



THE IMPLEMENTATION OF HOUSEHOLD-BASED SURVEYS: BASIS FOR AN ENHANCED INTERVENTION SCHEME

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ABSTRACT

This study evaluates the implementation of a household-based survey conducted by the Philippine Statistics Authority (PSA) and its manifestation to respondents, serving as a basis for an enhanced survey program. Three hundred (300) households were surveyed via random sampling from the six (6) selected barangays in the Municipality of Santa Cruz, Laguna Province. Demographic characteristics of respondents provided insights into survey findings and implications. Results indicate a high level of implementation, as demonstrated by mean scores in critical indicators such as interviewer/enumerator duties, survey characteristics, and perception of the survey. Challenges persist in communication and information dissemination, yet overall implementation still needs to be higher. The study reveals significant relationships between socio-demographic profile variables and implementation variables, with the location of respondents influencing survey experiences. Age, sex, education, income, and occupation significantly correlate with survey aspects. Strong statistical correlations are observed between implementation and manifestation variables, emphasizing their influence on survey outcomes. The findings reject the hypothesis of no significant relationship between the household survey and its manifestation, providing valuable insights into survey dynamics.

KEYWORDS: Household-based survey, Survey program, Implementation, Communication and information dissemination, Survey Experiences, Manifestation, Survey Outcome, Survey dynamics

INTRODUCTION

The Philippine Statistics Authority (PSA) plays a pivotal role in shaping the socio-economic landscape of the Philippines, serving as the custodian of the nation's statistical information. Entrusted to implementing the objectives and provisions of Republic Act No. 10625, or the Philippine Statistical Act of 2013, encompasses collecting, analyzing, and disseminating data critical to informed decision-making and policy formulation. The PSA's mandated activities are categorized into Statistical Operations and are divided into three major categories: Household Surveys, Census and Sampling Frames, Establishment Surveys and Administrative Data.

Of particular interest to this study are the Household-Based Surveys. There are many different types of household-based surveys available; these include the National Demographic and Health Survey, the Survey of Overseas Filipinos, the Annual Poverty Indicators Survey, the Family Income and Expenditure Survey, the Family Planning Survey, the Labor Force Survey, the Farm Price Survey, the Household Energy Consumption Survey, and the Palay and Corn Production Survey.

The functions of the PSA are extensive, involving primary data collection and the conducting regular censuses on vital subjects such as population, housing, agriculture, fisheries, business, industry, and various economic sectors. The PSA undertakes the critical task of conducting statistical sample surveys that delve into every facet of socio-economic life. Agriculture, industry, trade, finance, pricing, marketing, income, expenses,

education, health, culture, and social conditions are all covered in these surveys for the government and public use. In line with the mandate of Republic Act 10625, the PSA continuously adapts to the evolving needs of the nation, taking on new functions as assigned by the PSA Board.

OBJECTIVES OF THE STUDY

The study addresses the challenges, issues, and concerns encountered by the Philippine Statistics Authority (PSA) when conducting household-based surveys despite their critical importance for data collection. These difficulties include respondents' concerns about why they were selected for the interview, lack of advance information about the survey and its purpose, disinterest in answering surveys, lack of time due to lengthy questions, and privacy concerns about protecting their responses. This study provides valuable insights regarding implementing household-based surveys, ensuring the success and impact of the PSA's data collection efforts. The study provides evidence-based data that can be efficiently used to craft an action plan to enhance the survey program. Additionally, it addresses the specific needs within the Laguna Province for accurate resource allocation and socio-economic development based on the data collected.

MATERIALS AND METHODS

With the utilization of a survey questionnaire, this study collected data from respondents employing the Descriptive Quantitative Research Method. The Descriptive Research method describes existing phenomena as accurately as possible.



The main goal of descriptive research is to systematically tell the phenomena under study. Numerous subsets of research methodologies, including surveys, correlation studies, qualitative investigations, and content analysis, are included in the category of descriptive research. These subtypes differ not in data availability but in their data collection and analysis procedures. Thus, descriptive studies may involve quantitative (QUAN) analysis, qualitative (QUAL) analysis, or both. Surveys, for example, are typically designed to investigate a large population's perspective on a particular event or problem. Data collection is commonly conducted through questionnaires, and data analysis involves quantification (Atmowardoyo, H., 2018). In general, the procedure for this research involved data gathering, encoding, processing, interpretation, and evaluation of the collected data.

Population and Sampling Technique

This study aimed to statistically assess whether the Philippine Statistics Authority has implemented household-based surveys in the municipality of Santa Cruz, Laguna Province and their impact on residents and survey outcomes. The required data was gathered from three hundred (300) Santa Cruz, Laguna household respondents. To collect the necessary data, the researcher used the purposive sampling method to identify six (6) barangays to be included in the study. The researcher used the random sampling method to choose respondents. Each barangay was equally represented, with fifty (50) respondents in the following barangays: Poblacion 4, Poblacion 5, Santisima Cruz, Calios, Bagumbayan and Bubukal.

Data Collection Procedure

The researcher employed a self-formulated questionnaire to collect information. The questionnaire comprises six pages, with the cover page obtaining permission or consent for acquiring personal information in compliance with the Data Privacy Act. There were three sections on the questionnaire. Section A collected the socio-demographic about the household respondent; Section B determined the Level of implementation of household survey indicators such as the interviewer/enumerator duties and responsibilities, survey characteristics, perception of the survey, communication and information dissemination, and survey strategies, and Section C the level of manifestation of household survey indicators such as the response rate, respondents profile update and listing, trust and confidence, ease of access to LGU programs, improvement in data quality, and mechanisms to address public concerns. The questionnaire's Pilot testing was administered to a small group of respondents (N=10) using Cronbach's alpha reliability coefficients. The four-point rating scale used in Sections B and C of the questionnaires allowed participants to provide their responses and opinions on specific criteria or variables. Following collection, the data was subjected to various types of statistical examinations, including frequency, weighted mean, ANOVA, general linear model, t-test,

Spearman's rho, and Pearson r correlation coefficient to test the relationship between profile variables and the Level of implementation.

RESULTS AND DISCUSSION

Socio-Demographic Profile of the Respondents

The survey collected data from 300 household respondents from the six barangays, with an equal distribution of respondents at 16.70%. This statement aligns with Module-4, UNESCO (2020); household surveys typically collect data from a nationally representative sample of households randomly selected from a list of households. As characterized by family members, The Spouse had the highest number of respondents at 40.00%, followed by the Head at 35.30%, the Son at 10.00% and the Daughter at 8.67%. The previous research by Hasanbasri A. et al. (2021) highlighted that data on individuals should ideally be reported by household members themselves and not reliance on proxy respondents, a common practice in large-scale survey operations that raises related issues and serves as a useful design element to reduce the chance of information being missed otherwise. Most of the respondents were aged 35-44 years. Old at 22.00%, followed by aged 25-34 yrs. The respondents were 19.70%, and the following were respondents aged 45-54 years. Old and 55-64 yrs. Old at 17.30%, and those aged 15-24 yrs. Old at 14.00%. According to the study by Olson K. et al. (2019), older respondents are less likely to answer adequately. Most respondents are Female (61.00%), followed by Male respondents (39.00%). This observation is consistent with a study conducted by Habib, T.Z. (2020); there are also many households worldwide where women head. Most respondents had lower secondary education at 41.30%, followed by bachelor level or equivalent at 25.70%, and primary education at 16.30%. In Module 4 by UNESCO (2020), the national demand and need for education is decided upon at the home level by individuals who assess the advantages and disadvantages of schooling. Most respondents had an income of less than ₱5,000 monthly or at 37.30%, followed by monthly income ranging from ₱5,000 to ₱9,999 or at 29.70%, and monthly income ranging from ₱10,000 to ₱19,999 or at 22.30%. The findings align with Gourlay S. et al. (2021) study that a significant issue facing in-person household surveys nowadays is their decline, which is linked to rising urbanization, rising income levels, and, most recently, the COVID-19 pandemic's social distancing tactics.

Nearly half of the respondents (46.30%) belonged to the service and sales workers, followed by plant & machine operators & assemblers (13.00%) and those belonged to clerical support workers (8.00%).



Table 4. Level of Implementation of Household Survey in Terms of Interviewer’s/Enumerator’s Duties and Responsibilities

Indicator	M	SD	Interpretation
1. The Interviewer explained the importance and the purpose of the survey.	3.58	0.63	VH
2. The Interviewer provided clear instructions to respondents regarding survey questions.	3.58	0.61	VH
3. The Interviewer attentively listened to the respondent's answers and promptly addressed any questions or concerns.	3.55	0.62	VH
4. The Interviewer effectively handled unexpected situations and resolved conflicts or misunderstandings during the interview.	3.46	0.69	VH
5. The Interviewer treated the respondents respectfully and professionally (always polite, patient and gracious).	3.70	0.56	VH
Overall	3.58	0.52	VH

Note. N=300. The mean is interpreted as follows: 3.25–4.00=Very highly implemented (V.H.), 2.50–3.24=Highly implemented (H), 1.75–2.49=Less implemented (L), 1.00–1.74=Rarely implemented (R).

The responses to the first statement in Table 4, "The interviewer explained the importance and the purpose of the survey", indicate a very highly implemented ($M=3.58, SD=0.63$). For the second statement, "The interviewer provided clear instructions to respondents regarding survey questions", the responses show a very highly implemented ($M=3.58, SD=0.61$). The third statement, "The interviewer attentively listened to the respondent's answers and promptly addressed any questions or concerns", indicates a very highly implemented ($M=3.55, SD=0.62$). Similarly, "The interviewer effectively handled the unexpected situations and resolved conflicts or misunderstandings during the interview" is highly implemented ($M=3.46, SD=0.69$). Lastly, the statement "The interviewer treated the respondents with respect and professionalism (always polite, patient and gracious)" also signifies a very highly implemented ($M=3.70, SD=0.56$). Generally, there is a highly implemented ratings for the Interviewer's/Enumerator's Duties and Responsibilities ($M=3.58, SD=0.52$). The study by UNESCO (2024) highlights the comprehensive training for survey enumerators and data collection teams in the application of quality control procedures at every survey stage, including data entry, data collection, and data analysis.

The first statement in Table 5, "The manual questionnaire used simple words that can be easily answered and understood", indicates a very highly implemented ($M=3.66, SD=0.52$). The second statement, "The PSA frequently conducts household surveys that I have somehow experienced or attended", also shows a very highly implemented ($M=3.33, SD=0.73$). Similarly, the third statement, "The survey duration is not too short, too long, and just appropriate to provide meaningful responses", indicates a very highly implemented ($M=3.29, SD=0.77$). The fourth statement, "The survey content is diverse and covers a wide range of topics. The types of questions asked are simple and relevant", shows a very highly implemented ($M=3.55, SD=0.56$). Lastly, "Face-to-face interviews are the most common data collection method for obtaining accurate and detailed information" indicates a highly implemented ($M=3.69, SD=0.51$). Overall, the Survey Characteristics show a very highly implemented rating ($M=3.51, SD=0.46$). These findings are consistent with the study of Wilson L. et al. (2021), developing surveys that are clear and simple, being responsive to issues, worries, and inquiries, and making surveys more inclusive by involving respondents with diverse needs and abilities into the survey research and development process.

Table 5. Level of Implementation of Household Survey in Terms of Survey Characteristics

Indicator	M	SD	Interpretation
1. The manual questionnaire used simple words that can be quickly answered and understood.	3.66	0.52	VH
2. The PSA frequently conducts household surveys that I have somehow experienced or attended.	3.33	0.73	VH
3. The survey duration is not too short, too long, and appropriate to provide meaningful responses.	3.29	0.77	VH
4. The survey content is diverse and covers various topics. The types of questions asked are simple and relevant.	3.55	0.56	VH
5. Face-to-face interviews are the most common data collection method for obtaining accurate and detailed information.	3.69	0.51	VH
Overall	3.51	0.46	VH

Note. N=300. The mean is interpreted as follows: 3.25–4.00=Very highly implemented (V.H.), 2.50–3.24=Highly implemented (H), 1.75–2.49=Less implemented (L), 1.00–1.74=Rarely implemented (R).



The result of Table 6 supported the implementation of a household-based survey of the PSA's high-quality economic statistics that have assisted to the efficient financial administration through its Family Income and Expenditure Survey (FIES). Survey of Family Income and Expenditure (FIES). In 2018, a major tax reform package was implemented

based on the poll results from 2015. (Manasan, 2017). They led to reduced income taxes, higher excise taxes on a variety of goods, including fuel, and tax reform. The statement "This is how we show the value of our data and that this survey gives you all the data you need for tax reform" was also added by Bernales (2018).

Table 6. Level of Implementation of Household Survey in Terms of Perception of the Survey

Indicator	<i>M</i>	<i>SD</i>	Interpretation
1. The primary purpose of household surveys conducted by PSA is clearly stated and mentioned before the interview.	3.56	0.55	VH
2. The household survey, particularly in Laguna Province, is beneficial.	3.48	0.63	VH
3. The residents gain new insights by participating and providing information in household surveys.	3.44	0.61	VH
4. The survey topics are personally relevant to your present status and needs.	3.50	0.68	VH
5. The survey results could influence decision-making or further policy development.	3.56	0.60	VH
Overall	3.51	0.50	VH

Note. *N*=300. The mean is interpreted as follows: 3.25–4.00=Very highly implemented (V.H.), 2.50–3.24=Highly implemented (H), 1.75–2.49=Less implemented (L), 1.00–1.74=Rarely implemented (R).

The responses indicate that they are very highly implemented for various statements. The first statement, "The primary purpose of household surveys conducted by PSA is clearly stated and mentioned before the interview", shows very highly implemented (*M*=3.56, *SD*=0.55). Similarly, the second statement, "The household survey, particularly in Laguna Province, is beneficial," signifies very highly implemented (*M*=3.48, *SD*=0.63). The third statement, "The residents gain new insights from participating and by providing information

in household surveys", reflects very highly implemented (*M*=3.44, *SD*=0.61). The fourth statement, "The survey topics personally relevant to your present status and needs", shows very highly implemented (*M*=3.50, *SD*=0.68). Lastly, the fifth statement, "The survey results could influence decision-making or further policy development", indicates very highly implemented (*M*=3.56, *SD*=0.60). Overall, the perception of the survey shows that it is very highly implemented (*M*=3.51, *SD*=0.50).

Table 7. Level of Implementation of Household Survey in Terms of Communication and Information Dissemination

Indicator	<i>M</i>	<i>SD</i>	Interpretation
The primary sources through which respondents learn about the Household survey conducted by the PSA include:			
1. I learn about it on the PSA official website.	2.09	1.14	L
2. I learned about it on the Local Government Unit (LGU) posted banners, announcements or community meetings.	2.98	0.86	H
3. I learned about it on social media platforms (e.g., Facebook, Instagram, Twitter, and YouTube).	2.80	0.99	H
4. I learned about it on television.	2.91	1.00	H
5. I learn about it through Family members, relatives and friends.	2.86	1.05	H
Overall	2.73	0.72	H

Note. *N*=300. The mean is interpreted as follows: 3.25–4.00=Very highly implemented (V.H.), 2.50–3.24=Highly implemented (H), 1.75–2.49=Less implemented (L), 1.00–1.74=Rarely implemented (R).



The findings of Table 7 suggest the study of the United Nations Economic Commission for Europe (2021), quantifying the benefits and communicating the value of surveys. National Statistical Offices must invest in data visualization and journalism to better communicate the value of household surveys, both in and of themselves and through integration. They emphasize developing and maintaining a brand for NSOs associated with trust, relevance, independence, and quality, especially now that we have abundant information and misinformation. Also, consumer consultations, staff engagement, and communication and marketing strategies are critical for building such a branch.

The following statements are the responses in Table 7 for the primary sources through which respondents learn about the

household survey conducted by the PSA. The first statement, "I learned about it on the PSA official website", indicates a less implemented ($M=2.09, SD=1.14$). For the second statement, "I learned about it on Local Government Unit (LGU) posted banners, announcements or community meetings", the response was highly implemented ($M=2.98, SD=0.86$). The third statement, "I learn about it on Social media platforms (e.g., Facebook, Instagram, Twitter, YouTube)", indicates a highly implemented ($M=2.80, SD=0.99$). Similarly, "I learn about it on the Television" shows a highly implemented ($M=2.91, SD=1.00$). Lastly, the statement, "I learn about it through Family members, relatives and friends", also signifies a highly implemented rating for Communication and Information Dissemination ($M=2.73, SD=0.72$).

Table 8. Level of Implementation of Household Survey in Terms of Survey Strategies

Indicator	M	SD	Interpretation
1. Trained enumerators visit households to administer the survey questionnaire face-to-face.	3.68	0.56	VH
2. The PSA inform households about the survey in advance through community meetings, flyers, or local media.	3.56	0.65	VH
3. Enumerators offer giveaways and tokens with the PSA logo to households to introduce the survey and encourage participation.	2.34	1.19	L
4. An accompanying supervisor oversees data collection activities, monitors enumerator performance, and promptly addresses any issues or discrepancies.	2.64	1.19	H
5. Emphasize the confidentiality of responses and ensure that personal information collected from households is kept secure.	3.10	0.94	H
Overall	3.06	0.61	H

Note. $N=300$. The mean is interpreted as follows: 3.25–4.00=Very highly implemented (V.H.), 2.50–3.24=Highly implemented (H), 1.75–2.49=Less implemented (L), 1.00–1.74=Rarely implemented (R).

The first statement in Table 8, "Trained enumerators visit households to administer the survey questionnaire face-to-face", indicates a very highly implemented ($M=3.68, SD=0.56$). The second statement, "The PSA inform households about the survey in advance through community meetings, flyers, or local media," indicates a very highly implemented ($M=3.56, SD=0.65$). The third statement, "Enumerators offer giveaways and tokens with the PSA logo to households to introduce the survey and encourage participation", the response shows less implementation ($M=2.34, SD=1.19$). The fourth statement, "An accompanying supervisor oversees data collection activities,

monitors enumerator performance and addresses any issues or discrepancies promptly", shows a highly implemented ($M=2.64, SD=1.19$). Lastly, "Emphasis on confidentiality of responses and ensure that personal information collected from households is kept secure" indicates highly implemented ($M=3.10, SD=0.94$). The survey strategies have a highly implemented rating ($M=3.06, SD=0.61$). It aligns with the study of Calogero C. et al. (2022) that effective documentation and dissemination techniques are essential for maximizing the return on investment in household surveys and utilizing the full analytical potential of the data obtained.

Table 9. Level of Manifestation of Household Survey in Terms of Response Rate

Indicator	M	SD	Interpretation
1. The ease of understanding the survey instructions and questions is attributed to the clarity of the information stated by the PSA enumerator through their communication.	3.60	0.53	VH
2. My willingness to participate in future household surveys conducted by PSA will improve the response rates.	3.58	0.55	VH



3. Refusing to participate in household surveys results in low response rates and can hinder effective policymaking.	3.55	0.61	VH
4. The survey materials (e.g., questionnaires and information pamphlets) helped us understand the purpose and importance of the survey, thus improving public perceptions.	3.60	0.57	VH
5. Giving giveaways or tokens can be a way to persuade participation in the survey.	3.38	0.82	VH
Overall	3.54	0.48	VH

Note. $N=300$. The mean is interpreted as follows: 3.25–4.00=Very highly manifested (V.H.), 2.50–3.24=Highly manifested (H), 1.75–2.49=Less manifested (L), 1.00–1.74=Rarely manifested (R).

The first statement, "I believe the ease of understanding the survey instructions and questions is attributed to the clarity of the information being stated by the PSA enumerator through the way they communicate", indicates a very highly manifested ($M=3.60$, $SD=0.53$). The second statement, "I believe my willingness to participate in the future household surveys conducted by PSA will improve the response rates", indicates a very highly manifested ($M=3.58$, $SD=0.55$), aligns with the study of U.K. Statistics (2022), cited the willingness to participate, accessibility of data collecting, and trust and trustworthiness are the three main factors that influence respondent participation in household surveys. Likewise, the third statement, "I believe that refusing to participate in household surveys results in low response rates and can hinder effective policymaking", shows a very high manifest ($M=3.55$,

$SD=0.61$). The fourth statement, "I believe the survey materials (e.g., questionnaires, information pamphlets) helped understand the purpose and importance of the survey, thus improving public perceptions", also shows a very high manifest ($M=3.60$, $SD=0.57$). Lastly, "I believe that giving giveaways or tokens can be a way to persuade participation in the survey" indicates a very high level of motivation ($M=3.38$, $SD=0.82$). Overall, the Response Rate is very highly manifested ($M=3.54$, $SD=0.48$). The findings of Olson K. et al. (2019) explained while attitude questions do not typically differ from behavioral questions, question characteristics that impact the comprehension and mapping stages of the cognitive response process are consistently linked to answering behaviors.

Table 10. Level of Manifestation of Household Survey in Terms of Respondent’s Profile Update and Listing

Indicator	<i>M</i>	<i>SD</i>	Interpretation
1. The PSA reviews and updates not only demographic information but also various aspects of people’s lives and other socio-economic characteristics.	3.59	0.61	VH
2. It is essential to update household information whenever there are changes in household composition or other relevant details.	3.69	0.52	VH
3. I believe household information needs to be regularly updated for statistical purposes.	3.71	0.51	VH
4. The information listed for households in official records (e.g., voter registry, census data) must be accurate and current.	3.70	0.51	VH
5. updates are necessary to determine eligibility for benefits or services based on the household profile.	3.70	0.51	VH
Overall	3.68	0.45	VH

Note. $N=300$. The mean is interpreted as follows: 3.25–4.00=Very highly manifested (V.H.), 2.50–3.24=Highly manifested (H), 1.75–2.49=Less manifested (L), 1.00–1.74=Rarely manifested (R).

The responses to the first statement, "I believe that the PSA reviews and updates not only demographic information but also various aspects of people's lives and other socio-economic characteristics", show a very highly manifested ($M=3.59$, $SD=0.61$). The second statement, "I believe it is important to update household information whenever there are changes in household composition or other relevant details", signifies a very highly manifested ($M=3.69$, $SD=0.52$). The third statement, "I believe household information needs to be

regularly updated for statistical purposes", indicates a very highly manifested ($M=3.71$, $SD=0.51$). The fourth statement, "I believe the information listed for households in official records (e.g., voter registry, census data) needs to be accurate and up to date", also signifies a very highly manifested ($M=3.70$, $SD=0.51$). Lastly, the fifth statement, "I believe updates are necessary to determine eligibility for any benefits or services based on the household profile", also indicates ($M=3.70$, $SD=0.51$). Overall, the respondents' responses for the



Respondent's Profile Update and Listing indicate a very high level of manifestation ($M=3.68$, $SD=0.45$). It is in line with Module-4, UNESCO (2020), defining household surveys as an important monitoring tool for a long time and, in fact, they are a prime tool for social assessment that can serve as the foundation for national policymaking, going beyond simple

population registration. It can be combined with other characteristics to provide insightful analysis. These personal attributes include things like employment, income, expenditure, health, and other subjects covered in household surveys; these provide sufficient information for planning and the development of evidence-based policies.

Table 11. Level of Manifestation of Household Survey in Terms of Trust and Confidence

Indicator	M	SD	Interpretation
1. I trust the Philippine Statistics Authority (PSA) as a reliable authority for collecting and managing survey data.	3.60	0.61	VH
2. I trust the PSA regarding the transparency of the survey process, including how survey objectives are communicated and results are reported.	3.43	0.67	VH
3. I trust that the PSA has confidentiality measures to protect all survey responses and personal information.	3.48	0.72	VH
4. I trust the PSA as an impartial and unbiased agency in its data collection and analysis.	3.48	0.71	VH
5. I trust the PSA in ensuring that the information provided in the survey will be used for meaningful purposes.	3.56	0.67	VH
Overall	3.51	0.56	VH

Note. $N=300$. The mean is interpreted as follows: 3.25–4.00=Very highly manifested (V.H.), 2.50–3.24=Highly manifested (H), 1.75–2.49=Less manifested (L), 1.00–1.74=Rarely manifested (R).

The first statement, "I trust the Philippine Statistics Authority (PSA) as a reliable authority for collecting and managing survey data", indicates a very high manifest ($M=3.60$, $SD=0.61$). The second statement, "I have trust in the PSA regarding the transparency of the survey process, including how survey objectives are communicated and how results are reported", also shows a very highly manifested ($M=3.43$, $SD=0.67$). The third statement, "I trust that the PSA has confidentiality measures in place to protect all survey responses and personal information," shows a very highly manifested ($M=3.48$, $SD=0.72$). These findings are supported by the study of the Inter-Secretariat Working Group on Household Surveys (2021), pointing out that data integration raises the possibility of data breaches and misuse in their discussion on upholding strict ethical standards and data confidentiality. To allow access

under suitable conditions, strong institutional arrangements, legal frameworks, and data protection considerations are necessary. The fourth statement, "I trust the PSA as an agency that is impartial and unbiased in its data collection and analysis", shows a very high manifest ($M=3.48$, $SD=0.71$). The fifth statement, "I trust the PSA in ensuring that the information provided in the survey will be used for meaningful purposes", is very highly manifested ($M=3.56$, $SD=0.67$). In general, the survey's findings showed a very highly manifested Trust and Confidence ($M=3.51$, $SD=0.56$). According to Wilson, L et al. (2021), rethinking the interaction between NSOs and survey participants is necessary to establish trust; instead of seeing respondents as such, participants should be seen as collaborators and co-producers.

Table 12. Level of Manifestation of Household Survey in Terms of Ease of Access to LGU Programs

Indicator	M	SD	Interpretation
1. Vital statistics records provide access to LGU recording and monitoring.	3.57	0.58	VH
2. Household information can be utilized for government planning and resource allocation for the community.	3.47	0.62	VH
3. Survey results could help the LGU create programs and services specifically tailored to the needs of households or families, such as education and employment.	3.52	0.56	VH
4. I believe that the population of senior citizens, people with disabilities, and orphans has been identified through the household survey.	3.53	0.59	VH



5. I believe the survey results will be used to make positive changes in the community, improving accessibility to housing, healthcare, social welfare, and security protection. 3.51 0.60 VH

Overall 3.52 0.50 VH

Note. $N=300$. The mean is interpreted as follows: 3.25–4.00=Very highly manifested (V.H.), 2.50–3.24=Highly manifested (H), 1.75–2.49=Less manifested (L), 1.00–1.74=Rarely manifested (R).

Table 12 shows the effect of household respondents on ease of access to the LGU Programs. The first statement, "I believe that vital statistics records provide access to LGU recording and monitoring", indicates a very high manifest ($M=3.57$, $SD=0.58$). The second statement, "I believe that household information can be utilized for government planning and resource allocation for the community," shows a very highly manifested ($M=3.47$, $SD=0.62$). It is aligned with the study of the United Nations Economic Commission for Europe (2021); it is also essential for NSOs to document how survey data have been used for policymaking to further demonstrate the value of household surveys. Likewise, the third statement, "I believe that survey results could help the LGU create programs and services specifically tailored to the needs of households or families, such as education and employment", also yielded a very high manifest ($M=3.52$, $SD=0.56$). The fourth statement, "I believe

that the population of senior citizens, people with disabilities, and orphans have been identified through the household survey", also resulted in a very highly manifested ($M=3.53$, $SD=0.59$). It is supported by the 2016 study conducted by the former National Statistical Coordination Board Secretary General Romulo Virola, who highlighted the need for better time-use data, violence data, and data disaggregation, for example, data relating to those disabilities. The fifth statement, "I believe that the survey results will be used to make positive changes in the community, improving accessibility to housing, healthcare, social welfare, and security protection," produced a very highly manifested result ($M=3.51$, $SD=0.60$). Overall, the response of the household respondents yielded a very high manifest ($M=3.52$, $SD=0.50$).

Table 13. Level of Manifestation of Household Survey in Terms of Improvement in Data Quality

Indicator	<i>M</i>	<i>SD</i>	Interpretation
1. The effectiveness of enumerator training is evident in how well they adhere to survey protocols, utilize interview techniques, and uphold ethical considerations, ensuring consistency and reliability in data collection.	3.54	0.62	VH
2. The survey comprehensively captures all relevant aspects of households' demographics, economic status, and living conditions.	3.55	0.62	VH
3. The PSA implements quality control measures, such as data validation checks and re-interviews of a subset of households, to ensure the accuracy and reliability of data.	3.56	0.59	VH
4. The PSA continually enhances its communication methods and materials to reach and engage households better, improving data quality.	3.62	0.53	VH
5. The PSA values respondents' inputs, thoughts, and feedback, aiming to enhance the survey experience and better meet their needs.	3.59	0.58	VH
Overall	3.57	0.49	VH

Note. $N=300$. The mean is interpreted as follows: 3.25–4.00=Very highly manifested (V.H.), 2.50–3.24=Highly manifested (H), 1.75–2.49=Less manifested (L), 1.00–1.74=Rarely manifested (R).

The findings in Table 13 align with one of the significant ambitions of PSA since its inception: to employ more innovative methods for the production of official statistics, thereby increasing their depth, coverage, timeliness, and quality, as Bernales (2018) has noted. The first statement, "Effectiveness of enumerator training is evident in how well they adhere to survey protocols, utilize interview techniques, and uphold ethical considerations, ensuring consistency and reliability in data collection", yielded a very highly manifested ($M=3.54$, $SD=0.62$). Similarly, the second statement, "The

survey comprehensively captures all relevant aspects of households' demographics, economic status, and living conditions", produced a very high manifest ($M=3.55$, $SD=0.62$). Likewise, the third statement, "I believe the PSA implements quality control measures, such as data validation checks and re-interviews of a subset of households, to ensure the accuracy and reliability of data", indicates a very highly manifested ($M=3.56$, $SD=0.59$). The fourth statement, "I believe the PSA continually enhances its communication methods and materials to reach better and engage households, thereby improving data quality",



also resulted in a very highly manifested ($M=3.62, SD=0.53$). Finally, the fifth statement, “The PSA values the inputs, thoughts, and feedback of respondents, aiming to enhance the survey experience and better meet their needs”, produced a very highly manifested ($M=3.59, SD=0.58$). Overall, the manifestation of improvement in data quality is very high ($M=3.57, SD=0.49$).

These results are consistent with Open Data Watch 2018a, which states that the Open Data Inventory evaluates the openness and coverage of official statistics in order to help identify gaps, advance open data policy, enhance accessibility, and foster communication between data users and national statistical offices. Moreover, it supported Pacis's (2017) statement that it has provided the public with mechanisms for requesting access to local data.

Table 14. Level of Manifestation of Household Survey in Terms of Mechanisms to Address Public Concern

Indicator	M	SD	Interpretation
1. Through reports, presentations, and interactive workshops, The PSA disseminates the results and shares survey findings with relevant stakeholders, including government agencies, policymakers, NGOs, and surveyed communities.	3.51	0.63	VH
2. The PSA analyzes survey data using appropriate statistical methods and software, preparing comprehensive reports presenting key findings and recommendations for stakeholders.	3.47	0.64	VH
3. The PSA effectively employs various survey strategies to maximize the quality and reliability of household survey data, ultimately contributing to informed decision-making and policy development.	3.49	0.61	VH
4. The PSA establishes mechanisms for receiving feedback from households and communities to improve future survey implementation and address concerns or grievances.	3.56	0.59	VH
5. The PSA is responsive to other government agencies in addressing public concerns.	3.62	0.54	VH
Overall	3.53	0.50	VH

Note. $N=300$. The mean is interpreted as follows: 3.25–4.00=Very highly manifested (V.H.), 2.50–3.24=Highly manifested (H), 1.75–2.49=Less manifested (L), 1.00–1.74=Rarely manifested (R).

The first statement, “The PSA disseminates the results and shares survey findings with relevant stakeholders, including government agencies, policymakers, NGOs, and surveyed communities, through reports, presentations, and interactive workshops”, indicates a very highly manifested ($M=3.51, SD=0.63$). The second statement, “I believe the PSA analyzes survey data using appropriate statistical methods and software, preparing comprehensive reports presenting key findings and recommendations for stakeholders”, yields a very highly manifested ($M=3.47, SD=0.64$). The third statement, “The PSA effectively employs various survey strategies to maximize the quality and reliability of household survey data, ultimately

contributing to informed decision-making and policy development”, resulted in a very highly manifested ($M=3.49, SD=0.61$). The fourth statement, “The PSA establishes mechanisms for receiving feedback from households and communities to improve future survey implementation and address any concerns or grievances”, also yielded a very highly manifested ($M=3.56, SD=0.59$). The fifth statement, “I believe the PSA is responsive to other government agencies in addressing public concerns”, also resulted in a very high manifest ($M=3.62, SD=0.54$). Finally, the overall responses on the Mechanism to Address Public Concern were highly implemented ($M=3.53, SD=0.50$).



Table 15. Relationships Between Seven Profile Variables and Five Level of Implementation Variables

Profile variable	Level of Implementation				
	Interviewer/enumerator duties and responsibilities	Survey characteristics	Perception of the survey	Communication and information dissemination	Survey strategies
Barangay of residence	$F(5,294)=2.61^*$ $p=.025$	$F(5,294)=1.82$ $p=.108$	$F(5,136.7)=1.23^a$ $p=.299$	$F(5,136.9)=3.25^{a**}$ $p=.008$	$F(5,136.7)=2.55^{a*}$ $p=.030$
Household characteristic	$F=0.70^c$ $p=.712$	$F=1.14^c$ $p=.334$	$F=0.64^c$ $p=.761$	$F=3.86^{c***}$ $p<.001$	$F=1.38^c$ $p=.197$
Age	$r_s=-.14^*$ slight corr. $p=.015$	$r_s=-.16^{**}$ slight corr. $p=.005$	$r_s=-.05$ slight corr. $p=.403$	$r_s=-.15^*$ slight corr. $p=.010$	$r_s=-.09$ slight corr. $p=.133$
Sex	$t=-0.65$ $p=.516$	$t=-1.11$ $p=.267$	$t=0.50$ $p=.615$	$t=2.32^*$ $p=.021$	$t=1.35$ $p=.179$
Educational attainment	$r_s=-.02$ slight corr. $p=.715$	$r_s=-.04$ slight corr. $p=.457$	$r_s=.06$ slight corr. $p=.324$	$r_s=.15^{**}$ slight corr. $p=.008$	$r_s=.05$ slight corr. $p=.431$
Monthly income	$r_s=.03$ slight corr. $p=.564$	$r_s=-.10$ slight corr. $p=.100$	$r_s=.01$ slight corr. $p=.905$	$r_s=.17^{**}$ slight corr. $p=.003$	$r_s=.06$ slight corr. $p=.270$
Primary occupation	$F=1.00^c$ $p=.438$	$F=2.70^{c**}$ $p=.005$	$F=2.80^{c**}$ $p=.004$	$F=4.16^{c***}$ $p<.001$	$F=4.76^{c***}$ $p<.001$

Note. The cell contains the test statistic and its corresponding p -value. The degree of freedom for u_s and Students is 298. The degrees of freedom for the generalized linear model's F are 9 and 290.

^aWelch's ANOVA was used due to a violation of the assumption of homogeneity of variance.

^cGeneralized linear model was used, instead of one-way ANOVA, with a nominal level predictor or factor.

This is because some groups need more observations, which ANOVA cannot handle.

* $p<.05$. ** $p<.01$. *** $p<.001$.

Table 15 results show the significant relationship between the socio-demographic profile variables and the Level of implementation variables. A statistically significant linear relationship exists between the Barangay of residence and Interviewer/enumerator duties and responsibilities, $F(5,294)=2.61, p=.025$. The relationship between the Barangay of residence and communication and information dissemination was analyzed using Welch's ANOVA because it violated the assumption of homogeneity of variance. The test yielded an F -value of 3.25 with a corresponding p -value of .008, indicating a statistically significant relationship ($p<.01$). This suggests that the Barangay of residence significantly influences the Communication and information dissemination aspect of survey implementation. A statistically significant linear relationship exists between the Barangay of residence and Survey strategies, $F(5,136.7)=2.55, p=.030$. This means that the respondents' residence is related to how they evaluate the implementation of the household surveys in terms of survey strategies. This means educational attainment tends to increase in the way the respondents understand the communication and information dissemination activity. These findings are

supported by the study of Ezech, M. O. (2020), who emphasized that education is a tool for national progress and development and that only a nation or people can sustain its development with quality information. In addition, for an organization to survive, it needs quality information to maintain a competitive edge. The same result applies to monthly income and communication and information dissemination $r_s=.17^{**}$, the phrase "slight corr.", and $p=.003$. A slight but statistically significant correlation exists between Monthly Income and Communication and information dissemination, $r_s=.17, p=.003$. It means that the higher their monthly income, the more they can access the communication and information dissemination about the survey. This finding highlights the study of Bauer, J.M. (2018), which states that such granular data allows for evaluating the relationship between digital skills and the Level of income or the position of an individual or household in the socioeconomic pyramid. However, relations between digital connectivity and income distribution can only be properly characterized relative to a specific group or a geographic area. The intersection of Primary occupation and Level of implementation variables such as Survey



Characteristics ($F=2.70c^{**}, p=.005$); Perception of the survey ($F=2.80c^{**}, p=.004$); Communication and information dissemination $F=4.16c^{***}, p.<.001$); and Survey strategies ($F=4.76c^{***}, p.<.001$), generalized linear model was used, instead of one-way ANOVA, with a nominal level predictor or factor. This is due to some groups with insufficient observations, which ANOVA cannot handle. There is a statistically significant linear relationship between Primary Occupation and Survey Characteristics ($F=2.70, p=.005$), and it suggests that individuals' Primary occupations have a discernible impact on the characteristics of the surveys they participate in. The analysis reveals a statistically significant relationship between respondents' Primary occupations and their Perceptions of the survey ($F=2.80, p=.004$), indicating that individuals' primary occupations influence how they perceive the survey they are engaged in. The data demonstrates

a statistically significant linear relationship between Communication and information dissemination strategies utilized in the survey process ($F=4.16, p.<.001$), implying that the effectiveness of communication and dissemination strategies varies significantly and is influenced by other factors within the survey context. A statistically significant relationship exists between the survey strategies employed and the overall outcomes of the survey ($F=4.76, p.<.001$). The selection and implementation of survey strategies play a vital part in shaping the effectiveness and success of the survey process. These findings align with the recommendation of UNESCO (2024) to have the technical expertise to design appropriate instruments, select the sampling methodology, and determine the proper data collection techniques. It includes deciding on the survey's scope, sample size, and questionnaire design.

Table 16. Relationships Between the Household Survey and Results of its Manifestation

Level of Implementation	Level of Manifestation					
	Response rate	Respondents' profile update and listing	Trust and confidence	Ease of access to LGU programs	Improvement in data quality	Mechanisms to address public concern
Interviewer/ enumerator duties and responsibilities	$r=.47$ moderate corr. $p < .001$	$r=.48$ moderate corr. $p < .001$	$r=.38$ low corr. $p < .001$	$r=.45$ moderate corr. $p < .001$	$r=.38$ low corr. $p < .001$	$r=.40$ moderate corr. $p < .001$
Survey characteristics	$r=.41$ moderate corr. $p < .001$	$r=.47$ moderate corr. $p < .001$	$r=.34$ moderate corr. $p < .001$	$r=.35$ low corr. $p < .001$	$r=.38$ low corr. $p < .001$	$r=.38$ low corr. $p < .001$
Perception of the survey	$r=.50$ moderate corr. $p < .001$	$r=.44$ moderate corr. $p < .001$	$r=.44$ moderate corr. $p < .001$	$r=.54$ moderate corr. $p < .001$	$r=.53$ moderate corr. $p < .001$	$r=.45$ moderate corr. $p < .001$
Communication and information dissemination	$r=.14$ slight corr. $p = .016$	$r=.16$ slight corr. $p = .005$	$r=.35$ low corr. $p < .001$	$r=.24$ low corr. $p < .001$	$r=.22$ low corr. $p < .001$	$r=.27$ low corr. $p < .001$
Survey strategies	$r=.31$ low corr. $p < .001$	$r=.28$ low corr. $p < .001$	$r=.27$ low corr. $p < .001$	$r=.35$ low corr. $p < .001$	$r=.39$ low corr. $p < .001$	$r=.29$ low corr. $p < .001$

Note. Each cell contains Pearson r statistic, interpretation of its strength, and corresponding p -value. $df=298$.
 $*p<.05$. $**p<.01$. $***p<.001$.

Table 16 displays that all Levels of implementation variables are statistically significantly correlated with all the Levels of manifestation variables with all p values less than 0.001. These findings are aligned with the study of Young, D.K. (2019); In order to improve understanding and lower nonresponse, national statistical offices also work with communication specialists and behavioral economists to customize survey designs to the needs of respondents. They also pose direct

questions on response burden. Furthermore, it is in line with the study of Calogero, C. et al. (2022), as official statistics are gathered to enhance knowledge, encourage policy discussions, and inform policy. Household surveys, an essential component of the national data ecosystem, present a unique opportunity to address the data requirements of the public and policymakers. It guarantees that the information gathered from household surveys is relevant; policymakers and other relevant parties,



particularly marginalized populations, ought to be important collaborators throughout the whole survey preparation, data collection, analysis, and dissemination.

CONCLUSIONS AND RECOMMENDATIONS

The study revealed significant relationships between socio-demographic profile variables and the Level of implementation variables. The location influences and affects how the survey is conducted or experienced, as indicated by the linear relationship with the barangay of residence. Specific household traits may influence communication during the survey. Age, sex, educational attainment, monthly income, and primary occupation all exhibit significant associations with different aspects of the study. Hence, the findings rejected the hypothesis and denied that there is no significant relationship between the socio-demographic profile of respondents and the results of the household surveys.

Furthermore, the findings reveal statistically solid correlations between household survey implementation variables and their manifestation across various aspects. Interviewer/enumerator duties and responsibilities, survey characteristics, and perception of the study demonstrate moderate to high correlations with different indicators of survey manifestation, highlighting their significant influence. While communication and information dissemination show slight correlations, they still play a crucial role in survey outcomes. Although showing low correlations, survey strategies remain statistically significant, emphasizing their importance in the survey process. These findings shed light on the intricate relationships between implementation and manifestation variables, offering valuable insights into the dynamics of survey processes. Therefore, the conclusions rejected the hypothesis that there is no significant relationship between the household survey and its manifestation.

Based on the assessed implementation of a household-based survey conducted by the Philippine Statistics Authority in the municipality of Santa Cruz, Laguna Province, it is recommended to utilize the proposed enhanced survey program to address the issues, particularly on communication and information dissemination related to household surveys to improve survey participation and understanding among residents. Future researchers may conduct larger-scale research with more diverse municipalities, especially the 1st class municipalities and cities in Laguna. Lastly, future researchers may conduct follow-up studies to explore the nuances of survey implementation and manifestation in different contexts and utilize the findings as a basis for academic studies and projects related to survey methodologies and community development.

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