. First, they might consider the collection of taxes from those less able to pay as unequitable or unfair. Second, since cash tips are received directly from the customer to the server, some servers may view this transaction separate from the money paid to the restaurant and not part of the income required to be tracked by the employer. A third reason for underreporting tips is that some servers have the perception that tips are a gift from the customer, and therefore not taxable (Schmalbeck, 2010), After all, the customer is not obligated to pay a tip and the amount is entirely at the customer’s discretion. If servers perceive tips as a gift, then they will be less likely to report them as taxable income.

Other servers recognize that if they were employed in an industry that paid a higher wage (reported on a W-2) without tip income, all income would be considered taxable. Therefore, they do not see “low wages” as a reason to exclude tips as a part of taxable income. Furthermore, the idea that the money received is independent of their employer makes no sense since the restaurant and customers are interrelated. Finally, the concept that the tip is a gift has been addressed by the IRS (U.S. Dept. of Treasury, 2015). Tips are paid as recognition for the services provided, not out of love or admiration as with gifts.

For these reasons, servers may have a positive or negative perception of the appropriateness of the inclusion of tip income as a component of taxable income. This perception may impact the amount of tips that the server chooses to report as taxable income. Based on servers’ perceptions of the appropriateness of reporting tips as income, the following hypothesis is proposed:

**Hypothesis 8:** The perception of the taxation of tips is positively related the amount of tips reported.

***2.6 Knowledge of Tax Reporting Requirements***

The vast majority of U.S. citizens are not trained in tax laws or the requirements of tax reporting.  In fact, some servers receive incorrect training such as learning they must only report 8% of their total sales as tips to the employer. Often training occurs when servers are hired, and unlikely to be updated, unless a restaurant is enrolled in a voluntary tip reporting compliance program. Therefore, the reporting intentions of servers are often based on the normal practices at the restaurant, not on the actual legal requirements. Sometimes the cultural norm of the restaurant is thought to be the legal reporting requirement, causing some servers to unknowingly underreport tips (Anderson & Bodvarsson, 2005. In these cases, servers might only report the minimum amount of tips required at 8% of their gross sales (U.S. Dept. of Treasury, 2015).

For some servers, underreporting tips is unintentional. They do not know they are violating the law and believe that they are behaving ethically and legally. If they knew the correct laws, they would likely comply with them. Because some people obey laws as an ethical imperative and others to avoid negative consequences (e.g. termination, audit, fines, jail, etc.), it is likely that servers would comply with the tax laws if they were aware of them (Orviska & Hudson, 2003; Scholz & Pinney, 1995). The role of knowledge of tax laws leads to the final hypothesis of the study:

**Hypothesis 9:** Knowledge of tax laws will be positively related the amount of tips reported.

A summary of the variables discussed in the hypotheses is provided in Table 1.

**Table 1**

Summary of Variables in Hypotheses

|  |  |  |  |
| --- | --- | --- | --- |
| **Hypothesis and Related Variables** | **Description** | **Proposed Relation to Tip Reporting Compliance** | **Significance** |
| H1 – Form of Tips | Cash, credit card, or other | Credit card = high compliance  Cash and other = lower compliance | Yes |
| H2 – Ethical Position: Idealism | Actions that are morally right always have positive results for self and others | Higher idealism = higher compliance | No |
| H2 – Ethical Position: Relativism | Actions are based on the situation and what enhances personal position rather than that for others | Higher relativism = lower compliance | No |
| H3 – Negative Perception of Underreporting | Correct reporting is moral and/or the underreporting of tax income has negative consequences. | Negative perception = higher compliance | No |
| H4 – Positive Perception of Underreporting | Underreporting is beneficial and an act of civil disobedience | Positive perception = lower compliance | Yes |
| H5 – Overall Negative Perception of Taxation | A taxpayer does not like taxes and wants to minimize paying taxes | Negative perception = lower compliance | No |
| H6 – Overall Positive Perception of Taxation | A taxpayer views paying taxes a duty or responsibility of good citizenship | Positive perception = higher compliance | Yes |
| H7 – Perception of Taxation of Tips | The responsibility to report all tax income | Positive perception = higher compliance | Yes |
| H8 – Knowledge of Tax Reporting Requirements | Understanding of actual tip reporting requirements | Higher tax knowledge = higher compliance | Yes |

1. **Method**

***3.1 Participants***

For this study, participants were servers over the age of 18 years who received tips as a portion of their income in the last six months.[[1]](#footnote-2) These individuals were recruited through Qualtrics, an online paid survey vendor, over a period of four weeks. Respondents were experienced survey takers who had completed prior surveys for Qualtrics and were paid a nominal sum (approximately $5) to complete survey.  The use of these survey collection sites is fairly common and is an accepted method of gathering data (Bagley et al., 2012; Brandon et al., 2013; Dalton et al., 2013; Nelson & Rupar, 2014; Soster et al., 2010; Miller et al., 2013).

The mean age of the respondents was 35 years, and approximately 70.7% percent were female. Additionally, 69.9% of the respondents had completed high school and had at least some college education. When compared to the general restaurant population, the survey’s mean age is higher than that of the typical server where 66% of servers are under 30 years old, but consistent with gender statistics of being 72% female (National Restaurant Association, 2012).

The survey asked participants several questions to make sure they met the qualifying criteria for the study with 471 servers completing the survey. Qualtrics does not provide researchers with information regarding the number of individuals who did not meet the required criterion or who only partially completed the survey. Due to this limitation, researchers cannot report information about the response rate for the survey. The demographic information for the respondents is presented in Table 2.

***3.2 Task and Independent Variables***

To collect data to test the hypotheses, researchers asked a series of situational questions about the amount of tips they would report at the end of a single shift.  These tips were defined as single dollar amount for the shift.  Participants were asked how much they would report if the

Table 2: Descriptive Statistics - Respondent Demographics

n %

Gender:

Male 133 28.7%

Female 330 71.3%

Total 463 100.0%

n %

Education:

High School or less 132 28.5%

Some College 190 41.0%

Undergraduate Degree 99 21.4%

Graduate Degree 37 8.0%

Not Disclosed 5 1.1%

Total 463 100.0%

n % mean

Age:

18 – 20 35 7.6%

21 – 25 95 20.5%

26 – 30 93 20.1%

31 – 35 59 12.7%

36 – 40 36 7.8%

41 – 45 49 10.6%

46 – 50 31 6.7%

51 – 60 48 10.4%

61 – 70 15 3.2%

* 70 1 0.2%

Not Disclosed 1 0.2%

Total 463 100.0% 34.7

tip had been left as cash only, credit card only, or as an amount paid in an item other than cash (concert tickets with a defined face and market value).

The survey specifically asked participants to assume the role of server at the restaurant or location where they were currently or last employed.  Servers were asked to indicate how much of tip income they would report under that assumed role under three different scenarios: if the gratuity was cash only, credit card only, or another type of payment such as tickets to a concert with a defined face value equal to market value. Each question was an independent and stand-alone situation which did not build from prior questions.

***3.3 Dependent Variable***

To create a measure that would appropriately assess the tip reporting intentions of each individual, servers were asked to report the amount of a gratuity that they would report under the three scenarios that included cash tips, credit tips and a non-monetary tip with an established monetary value.  Rather than using a Likert scale which would merely ask if they had the intention of reporting, the respondents were asked to indicate the amount they would likely report for each situation.  They were provided with either a range of the percentage of gratuities received or a variety of dollar amounts which reflected common responses in the industry. These percentages included reporting 100% of the tips, 50% of tips, a percentage of the amount of sales (50%, 25%, 15%, 8%), none of the tips, and an option to report a different amount. Additionally, the dollar amounts reported were presented in different questions, allowing the researchers to validate the understanding of the respondents.  As a result of these manipulation and comprehension checks, data from eight participants (1.7 %) was excluded from the analysis due to drastically inconsistent responses between the percent response and the dollar amount response.  Thus, researchers had 463 usable surveys out of 471.

***3.4 Ethical Position***

The Ethical Position Questionnaire (EPQ) developed by Forsyth (1980) was used measure the respondent’s current ethical position on a spectrum ranging from idealistic to relativistic.  The EPQ uses 20 statements related to either idealistic (10 statements) or relativistic (10 statements) to measure evaluate the respondent’s position.  Each statement requires an acknowledgement of agreement or disagreement based on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). Originally, Forsyth used a nine-point Likert scale to evaluate a measure of high or low idealism and relativism.  Because the current study used a five point Likert scale, the average responses for the idealistic and relativistic positions were recalculated using the adjusted scale provided by Forsyth.  The adjustment was calculated by multiplying the highest possible score (5) by the adjusting amount (0.734 for idealism and 0.606 for relativism) (Forsyth, 2011). The adjusted means for idealism and relativism were 4.08 and 3.34 respectively.  Additionally, the medians for idealism and relativism were 4.10 and 3.40 respectively.

***3.5 Perception of Underreporting Tips***

Survey participants were asked to evaluate several statements which allowed for an estimation of the respondents’ perception of the impact of the underreporting of tips as taxable income on a five-point Likert scale ranging from SD (1) to SA (5). These statements were structured so that both positive and negative toned statements could be independently evaluated.  Certain statements asked the server to determine if the underreporting of gratuities was in the best interest of the respondent, colleagues or the employer. In separate aspects of the survey, servers were asked negative versions of similar questions. The different tone used in each statement allowed for the estimation of both the negative and positive perception of underreporting tips. A negative perception of underreporting would indicative of being more aware of the negative consequences of underreporting income and underpaying taxes.

***3.6 Overall Perception of Taxation***

Respondents evaluated statements which were intended to measure their overall perception of taxation on a five-point Likert scale ranging from SD (1) to SA (5). These statements asked for the respondent’s agreement (or disagreement) with statements about the fairness, equity, morality, legality or overall appropriateness of taxation.

Consistent with the statements used to evaluate the respondent’s perception of underreporting tips, the statements in this section were both negatively and positively toned.  The different tone used in each statement allowed for the estimation of both the negative and positive perception of underreporting gratuities.

***3.7 Perception of Taxation of Tips***

Additionally, the respondents were asked to indicate the amount of tips that should be required to be reported as taxable income. The perception of taxation of tips is an indicator of the opinion of the server regarding the fairness or appropriateness of the inclusion of tips in taxable income. These responses were measured using a percentage of total tips received (100%, 75%, 50%, 25% 0%, or another amount).   The servers indicated the amount (percentage) of tip income that they felt should be subject to taxation. These questions were not solely directed to the behavior of the respondent, but were also formatted to ask servers what they felt other servers should do. The responses support the servers’ overall perception of the equity of the tax structure and specifically the taxation of tips and were used to establish the server’s perception the taxation of tips.

***3.7 Knowledge of Tip Reporting Laws***

The respondents were asked questions about their training in tax reporting laws and their perception about the fairness or moral correctness of tip reporting laws.  Specifically, the respondents were asked if they had knowledge of the minimum required amount of gratuity income that was required to be reported. These responses were recorded as either a 1 (knowing that 100% of tip income must be included in taxable income) or zero (not knowing the legal requirement to include all tips as taxable income) to indicate if the server understood the tax laws regulating the amount of tips required to be reported.  Subsequent questions asked for them to indicate the amount of tips that are required to be reported as a percentage of total sales.  The responses to these questions were highly correlated which indicated that the respondents understood the questions being asked.

1. **Results**

***4.1 Correlations and Descriptive Statistics***

Descriptive statistics for each of the variables included in the study are presented in Table 3.  These statistics include the mean, standard deviation, and number of observations for each of the dependent and independent variables examined.  The discussion of the means and how they impact the hypotheses will be discussed in subsequent sections.

Table 3: Descriptive Statistics – Dependent and Independent Variables

Mean Std Dev n

Cash Gratuities $122.08 44.56 463

Credit Card Gratuities $163.38 75.47 463

Other than Monetary Gratuities $37.44 58.57 463

Total Combined Gratuities $322.91 143.36 463

Idealism 4.08 0.64 463

Relativism 3.34 0.73 463

Negative Perception of Underreporting Tips 2.99 0.95 463

Positive Perception of Underreporting Tips 2.54 0.96 463

Negative Perception of Overall Taxation 3.06 0.87 463

Positive Perception of Overall Taxation 3.29 0.81 463

Perception of Taxation of Tips 57.13% 38.93 463

% of Servers Who

Knew the Did Not Know the

Tax Laws Tax Laws

Knowledge of Tip Reporting Laws 43.84% 56.16%

Stepwise Forward Regression was used to assess the relation between the reported amounts of tips and the independent variables.  This method performs a regression initially including only the most significant variable used as a predictor of behavior.  Subsequently, additional variables are included in the model to increase the predictive quality.  When additional variables add no additional value to the model, then the model is deemed to be complete based on the variables that are presented for inclusion.

Pearson’s r correlations and Spearman’s rho were calculated to determine association between each of the independent variables and all three of the potential dependent variables (cash only, credit card only, or gratuities other than cash or credit card) using both parametric and non-parametric measurements. These correlations are presented in Table 4.

Table 4: Total Combined Gratuities as a Dependent Variable - Reliability and Correlations

Variable 1 2 3 4 5 6 7 8 9

1. Total Gratuities **0.658** 0.296\*\* 0.175\*\* -0.081 0.444\*\* -0.414.\*\* -0.509\*\* 0.321\*\* 0.472\*\* 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
2. Tip Law Knowledge 0.289\*\* **0.835** 0.122\*\* -0.015 0.174\*\* -0,175\*\* -0.252\*\* 0.386\*\* 0.287\*\* 0.000 0.008 0.748 0.000 0.000 0.000 0.000 0.000
3. Idealism 0.161\*\* 0.103\*\* **0.880** 0.106\*\* 0.227\*\* -0.226\*\* -0.186\*\* 0.283\*\* 0.100\* 0.001 0.027 0.023 0.000 0.000 0.000 0.000 0.031
4. Relativism -0.066 0.010 0.126\*\* **0.867** -0.167\*\* 0.251\*\* 0.165\*\* 0.059 -0.027 0.155 0.824 0.006 0.000 0.000 0.000 0.209 0.567
5. Neg. Percept. of 0.424\*\* 0.167\*\* 0.215\*\* -0.187\*\* **0.582** 0.710\*\* 0.687\*\* -0.467\*\* -0.450\*\*

Underreporting 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000

1. Pos. Percept. of -0.399\*\* -0.153\*\*-0.200\*\* 0.270\*\* 0.713\*\* **0.439** 0.580\*\* -0.347\*\* -0.331\*\*

Underreporting 0.000 0.001 0.000 0.000 0.000 0.000 0.000 0.000

1. Neg. Percept. of -0.486\*\* -0.242\*\* -0172.\*\* 0.160\*\* 0.684\*\* 0.581\*\* **0.408** -0.523\*\* -0.552\*\*

Overall Taxation 0.000 0.000 0.000 0.001 0.000 0.000 0.000 0.000

1. Pos. Percept of 0.317\*\* 0.344\*\* 0.252\*\* 0.072 -0.476\*\* -0.301\*\* -0.531\*\* **0.552** 0.531\*\*

Overall Taxation 0.000 0.000 0.000 0.124 0.000 0.000 0.000 0.000

1. Percept of Taxation 0.464\*\* 0.283\*\* 0.077 -0.011 -0.432\*\* -0.293\*\* -0.525\*\* -0.516\*\* **0.356** of Tips 0.000 0.000 0.098 0.813 0.000 0.000 0.000 0.000

Note: Data on the diagonal are the Kaiser-Meyer-Olkin Measure (**in bold**).  Data above the diagonal are Spearman coefficients while amounts below the diagonal are Pearson coefficients.

***4.2 Hypothesis 1: Cash versus Credit Card Tips versus Other Gratuities***

Hypothesis 1 proposes that the overall reporting of credit card gratuities will be higher than the reported gratuities paid in cash.  Servers were asked how much they would report out of $200 credit card tips, $200 cash times, and $100 non-cash tip (e.g. game tickets). Out of that potential $200 credit card tips, the servers reported a mean amount of $163.38 or 81.69% of the total credit card tips received. On the other hand, the servers reported a mean amount of $122.08 or 61.04% of the total cash tips received. The cash tips that were considered by the servers in the study also totaled $200. As predicted, the amount of cash reported as taxable income was substantially lower than credit card tips. In fact, 65.8% of servers reported that they would report the full amount of cash tips compared to 41.69% of servers who would report the full amount of cash tips. Finally, when the servers received tips that were not cash or credit card based, they would only have reported $37.44 out of a defined value of $100 of non-credit or cash tips (e.g. game tickets). Only 30.9% of servers indicated that they would report the full amount of tips paid in a form other than cash or credit cards which is significantly lower than both credit card and cash reporting.

Researchers found a high correlation between the types of tips and amounts reported. When examined using a T- Test, the difference between the reporting of cash vs. credit vs. other, the means were statically significant. Hypothesis 1 is supported by the data.

***4.3 Hypotheses 2 and 3: Ethical Position***

Hypotheses 2 and 3 propose a relation between the ethical position (idealistic or relativistic) and the tips amounts reported by servers. Idealism is both positively and significantly related the amount of tips reported (Spearman’s rho = 0.175, p = 0.000; Pearson’s r = 0.161, p = 0.001).  Relativism is negatively related to the amount of gratuities reported (Spearman’s rho = -0.081, p = 0.000; Pearson’s r = -0.066, p = 0.155), but the relation is not considered significant.  When hierarchical regression is used to evaluate the model, neither idealism (t = 0.1.465, p =0.144) nor relativism (t = 0.479, p =0.632) is considered significant to the model. Because neither of these variables are not considered significant in the final model, both hypotheses 2 and 3 are not supported by the data.

***4.4 Hypotheses 4 and 5: Perception of Underreporting***

Hypotheses 4 and 5 propose a relation between the respondent’s perception of underreporting tip income (negative and positive) and the total gratuities reported by the respondent.   A negative perception of underreporting gratuity is positively and significantly related to the amount of tips reported (Spearman’s rho = 0.444, p = 0.000; Pearson’s r = 0.424, p = 0.000).  A positive perception of underreporting gratuity income is negatively and significantly related the amount of gratuities reported (Spearman’s rho = 0.414, p = 0.000; Pearson’s r = 0.399, p = 0.000).  When hierarchical regression is used to evaluate the model, a respondent having a positive perception of underreporting (keeping more money untaxed, thus lowering the reported gratuities) is significant and included in the final model (t = -3.805, p =0.000).  However, a negative perception of underreporting is not considered significant and is not included in the model (t = 0.663, p =0.372). Hypothesis 4 is not supported by the data and excluded from the final model.  Hypothesis 5 is supported by the data and is included in the final model.

***4.5 Hypotheses 6 and 7: Overall Perception of Taxation***

Hypotheses 6 and 7 propose a relation between the server’s perception of taxation (positive and negative) and the total tips reported by the serve.  A positive perception of taxation is positively and significantly related the amount of gratuities reported (Spearman’s rho = 0.321, p = 0.000; Pearson’s r = 0.317, p = 0.000).  A negative perception of taxation is positively and significantly related to the amount of gratuities reported (Spearman’s rho = -0.509, p = 0.000; Pearson’s r = -0.486, p = 0.000).  When hierarchical regression is used to evaluate the model, a respondent having a positive perception of taxation is not significant and is excluded from the final model (t = 1.051, p =0.610).  However, a negative perception of taxation is found to be significant and is included in the model (t = -4.020, p =0.000). Hypothesis 6 is not supported by the data and is excluded included in the final model.  Hypothesis 7 is supported by the data and will be included in the final model.

***4.6 Hypothesis 8 and 9: Perception of Taxation of Tips and the Knowledge of Tip Reporting Laws***

Hypothesis 8 proposes that a server’s perception of taxing of tips is related to the amount of total tips reported.  This perception provide more evidence about the servers’ perception or opinion about the equity or fairness of the inclusion of tips in taxable income specifically. The respondent’s perception of tip reporting laws is positively and significantly related to the amount of gratuities reported (Spearman’s rho = 0.472, p = 0.000; Pearson’s r = 0.464, p = 0.000).  The mean amount of tips that the servers felt should be reported as taxable income is 57.13% (Table 3). While the servers did indicate that they felt some of the tips should be included as taxable income, the responses clearly indicate that the inclusion of all tips is not supported by the servers. When evaluated using hierarchical regression, a server’s perception of taxation of tips was found to be significant and will be included in the final model (t = 5.742, p =0.000).

Hypotheses 9 proposes a relation between the respondent’s knowledge of the tax reporting laws as they relate to the reporting of tip income.  The responses from the servers indicated that only 43.84% or 203 of the 463 respondents understood that 100% of the tips received were required to be reported as taxable income. The responses ranged from 0% of tips received to 100%. Any response that specified an amount of less than 100% indicated a lack of knowledge related to the relevant tax laws. The knowledge and understanding of the tax laws has a positive and significant relation to the amount of gratuities reported (Spearman’s rho = 0.296, p = 0.000; Pearson’s r = 0.289, p = 0.000).  When evaluated using hierarchical regression, the respondent’s knowledge of the relevant tax laws was found to be significant and will be included in the final model (t = 1.051, p =0.610).

***4.7 Hierarchical Regression***

Hierarchical regression models are commonly used analytical tools.  This method of analysis is helpful in evaluating the variables that are most significant in serving as predictors of the dependent variable (Hox, 1994; Keenan 2000; Wenzel, 2004; Wenzel, 2005). Numerous prior studies have established that the most significantly important variables in a study can be determined and ranked by using hierarchical regression models (Hirshci & Selvin 1973; Nunnally 1967).  This study used a forward stepwise regression model to establish which of the potential variables in the study are most highly associated with tip reporting intentions and should be included in the final predictive model.

The model established by this study includes the most predictive combination of the independent variables.  Through each iteration of the regression additional independent variables were included to increase the predictive value (R2) while still being measured as a significant variable.  When additional variables do not add significance to the model, the model is deemed to be complete.  Because not all variables are evaluated as significant to the model, not all variables are included in the final iteration.

To ensure that the variables considered for the model were adjusted correctly for potential family-wise alpha error rates commonly associated with multiple significance tests, only those variables with a low p-value (less than 0.05) were included in the model.  Simultaneously, variables with a high p-value (greater than 0.10) were removed from consideration for the model.

Because the study included multiple items that could have been observed as dependent variables (cash only, credit card only, other than cash/credit card, and total tips) a hierarchical regression was performed with each of these potential items as the dependent variable.  Because the receipt of tips in only one format (either cash or credit cards or other types of tips) is not realistic in practice, the main focus of the analysis of the data used the tips received from all possible formats. However, as the differences in the methods of leaving tips or gratuities were estimated to impact the amount of gratuities reported, the models are included.

[Insert Table 5 about here]

As shown in Table 5 - Scenario 1, the first regression analysis evaluates the independent variables impact of the reporting of Cash Only Gratuities.  The final model includes the Perception of Taxation of Tips, the Negative Perception of Underreporting Tips, Knowledge of Tip Reporting Laws, and Negative Perception of Overall Taxation as significant predictor variables associated with reporting Cash Only Gratuities (R = 0.402, R2 = 0.397).  The final iteration of the model is statistically significant (F = 77.119, df = 4,458, p < 0.000).  There were four variables that were not included in this model (Idealism, Relativism, Positive Perception of Underreporting, and Positive Perception of Taxation).

As shown in Table 5 - Scenario 2, the second regression analysis evaluates the independent variables impact of the reporting of Credit Card Only Gratuities.  The final model includes the Positive Perception of Underreporting Tips, Perception of Taxation of Tips, Negative Perception of Underreporting Tips, Negative Perception of Overall Taxation, Positive Perception of Overall Taxation, and Perception of Taxation of Tips as significant predictor variables associated with reporting Credit Card Only Gratuities (R = 0.178, R2 = 0.167).  The final iteration of the model is statistically significant (F = 16.471, df = 6,456, p < 0.000).  There were two variables that were not included in this model (Idealism and Relativism).

As shown in Table 5 - Scenario 3, the third regression analysis evaluates the independent variables impact of the reporting of Other than Cash/Credit Card Gratuities. The final model includes the Negative Perception of Overall Taxation, Perception of Taxation of Tips, and Negative Perception of Overall Taxation were included as significant predictor variables associated with reporting Other than Cash/Credit Card Gratuities (R = 0.161, R2 = 0.156).  The final iteration of the model is statistically significant (F = 29.359, df = 3,459, p < 0.000).  There were five variables that were not included in this model (Idealism, Relativism, Knowledge of Tip Reporting Laws, Positive Perception of Underreporting, and Positive Perception of Overall Taxation).

As shown in Table 5 - Scenario 4, the final regression analysis evaluates the independent variables impact of the reporting of Total of All Categories of Gratuities.  The final model includes the Negative Perception of Overall Taxation, Perception of Taxation of Tips, Positive Perception of Underreporting Tips, and Knowledge of Tip Reporting Laws as significant predictor variables associated with reporting Credit Card Only Gratuities (R = 0.178, R2 = 0.167).  The final iteration of the model is statistically significant (F = 77.119, df = 4,458, p < 0.000).  There were four variables that were not included in this model (Idealism, Relativism, Negative Perception of Underreporting, and Positive Perception of Overall Taxation).

**Table 5**

**Scenario 1 -** Impact of Cash Gratuities, Ethical Position, Perceptions of Underreporting Tip Income, and Perceptions of Taxation on Tip Reporting Intention.

F = 77.119 p < 0.000 R = 0.402 R2 = 0.397

Variable Standard Beta Standard Error t p

Perception of Taxation of Tips 0.291 0.084 6.679 0.000

Negative Perception of Underreporting Tips 0.254 3.956 5.096 0.000

Knowledge of Tip Reporting Laws 0.133 5.761 3.508 0.000

Negative Perception of Overall Taxation -0.158 4.620 -2.973 0.003

**Scenario 2 -** Impact of Credit Card Gratuities, Ethical Position, Perceptions of Underreporting Tip Income, and Perceptions of Taxation on Tip Reporting Intention.

F = 16.471 p < 0.000 R = 0.178 R2 = 0.167

Variable Standard Beta Standard Error t p

Positive Perception of Underreporting Tips -0.320 3.783 -5.130 0.000

Knowledge of Tip Reporting Laws 0.152 5.400 3.313 0.000

Negative Perception of Underreporting Tips -0.273 4.365 -3.852 0.001

Negative Perception of Overall Taxation -0.245 4.401 -3.752 0.000

Positive Perception of Overall Taxation -0.199 3.992 -3.598 0.000

Perception of Taxation of Tips 0.170 0.080 3.185 0.002

**Scenario 3 -** Impact of Non-Monetary Gratuities, Ethical Position, Perceptions of Underreporting Tip Income, and Perceptions of Taxation on Tip Reporting Intention.

F = 29.359 p < 0.000 R = 0.161 R2 = 0.156

Variable Standard Beta Standard Error t p

Negative Perception of Overall Taxation -0.133 3.211 -2.133 0.033

Perception of Taxation of Tips 0.189 0.058 3.744 0.000

Negative Perception of Underreporting Tips 0.160 2.764 2.702 0.007

**Scenario 4 -** Impact of Total of All Categories of Gratuities, Ethical Position, Perceptions of Underreporting Tip Income, and Perceptions of Taxation on Tip Reporting Intention.

F = 57.731 p < 0.000 R = 0.335 R2 = 0.329

Variable Standard Beta Standard Error t p

Negative Perception of Overall Taxation -0.212 8.717 -4.020 0.000

Perception of Taxation of Tips 0.262 0.168 5.742 0.000

Positive Perception of Underreporting Tips -0.178 6.959 -3.805 0.000

Knowledge of Tip Reporting Laws 0.136 11.543 3.406 0.001

1. **Discussion and conclusions**

Many factors contribute to the tax gap including the non-filing, underreporting, and underpayment of taxes (U.S., Dept. of Treasury, April, 2016). According to the IRS, underreporting income makes up the largest component of this tax gap ($387 of the $458 million total tax gap). Accordingly, underreported tips would also contribution to the tax gap.

Using a survey instrument, this study collected data from restaurant servers who worked in the restaurant industry. Servers indicated the amount of tips that they would report as taxable would differ under different scenarios presenting tips that were Cash Only, Credit Card Only and Other than Cash/Credit Card Tips. Researchers also gathered measures including the respondent's perceptions of underreporting, overall perception of taxation, perception of taxation of tips, and knowledge of tax reporting laws as well as the ethical position of the individual. This study adds to the tax literature base by examining how these factors might impact a server’s tip reporting behavior.

Initially, the study evaluated whether the method of receiving gratuities was significant to the reporting intention. The study found that the reporting of credit card tips, which is easily tracked and monitored by POS systems, was significantly higher than cash and other tips. A lower percentage of cash tips were reported, and an even lower rate of non-credit card/cash tips. This information suggests that restauranteurs or governmental agencies need to think ways to encourage servers to report both cash and non-credit card/cash tips.

This study also suggests that lower tip reporting compliance is likely the result of a lack of knowledge about the actual tax reporting requirements. Lower reporting intentions were highly correlated to the self-reported lack of knowledge about tax reporting laws. On certain questions in the survey, servers also wrote comments providing additional information. Numerous servers indicated that the training they received at the restaurant was either incorrect or not helpful in understanding tip reporting requirements. This is a clear indication that the training of these servers is not sufficient or effective.

Additional analyses also indicated that a server’s perspective of the taxation of tips and knowledge of tax laws were significant predictors of tip compliance.  These analyses found that the perspective of the individual related to taxation and the underreporting of income superseded any impact of the ethical position of the individual.  This could be due to the behavioral norms in the restaurant or the highly negative perception of governmental spending of tax dollars.  Additionally, because servers normally earn limited wages, servers may not feel they earn sufficient income to be required to pay taxes. Servers wrote that they felt that their income was so low that it should be exempt from taxation.

This study extends the tax evasion and underreporting of income literature base. Specifically, this study contributes by showing the impact that education about tax reporting laws might have on the reporting of tip income.  The knowledge of tax laws is highly predictive of tip reporting intentions.  Furthermore, the servers’ overall perspectives of taxation and underreporting are predictive of their tip reporting behaviors. Employers should not hesitate to invest time and money to better educate servers about tip reporting laws. By increasing the compliance with tax laws, restaurants can reduce their risk of audit and penalties, and implement successful education programs that are required by TRAC and EmTRAC. Lastly, restaurants and the governmental agencies, the IRS in U.S., the HM Revenue and Customs Office in the United Kingdom, etc. might try to improve taxpayers’ perceptions of the overall taxation.  This will help reduce the underpayment taxes in the U.S. Despite the current focus on tip reporting behaviors in the U.S., this results of this study could be used to begin studies with an international focus. These studies could examine each country separately or compare the results across borders including cultural aspects that are beyond the scope of this paper.

This study has its limitations. First, servers were gathered from a non-random study pool administered by Qualtrics, which limits the generalizability of the results. Second, this study examined a limited number of variables believed to predict the reporting of tip income. There are potentially many other factors that could influence the tipping behaviors of servers. Therefore, additional studies in this area could extend the literature base. For example, future research could include the type of restaurant, type of food served, number of locations (family owned versus national chain), etc. In addition, personal variables related to the server could be examined such as religious beliefs or spirituality. Researchers might investigate the significance of the variables in this study in other countries with tip income and compliance issues. And finally, an experiment could be conducted to measure the impact of tax education on tip reporting intentions.

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Appendix A – Form 8027



1. The study was reviewed and approved by the appropriate Institutional Review Board for human subjects research. All voluntary participants gave informed consent prior to participating in the study. [↑](#footnote-ref-2)