

# Measures of Taxpayer's Satisfaction: An Exploratory Factor Analysis

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## Abstract:

One of the significant challenges for the Philippine government is to develop tax administrative reforms to increase tax awareness among taxpayers in the country and eliminate the most common problematic issues of the Bureau of Internal Revenue (BIR) about corruption, biased processing, noncompliance of taxpayers, tax evasions, and unsatisfactory services. This study focused on identifying the thematic framework of measures of taxpayers' satisfaction. Stratified Random Sampling was used to divide the population into strata or subgroups, and then a random sample was taken from each subgroup. The study surveyed 337 taxpayers in Davao City with a confidence level of 95%. Results showed that six thematic factors were extracted from the Exploratory Factor Analysis used in the study: Timeliness, Promptness, Communication, Accessibility of Office, Improved Procedures, and Processing of Information. From the 60 indicators, these six factors imply that BIR needs to improve its processes to support increased taxpayer satisfaction in the said themes. This research recommends creating intervention programs that address the tax gap from voluntary compliance and increase taxpayers' trust and confidence in the service provided by the tax authorities.

**Keywords:** Taxpayer satisfaction, measures, Bureau of Internal Revenue, tax compliance, KMO Bartlett's test of Sphericity, Philippines

## 1. Introduction

According to the BIR, the tax compliance rate in the Philippines was only 55.6 percent in 2019, which means that almost half of the potential tax revenues still needed to be collected. Some factors contributing to low tax compliance and evasion are the complex and cumbersome tax system, the lack of transparency and accountability, the high cost of compliance, the weak enforcement and audit capacity, and the corruption and collusion among taxpayers and tax officials. The BIR reported that its tax collection in 2020 declined by 10.7 percent from the previous year, mainly due to the economic contraction and the lockdown measures imposed to contain the spread of the virus. The pandemic also disrupted the everyday operations and services of the BIR, such as processing tax returns, issuing tax clearances and certificates, and conducting audits and investigations.

The BIR has been implementing various digitalization initiatives to improve its tax administration and collection, such as the Internal Revenue Integrated System (IRIS), the Electronic Filing and Payment System (eFPS), the Electronic BIR Forms (eBIRForms), and the Electronic Sales Reporting System (eSales). However, these initiatives face challenges, such as the need for adequate infrastructure, the low

digital literacy and readiness of taxpayers and tax personnel, the resistance to change and innovation, and the cyber security risks and data privacy issues.

One of the significant challenges for the Philippine government is to develop tax administrative reforms to increase tax awareness among taxpayers in the country. Issues like corruption within the office, biased Processing, noncompliance of taxpayers, tax evasion, and unsatisfactory services are among the office's problems. Further, issues relating to introducing innovations in simplifying tax-related procedures and regulations add to the challenges faced by the Bureau of Internal Revenue (BIR). Apart from the reforms, there are significant cases where the taxpayer would express disbelief and doubts to the office because of the various news relating to mismanagement.

A study on tax satisfaction said that tax administrators should improve the work processes and procedures to promptly provide more services to surpass taxpayer expectations, resulting in greater taxpayer satisfaction (Jofreh & Rostami, 2014). Suppose the taxpayers are satisfied with the product or continued service of tax administrators. In that case, there is an intention for the latter to repurchase and reuse the product or service offered by tax enforcers (Puthur et al., 2016). Satisfied customers tend to pay more or attract new customers due to positive feedback (Eklof et al., 2018). Hence, happy taxpayers tend to happily avail of the improved service and provide word of mouth from tax enforcers' services.

It is well-known that men's business perceptions of the tax system have a significant advantage in generating revenue (Debere, 2014). Mobilizing revenue allows governments to create fiscal space, provide essential public services, and reduce foreign aid and single-resource dependence (Juma, 2014). Specifically, if no one filed their income tax returns, that would mean a massive increase in tax evasion and much less money for the federal government, which already runs substantial deficits. Moreover, she emphasized that the government would have to borrow a lot more money, and the spending would have to go way down (Conti, 2016). Moreover, it is emphasized that poor customer service is costing businesses more than \$75 billion a year (Hyken, 2018). Further, a study about governments and companies showed they should have tax admin reforms to increase customer satisfaction, resulting in product patronage and revenue (Musau, 2015).

Meanwhile, quality is a dynamic condition associated with service products, people, processes, and environments that meet or exceed expectations. At the same time, quality is a measure of the overall assessment of the level of good service. The definition of tax service is a process of assistance to taxpayers in specific ways that require sensitivity and interpersonal relationships to create satisfaction and success. At the same time, the quality of tax services is the implementation of services that can provide optimal satisfaction for taxpayers related to the quality of services offered (Awaluddin & Tamburaka, 2017). The ease of making good communication relationships, understanding the taxpayer's needs, the availability of physical facilities including adequate means of Communication, and skilled employees in their duties have been suggested that the tax system and its reforms directly correlate with taxpayer satisfaction. He emphasized that if the government undertakes more reforms in tax systems, taxpayers' awareness and happiness will increase, thereby suggesting an organization of tax systems and simplifying tax policies and procedures to moderate complexity (Debere, 2014).

On the other hand, the discussion on the service quality dimension significantly correlates with taxpayer satisfaction regarding parking facilities, availability of staff in the office, timeliness of service delivery, and tax education programs (Reddy & Abay, 2018). They also further indicate that the complaint mechanism directly correlates with taxpayers' satisfaction. This means that a taxpayer is dissatisfied if the medium of complaints is not accessible to them and if complaints are not acted on promptly.

## 2. Taxpayer Satisfaction

Several researchers delving into customer satisfaction posit that it emanates from a customer's evaluative juxtaposition of perceived service quality against actual service performance. This comparative analysis can result in either satisfaction or dissatisfaction. Furthermore, they contend that customer satisfaction delineates the extent to which a consumer perceives that engaging with or possessing a specific service will elicit favorable emotional responses. Consequently, customer satisfaction represents the affective state associated with aligning or misaligning a consumer's perceived service quality during and after post-service interaction (Johnson, Karlay, 2018; Abd-El-Salam et al., 2013; Chen, 2010).

Satisfaction is the discernible response of customers to fulfilling their needs, Awaluddin and Tamburaka (2017). Their work emphasizes the substantial correlation between taxpayer satisfaction and service quality, highlighting its pivotal role in influencing tax compliance. The contention is that heightened customer satisfaction translates to an increased willingness within the public to contribute more taxes. The nexus between service quality and taxpayer satisfaction is particularly pronounced in the context of motor vehicle taxes, where a favorable service experience positively contributes to improved taxpayer compliance. Moreover, in its broader conceptualization, customer satisfaction delineates how a product's perceived performance aligns with buyers' expectations. When product performance falls short of expectations, dissatisfaction ensues, while meeting or surpassing expectations results in customer satisfaction or even delight. The satisfaction derived from a purchase is intricately tied to the product's performance relative to the buyer's expectations. This multifaceted understanding of customer satisfaction finds its prominence in the business and commerce industry, where it serves as a metric for evaluating the efficacy of products and services in meeting customer expectations. A foundational premise within this discourse is the recognition that satisfied customers play a pivotal role in securing long-term business success. Customer satisfaction encapsulates the comprehensive fulfillment of one's expectations. Notably, the term "customer satisfaction" is ubiquitous in business parlance, representing the meticulous measurement of a company's ability to provide products and services that align with customer expectations (Oliver, 1980; Mengesha, 2015).

This study aims to identify measures of the Taxpayers Account Management Program (TAMP) and Medium Taxpayers' Satisfaction in Davao City. Moreover, this study seeks to achieve the following specific objectives:

1. To identify factors influencing taxpayer satisfaction;
2. To determine the factor structure of taxpayer satisfaction; and
3. To develop a framework for taxpayer satisfaction.

## 3. Thematic Factors of the Measures of Taxpayer's Satisfaction

**Timeliness.** The pivotal role of timeliness in achieving customer satisfaction and loyalty within a specific business operation reveals a substantial and direct impact of punctuality on both customer satisfaction and loyalty, Daengs, Gsachmad, Istanti, and Enny 2022. The study also establishes a positive influence of customer satisfaction on customer loyalty. The practical ramifications of these findings extend to the incentivization of businesses, particularly in the domain of transportation operators. In taxation, the prompt responsiveness of service providers to customer queries and their willingness to assist and deliver fast services is deemed paramount, as Khan and Fasih (2014) emphasized. "Responsiveness" denotes the swift and affirmative resolution of customer issues within a specified timeframe, as articulated by Blery et al. (2009). This dimension of service quality is perceived through the human element. Furthermore,

integrating information technology, including emails, webpages, and customer service interfaces, augments firms' responsiveness. The continual evolution of these technological tools contributes to enhancing service providers' ability to promptly address customer needs and concerns, Kaura et al. (2012). Promptness. The prompt resolution of customer issues within a specified timeframe, termed responsiveness (Johnson & Karlay, 2018), is intricately tied to the people-oriented aspect of service quality. This dimension, highlighted by Johnson and Karlay, emphasizes the significance of competent frontline employees possessing technical and behavioral competencies. Technical competencies, primarily centered around acquired knowledge and technical abilities specific to the service domain, are discernible and trainable. Behavioral competencies, constituting innate qualities such as attitudes, traits, and effective communication and collaboration skills with team members, are vital for understanding and addressing customers' needs and interests. The technical competencies encompass the specialized requisites of an occupation, characterized by knowledge and skills that are tangible, trainable, and developmental. Conversely, behavioral competencies are intrinsic and pertain to an individual's disposition, communication skills, and collaborative work approach. These deep-seated qualities are fundamental for effective customer interaction and service delivery. Incorporating information technology tools such as emails, webpages, and customer service interfaces enhances service responsiveness in delivery firms; the quality of service, as emphasized, extends beyond employees' technical and operational proficiency to encompass their awareness of customer satisfaction as a paramount aspect and primary objective of their roles as delineated by Mengesha (2015).

Communication. Empathy in the context of service delivery firms pertains to their capacity to acknowledge and effectively address individual customer problems and demands attentively. How a company assumes responsibility for resolving customer issues, whether on an individual or group level, constitutes empathy within the dimension of service quality perceived through the people aspect (Khan & Fasih, 2014). A positive correlation between empathy and customer satisfaction, underscoring that the absence of heart leads to customer dissatisfaction with service quality, is asserted by Johnson and Karlay (2018).

Foundational trust in tax authorities, encompassing beliefs in the honesty of taxpayers and the respectful treatment by tax authorities, necessitates the concurrent implementation of incentives to induce taxpayer adherence to regulatory frameworks (Gerger et al., 2014; Feld & Frey, 2002). To establish trust, it is crucial to have transparent tax collection procedures. It is essential to emphasize the perception of fairness in these procedures. Treating regulated entities as trustworthy fosters a cooperative regulatory approach, encourages information sharing on practices and potential noncompliance, and facilitates regulators in making optimal decisions for compliance assurance. The reciprocal nature of trust is evident, as entities subjected to regulation are more inclined toward voluntary compliance with equitable requirements when treated with trust and respect (OECD, 2004). In service delivery, front desk activities entail frequent interactions between employees and customers, demanding effective communication and problem-solving skills from frontline employees. Proficiency in service policies and job responsibilities alone needs to be improved; transparent and honest Communication with colleagues and customers is imperative. Furthermore, fostering respect and adeptly resolving conflicts contribute to creating a harmonious work environment. When breakdowns occur, customers anticipate potential frustrations within the processes, often attributed to lapses in employee communication about customer issues and the inability to deliver a courteous and comprehensive service process (Mengesha, 2015).

Enhanced respect from the tax administration towards taxpayers correlates inversely with the likelihood of tax evasion, fostering a proclivity toward ethical tax compliance. This inclination aligns with taxpayers' charters and the presumption of taxpayer honesty. Establishing an environment conducive to voluntary tax compliance necessitates fostering effective Communication with taxpayers through public relations initiatives, disseminating general guidance, and engaging in consultations (Gerger et al., 2014; Walsh, 2012). Through talks, tax administrations inform taxpayers about changes in taxation and provide beneficial information, thereby positively influencing the success of these engagements.

Improved Procedures. Marketing competencies encompass an organization's distinctive capacities for acquiring customer insights and delivering sought-after benefits (Woodside et al., 1999; Mengesha, 2015). These competencies are operationally defined as the capabilities and processes strategically designed to deploy the collective knowledge, skills, and resources of the firm to meet its market-related requirements (Wang et al., 2004; Mengesha, 2015). Furthermore, marketing competencies constitute the skills instrumental in positioning a firm close to its customers (Prahalad & Hamel, 1994; Mengesha, 2015). The pivotal constituents of these competencies encompass "customer knowledge," "customer access," and "competitor knowledge" (Fowler et al., 2000; Mengesha, 2015).

Tax compliance hinges on understanding taxpayers' viewpoints on tax administration (Gerger et al., 2014). Countries undertaking tax administration restructuring favor a "with taxpayer" approach over a "despite taxpayer" approach, often organizing tax administrations into structures focused on taxpayers. Concurrently, there is an increasing emphasis on scrutinizing changes in taxpayers' perspectives. There is a positive correlation between service quality and customer satisfaction, positioning service quality as a precursor to customer satisfaction, as emphasized by Johnson and Karlay (2018). Their observation that the disparity between customer expectations before and after service consumption influences satisfaction or dissatisfaction aligns with the notion that exposure to additional promotional material can shape expectations of service quality.

Customer satisfaction, denoting the general contentment experienced by service users, differs from service quality, which focuses on specific service aspects. Despite their conceptual distinctions, a close interconnection exists between service quality and satisfaction. Study findings reveal a significant association between service quality and customer satisfaction, emphasizing the positive impact of enhanced service quality on taxpayers. Modernizing applications and policies within tax administration can increase taxpayer satisfaction (Hoang, 2015). The fidelity of a service provider in consistently delivering services constitutes the reliability dimension of service quality (Khan & Fasih, 2014). This dimension ensures customers of the provider's ability to perceive service quality. Reliability, influencing trust and shaping the overall impression retained by customers post-service consumption, is a crucial aspect of service quality perceived through the people-oriented dimension (Abd-El-Salam et al., 2013).

Regarding customer satisfaction, service pricing is inevitable, and the inseparability of price and quality is affirmed (Johnson & Karlay, 2018). Various price concepts are integral to this context, including objective price (the actual cost of a product) and perceived price (the perceived sacrifice to acquire a service or product). Researchers have identified that consumers often need to remember the specific costs of services or products but retain a general perception of price levels, such as expensive or cheap. Customer satisfaction, a central marketing concept influenced by multiple variables, includes pricing services/products among its determinants, consequently shaping customer behavior. Global tax administrations strive to customize services to simplify compliance. Taxpayers' charters delineate expected treatment by tax authorities, conveying a positive message about the mutual benefits of fostering

a cooperative relationship (OECD, 2003). While taxpayers' rights have historical roots in Turkish tax law (Gerger et al., 2014), a systematic concern for taxpayer rights gained prominence in the 1990s. E-taxation is expected to bolster tax authority processes, encompassing workflow systems and electronic record management. Simultaneously, it should integrate knowledge management and automated risk analysis to assess tax returns' credibility. These processes, suitable for direct and indirect measures, aim to positively influence taxpayers' behavior (Gerger et al., 2014; Walsh, 2012).

**Accessibility of the Office.** Tangibles are entities that are perceptible by touch or possess a visible existence. In service quality, these tangibles encompass Information and Communication Technology (ICT), tools, websites, company employees, and any discernible facilities, as defined by Khan and Fasih (2014). Service providers employ these tangibles in diverse manners, leading to varied perceptions and experiences among end-users. The significance of tangibles is particularly pronounced for service delivery firms, serving as pivotal variables in cultivating robust, positive, and impactful customer associations and experiences through proprietary assets (Naidoo, 2014).

The manifestation of acquired knowledge by staff members in executing their preferences during service delivery instills a high level of customer assurance, as asserted by Khan and Fasih (2014). This concept engenders confidence in customers that the service delivery representative will execute their duties professionally and ethically. Not all customers possess the expertise to discern the quality of service and values received. Consequently, effective Communication or personalized explanations may be necessary to facilitate their comprehension of the matter they are obtaining, as contended by Naidoo (2014).

The findings reveal that assurance is a fundamental dimension of service quality, significantly influencing customer satisfaction by fostering a positive organizational perception, as shown by Parasuraman et al. (1988). This, in turn, enhances the likelihood of word-of-mouth activity, particularly in financial institutions. A financially reliable service provider instills heightened customer confidence (Khan & Fasih, 2014). To further promote voluntary compliance and bolster the tax administration's image, tax offices should prioritize accessibility and comfort. Taxpayer assistance, involving direct interactions between tax administration personnel and taxpayers, is pivotal in enhancing the overall perception of the tax administration (Debere, 2014). Reinforcing the commitment to provide optimal service, tax offices should be designed to be as accessible and comfortable as possible, acknowledging financial constraints. Staff at tax offices can assist small taxpayers in completing their returns in person or via telephone. However, taxpayers should be encouraged to complete future tax returns independently.

To enhance taxpayer satisfaction initiatives, the researcher identifies the necessity of conducting this study to assist implementing agencies in directly addressing taxpayer concerns. The objective is to discern factors influencing taxpayer satisfaction and establish correlations to enhance the tax system. Recognizing the pivotal role of taxpayers in government for the betterment of Filipino lives, tax administrators need comprehensive expertise in refining tax systems to bolster compliance by addressing taxpayers' desires and requirements. The study is situated in Davao City, prompted by the escalating number of taxpayers engaging with the primary Revenue Region in Mindanao. Notably, prior research has yet to explore taxpayer satisfaction in the Philippines. A pertinent study in Ethiopia demonstrated the tax system's impact on taxpayer satisfaction (Debere, 2014). The influence of customer satisfaction on the service quality of the Liberian Revenue Authority is concentrated by Johnson and Karlay (2018). Consequently, the researcher aims to identify predictors of taxpayer satisfaction.

**Processing of Information.** The Organization for Economic Co-operation and Development (OECD) expounded on three dimensions of fairness in taxation in 2010: distributive fairness, which pertains to the

perception of the government as judiciously managing tax revenues; procedural justice, which involves the perception of the tax administration following equitable procedures in dealing with taxpayers; and retributive fairness, which relates to the perception of the tax administration's fairness in applying penalties for rule violations. The latter two dimensions, procedural and penal fairness, are particularly pertinent to and can be influenced by tax administrations. Noncompliance tends to escalate if taxpayers need more confidence in the tax administration's ability to collect taxes impartially and allocate tax revenues wisely (Gerger et al., 2014; Murphy, 2004). Accurate information processing is paramount for achieving tax revenue targets, necessitating support from tax facilities and compliance in meeting fiscal obligations. Modernizing tax administration is facilitated by a taxation information system, an application designed to provide taxpayers with convenient access to the necessary tax information. This system ensures that all taxation processes and services are executed seamlessly, accurately, and efficiently, with the expectation that improved tax information accessibility will boost tax compliance (Jaya et al., 2017).

Tax administrations should streamline tax forms to enhance tax compliance, straightforwardly providing clear instructions. Disseminating leaflets and booklets elucidating various facets of tax laws for different segments of the public is recommended. In line with the theory proposed by Jaya, Ratnawati, and Sardjono (2017), tax information accessibility involves leveraging information technology and taxation information systems to optimize work processes and services, simplifying tax-related tasks for taxpayers. Public awareness should be raised regarding publications' availability and locations for consultation. Strategic placement and an adequate number of tax offices, consistent with available resources and cost-benefit considerations, are crucial. Additionally, taxpayers must be informed about obtaining tax forms, filing deadlines, payment procedures, and noncompliance penalties within stipulated time frames (Debere, 2014).

#### **4. Assumption**

Taxpayer satisfaction is a multidimensional concept influenced by many factors.

This paper was anchored in the study of Debere (2014), Johnson and Karlay (2018), and Aminul et al. (2012). The following propositions supported this study:

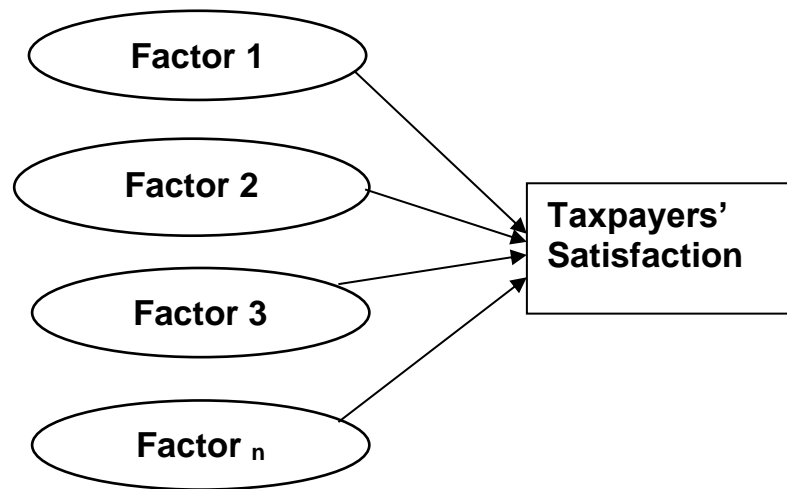
The system quality measures refer to the desired characteristics of electronic information systems by using usability, availability, reliability, adaptability, and response time quality dimensions (DeLone & McLean, 2004; Ambali, 2009). He proposed that creating a fast, reliable, and safe service should be the main priority of any government worldwide. Thus, adapting technology to the public service delivery systems is one of the ways to create such a fast, reliable, and safe service delivery (Aminul et al., 2012).

Meanwhile, taxpayers have a high level of trust in the tax administrators. This confidence has positively affected taxpayer's satisfaction with the tax service delivery by tax administrators. In addition, the authors further discussed that taxpayers perceived the service of tax administrators in Liberia as fast, simple, and met their expectations and needs. The tax administrator's integrity and honesty have directly affected taxpayer's satisfaction with the tax service. Moreover, the proponents suggested a need for service quality improvement because of the displeasure of taxpayers and their concerns regarding the processing time for filing taxes and for payment of tax returns and the response time to customer inquiries. Thus, the issues have greatly affected taxpayers' satisfaction and ultimately discouraged them from paying their legitimate taxes (Johnson & Karlay, 2018).

The taxpayer's service has primarily affected taxpayer's satisfaction. In the study of Debere (2014), a tax policy's planned goals can be achieved when properly administered. Hence, if there is a failure on the part

of tax administrators, such as not educating the taxpayers on their duties and responsibilities when filing income tax returns, it is suggested that a low satisfaction level will threaten the equity and convenience of taxpayers. Moreover, he discussed that using information technology reduces delays and face-to-face contact between tax authorities and taxpayers, thereby increasing satisfaction through building transparent, truthful service and making the latter's rights and obligations clear and concise. As a result, many taxpayers use e-tax filing to reduce the interaction between taxpayers and tax officials, reducing compliance costs and the opportunity to engage in corrupt practices.

Taxpayer satisfaction, which was thoroughly discussed in the previous sections, might be determined and might have a direct relationship or influence with the factors that have been analyzed.



**Figure 1. The Conceptual Framework of the Study**

Poor customer satisfaction has a deterrent effect on the revenue generated from operations. In addition, if customers are not satisfied with the quality of services offered by an institution, they will try to switch from one brand to another, thereby losing their loyalty and confidence in the product or service provider. Therefore, this study is conducted to address the concerns of the service providers about the existing perception and behavior of customers. This also gives a clear picture of the actual events to help service providers focus on the critical areas of their policies and strategies to improve and foster a positive relationship with customers.

As a final result, this study may benefit not just tax administrators but also the service providers, policymakers, and some government agencies like the Bureau of Internal Revenue, the Bureau of Customs, the Land Transportation Office, the Land and Registration Authority, and other government agencies that deal with taxpayers. Furthermore, policymakers might focus on improving the key areas or factors that affect taxpayer satisfaction to increase revenue for the people's welfare within the government agencies' jurisdiction. Intervention programs might address the tax gap from voluntary compliance and increase taxpayers' trust and confidence in the service provided by tax authorities.

The following are the operational definitions of some crucial terms in the study: measure is a standard unit used to express a degree of something being discussed or referred to in this study as the variables of factors that affect taxpayers' satisfaction on tax system quality, information quality, and service quality offered by the BIR Regional Office No. 19, Davao City. Taxpayers' satisfaction includes perceptions and customers' responses to fulfilling their needs regarding the tax service provided by tax administrators.



Further, Exploratory Factor Analysis is a statistical method used to uncover the underlying structure of a relatively large set of variables. It is a technique within factor analysis that aims to identify the underlying relationships between measured variables.

## 5. Method

This section discusses the research steps and procedures to be employed in this study. It includes the discussion of research respondents, materials and instruments, and design and methods. Moreover, discussions on the research locale, population and sample, data collection procedures, statistical tools, and detailed ethical considerations are also presented.

### 5.1 Research Respondent

The participants of this study were 337 taxpayers. All participants were only people or taxpayers of the Bureau of Internal Revenue in Davao Region XI. The respondents were individual and corporate taxpayers who process, transact, and pay taxes in RDO No. 113-A West and RDO No. 113-B East.

The sampling method used in this study is Stratified Random Sampling. It is where the population is divided into strata or subgroups, and a random sample is taken from each subgroup. A subset is a natural set of items from population size, gender, or occupation, among other factors (Taherdoost, 2016). In this study, the subgroups include individual and corporate taxpayers. Stratified random sampling is used where there is much variation within a population, just like how this study was employed. The study determined 337 respondents to be the taxpayer population, which means that 337 or more surveys were needed to have a confidence level of 95%, and the actual value was within  $\pm 5\%$  of the measured or surveyed value. What the researcher gets from the study will not be the same as the population success rate as there would always be some measurement error; however, it would be close enough. The sample size for this study was identified using a sample size calculator.

The inclusion and exclusion criteria set the boundaries for the systematic review. The following criteria were used for the respondents as they were deemed appropriate for the study: exposure of interest, where the respondents were well-experienced taxpayers on the particular condition of the study; geographic location of the study, as it was necessary to limit the review to only studies targeting the same population group of interest; and setting, the participants were included or excluded based on where they transact or file tax payments and other taxation transactions.

Thus, the inclusion criteria for this study were that all participants were only people or taxpayers of the Bureau of Internal Revenue in Davao Region XI. The respondents were individual and corporate taxpayers who process, transact, and pay taxes in RDO No. 113-A West and RDO No. 113-B East.

Further, the exclusion criteria for this study were all taxpayers not listed in the inclusion criteria. These are taxpayers who do not belong or those who do not transact or do business with both RDO No. 113-A West and RDO No. 113-B East.

Withdrawals of participants were set and clearly explained before the survey. A participant can leave a research study at any time. The respondent should let the researcher know that they wish to withdraw. A participant may provide the research team with reasons (s) for leaving the study, but it is optional.

This study was conducted in Region XI, Davao Region, Southern Mindanao, Philippines, particularly in the jurisdiction of the Bureau of Internal Revenue – Revenue Region (RR) No. 19, Davao Region, which involves two (2) out of five (5) Revenue District Offices (RDOs), namely, (a) RDO No. 113 A – West Davao City; and (b) RDO No. 113 B – East Davao City. The jurisdiction of RDO No. 113 A – West Davao

City and RDO 113 B – East Davao City were the taxpayers residing and doing business within the eleven (11) Districts of Davao City and its respective barangays.

The revenue districts were limited to the two geographical areas as this study is limited to Davao City. All the respondents in this study were servicing in Davao City even though they came from neighboring provinces and other cities. RDO No. 113-A West, located in Bolton Extension has an area of jurisdiction in the following places: Baguio, Calinan, Marilog, Toril, Talomo, and Tugbok Districts. Meanwhile, RDO No. 113-B East is in the same office building as the west revenue district but comprises Agdao, Buhangin, Bunawan, Paquibato, and Poblacion Davao City Districts A to D.

Taxpayers' satisfaction in both revenue districts needs to be studied as there were not enough studies in these offices. Further, customer satisfaction is essential in dealing with taxation improvements in the city and finding ways to enhance the system in general.

## 5.2 Materials and Instrument

Without standardized instruments, the proponent employed a semi-structured questionnaire that consisted of different variables from various authors and researchers and self-made questions. The research questionnaire was formulated based on several readings, references, and related works of literature following the results of Debere (2014), Johnson and Karlay (2018), and Aminul et al. (2012). All structured questionnaires were cited from previous studies and research based on this research topic. There were no interviews, such as the conduct of face-to-face or focused group discussions during the data gathering, as the focus was on the existing measures from previous studies and articles on taxpayers' satisfaction. The overall mean score of the expert validators was 4.48.

## 5.3 Design and Procedure

The survey was conducted to understand the measures of taxpayers' satisfaction in its varying dimensions. The study's research design was non-experimental descriptive research that described the situation or phenomenon simply as it stands without any interference from the researcher himself. It is quantitative research mainly gathering numerical data and finding the cause-and-effect relationship of the existing variables of this study from different researchers and research respondents. Quantitative research methods focus on collecting data that could be displayed numerically (Matthews & Ross, 2010). Generally, quantitative data is accumulated when collected data may be scientifically analyzed.

An Exploratory Factor Analysis (EFA) was employed to determine the factorial validity of the measure. Exploratory Factor Analysis (EFA) is a complex, multi-step process, and it is a widely utilized and broadly applied statistical technique in the social sciences (Osborne & Costello, 2005). Factor analysis is essential for developing, refining, and evaluating tests, scales, and measures that can be used parametrically in education and clinical contexts (Onsman & Brown, 2010).

The following were the data collection procedures employed during this study. A permission letter for the study was requested from the Dean of the Professional School as proof that the University of Mindanao officially acknowledges this research. The letter was sent to the Regional Director of the Bureau of Internal Revenue, Revenue Region No. 19 – Davao Region, Ms. Esmeralda M. Tabule, CPA, and all taxpayers and their authorized representatives. The letter's content asked permission to conduct a study regarding the Measures of Taxpayer Satisfaction in the Davao Region.

Upon approval of the Regional Director, the BIR will provide a Legal Opinion. The legal opinion will be filed for reference and used as permission to conduct the study within the registered taxpayers of the

Agency. After that, the Informed Consent Form (ICF) and Assent Form were given to the participants, asking them permission to be part of the study. The research questionnaire was personally administered to the study participants to ensure one hundred (100%) percent retrieval; further, due to the current COVID-19 protocol, some surveys were done through online platforms via Google Forms and emails. After that, a Certificate of Appearance was secured from the taxpayers and their authorized representative as an attestation that the proponent had personally appeared in the conduct of gathering of data. Consequently, the data that was gathered, recorded, summarized, analyzed, and interpreted statistically. Finally, conclusions were drawn from the results, which led to research recommendations.

During the data collection, respondents were given enough time to participate. Since there were participants who physically attended the data gathering, the researcher ensured that COVID-19 measures taken were also done with utmost knowledge and compliance. The collection of data was conducted from September to December 2022.

The statistical tools used in interpreting the data gathered include finding the Mean score and KMO Bartlett's test of Sphericity. Mean is the commonly used measure of central tendency. It is the average computed by adding all the values in the dataset divided by the number of observations. It uses every value in the data and hence is a good representative of data (Manikandan, 2011). Kaiser-Meyer-Olkin (KMO) Bartlett's test of Sphericity measures sampling adequacy, which tests the data to assess the appropriateness of using factor analysis on the data set. Bartlett's test of Sphericity is used to test the null hypothesis that the variables in the population correlation matrix are uncorrelated (Mikkelsen, 2019).

There are ten most important principles related to ethical considerations in research (Bryman & Bell, 2007). The following principles were used and observed in this study: Research participants were not subjected to harm in any way which assured that they were properly taken care of; Respect for the dignity of research participants was prioritized; Full consent was obtained from the participants prior to the study; The protection of the privacy of research participants was ensured; Adequate level of confidentiality or the research data was provided; Anonymity of individuals and organizations participating in the research was guaranteed; Deception or exaggeration about the aims and objectives of the study were avoided so as to ensure participants that the investigation is solely done for the purpose of research and development; Affiliations in any forms, sources of funding, as well as any possible conflicts of interests was declared; Any type of Communication in relation to the research was done with honesty and transparency; and Any misleading kind of information, as well as representation of primary data findings in a biased way was avoided. The UM Ethics Review Committee applied for compliance with research ethics provisions, and a compliance certificate from UMEREC was required before the data collection.

Specifically, the following items were used in this study: Informed consent. The research went through a rigorous orientation and consent-taking from all the respondents. For voluntary participation, only informants who accepted to be part of the study were administered the questionnaires, and they had the right to withdraw from the study at any stage. These voluntary respondents include males or females 18 years old and above, with transactions done at the Bureau of Internal Revenue Region XI.

Privacy and Confidentiality. Since privacy and confidentiality were paramount, respondents were informed of the anonymity and confidentiality of the survey results. Thus, each was anonymously retrieved and labeled with an assigned number to ensure their privacy. These numbers were used in tallying to present the results without divulging the respondents' basic information. Post transcriptions were disposed of upon publication of this study to retain confidentiality using a paper shredder. Meanwhile, to assess only relevant components of this study, the researcher maintained the highest level of objectivity

in formulating questions associated with the grounds of the research paper, including discussions and analyses. The research will also adhere to the Data Privacy Law.

Data Privacy Act of 2012. Further, in adherence to Republic Act No. 10173, otherwise known as the Data Privacy Act of 2012, a law that seeks to protect all forms of information, be it private, personal, or sensitive. It is meant to cover both natural and juridical persons processing personal data. This research assured all respondents that their privacy was taken into consideration.

Risks. The researcher has followed the IATF guidelines against COVID-19 to prevent the spread of the virus or other health risks. Benefits. The respondents will not receive tangible benefits similar to tokens of appreciation for participating in the study as the researcher thoroughly explained that the survey is solely for academic purposes—conflict of Interest. The researcher has not been acquainted with any subjects that could cause COI—permission from Organization/Location. The Bureau of Internal Revenue Region XI has provided the approval to conduct the study and continue the survey for academic research.

## 6. Results and Discussion

This section of the study includes the results, analysis, and interpretation of data from the respondents' responses on measures of taxpayers' satisfaction. The presentation in the following sequence of the results' subheadings with associated tables and figures were applied: KMO and Bartlett's Test; Total Variance Explained; Rotated Component Matrix; Component Transformation Matrix; Model Summary; ANOVA Model; Coefficients Model; and Residuals Statistics.

**Table 1. KMO and Bartlett's Test**

KMO and Bartlett's Test	Threshold
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.951
Bartlett's Test of Sphericity	Approx. Chi-Square
	df
	Sig.
	8385.526
	1485
	0

**6.1 KMO and Bartlett's Test.** Table 1 shows the Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett's test of Sphericity. Table 1 shows that the Kaiser-Meyer-Olkin Measure of Sampling Adequacy is high at 0.951, implying that the samples or data gathered were fit and relevant to the study. Moreover, the sampling is adequate such that Bartlett's Test of Sphericity yields a value of 8385.526 and a significance level of 0, implying a significant difference in the variances and that samples are adequate. Meanwhile, the test result shows that the study's assumption has been accepted, whereby there is a multidimensional framework in taxpayers' satisfaction that will help determine what factor structures are present, providing both the researcher and readers with how significant satisfaction is to taxpayers.

**6.2 Total Variance Explained.** A total of 60 indicators were collected, and six thematic factors that built a robust framework for the measures of taxpayers' satisfaction were extracted. The Initial Eigenvalues of the associated dimensions and the Extractions Sums and Rotation Sums of Squared Loadings are presented in Table 2. It also shows the Total Value, Percentage of Variance, and Cumulative Percentage of each Extraction and Rotation Sum of Squared Loadings. The results of the Initial Eigenvalues and the Extraction Sums of Squared Loadings are identical except for the factors that are less than one, which is

not shown in the table. Further, the Eigenvalues with a total value of more than one include the factors of taxpayers' satisfaction.

<b>Table 2. Total Variance Explained</b>				
<b>Indicators</b>	<b>Initial Eigenvalues</b>	<b>% Variance</b>	<b>Cumulative</b>	<b>Extracted Factors</b>
The staff is accommodating in promptly providing customers with the requisite information.	0.296	0.538	97.846	Timeliness
Staff is extremely helpful to their customers in explaining the tax payment processes and when and how to pay their taxes.	0.312	0.566	96.761	
They are very responsive and cooperative, listening to taxpayers' problems and providing solutions.	0.301	0.547	97.308	Promptness
The staff is helpful towards customer inquiries much faster than other government agencies.	0.274	0.498	98.344	
Customer inquiries are addressed on time verbally and in writing by emails and texts.	0.316	0.574	96.194	
General tax law enforcement is fair and acceptable.	0.953	1.733	61.645	Communication
Tax authorities or officers solve complaints correctly.	1.246	2.266	50.031	
Convenience of tax office location and accessibility.	1.35	2.454	47.765	Accessibility of office
Ease in locating and contacting the appropriate person or officer in the tax office.	1.433	2.605	42.801	
Improvement of audit selection and auditing procedures.	0.755	1.372	70.658	Improved Procedures
Content and coverage of tax documents are enough and simple to fill out.	0.799	1.452	67.855	
The Tax audit selection procedure is sound enough.	1.381	2.51	45.311	Processing of Information
The staff helps explain the entirety of the tax system and what needs to be done.	1.632	2.967	40.196	

**Table 3. Factors Extracted from EFA**

Indicators	Factor Loadings	Extracted Factors
Help, including the needed information, is provided to clients in a timely manner.	0.700	Timeliness
Help extended is extremely helpful to the clients in explaining the processes of tax payment and when and how to pay their taxes.	0.668	

The response and cooperation in hearing clients' problem are provided with solutions.	0.705	Promptness
Help with client inquiries is much faster than other government agencies.	0.666	
Verbal and in writing (emails and texts) from clients are addressed on time.	0.652	
General tax law enforcement is fair and acceptable.	0.634	Communication
Tax authorities or officers correctly solve complaints.	0.618	
The location and accessibility of the tax office are convenient.	0.650	Accessibility of office
It is easy to locate and contact the tax office's appropriate person or officer.	0.638	
There is improved auditing selection process and procedures.	0.633	Improved Procedures
Content and coverage of tax documents are enough and simple to fill out.	0.623	
The Tax audit selection procedure is sound enough.	0.809	Processing of Information
The staff clearly explains the entirety of the tax system and what needs to be done by the clients.	0.677	

**6.3 Rotated Component Matrix Converged in 17 Iterations.** Among the 60 indicators presented, 13 indicators were grouped into six factors as themes of the study to measure the taxpayers' satisfaction, and the rest were not included due to their outliers of loadings below .600. The six factors were grouped as themes from the factor loading and proceeded with the rotated component matrix. The key output of principal component analysis contains estimates of correlations between variables and components (Ehrenberg, 1981). These components were subjected to an exploratory factor analysis using Principal Component Analysis for the extraction method and Varimax with Kaiser Normalization for the rotation method. It is a statistical technique that minimizes the number of variables with high loadings on each factor and makes small loadings even smaller (Yong & Pearce, 2013).

The six factors extracted from the Exploratory Factor Analysis which were grouped accordingly include help including the needed information are provided to clients in a timely manner (0.700), help extended is extremely helpful to the clients in explaining the processes of tax payment and when and how to pay their taxes (0.668), the response and cooperation in hearing clients' problem are provided with solutions (.705), help towards client inquiries is much faster than other government agencies (0.666), verbal and in writing (emails and texts) from clients are addressed on time (0.652), general tax law enforcements are fair and acceptable (0.634), complaints are correctly solved by tax authorities or officers (0.618), there is convenience in the location and accessibility of the tax office (0.650), there is ease in locating and

contacting the appropriate person or officer in the tax office (0.638), there is improved auditing selection process and procedures (0.633), content and coverage of tax documents are enough and simple to fill out (0.623), the tax audit selection procedure is sound enough (0.809), there is clear explanation by the staff in the entirety of the tax system and what needs to be done by the clients (0.677).

Thus, the indicators were analyzed by group, which are presented as the six themes of this study. The first factor is timeliness, which states that the staff is accommodating and that they provide customers with the requisite and needed information promptly, as the first component is most likely correlated with the second component, which is the Processing of information refers to the respondents saying that the staff is extremely helpful to their customers in explaining the processes of tax payment and when and how to pay their taxes. Moreover, the time attribute is the core attribute of historical data and is quite different from modern data (Zhang et al., 2018).

Promptness includes the response and cooperation in hearing clients' problems, which are provided with solutions, the help towards client inquiries is much faster than other government agencies, and the verbal and in writing (emails and texts) from clients are addressed on time. It is most likely correlated with each other, as seen in the results. Respondents expressed that employees assigned to the BIR office are very responsive and cooperative in hearing the problem and providing solutions, which refers to the component responsiveness and cooperativeness. Likewise, respondents agreed that the BIR staff is helpful towards customer inquiries much faster than other government agencies, which means the component promptness was shown. Results also showed that customer inquiries are addressed in time verbally and in writing by emails and texts, which refers to the component communication. These indicators make up the factor of Promptness.

In addition, the third theme of this study is called Communication, including the components of fair enforcement and solution-driven, which are most likely correlated as respondents agreed that general tax law enforcement is fair and acceptable and that tax authorities or officers solve complaints correctly. Meanwhile, the fourth theme is accessibility of the office, which comprises accessibility of contact person and physical location of the office. This factor shows that respondents are satisfied because there is convenience in the location and accessibility of the tax office and ease in locating and contacting the appropriate person or officer.

The two indicators, namely improved procedures and simplicity of tax documents, show a correlation with each other and thus compose the fifth theme called improved procedures. Respondents showed that the audit selection and auditing procedures are improved, and the content and coverage of tax documents are enough and simple to fill out. Further, the sixth theme extracted from the EFA is the Processing of information, which includes fair audit selection, which refers to the Tax audit selection procedure being sound enough, and helpfulness, which refers to the staff helping out to explain the entirety of the tax system and what needs to be done are most likely correlated components.

#### **6.4 Discussion: Thematic Framework of Measures of Taxpayers' Satisfaction**

As shown in Table 3, six thematic factors that measure taxpayers' satisfaction were extracted. It includes Timeliness, Promptness, Communication, accessibility of office, improved procedures, and Processing of information. All these factors relate to how taxpayers assess their satisfaction with BIR's processes. Given satisfaction as the dependent variable, it comprises the overall satisfaction with the service provided by the tax officers, overall satisfaction with the service provided by the tax office, overall satisfaction with the information provided by the tax system, including websites and other information-

related concerns, overall satisfaction in the opportunity with the tax system implemented by the office, and overall satisfaction in the opportunity and complexity of tax law enforcement in the office.

The first factor is timeliness, where staff are accommodating in providing customers with the requisite and needed information in a timely manner. The second factor is Promptness, which means the staff must be very responsive and cooperative to hear customers' concerns and provide necessary solutions. Promptness in this study relates to the staff being helpful towards customer inquiries much faster than other government agencies in Processing information, where the staff must give BIR clients ample help in explaining the processes of tax payment and when and how to pay their taxes. The third factor is Communication. Customer inquiries are addressed in time verbally and in writing by emails and texts, resulting in a reasonable customer service satisfaction rate. Respondents also believe this factor is essential to attain satisfaction from BIR services. In Communication, the fair enforcement of general tax law should be acceptable and solution-driven. This means that BIR tax authorities or officers solve complaints correctly with good Communication. The fourth factor is the Accessibility of the Office. This factor refers to the convenience of the location and accessibility of the BIR, which includes the accessibility of the contact person or the person in charge of the office while considering the ease of locating and contacting the appropriate person or officer in their respective offices or departments. The fifth thematic factor of the measures of taxpayers' satisfaction is Improved Procedures, which include simplicity of tax documents, showing that taxpayers are satisfied with how BIR makes simple documents to fill out. It is also considered to be essential for the clientele in order to achieve customer satisfaction. Lastly, the sixth factor extracted by EFA is the Processing of Information. The tax audit selection procedure should also be sound enough, as well as the presence of help where the staff explains the entirety of the tax system and what needs to be done to the clientele. These measures are essential for the respondents to feel satisfied with the overall transaction in the Bureau of Internal Revenue.

A standardized residual is the raw residual divided by an estimate of the standard deviation of the residuals. It measures the strength of the difference between observed and expected values. Results show that the small residual indicates that predictors fit the data well.

**Table 4. Residual Statistics**

Residuals Statistics						
	Minimum	Maximum	Mean	Std. Deviation	N	
Predicted Value	1.2332	4.9693	4.5383	0.33866	337	
Residual	-0.96224	0.84163	0	0.24016	337	
Std. Predicted Value	-9.759	1.273	0	1	337	
Std. Residual	-3.971	3.473	0	0.991	337	

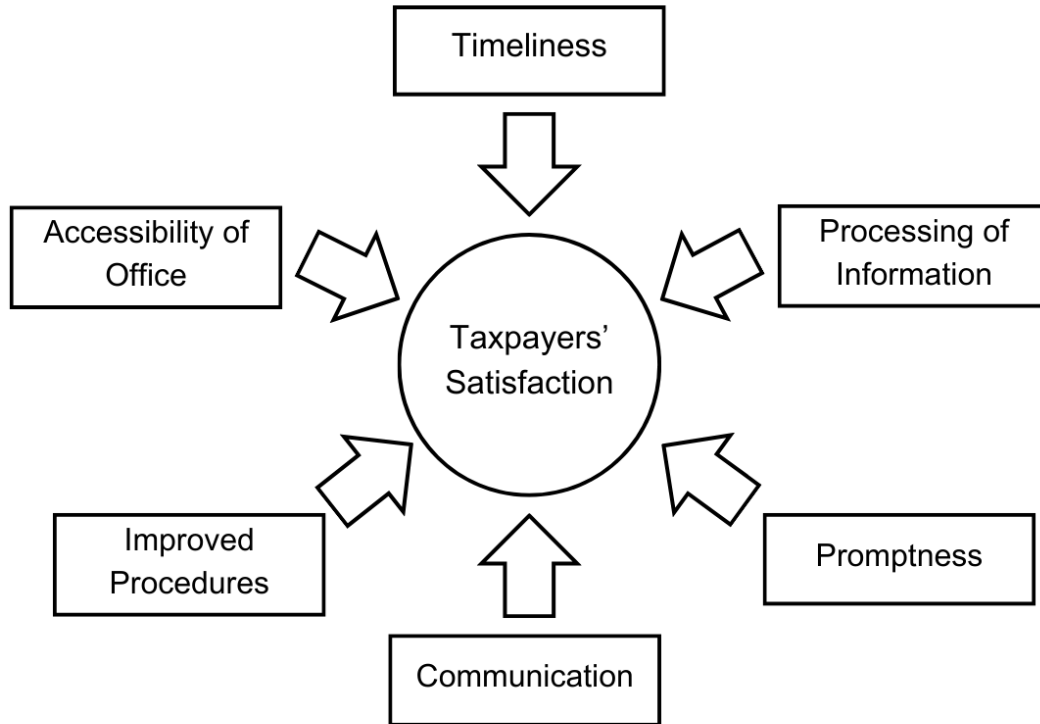
Dependent Variable: Satisfaction

### 6.5 Discussion

The Standardized Residual Histogram is based on the idea that the z-scores of individual studies, also known as standardized residuals, are expected to follow a normal distribution around the combined effect size (Sutton et al., 2000). Results show that the indicators gathered from the processed data based on the



survey may be thematically analyzed as six factors composed: of Timeliness, Promptness, Communication, Accessibility of Office, Improved Procedures, and Processing of Information. Further, Table 4 shows the residual statistics of the study.



**Figure 2. Thematic Framework of the Measures of Taxpayers' Satisfaction**

### 6.6 Discussion: Measures of Taxpayers' Satisfaction and their Relationship

Timeliness and Processing of information. These factors are likely correlated because the time attribute is the core attribute of historical data and is quite different from modern data. Timeliness refers to the time expectation for accessibility and availability of information (Zhang et al., 2018). A study conducted on complaint satisfaction shows that companies should be actively managing the timeliness component of problem resolution and indicates that timeliness expectations vary by complaint type, including reservations, accommodations, billing, and service, which allows the opportunity to manage timeliness issues better when resolving problems (Mattila. et al., 2006). Further, a study shows that information content varies, particularly with measurement timing (Chen et al., 2014).

Promptness. According to Uyoga (2018), past research studies on customer responsiveness have conceptualized it as a dimension of service performance. However, it was also found that responsiveness is also customer-driven and not just by the service provider, where customers perceive greater satisfaction when they are more responsive towards service performance. This factor indicates that responsiveness is most likely related to the Promptness of BIR staff to provide the relevant information and solutions to its customers or clients. Providing such quality service leads to the overall satisfaction of their customers or clients.

Communication. It is connected to how staff responds to specific issues and customer inquiries that must be solved immediately. When there is proper Communication, the response time increases, and satisfaction is achieved. Although some various dimensions or factors affect customer satisfaction, these three factors

are interrelated. Fair enforcement and solution-driven is critical to minimizing dissatisfaction in the service industry. As such, there is an impact on the perceived fairness on satisfaction (Sindhav et al., 2006). The roles of procedural fairness, outcome favorability, and outcome fairness in the acceptance of tax authority decisions, notwithstanding the issue of how to fairly distribute tax burdens between citizens, are discussed widely by economists, philosophers, and politicians (Niesiobędzka & Kołodziej, 2020). With this, taxpayers greatly appreciate BIR's fair enforcement of general tax laws. Also, tax authorities or officers solve complaints correctly, thus proving that there is a relationship between fair enforcement and solution-driven factors. Similarly, taxpayers rated this factor as essential for them to experience overall satisfaction in BIR.

**Accessibility of Office.** These factors are considered to be highly essential for taxpayers. As both are interrelated, accessibility is vital for valued taxpayers to achieve customer satisfaction. Accessibility is an essential aspect of customer experience, service, and loyalty. Thus, when people can easily access a company and its virtual and physical services, they tend to have a better customer experience (Travers, 2020). The Bureau's location is essential for taxpayers to meet their satisfaction needs. Also, providing good access to contact persons in the office is highly essential for taxpayers. Accessibility on both location and contact person denotes that it is more likely perceived as a driving force in reaching customer satisfaction.

**Improved Procedures.** As there is a need for more previous sources and studies about improved procedures and satisfaction, the researcher aims to offer recommendations on this specific factor. There is a need to study more about how improved procedures affect customers' overall satisfaction. On the other hand, this study shows improved procedures in the Bureau of Internal Revenue, which refers to improved audit selection and auditing procedures essential for customer experience. Since government agencies need more standardized procedures in their system, it hardly answers customer concerns and even resulted in low satisfaction rates. This factor is likely related to the simplicity of tax documents due to its effect on the overall satisfaction of customers or clients. As such, simplifying the tax documents is one example of how the BIR improved its procedures, making it easier for its clients to transact in the office. Without taxes, the government's operations will not be sustained and cannot fund project development. It cannot suffice in promoting economic growth, and it cannot protect and care for its citizens. Without taxes, the Philippines would be paralyzed, unable to perform its functions efficiently and effectively; thus, improved procedures implement strategies to support effective tax collection (Manalo, 2020).

**Processing of Information.** Study shows that this factor is closely related to fair audit selection and helpfulness. The Tax audit selection procedure is sound enough for the taxpayers because the staff helped explain the entire tax system and its processes. Fair audit selection is deemed independent in delivering a trusted opinion and responsible for increasing the reliability of a company's financial statements (Gozali et al., 2022), which adds to the overall satisfaction of taxpayers upon doing transactions in the BIR office in Davao Region. Further, service satisfaction is always perceived in the helpfulness of staff towards their customers or clients, and high employee and customer satisfaction can be found outside of service industries (Chamberlain & Zhao, 2019). The researcher would also recommend the use of future research on this topic.

## 7. Conclusion and Recommendation

Based on the study's findings, the following conclusions are drawn: The assumption of the study that there is a multidimensional framework for taxpayers' satisfaction is accepted. There is a function of latent variables and factors, which brings us to different factor structures that show how significant the study of taxpayers' satisfaction in the Davao region is. Moreover, the researcher concludes that there are 13 factors in the measures of taxpayers' satisfaction in the Bureau of Internal Revenue of Davao City. These are timeliness, Processing of information, responsiveness, Promptness, Communication, fair enforcement, solution-driven, accessibility of office, accessibility of contact person, improved procedures, simplicity of tax documents, fair audit selection, and helpfulness. All these factors measure taxpayers' satisfaction level with BIR's system and process entirely.

Based on the findings and conclusions of this study, the following recommendations are given:

The six thematic factors measuring taxpayers' satisfaction rates are essential to the Bureau of Internal Revenue Region XI, tax administrators, and their respective offices to achieve high satisfaction ratings from its taxpayers.

These factors are highly essential to service providers, policymakers, and other government agencies like the Bureau of Customs, the Land Transportation Office, the Land and Registration Authority, and other governing bodies of financial institutions that are still in the process of creating their standard operating procedures and implementing improved policies.

Specifically, it is essential to do the office operations with ease to entice taxpayers to process their transactions and positively comply with government requirements. The Ease of Doing Business is easily identified when taxpayers are satisfied. It refers to the simplicity and convenience of conducting government processes. To do this, each office should have direct telephone lines or client-specific hotlines to avoid longer waiting times and increase the response rate of every staff.

Aside from the legal and regulatory framework of the Bureau, the office should also strengthen its social media presence. This includes creating a better Facebook page in today's digital age. It provides direct and accessible channels of Communication that are real-time and up-to-date. This channel between the government and the community will allow a seamless online interaction for the citizens and promote better public service and engagement. It can also help reach wider audiences for the benefit of promoting office practices and government policies.

In addition, extensive seminars and webinars are necessary to train government employees, particularly the Bureau of Internal Revenue staff. With these sessions, employees will be empowered to do their tasks and responsibilities better and know about the new technologies and practices to carry out their duties effectively. These programs will also improve the abilities of each staff to establish better connections and a tight workforce.

Taxation Conference is also a good start for the Bureau to invite taxpayers and conduct tax consultations and panel discussions to promote standardization of policies and processes, ISO compliance and accreditation, and also to use traditional promotions like handing out flyers and the like to promote public awareness.

Regarding technological advancement, the researcher recommends using new software for tracking documents, easing the tracking and filing for proper documentation. This software will also help alleviate the long waiting lines or queueing to serve the public better and increase the response time of each staff to their respective designations. In addition, software focused on the selection of audits is an essential tool for the office to utilize because of its relevance to the ease of transactions in each area or department.

Aside from the abovementioned recommendations, it is significant to note the capacity of each taxpayer in terms of the mandatory payments to be made. For example, large taxpayers must comply with a mandatory payment position; meanwhile, medium taxpayers may depend on each client's sales declaration. Further, small enterprises or businesses should be waived and subjected to noncompliance and benchmarking rates.

The office's physical location would also be advantageous if it had a bigger parking space and an allocated area for extra parking. It would be best to cater to more than the designated number of vehicles, especially during peak hours. Most importantly, providing a One-Government-Agency or an All-Offices Building in a specific location is very beneficial. Constructing a building that houses all the government agencies is a must in today's generation of public management. This structure may be benchmarked from other countries with the same purpose and relevance.

This research recommends creating intervention programs that address the tax gap from voluntary compliance and increase taxpayers' trust and confidence in the service provided by the tax authorities. Researchers are welcome to conduct more studies on this area as the basis of future studies on financial institutions and their overall satisfaction ratings.

**APPENDICES**

**Appendix A**

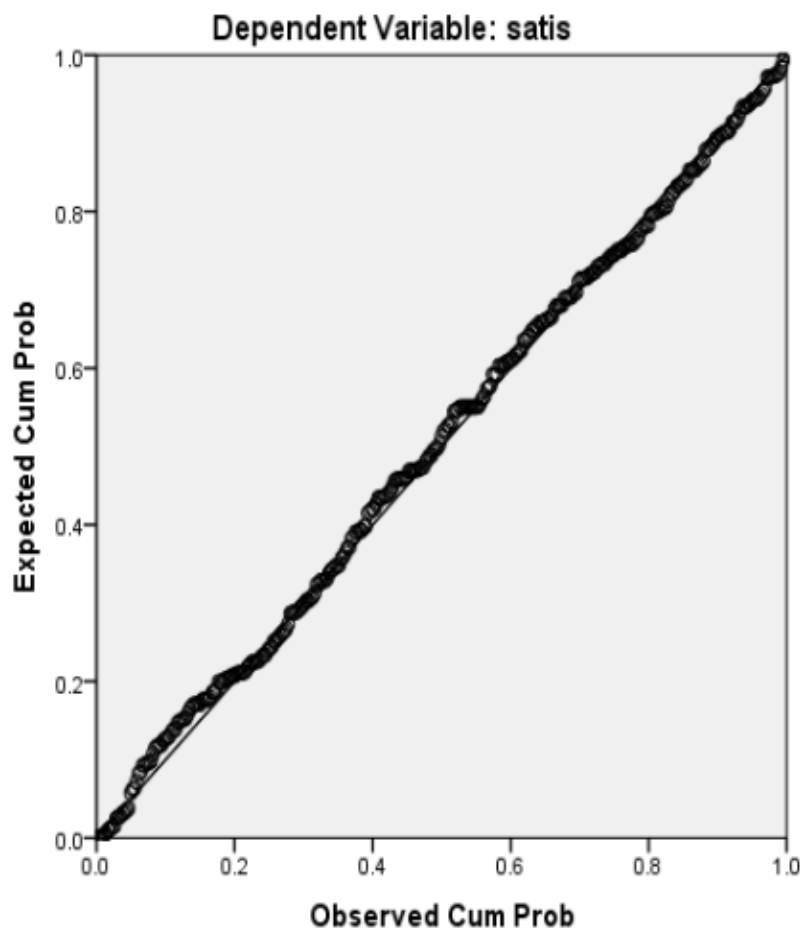
**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	18.406	33.466	33.466	18.406	33.466	33.466	4.085	7.428	7.428
2	2.073	3.763	37.229	2.073	3.763	37.229	3.873	7.042	14.47
3	1.632	2.967	40.196	1.632	2.967	40.196	3.615	6.573	21.043
4	1.433	2.605	42.801	1.433	2.605	42.801	3.089	5.616	26.66
5	1.381	2.51	45.311	1.381	2.51	45.311	2.692	4.894	31.554
6	1.35	2.454	47.765	1.35	2.454	47.765	2.617	4.759	36.312
7	1.246	2.266	50.031	1.246	2.266	50.031	2.603	4.733	41.045
8	1.205	2.192	52.223	1.205	2.192	52.223	2.53	4.608	45.653
9	1.125	2.045	54.267	1.125	2.045	54.267	2.32	4.218	49.871
10	1.072	1.949	56.216	1.072	1.949	56.216	2.241	4.074	53.946

11	1.025	1.864	58.08	1.025	1.864	58.08	1.93	4	3.516	57.461
12	1.008	1.832	59.912	1.008	1.832	59.912	1.34	8	2.451	59.912
13	0.953	1.733	61.645							
Extraction Method: Principal Component Analysis										

**Appendix B**

**Normal P-P Plot of Regression Standardized Residual**



**Appendix C**

**Questionnaire**

**Measures of Taxpayers’ Satisfaction: An Exploratory Factor Analysis**

Greetings!

This questionnaire is designed by Antonio Sayson, Jr. It addresses the researcher’s aim of factoring the measures of taxpayers’ satisfaction in Davao City. Specifically, this survey aims to assess your satisfaction with the various aspects of business tax issues for further improvement of the government agency. To supplement the data obtained from different sources, the researcher seeks to gather relevant information from a sample of 300 taxpayers by means of self-administered questions using this semi-structured questionnaire. Participation in this study is completely voluntary, and the survey results will be

treated with utmost anonymity and confidentiality. For further information, please contact me via Tel: (082) 227-5583.

**Part I: Demographic Profile.** For each of the following items, please indicate your choice from the list below and mark (✓) in the box along the selected item.

1. Age

- 20 - 30 years
- 31- 40 years
- 41-50 years
- Above 50 years

2. Gender

- Male
- Female

3. Educational Qualification

- Elementary
- High School
- College
- Master's degree and above

4. Position

- Owner
- Manager
- Employee, please specify position \_\_\_\_\_

5. Please indicate how long you have been working on tax-related issues.

- Less than 1 year
- 1-5 years
- 6-10 years
- More than 10 years

6. Please indicate how frequently you visit the BIR office on average.

- Monthly
- 6 visits per year
- 3 visits per year
- 2 visit per year
- 1 visit per year

7. When was the last time you visited the Tax office?

- Less than 1 month ago
- 3 months ago
- 6 months ago

1 year ago

**Part II: Company’s Background.** For each of the following questions or items, please indicate your choice from the list below, and mark (✓) in the box along the selected item.

1. What is your company’s main business activity?

- Manufacturing
- General Trade (wholesale and or retail)
- Services
- Others, please specify \_\_\_\_\_

2. Please indicate the legal form of your business.

- Sole proprietorship
- Partnership
- Private limited company
- Share company
- Others, please specify \_\_\_\_\_

3. Please indicate how long your company is in business.

- Less than 1 year
- 1-5 years
- 6-10 years
- More than 10 years

4. Please indicate where you pay your taxes.

- Revenue District Office (RDO) 113-A West
- Revenue District Office (RDO) 132 East
- Thru bank, please specify \_\_\_\_\_

**Part III: Taxpayers’ Satisfaction with the Tax System.** Kindly rate your responses on the quality of services provided by BIR Revenue Regional Office No. 19, Davao City on five scales ranging from (1-not essential/ important to 5-highly essential/ important).

**Scale:**

- 5: Highly essential/important
- 4: Essential/Important
- 3: Somehow essential/important
- 2: Less essential/important
- 1: Not essential/important

For each of the following items, please indicate your choice by marking (✓) in the box along with the selected item.

Factor	Scale				
	5	4	3	2	1

1. The staff are knowledgeable of the institution and understand the tax system.					
2. The government and office have clearly defined their tax policies.					
3. The staff help to explain the entirety of the tax system and what needs to be done.					
4. Ease in locating and contacting the appropriate person or officer in the tax office.					
5. The tax audit selection procedure is sound enough.					
6. Location and accessibility of tax office convenience.					
7. Tax authorities or officers solve complaints properly.					
8. The staff has a better understanding of the tax system.					
9. Overall satisfaction with the service provided by the tax officers.					
10. Overall satisfaction with the service provided by the tax office.					
11. Overall satisfaction with the information provided by the tax system including websites and other information-related concerns.					
12. Education of taxpayers and conduct of awareness creation and consultation sessions with tax officers.					
13. General tax law enforcements are fair and acceptable.					
14. Overall satisfaction with the tax system implemented by the office.					
15. Overall satisfaction in the opportunity and complexity of tax law enforcement in the office.					
16. Ease in getting tax refunds, fairness in procedures in submitting tax returns.					
17. Content and coverage of tax documents are enough and simple to fill out.					
18. Availability of tax information and understanding of available tax documents via marketing strategies.					
19. Improved audit selection and auditing procedures.					
20. Friendliness and behavior of tax officials.					
21. Ample information and working website.					
22. Taxpayers are aware of the overall tax system implemented in the city.					
23. Taxpayers are aware of their rights.					
24. Taxpayers are aware of their responsibilities.					
25. Taxpayers are knowledgeable through the tax offices' services					



26. The tax office promotes tax awareness throughout its tax campaign in the office and online.					
27. Availability of enough tax information.					
28. Information is provided via infographics, infomercials, and traditional information dissemination strategies.					
29. Ease of access to the tax office and other related offices for tax transactions.					
30. Length of time taken to complete tax matters.					
31. The attitude of tax officers towards solving a problem.					
32. Overall transparent and simple tax collection procedures.					
33. Timely responses when there are technical difficulties in the tax office.					
34. The office does not only respond to customer inquiries but also takes proactive measures in reaching out to taxpayers and educating them.					
35. The simplicity of website usage.					
36. Computers, websites, and other technological equipment are used in the tax office.					
37. The staff is very responsive to inquiries and problems.					
38. Imposing of tax payments and penalties.					
39. Tax officers do their jobs diligently and deliver their services in a consistent and ethical manner.					
40. On average, the staff is 50% helpful to customers in providing information and rendering services.					
41. Fairness and attitude of tax officers in dealing with customers.					
42. Staff provides tax information to clients daily no matter their appearances, ethnicities, religions, and educational backgrounds.					
43. The staff is helpful by trying to uphold the institution's core values, one of which is proper service delivery to its customers.					
44. Staff are professionals and always gallant in their discharge of duty.					
45. Overall tax procedures in the office.					
46. Staff is extremely helpful in addressing customer inquiries in many ways.					
47. Customer inquiries are addressed in time verbally and in writing by emails and texts.					
48. Staff is extremely helpful to their customers in explaining the processes of tax payment and when and to pay their taxes.					

49. They are very responsive and cooperative to hear your problem and provide solutions if need be.					
50. The staff is very much helpful in that they provide customers with the requisite and needed information in a timely manner.					
51. The staff of the LRA is helpful towards customer inquiries much faster than other entities.					
52. Staff is always available to answer customer inquiries about related tax issues.					
53. Website information including advisories and announcement on taxes are updated.					
54. Website is functional in general.					
55. Website is easy to navigate.					
56. Online client support is responsive.					
57. Staff display commendable attitudes upon encounters.					
58. Staff deliver its services in a consistent manner.					
59. Staff show professionalism all the time.					
60. Tax audit outcomes and penalties are fair and sound enough.					

## 8. References

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