

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY: APPLIED BUSINESS AND EDUCATION RESEARCH

2024, Vol. 5, No. 12, 4953 – 4973

<http://dx.doi.org/10.11594/ijmaber.05.12.06>

Research Article

The Community-Based Monitoring System of Philippine Statistics Authority in North Cotabato: Basis for A Pre-Deployment Training Program

Kareen Calibayan Cagasan*

Graduate School, Philippine College of Criminology, 3001, Philippines

Article history:

Submission 21 October 2024

Revised 07 December 2024

Accepted 23 December 2024

*Corresponding author:

E-mail:

kareen.cagasan@my.pccr.edu.ph

ABSTRACT

This study provides a comprehensive review and analysis of the vital role of enumerators in the Community-Based Monitoring System (CBMS) in North Cotabato, Philippines. The research aims to shed light on the responsibilities, challenges, and impacts faced by enumerators during the data collection process, as well as to propose evidence-based strategies for improving their performance and the accuracy of data collection. The CBMS is a crucial system for collecting disaggregated data necessary for evidence-based decision-making and targeted development programs. However, there needs to be more literature regarding the specific challenges and roles of enumerators in ensuring the accuracy and integrity of the monitoring process. By addressing this gap, this study strives to enhance the effectiveness and reliability of the CBMS. Drawing from international, national, and local contexts, this research provides insights into the importance of enumerators' roles based on experiences from other countries implementing similar systems. It discusses the potential biases and errors enumerators may encounter during data collection. It emphasizes the need for community collaboration and support to ensure the accuracy and comprehensiveness of the collected data. Furthermore, the study highlights the significance of understanding enumerators' roles in identifying poverty hotspots, tracking changes in poverty levels, and devising targeted interventions to address the root causes of poverty. By bridging the gap in the literature, this research aims to contribute to a better understanding of the enumerator's role and offer valuable insights for future research and the development of strategies and training programs to improve the CBMS.

Keywords: *Community-Based Monitoring System (CBMS), Training, program, Philippine Statistics Authority, Enumerator, Data collection*

How to cite:

Cagasan, K. C. (2024). The Community-Based Monitoring System of Philippine Statistics Authority in North Cotabato: Basis for A Pre-Deployment Training Program. *International Journal of Multidisciplinary: Applied Business and Education Research*. 5(12), 4953 – 4973. doi: 10.11594/ijmaber.05.12.06

Introduction

The Philippine Statistics Authority (PSA) must maintain a comprehensive and accurate statistical system for shaping public and government programs and policies. Its responsibilities span collecting, analyzing, and disseminating data across various sectors, which supports informed decision-making and sustainable development in the country. The Community-Based Monitoring System (CBMS), initiated under Republic Act No. 11315, focuses on gathering data directly from communities, particularly on vital aspects like health, housing, education, and employment. This study highlights the importance of enumerators' responsibility for collecting detailed local data in North Cotabato. Despite their essential role in ensuring data quality and supporting evidence-based decisions, limited research exists on their challenges and their impact on the monitoring system's integrity. This study seeks to fill this gap, aiming to understand enumerators' perceptions, responsibilities, and challenges, which can guide the development of strategies for improving data collection, training, and reducing potential biases in the monitoring process.

International Background

The Community-Based Monitoring System (CBMS) aligns with Sustainable Development Goal (SDG) 16, promoting inclusive societies and effective institutions. This alignment supports a comprehensive framework to address global challenges such as poverty, inequality, and sustainable development (Noterdaeme & Desmet, 2020). By focusing data collection on areas identified by the SDGs, CBMS enables local communities to contribute to global development targets. This contributes to accountability, transparency, and informed local decision-making, helping monitor progress and tailor interventions to specific needs (Oloo, 2017).

Initially developed by the United Nations Development Programme (UNDP) in the early 1990s, CBMS addresses the demand for detailed, timely data to track poverty and development at the local level. It has since been implemented in 14 countries across Africa, Asia, and Latin America (Robino, 2022). For example, a study in Punjab, Pakistan, utilized CBMS to assess poverty in both rural and urban areas,

aiding local governments in creating effective social welfare and poverty alleviation strategies (Akhtar Noon, 2020). Beyond monitoring progress toward the Millennium and Sustainable Development Goals, CBMS data informs local policies, supports evidence-based decision-making, and addresses specific community gaps.

The International Development Research Centre-Canada has played a significant role in supporting CBMS for over a decade, advocating for data-driven poverty reduction. Their report, "Fighting Poverty with Facts," emphasizes the empowerment of communities through CBMS and highlights the ongoing need for investment in these initiatives globally.

National Background

The Community-Based Monitoring System (CBMS) in North Cotabato aligns with the Philippine Development Plan 2023–2028, serving as a vital tool to gather localized data on poverty, inequality, and other critical areas. This alignment allows CBMS to track progress, facilitate targeted interventions, and support the national sustainable development agenda (Dikno-Sicat, Adaro, & Maddawin, 2020).

The CBMS, originally designed by Pedro and Florentino in 1992 under the Micro Impacts of Macroeconomic Adjustment Policies (MIMAP) Phase II, was modified by Reyes and Alba in 1994 to encourage local government-based implementation for sustainability. It was pilot-tested in Pandi-Bulacan in 1995–1996 and again in 1999 to assess the impacts of the 1997–1998 Asian financial crisis and El Niño. The system expanded to Palawan in 1999 and Puerto Princesa in 2001, with core indicators formalized during the National Anti-Poverty Commission's Seventh En Banc Meeting in 2022. This led to the Department of Interior and Local Government's Memorandum Circular No. 2003-92, outlining guidelines for adopting local poverty indicators in planning.

In 2022, the Philippine Statistics Authority (PSA) partnered with Local Government Units (LGUs) to implement CBMS in 331 cities and municipalities, involving over 6,000 enumerators, 1,312 team supervisors, and 400 area supervisors across more than 5,000 barangays. The PSA's first CBMS was conducted in 2021 to

refine tools and systems, followed by a 2022 rollout covering about 250 LGUs. The 2023 CBMS enumeration spanned from March 27 to June 10, 2023, lasting approximately 52 working days (Philippine Statistics Authority, 2023).

Local Background

North Cotabato, a landlocked province in the Soccsksargen region of Mindanao, Philippines, covers 656,590 hectares and is home to 1,490,618 residents (Province of Cotabato, 2018; Philippine Statistics Authority, 2021). Known for its rich cultural diversity, North Cotabato includes communities with Ilonggo, Cebuano, and Maguindanao populations. The 2022 Community-Based Monitoring System (CBMS) launched in North Cotabato on October 20, 2022, in collaboration with local government units (LGUs), focuses on collecting data across socioeconomic factors like income, education, health, and housing. This data guides local development efforts, enabling policymakers to identify poverty hotspots and track poverty changes over time, ensuring resources are effectively targeted (Diokno-Sicat, 2020).

The CBMS provides valuable data for the North Cotabato Provincial Development Plan and Sustainable Development Goals, supporting interventions for vulnerable populations. However, enumerators face challenges, including access issues, language barriers, and logistical constraints, which may impact data quality. This study aims to address these gaps, offering insights into enumerators' experiences to improve the CBMS process and strengthen future data-gathering efforts.

Methods

Research Design

This study employs a quantitative research design, which is well-suited for examining the Community-Based Monitoring System (CBMS) of the Philippine Statistics Authority in North Cotabato. This design allows for the objective measurement and statistical analysis of various variables, including the experiences, duties, responsibilities, and challenges faced by CBMS enumerators. By utilizing structured surveys and questionnaires, the research collects consistent and unbiased data from a large sample

size, enhancing the generalizability of the findings.

The quantitative approach enables the testing of hypotheses regarding the factors that impact enumerators' effectiveness and well-being, and it facilitates the identification of prevalent issues through statistical analysis. This data-driven methodology provides reliable conclusions that inform targeted, evidence-based solutions, ultimately aiming to enhance the roles of CBMS enumerators and improve the quality of data collected. Overall, the structured and objective nature of quantitative research effectively addresses the complex challenges of the CBMS program and supports the implementation of scalable improvements.

Research Method

This study employed a descriptive-correlational method combined with total population sampling to gather and analyze data on the roles of enumerators in the Community-Based Monitoring System (CBMS) in North Cotabato. The descriptive-correlational approach enabled the measurement of relationships between variables without manipulation, making it ideal for exploring new phenomena and evaluating program effectiveness. Total population sampling involved surveying the entire population that met specific criteria, ensuring comprehensive insights into the enumerators' experiences, challenges, and performance while eliminating sampling bias. Although resource-intensive, this approach was feasible given the manageable size of the enumerator population. Questionnaires were administered to collect demographic data and insights from enumerators about their roles in collecting CBMS data, addressing various aspects of their experiences, including challenges and suggestions for improvement. The analysis provided a thorough evaluation of the CBMS process, informing future efforts to enhance its efficiency and effectiveness.

Population of the Study

This research used total population sampling to define the study's population, which consists of individuals from the Philippine Statistics Authority in North Cotabato. The partic-

ipants include CBMS Enumerators, Team Supervisors, CBMS Area Supervisors, Head CBMS Area Supervisors, and the Provincial CBMS Focal Person.

The sample encompasses 500 enumerators, 55 team supervisors, 10 area supervisors, 9 head area supervisors, and 1 provincial focal person. By including the entire population that meets specific criteria, this method aims to eliminate statistical uncertainty and provide a thorough understanding of the group's characteristics and experiences. This comprehensive approach is designed to yield valuable insights into the Community-Based Monitoring System's effectiveness and the roles of its members.

Data Gathering Tools

The primary research instruments for this study are a survey questionnaire and unstructured interviews. The questionnaire is meticulously designed based on the 2023 CBMS Enumerators Manual from the Philippine Statistics Authority to ensure its relevance.

To validate the questionnaire, a two-step process was employed: face validation, wherein experts reviewed the questionnaire for clarity and alignment with the study's objectives, followed by content validation, which involved a detailed examination by field specialists to ensure that the questions accurately captured the necessary data.

Reliability was measured using Cronbach's alpha, assessing the internal consistency of the questionnaire, with a high score indicating effective measurement of the intended variables. Before data collection, the questionnaire was pilot-tested with 30 respondents to identify and rectify potential issues.

Data processing and analysis were performed using SPSS (Statistical Package for the Social Sciences) software, appropriate for managing large datasets and executing complex statistical analyses. The integration of structured questionnaires, unstructured interviews, and rigorous validation methods guarantees comprehensive and reliable data collection, ensuring high quality for subsequent analysis.

Data Gathering Procedures

The data-gathering procedure for this research study was conducted with a structured and ethical framework to ensure the reliability and integrity of the findings. The researcher secured necessary approvals by submitting formal requests to the Dean of the Graduate School of the Philippine College of Criminology and the city and municipal mayors for authorization to collect data from Community-Based Monitoring System (CBMS) personnel.

Participants were informed about the study's objectives and ethical considerations and informed consent letters were distributed via email to all CBMS personnel, emphasizing their voluntary participation. The primary data collection instrument, a survey questionnaire based on the 2023 CBMS Enumerators Manual, was distributed through Google Forms for secure and efficient data collection. The survey questionnaire was distributed to the target CBMS personnel with a clear timeframe for completion. Respondents from selected municipalities and the city within North Cotabato participated either by personally answering the questionnaires or through Google Forms, which were conveniently shared via electronic mail and messages. Responses submitted through Google Forms were automatically recorded and calculated in a Google Spreadsheet, ensuring efficient data management. While reaching out to former CBMS personnel in the selected localities posed some challenges, the unwavering support and assistance of the LGUs greatly facilitated the process. The researcher remained readily available to address any queries or concerns, ensuring a smooth and responsive data collection phase.

Before distribution, the questionnaire underwent a comprehensive validation process, including a review by experts from the Philippine Statistics Authority and a pilot test with community members to refine its content. Reliability was assessed using Cronbach's alpha, with a target coefficient of 0.70 or higher. Participants were given a designated timeframe to complete the questionnaire, with the researcher available for any inquiries.

After data collection, responses were securely stored and analyzed using various statistical techniques. Ethical considerations and data privacy were prioritized throughout the process, including anonymizing data to protect participant confidentiality. The findings were compiled and presented objectively, ensuring adherence to ethical standards and enhancing the study's validity and reliability.

Treatment of Data

In the quantitative study examining the roles of enumerators in the Community-Based Monitoring System (CBMS) of the Philippine Statistics Authority in North Cotabato, a systematic approach was adopted for data summarization and analysis utilizing various statistical techniques. The percentage technique was employed to determine the distribution of responses for specific variables, which helped identify trends and prevalence within the data. Additionally, the weighted mean was calculated to assess the central tendency of responses, accounting for the significance of each response and emphasizing the importance of specific enumerator roles. Ranking was utilized to evaluate the relative significance of various factors, thereby identifying the most critical functions of enumerators in the CBMS. The Chi-Square test analyzed the relationship between two categorical variables, focusing on how demographic characteristics influenced enumerator roles. Moreover, the Kruskal-Wallis H test and Kendall's Coefficient of Concordance W were applied as non-parametric methods to assess the level of agreement among respondents regarding the importance of various enumerator roles. The data analysis followed a rigorous quantitative approach, with significance set at a probability level of 0.05. This comprehensive methodology ensured accurate findings, contributing to a deeper understanding of the complex dynamics of enumerator responsibilities within the CBMS framework.

Ethical Considerations

The ethical considerations of this research study are thoroughly addressed to uphold participant welfare and integrity. Before participation, clear consent letters were provided to respondents, detailing the study's purpose,

procedures, potential risks, and benefits, while emphasizing the voluntary nature of their involvement. Participants were assured that their data would be used solely for research purposes. To ensure anonymity and confidentiality, participant responses were anonymized and aggregated, with secure data storage and management practices implemented to protect sensitive information.

Respect for autonomy is a guiding principle in this study; participants were informed of their right to withdraw from the research at any time without repercussions, as stated in the consent documents. The study did not involve vulnerable populations, thereby reducing ethical concerns and ensuring that all participants were selected based on non-discriminatory criteria. During data collection, Google Docs was utilized for distributing questionnaires, with settings adjusted to collect anonymous responses, further protecting participant privacy. Follow-up requests for participation were conducted respectfully, ensuring that individuals could decline without pressure.

After data collection, participants were offered a debriefing session to summarize findings, acknowledge their contributions, and share insights from the study. Collectively, these ethical considerations ensure that the study is conducted with integrity, transparency, and respect for participants' rights and privacy.

Result and Discussion

The results and discussion of this study were structured around the key objectives related to the roles of enumerators in the Community-Based Monitoring System (CBMS) in North Cotabato. Each section was introduced with a description of the specific topic addressed, followed by relevant tables that summarized the findings.

Table 1 presents the attainment levels of enumerators across several identified variables. In terms of Training, the overall mean rating of 2.20 indicates that enumerators effectively acquired the necessary skills and knowledge through the training program. They exhibited regular attendance, engagement, and competence during practice sessions, demonstrating a solid understanding of CBMS

concepts and proficiency in managing challenging data collection situations.

Regarding Working Time, an overall mean rating of 2.0 reflects that enumerators generally showed commitment to their work, including flexibility in scheduling interviews to accommodate respondents. They maintained punctuality and effectively managed their time, fulfilling their daily and weekly responsibilities.

The Area of Assignment received a rating of 2.06, suggesting that enumerators generally met expectations in completing tasks within the prescribed timeframes. They efficiently managed their workloads, familiarized themselves with their designated areas, and executed enumeration activities effectively, all

while addressing challenges encountered in their assignments.

For Duties and Responsibilities, the overall rating was 1.84, classified as moderately attained. This indicates that while enumerators adhered to the CBMS manual and completed interviews accurately, there were areas needing improvement, such as data accuracy and adherence to instructions.

Lastly, the Working Relationship with Team Supervisors received a commendable rating of 2.93, signifying that enumerators generally excelled in communication, strategy discussion, and maintaining rapport with supervisors. This collaboration is essential for optimizing the CBMS process and achieving program objectives.

Table I. The level of the attainment of the roles of enumerators in CBMS and the Degree of seriousness of challenges encountered by CBMS Enumerators in terms of Identified Variables

Variables	Weighted Mean of Attainment of Roles	Weighted Mean of Seriousness
Training	2.20	2.99
Working Time	2.00	2.29
Area of Assignment	2.06	2.35
Duties and Responsibilities	1.84	2.61
Working Relationship with Team Supervisor	2.93	2.51

Table II. Significant difference in the perceptions of the respondents along the different roles of enumerators in CBMS

Correlations				
			Position	MEAN_RESPONSE
Kendall's tau_b	Position	Correlation Coefficient	1.000	.054
		Sig. (2-tailed)		.022
		N	515	515
	MEAN_RESPONSE	Correlation Coefficient	.054	1.000
		Sig. (2-tailed)	.022	
		N	515	515
Kruskall Wallis test				4.505
df				4
Asymp. Sig.				.042

Table III

Variables	Weighted Mean
Personal	3.15
Professional	2.79
Social	2.92
Variables	Weighted Mean

Table IV. Degree of necessity of the suggestions offered to enhance the attainment of the roles of enumerators in CBMS

Variable	Weighted Mean
Training	3.39
Working Time	2.40
Area of Assignment	3.02
Duties and Responsibilities	3.34
Working Relationship with Team Supervisor	3.07
Overall Well-being	3.15

Conclusion

The study examining the roles of enumerators in the Community-Based Monitoring System (CBMS) identified critical insights and challenges across five key areas: training, working time, area of assignment, duties and responsibilities, and working relationships with team supervisors. Overall, enumerators demonstrated confidence and effectiveness in their tasks, indicating that the training they received was beneficial. However, a gap in active participation during training sessions was evident, suggesting that while enumerators could absorb the content, they may not fully internalize it. In terms of working time, enumerators exhibited commitment by meeting required hours but struggled with flexibility and punctuality, indicating a need for improved time management strategies. Challenges related to the area of assignment were significant, with enumerators feeling overwhelmed, highlighting the need for better workload management and logistical support. Although enumerators generally adhered to their duties and responsibilities, there was a noticeable need for more thorough reviews of completed questionnaires to ensure data accuracy. The working relationships with team supervisors were generally positive; however, improvements in quality assurance measures and responsiveness to enumerators' concerns were necessary. The Kruskal-Wallis test revealed variations in satisfaction and effectiveness regarding enumerator roles, indicating the necessity for targeted interventions.

Acknowledgment

The researcher would like to extend her deepest gratitude to those who contributed to the completion of this research study, titled

"Community-Based Monitoring System of the Philippine Statistics Authority of North Cotabato."

First, the researcher expresses her profound appreciation to her adviser, Dr. Donald B. Narra, for his dedication and expertise, which guided her throughout the research process. His insightful feedback and steadfast support were instrumental in overcoming challenges and achieving a high standard of research.

Special thanks are due to the Philippine College of Criminology for providing essential resources and facilities for this study. The researcher is particularly grateful to the Dean of the Graduate School and Chair of the Panel, Dr. Jezreel B. Vicente, for his encouragement and support.

Acknowledgment is also extended to the panel members, Dr. Jomel Pinera and Dr. Shirley Domingo, for their constructive feedback and suggestions that improved the quality of the study.

The researcher wishes to thank Engr. Belinda R. Penuela, Chief Statistical Specialist at the Philippine Statistics Authority, for her guidance and authorization to conduct this study on CBMS personnel in North Cotabato. Her insights and support were invaluable to the project's success.

The researcher acknowledges the invaluable contributions of Dr. Aljoriz M. Dublin, EdD, LPT (Statistician); Dr. Marlyn P. Wacnag, PhD (English Grammar Editor); and Ms. Shaireen S. Lagaylay (Format Editor) for their expertise in refining this research. Sincere thanks are also extended to the Research Tool Validators from the Provincial Statistics Office of Cotabato: Ms. Lilia C. Caoagdan (Supervising Statistical Specialist), Ms. Edna C. Alagano (Senior Statistical

Specialist), and Ms. Norhayyah B. Tula (Senior Statistical Specialist).

Special appreciation is extended to the mayors of North Cotabato for their cooperation and support: Hon. Jose Paolo M. Evangelista (Kidapawan City), Hon. Juanito C. Agustin (Pigcawayan), Hon. Russel M. Abonado (M'lang), Hon. Rolando C. Sacdalan (Midsayap), Hon. Armand M. Quibod (Makilala), Hon. Angel Rose L. Cuan (Libungan), Hon. Jeam D. Villasor (Ara-kan), Hon. Cristobal D. Cadungon (Antipas), and Hon. Eduardo C. Cabaya (Aleosan).

The researcher would like to thank all study participants for their generosity in sharing their time and experiences, without which this research would not have been possible.

Heartfelt gratitude is also extended to her family and future in-laws for their unwavering love and support, and to her partner, Jaymar Curambao, for his constant encouragement and belief in her. Their steadfast support has been a source of strength throughout this journey.

In closing, the researcher hopes that this study will advance understanding of the CBMS of the Philippine Statistics Authority in North Cotabato and contribute to improving the system's effectiveness and efficiency, ultimately benefiting the community.

References

- Abun, D., Magallanes, T., Foronda, S., & Encarnacion, M., (2021). Employees' Workplace Well-Being and Work Engagement of Divine Word Colleges' Employees in Ilocos Region, Philippines (February 6, 2021). *International Journal of Research in Business and Social Science* 9(2) 70-84. Retrieved November 10, 2023, from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3780563
- Abun, D., Magallanes, T., Foronda, S., & Encarnacion, M., (2021). Employees' Workplace Well-Being and Work Engagement of Divine Word Colleges' Employees in Ilocos Region, Philippines (February 6, 2021). *International Journal of Research in Business and Social Science* 9(2) 70-84. Retrieved November 10, 2023, from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3780563
- Abun, D., Pellogo, R. B., Magallanes, T., Sapi-noso, M. L. M., & Encarnacion, M.J. (2021). Employees' Workplace Well-Being and Organizational Citizenship Behavior of Private Education in Ilocos Norte, Philip-pines. *Technium Soc. Sci. J.*, 19, 421. Re-trieved November 14, 2023, from [https://scholar.google.com/scholar?clus-ter=17993002894246299548&hl=en&as_sdt=0.5&as_ylo=2019](https://scholar.google.com/scholar?cluster=17993002894246299548&hl=en&as_sdt=0.5&as_ylo=2019)
- Abun, D. (2021). The effect of workplace rela-tionship toward job satisfaction of divine word colleges' employees in region I, Phil-ippines. *Philippines* (March 19, 2021). Re-trieved November 14, 2023, from [https://papers.ssrn.com/sol3/pa-pers.cfm?abstract_id=3807897](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3807897)
- Adewale, A. A., Adenegan, K. O., & Adepoju, A. A. (2015). Factors affecting the performance of enumerators in agricultural surveys in Nigeria. *Journal of Agricultural Extension and Rural Development*, 7(2), 36-42.
- Agency for Technical Cooperation and Devel-opment (2019). Working in Conflict: The Critical Role Played by Enu-merators. ReliefWeb. Retrieved Septem-ber 28, 2023, from <https://re-liefweb.int/report/ukraine/working-conflict-critical-role-played-enumerators>
- Agoot L. (2023) SA-CAR seeks public support with the start of agri-fishery census. Phil-ippine News Agency. Retrieved Septem-ber 22, 2023, from <https://www.pna.gov.ph/arti-cles/1209179>
- Ahmed, M., Ali, A., & Rahman, S. (2018). A com-parative analysis of census-taking meth-odologies: Lessons learned from Bangla-desh. *Journal of Population and Social Studies*, 26(2), 95-107.
- Ahmed, M., Das, M. R., & Islam, S. (2018). Chal-lenges of field enumeration: A reflection on household surveys in Bangladesh. *Journal of Public Health in Developing Countries*, 4(1), 136-143.
- Akhtar Noon, & Nadeem. (2020). Poverty, its Distribution and Analysis: CBMS-Pakistan Pilot Project in the Punjab. ResearchGate. Retrieved September 22, 2023, from <https://www.researchgate.net/publica->

- tion/363022601_Poverty_its_Dis-tribut%20ion and Analysis CBMS-Pakistan Pilot Project in the Punjab
- Akinrole, O., & Ojo, O., (2020). Work-Life Balance: The Relevance of Social Support. Allied Business Academies. Retrieved September 27, 2023, from <https://www.abacademies.org/articles/worklife-balance-the-relevance-of-social-support-9315.html>
- Alam, M. M., Rahman, M. M., & Hossain, M. A. (2018). Quality of census data in Bangladesh: An analysis of the 2011 population and housing census. *Journal of Population and Social Studies*, 26(3), 207-222.
- Alarcon, A., Arzaga, L., Baguio, L., Sandvictores, M., & Platon, J., (2021). The Impact of Work Environment on The Productivity and Job Satisfaction of the Employees in BPO Companies in Quezon City. *International Journal of Information, Business and Management*, Vol. 13, No.1. Retrieved November 10, 2023, from <https://www.proquest.com/open-view/fd71fae5b68409b106e8a58c41d92e0c/1?pq-origsite=gscholar&cbl=2032142>
- Albert, J. R. G., & Vizmanos, J. F. V. (2019). Philippine statistical system in the wake of the emerging data revolution and digitization (No. 2019-17). PIDS Discussion Paper Series. Retrieved November 10, 2023, from <https://www.econstor.eu/handle/10419/240968>
- Alberta Municipal Affairs (2019). 2019 Municipal Census Manual. Alberta Municipal Affairs. ISBN 978-1-4601-4308-7. Retrieved September 28, 2023, from <https://open.alberta.ca/dataset/ebee0c79-a9eb-4bf5-993d-30995a2f7554/resource/61613571-e381-4c4e-9f11-2bfe6823ef81/download/2019-municipal-census-manual.pdf>
- Alzahrani, N. A., Sheikh Abdullah, S. N. H., Mohamed, I., & Mukred, M. (2021). The adoption of geographic information systems in the public sector of Saudi Arabia: A conceptual model. *Mathematical Problems in Engineering*, 2021, 1-14. Retrieved November 10, 2023, from <https://www.hindawi.com/journals/mpe/2021/1099256/>
- Angelici, M., & Profeta, P. (2023). Smart working: work flexibility without constraints. *The Institute for Operations Research and the Management Science*. Retrieved September 18, 2023, from <https://doi.org/10.1287/mnsc.2023.4767>
- Ariffin, D. (2019). The censuses of the Philippine islands: From ethnological inquiry to the formalization of racial categories in the American-occupied Philippines from 1903 to 1939. *Social Science Diliman*, 15(1). Retrieved November 14, 2023, from https://d1wqtxts1xzle7.cloudfront.net/80715850/Ariffin_Social_Science_Diliman_2019-libre.pdf?1644751206=&response-content-disposition=inline%3B+filename%3DThe+censuses+of+the+Philippine+islands+F.pdf&Expires=1699927683&Signature=JHwGdowci8Co4MTtVefaT-fCgb9NsfeQ22Twv72aIGVX2-SiFu1zFIp-zCjam-7pZDOjt2Ey-aLgNr3xeLyXQG0GEQM03dcTvcflaCdL7C6tIjVm1an0og1N4ig-lSjaHXZa9nQzNa4jvKXfvaiL-PCsamYDYaa-Dh6s8ZLF-pJdODv3Xy4lUPCXAUYgwoI-uSpT5SKwMf1ZYNL9NPgoqiZyKRMxm7ieQSYEitty0fK9GCo5a0-EmvQSbwUbrXWEAYnxa3QDVyrJAH A1PFOI35tIJG-yujcS4H547XunY41TjzjmJJe1aRwu-tBvT38n3ToDnp~ERN KV5Aan8i8zScfDsYA&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA
- Armenta, J. M. L., Josafat, R. C., Macam, F. J. L., Minas, C., Austin, T., & Cabal, E. M. (2022). Perception of Employees in the Implementation of a Safe Workplace in the Municipal Offices of a Local Government in Zambales. Retrieved November 10, 2023, from <http://ijses.com/wp-content/uploads/2022/04/110-IJSES-V6N3.pdf>
- Asian Development Bank (2019). The Capi Effect Boosting Survey Data Through Mobile Technology A Special Supplement of the Key Indicators for Asia and the Pacific

2019. Asian Development Bank Publication. Retrieved September 20, 2023, from <https://www.adb.org/sites/default/files/publication/522701/capi-survey-data-mobile-tech.pdf>
- Aslam, H., (2023). The link between employee well-being and organizational success: exploring the evidence. LinkedIn. Retrieved October 18, 2023, from <https://www.linkedin.com/pulse/link-between-employee-well-being-organizational-haseeb-aslam-pmp-/>
- Bak, H., (2020). Supervisor Feedback and Innovative Work Behavior: The Mediating Roles of Trust in Supervisor and Affective Commitment. *Frontiers in Psychology*. Volume 11. Retrieved October 10, 2023, from <https://doi.org/10.3389/fpsyg.2020.559160>
- Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: state of the art. *Journal of Managerial Psychology*, 22(3), 309–328. <https://doi.org/10.1108/02683940710733115>
- Bellet, C. S., De Neve, J. E., & Ward, G. (2023). Does employee happiness have an impact on productivity? The Institute for Operations Research and the Management Sciences. Retrieved September 13, 2023, from <https://doi.org/10.1287/mnsc.2023.4766>
- Berry-Cahn, J., (2021). Paid By The Line: Copying Mistakes made by Enumerators in 1850, 1860, and 1870. Federal Census Returns. Retrieved on September 5, 2023, from https://www.researchgate.net/profile/Jeremy-Berry-Cahn/publication/369369333_Paid_By_The_Line_Copying_Mistakes_made_by_Enumerators_in_1850_1860_and_1870_Federal_Census_Returns/links/6417d39f92cfd54f84144828/Paid-By-The-Line-Copying-Mistakes-made-by-Enumerators-in-1850-1860-and-1870-Federal-Census-Returns.pdf
- Bhattarai, K., Chalise, B., & Karki, K. B. (2017). Challenges faced by field enumerators during 2016. Nepal Demographic and Health Survey. *BMC Research Notes*, 10(1), 1-5.
- Blair, G., Coppock, A., & Moor, M. (2020). When to Worry about Sensitivity Bias: A Social Reference Theory and Evidence from 30 Years of List Experiments. *American Political Science Review*, 114(4):1297–1315
- Bui, T., Zackula, R., Dugan, K., & Ablah, E. (2021). Workplace Stress and Productivity: A Cross-Sectional Study. *Kansas journal of medicine*, 14, 42–45. Retrieved October 10, 2023, from <https://doi.org/10.17161/kjm.vol1413424>
- Cabanas, J., (2019). Communication within the Workplace in the Academics of De La Salle Medical and Health Sciences Institute: Basis for Proposed Communication Strategic Model. *British Journal of Medical & Health Sciences (BJMHS)* Vol. 1 Issue 1. Retrieved September 15, 2023 from <http://www.jmhsci.org/wp-content/uploads/2019/07/BJMHS450003.pdf>
- Cabillo, J. A. E., & Daño, J. C. (2020). Verbal Abuse in the Workplace: The Unfolding Phenomenon. *The Malaysian Journal of Nursing (MJN)*, 11(4), 68-77. Retrieved November 10, 2023, from <https://ejournal.lucp.net/index.php/mjn/article/view/1004>
- Carter, E. R., Onyeador, I. N., & Lewis Jr, N. A. (2020). Developing & delivering effective anti-bias training: Challenges & recommendations. *Behavioral Science & Policy*, 6(1), 57-70. Retrieved November 10, 2023, from <https://journals.sagepub.com/doi/abs/10.1177/237946152000600106>
- Cashwell, E. J. (2021). Recruitment and Data Collection in the 21st Century: Implications for Grounded Theory. *Grounded Theory Review*, 20(2). Retrieved July 28, 2023, from <https://web.s.ebsco-host.com/abstract?direct=true&profile=ehost&scope=sit&authtype=crawler&jrnl=15561542&N=156410095&h=fGkYiO5xsx71dt3DJ%2fS1g5nli-jzzx97FTDI0Fkl9POjWowFPFGEbDnPLT%2fn2339U%2fyM5HQI%2ffH3vC5IjpJ>

- W9JQ%3d%3d&crl=c&resultNs=Admin-WebAuth&result-Local=ErrCrINotAuth&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3de-host%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d15561542%26AN%3d156410095
- Casinillo, L. F., Casinillo, E. L., & Aure, M. R. K. L. (2021). Economics of happiness: a social study on determinants of well-being among employees in a state university. *Philippine Social Science Journal*, 4(1), 42-52. Retrieved November 14, 2023, from <https://www.philssj.org/index.php/main/article/view/316>
- Castorena, O., Cohen, M., Lupu, N., & Zechmeister, E., (2023). How Worried Should We Be? The Implications of Fabricated Survey Data for Political Science. *International Journal of Public Opinion Research*, Volume 35, Issue 2. Retrieved July 29, 2023, from <https://doi.org/10.1093/ijpor/edad007>
- Center for International Earth Science Information Network (CIESIN), Columbia University; Flowminder Foundation; United Nations Population Fund (UNFPA); WorldPop, University of Southampton, (2022). Generating and Evaluating Digitised Census Enumeration Areas. Palisades, NY: Georeferenced Infrastructure and Demographic Data for Development (GRID3). Columbia University Libraries. Retrieved July 20, 2023 from <https://doi.org/10.7916/dgz1-sh16>
- Central Statistics Office (2021). Press Statement Over 5,000 Census Enumerators to be hired for Census 2022. Central Statistics Office. Retrieved on September 10, 2023, from <https://www.cso.ie/en/cso/latestnews/pressreleases/2021pressreleases/pressstatementover5000censusenumeratorstobehiredforcensus2022/>
- Chong, A. M., Guo, Y., & Li, B. (2020). Strategies for improving census and survey data quality in developing countries: A review. *Journal of Population and Social Studies*, 28(4), 273-286.
- Colman, H., (2022). Learning Retention – How To Make Information Stick. iSpring. Retrieved September 23, 2023, from <https://www.ispringsolutions.com/blog/learning-retention>
- Dagnachew, A. G., & Assefa, T. (2017). Assessment of the performance of enumerators in agricultural surveys in Ethiopia. *Journal of Agricultural Extension and Rural Development*, 9(4), 74-83.
- Davis, J. M., & Wilfahrt, M. (2023). Enumerator Experiences in Violent Research Environments. *Comparative Political Studies*, 0(0). Retrieved September 16, 2023 from <https://doi.org/10.1177/00104140231178735>
- Dayrit, J. S., & Lacap, J. P. (2020). The Influence of Work life balance on Employee engagement among workers in Pampanga. Philippines: A Structural Equation Modelling Approach. *International Journal of Psychosocial Rehabilitation*, 24(4), 3095-3112. Retrieved November 14, 2023, from https://www.researchgate.net/profile/Joyce-Dayrit/publication/339901574_The_Influence_of_Work_life_balance_on_Employee_engagement_among_workers_in_Pampanga_Philippines_A_Structural_Equation_Modelling_Approach/links/5e9d6deb299bf13079aa58fa/The-Influence-of-Work-life-balance-on-Employee-engagement-among-workers-in-Pampanga-Philippines-A-Structural-Equation-Modelling-Approach.pdf
- De Guzman, A. B., & Dumantay, M. C. F. (2019). Examining the role of future time perspective (FTP) and affective commitment on the work engagement of aging Filipino professors: A structural equation model. *Educational Gerontology*, 45(5), 324-333. Retrieved November 10, 2023, from <https://www.tandfonline.com/doi/abs/10.1080/03601277.2019.1622243>
- Department of Agriculture (2021). Memorandum Order No. 55 Series of 2021: Guidelines For The Validation Activity Of The Updating Of The Registry System For Basic Sectors In Agriculture (RSBSA). De-

- partment of Agriculture. Retrieved September 10, 2023 from https://www.da.gov.ph/wp-content/uploads/2021/09/mo55_s2021.pdf
- De Silva, W. R. T.; De Alwis, A. C. (2021), Impact of Supervisor's Autocratic Leadership Style on Employee Turnover Intention: A Study Based on XY Clothing Company. University of Kelaniya Sri Lanka 15p. Retrieved September 22, 2023, from <http://repository.kln.ac.lk/handle/123456789/25112>
- Diener, E., Oishi, S., & Tay, L. (2018). Advances in subjective well-being research. *Nature Human Behaviour*, 2(4), 253-260.
- Di Maio, M., & Fiala, N., (2020). Be Wary of Those Who Ask: A Randomized Experiment on the Size and Determinants of the Enumerator Effect. *The World Bank Economic Review*, Volume 34, Issue 3, Pages 654–669. Retrieved September 13, 2023, from <https://doi.org/10.1093/wber/lhy024>
- Diokno-Sicat, C., Adaro, C., & Maddawin, R., (2020). The Community-Based Monitoring System (CBMS) as a Local Planning Tool: Results from the PIDS-DILG Baseline Study on Policy and Governance Gaps for the Local Government Support Fund Assistance to Municipalities (LGSF-AM) Program. Philippine Institute for Development Studies. Discussion Papers. 2020-07. Retrieved September 26, 2023, from <https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidsdps2007.pdf>
- Doherty, T., Jackson, D., & Swanevelder, S. (2017). The challenges of collecting health survey data in a low-income rural South African setting. *Global Health Action*, 10(1), 1364887.
- Doyle, A., (2022). What is a Flexible Work Schedule? The balance. Retrieved September 23, 2023 from <https://www.thebalancemoney.com/what-is-a-flexible-work-schedule-2063677>
- Economic and Social Commission for Western Asia (2022). Assessment of GIS for the population and housing census and agricultural census in Sudan. UNESCWA. Retrieved September 13, 2023, from <https://www.unescwa.org/publications/gis-population-housing-agriculture-census-sudan>
- Fariduddin, Shadab. (2023). Pakistan Digital Census 2023 – Enumerators' Training Evaluation: Summative Review of the Whole Monitoring and Quality Assurance Process with Key Findings and Way Forward. ResearchGate. Retrieved September 22, 2023, from https://www.researchgate.net/publication/369184389_Pakistan_Digital_Census_2023_-_Enumerators%27_Training_Evaluation_Summative_Review_of_the_Whole_Monitoring_and_Quality_Assurance_Process_with_Key_Findings_and_Way_Forward
- Felipe, J., Sawada, Y., Estrada, E., & Bajaro, D., (2020). Why do Filipinos desire to work more hours? *Wiley Online Library* Volume 34, Issue 2. Retrieved September 25, 2023, from <https://doi.org/10.1111/apel.12298>
- Freedman, M., (2023). How to Manage Employee Attendance (Free Attendance Template). *Business News Daily*. Retrieved September 25, 2023, from <https://www.businessnews-daily.com/16114-manage-employee-attendance-templates.htmls>
- Friganović, A., Selič, P., Ilić, B., & Sedić, B. (2019). Stress and burnout syndrome and their associations with coping and job satisfaction in critical care nurses: a literature review. *Psychiatria Danubina*, 31(Suppl 1), 21–31. Retrieved September 13, 2023, from <https://pub-med.ncbi.nlm.nih.gov/30946714/>
- Future Workplace (2021). 2021 HR Sentiment Survey. Executive Networks. Retrieved September 26, 2023, from Retrieved September 25, 2023, from <https://future-workplace.com/ebooks/2021-hr-sentiment-survey/>
- Galab, S., Gari, T., & Woldehanna, T. (2019). The challenges of implementing a large-scale nutrition survey in Ethiopia. *Public Health Nutrition*, 22(11), 2066-2074.

- Garavan, T., McCarthy, A., Lai, Y., Murphy, K., Sheehan, M., & Carbery, R. (2021). Training and organizational performance: A meta-analysis of temporal, institutional and organizational context moderators. *Human Resource Management Journal*, 31(1), 93-119. Retrieved November 10, 2023, from <https://onlinelibrary.wiley.com/doi/abs/10.1111/1748-8583.12284>
- Gebrehiwot, G. D., & Elantheraiyan, P. (2023). A study on the effect of training on employee performance in the case of Mekelle City, Tigray, Ethiopia. *Social Sciences & Humanities Open*, 8(1), 100567. Retrieved September 10, 2023, from <https://doi.org/10.1016/j.ssaho.2023.100567>
- Gernal, L. J. M., Guimba, S., & Sergio, R. P. (2019). Time Observance and Productive Performance of Civil Servants: Policy Implications. *Knowledge-Based Sustainable Development*, 25. Retrieved November 10, 2023 from https://www.researchgate.net/profile/Liza-Gernal/publication/370341029_ERAZ_Conf-WEB_2/links/644b74ec5762c95ac35b5543/ERAZ-Conf-WEB-2.pdf#page=43
- Ghana Statistical Service (2021). 2021 Population and Housing Census Field Operation Handbook. Census. Ghana Statistical Service. Retrieved September 25, 2023, from <https://census2021.statsghana.gov.gh/gss-main/fileUpload/pressrelease/Field%20Operations%20Handbook%20-%2012th%20May,%202021.pdf>
- Giday, D., & Perumal, D., (2022). A Study on the Effect of Training on Employee Performance in the Case of Mekelle City, Tigray, Ethiopia. *SSRN Electronic Journal*. 8. 10.2139/ssrn.4257987. Retrieved September 14, 2023, from https://www.researchgate.net/publication/365263873_A_Study_on_the_Effect_of_Training_on_Employee_Performance_in_the_Case_of_Mekelle_City_Tigray_Ethiopia
- Graffeo, C., (2023). The Power of Good Attendance at Work: Exploring the Pros and Cons. *Linkedin*. Retrieved September 10, 2023, from <https://www.linkedin.com/pulse/power-good-attendance-work-exploring-pros-cons-carlo-graffeo-jr-/>
- Gumpal, M., & Cardenas, R., (2020). Work-Life Balance in the Lens of Filipino Workers: A Generational Perspective. *International Journal of Science and Research (IJSR)* ISSN: 2319-7064 SJIF (2020): 7.803. Retrieved September 13, 2023, from <https://www.ijsr.net/archive/v10i10/SR201007212347.pdf>
- Half, R., (2019). What to Do When Calling in Sick is Unavoidable. *Robert Half* Retrieved September 9, 2023, from https://www.roberthalf.com/us/en/insights/career-development/feeling-the-flu-when-calling-in-sick-is-unavoidable?utm_campaign=Press_Release&utm_medium=Link&utm_source=Press_Release
- Hall, B.J., Garabiles, M.R. & Latkin, C.A., (2019). Work life, relationship, and policy determinants of health and well-being among Filipino domestic Workers in China: a qualitative study. *BMC Public Health* 19, 229. Retrieved September 13, 2023, from <https://doi.org/10.1186/s12889-019-6552-4>
- Hasan, S., (2023). Enumerators struggle to deal with challenges in census data gathering. *Dawn*. Retrieved September 20, 2023, from <https://www.dawn.com/news/1741736>
- Herrity, J., (2023). The Importance of Training Employees: 11 Benefits. *Indeed*. Retrieved September 11, 2023, from <https://www.indeed.com/career-advice/career-development/importance-of-training>
- Holewa, R., (2022). What is Flextime? Introduction to flexible working. *Quidlo Time-sheets*. Retrieved September 15, 2023, from <https://www.quidlo.com/blog/what-is-flextime-flexible-working/>
- Hong Y., Zhan, Y., Xue, P., Fang, X., Zhou, L., Wei, F., Lou, X., & Zou, H., (2022). The Influence of Long Working Hours,

- Occupational Stress, and Well-Being on Depression Among Couriers in Zhejiang, China. *Frontiers in Psychology*. Volume 13 - 2022. Retrieved September 22, 2023, from <https://doi.org/10.3389/fpsyg.2022.928928>
- Hughes, I.M., Freier, L.M. & Barratt, C.L., (2022). Your help isn't helping me! Unhelpful workplace social support, strain, and the role of individual differences. *Occup Health Sci* 6, 387–423 (2022). Retrieved September 16, 2023, from <https://doi.org/10.1007/s41542-022-00115-x>
- International Journal of Humanities Social Science and Management (2023). A Study on Employees Perception towards Training and Development. *International Journal of Humanities Social Science and Management (IJHSSM)* Volume 3, Issue 2, Mar.-Apr. 2023, pp: 891-897. Retrieved September 21, 2023, from https://ijhssm.org/issue_dcp/A%20Study%20on%20Employees%20Perception%20to%20wards%20Training%20and%20Development.pdf
- Ivanova, I. A., Pulyaeva, V. N., Vlasenko, L. V., Gibadullin, A. A., & Sadriddinov, M. I. (2019). Digitalization of organizations: current issues, managerial challenges, and socio-economic risks. In *Journal of physics: conference series* (Vol. 1399, No. 3, p. 033038). IOP Publishing. Retrieved November 10, 2023, from <https://iopscience.iop.org/article/10.1088/1742-6596/1399/3/033038/meta>
- Jabutay, F. A., Suwandee, S., & Jabutay, J. A. (2023). Testing the stress-strain-outcome model in Philippines-based call centers. *Journal of Asia Business Studies*, 17(2), 404-423. Retrieved November 14, 2023, from <https://www.emerald.com/insight/content/doi/10.1108/JABS-06-2021-0240/full/html>
- Jeong, D., Aggarwal, S., Robinson, J., Kumar, N., Spearot, A., & Park, D., (2022). Exhaustive or Exhausting? Evidence on Respondent Fatigue in Long Surveys. *David Sungho Park*. Retrieved September 23, 2023 from https://dshpark.com/files/survey_fatigue.pdf
- Jolly, P., Kong, D., & Kim, K., (2020). Social Support at Work: An Integrative Review. *Journal of Organizational Behavior*. 42.10.1002/job.2485. Retrieved September 25, 2023, from https://www.researchgate.net/publication/344504726_Social_Support_at_Work_An_Integrative_Review
- Kaplan, L., Kuhnt, J., & Steinert, J., (2019). Do no harm? Field research in the Global South: Ethical challenges faced by research staff. *ScienceDirect*. Retrieved September 25, 2023, from <https://doi.org/10.1016/j.worlddev.2019.104810>
- Kaur, M., Grewal, J. S., & Kaur, S. (2019). An overview of data collection methods used in social research. *International Journal of Scientific Research and Management*, 7(5), 62-66.
- Kelloway, E. K., Day, A. L., & Hurrell Jr, J. J. (2017). *Workplace health and safety: A systems approach*. Routledge.
- Kern, M., Heissler, C. & Zapf, D. Social Job Stressors can Foster Employee Well-Being: Introducing the Concept of Social Challenge Stressors. *J Bus Psychol* 36, 771–792 (2021). Retrieved September 10, 2023, from <https://doi.org/10.1007/s10869-020-09702-7>
- Kesslen, B., (2019). Native Americans, the census' most undercounted racial group, fight for an accurate 2020 tally. *NBC Universal*. Retrieved September 20, 2023, from <https://www.nbcnews.com/news/us-news/native-americans-census-most-undercounted-racial-group-fight-accurate-2020-n1105096>
- Kikuchi, H., Odagiri, Y., Ohya, Y., Nakanishi, Y., Shimomitsu, T., Theorell, T., & Inoue, S. (2020). Association of overtime work hours with various stress responses in 59,021 Japanese workers: Retrospective cross-sectional study. *PloS one*, 15(3), e0229506. Retrieved September 20, 2023, from <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0229506>

- Kim, T. Y., Baldrias, L., Papageorgiou, S., Aguilar, E., Tee, M., Kelly, T., ... & Wilkes, M. (2022). A community-based survey to assess risk for one health challenge in rural Philippines using a mobile application. *One Health Outlook*, 4(1), 1-12. Retrieved September 13, 2023, from <https://onehealthoutlook.biomedcentral.com/articles/10.1186/s42522-022-00063-0>
- Koffi-Tessio, E., Adja, A. K., & Yao, K. (2019). Challenges encountered by enumerators during the implementation of household survey in Côte d'Ivoire. *BMC research notes*, 12(1), 1-6.
- Kokubun, K. (2019). Organizational commitment, rewards and education in the Philippines. *International Journal of Organizational Analysis*, 27(5), 1605-1630. Retrieved November 14, 2023, from <https://www.emerald.com/insight/content/doi/10.1108/IJOA-02-2019-1667/full/html>
- Koumparaki, E., (2023). 8 Employee Training Challenges and Solutions to Overcome Them. *TalentLMS Blog*, 31 Jan. 2023, Retrieved September 10, 2023 from www.talentlms.com/blog/training-challenges-solutions-workplace.
- Kwon, C., & Raman, A. (2023). The Effects of Inconsistent Work Schedules on Employee Lateness and Absenteeism. Available at SSRN 4592763. Retrieved November 10, 2023, from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4592763
- Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal, and coping. Springer Publishing Company. Retrieved September 23, 2023, from https://link.springer.com/referenceworkentry/10.1007/978-1-4419-1005-9_215
- Lin, C. P., Xian, J., Li, B., & Huang, H. (2020). Transformational leadership and employees' thriving at work: the mediating roles of challenge-hindrance stressors. *Frontiers in Psychology*, 11, 1400. Retrieved September 20, 2023, from <https://www.frontiersin.org/articles/10.3389/fpsyg.2020.01400/full>
- Lofgren L., (2023). Mandatory Training for Employees Starter Guide: Learn the Basics. Quicksprout. Retrieved September 16, 2023, from <https://www.quicksprout.com/mandatory-training-for-employees/>
- Ma, L., Zheng, Y., & Wei, Y. (2023). The double-edged sword effect of telecommuting on employees' work engagement: evidence from China during COVID-19. *Frontiers in psychology*, 14, 1110108. Retrieved September 24, 2023, from <https://doi.org/10.3389/fpsyg.2023.1110108>
- Maduekwe, E., & de Vries, W.T., (2019). Random Spatial and Systematic Random Sampling Approach to Development Survey Data: Evidence from Field Application in Malawi. *Sustainability*. Retrieved September 19, 2023, from <https://doi.org/10.3390/su11246899>
- Martinez, A.B., Co, M., Lau, J. et al. (2020). Filipino help-seeking for mental health problems and associated barriers and facilitators: a systematic review. *Soc Psychiatry Psychiatr Epidemiol* 55, 1397-1413. Retrieved September 20, 2023, from <https://doi.org/10.1007/s00127-020-01937-2>
- Mata, K. K. C., & Tarroja, M. C. H. (2022). Impact of emotional exhaustion and self-efficacy on the psychological well-being of child care workers in the Philippines. *Psychological Studies*, 67(3), 352-361. Retrieved November 14, 2023, from <https://link.springer.com/article/10.1007/s12646-022-00662-x>
- McIlroy, T. D., Parker, S. L., & McKimmie, B. M. (2021). The effects of unanswered supervisor support on employees' well-being, performance, and relational outcomes. *Journal of Occupational Health Psychology*, 26(1), 49-68. Retrieved September 15, 2023, from <https://doi.org/10.1037/ocp0000270>
- Mega Interview Team (2023). What Does an Enumerator Do? Mega Interview. Retrieved September 13, 2023 from https://megainterview.com/enumerator/#Enumerator_Work_Environment.

- Meister, J., (2021). The Future Of Work Is Employee Well-Being. *Forbes*. Retrieved September 20, 2023, from <https://www.forbes.com/sites/jean-nemeister/2021/08/04/the-future-of-work-is-worker-well-being/?sh=766a92274aed>
- Mohamed, S. F., Osman, K. A., & Ali, A. S. (2017). Factors affecting the performance of enumerators in agricultural surveys in Sudan. *Journal of Agricultural Extension and Rural Development*, 9(4), 84-92.
- Mohanty, P. C., Dash, M., Dash, M., & Das, S. (2019). A study on factors influencing training effectiveness. *Revista Espacios*, 40(2), 7.
- Morrison-Smith, S., & Ruiz, J., (2020). Challenges and barriers in virtual teams: a Literature Review. *SN Applied Sciences*. 2. 10.1007/s42452-020-2801-5. Retrieved September 12, 2023, from https://www.researchgate.net/publication/341523160_Challenges_and_barriers_in_virtual_teams_a_literature_review
- Mukiibi, N. F., Musunguzi, G., Kiggundu, D. S., & Wasswa, P. (2019). Challenges faced by enumerators in conducting community health surveys in low-resource settings: a qualitative study. *BMC health services research*, 19(1), 1-10.
- Nagle, R. (2020). We are still here: Native Americans fight to be counted in the US census. *The Guardian*. Retrieved September 20, 2023, from <https://www.theguardian.com/us-news/2020/jan/15/we-are-still-here-native-americans-fight-to-be-counted-in-us-census>
- Nantege, L., Nyange, H., Muhumuza, B., & Acimo, P. (2022). Mobile census management application. Undergraduate Dissertation. Makerere University Undergraduate Dissertations Repository. Retrieved November 11, 2023, from <http://dissertations.mak.ac.ug/handle/20.500.12281/15550>
- Nardo, G., Polinar, M., Delantar, A., & Buntiago, J., (2022). Training and Development of the Rank-and-File Employees among Selected Hotels in Cebu City. *International Journal of Multidisciplinary: Applied Business and Education Research*. Volume 3 No. 7. Retrieved September 15, 2023 from <https://ejournals.ph/article.php?id=18013>
- Nitafan, R. P., & Camay, J. C. (2020). Work Motivation and Job Satisfaction of Local Government Employees in Matalam, Cotabato Philippines: A Basis for Intervention Program. *International Journal of Humanities and Education Development (IJHED)*, 2(6), 534-542. Retrieved November 14, 2023, from <https://theshillonga.com/index.php/jhed/article/view/153>
- Northern Ireland Statistics and Research Agency (2019). Draft Enumerator Candidate Information Booklet for 2019 Census Rehearsal V4.DOCX. HR Connect. Retrieved September 22, 2023, from <https://irecruit-ext.hrconnect.ni.gov.net/resources/documents/e/n/u/enumerator-cib---final.docx.pdf>
- Odame, E. A. (2013). Training and supervision of enumerators in population and health research in developing countries. *African Population Studies*, 27(2), 173-184.
- Oduro, A. D., & Ayawere, P. K. (2016). Assessing the training needs of enumerators for household surveys: A case study of Ghana. *Journal of Population and Social Studies*, 24(1), 55-68.
- Okebiorun, J. O. (2022). Socio-Economic And Demographic Variables As Perceived Factors Contributing To Absenteeism And Tardiness Among Local Government Employees In Ekiti State, Nigeria. *Nigerian Online Journal of Educational Sciences and Technology*, 4(2), 151-162. Retrieved November 10, 2023, from <http://nojest.unilag.edu.ng/article/view/1640>
- Omoko F., (2022). Duties of Census Field Supervisors. Felix Omoko's Blog. Retrieved September 16, 2023, from <https://www.felixomokosblog.com/2022/12/duties-of-census-field-supervisors.html>
- Orbeta, A. C., & Corpus, J. P. P. (2021). Profile of training and skilling programs in the Philippines (No. 2021-14). PIDS Discussion Paper Series. Retrieved November 10,

- 2023, from <https://www.econstor.eu/handle/10419/241062>
- Oyekale, A. S., Adejobi, A. O., & Akinola, A. A. (2017). Factors affecting the performance of enumerators in agricultural surveys in Nigeria. *Journal of Statistical and Econometric Methods*, 6(2), 1-16.
- Patterer, A., Yanagida, T., Kühnel, J., & Korunka, C., (2023). Daily receiving and providing of social support at work: identifying support exchange patterns in hierarchical data, *European Journal of Work and Organizational Psychology*, 32:4, 489-505, DOI: 10.1080/1359432X.2023.2177537. Retrieved September 11, 2023, from <https://www.tandfonline.com/doi/full/10.1080/1359432X.2023.2177537>
- Peprah, W., Mattu, A., Antwi-Yamoah, P., Valley View University, Adventist University of the Philippines (2019). Compensation and Social Support on Continuance Commitment of Working Students in Adventist University of the Philippines. *International Scholars Conference Volume 7 Issue 1*, October 2019, pp.75-82. Retrieved September 13, 2023, from <https://jurnal.unai.edu/index.php/isc/article/view/952/1416>
- Philippine News Agency (2020). PSA-Cordillera hires almost 3K workers for the 2020 census. Philippine News Agency. Retrieved September 9, 2023 from <https://www.pna.gov.ph/articles/1113960>
- Philippine Statistics Authority (2019). Enumeration Area Reference File: PSA Central Visayas conducts the 2019 Integrated Census Map Updating – Second Level Training. Philippine Statistics Authority Region VII-Central Visayas. Retrieved September 9, 2023, from <https://rso07.psa.gov.ph/tags/enumeration-area-reference-file>
- Philippine Statistics Authority (2021). Census of Population 2020. Press Release Issue # 47R12-PR-2021-05. Retrieved June 27, 2024, from <https://rso12.psa.gov.ph/content/press-release-issue-47r12-pr-2021-05>
- Philippine Statistics Authority (2022). LGU Mlang and PSA Cotabato Provincial Statistical Office Conducted the 2022 Community-Based Monitoring System (CBMS) Municipal Level Training. Philippine Statistics Authority Region XII-Soccsksargen. Press Release 47R12-PR-2022-16. Retrieved September 9, 2023, from <https://rso12.psa.gov.ph/article/lgu-mlang-and-psa-cotabato-provincial-statistical-office-conducts-2022-community-based>
- Philippine Statistics Authority (2023). 2022 CBMS Enumerators Manual. Community-Based Monitoring System. Retrieved September 9, 2023 from <https://cbms.psa.gov.ph/resources/enumerator/>
- Philippine Statistics Authority (2023). Ethnicity in the Philippines (2020 Census of Population and Housing). Retrieved July 3, 2024, from <https://www.psa.gov.ph/content/ethnicity-philippines-2020-census-population-and-housing>
- Poethke, U., Klasmeier, K. N., Radaca, E., & Diestel, S., (2023). How modern working environments shape attendance behavior: A longitudinal study on weekly flexibilization, boundaryless work, and presenteeism. *Journal of Occupational and Organizational Psychology*. Retrieved September 19, 2023, from <https://bpspsychub.onlinelibrary.wiley.com/doi/full/10.1111/joop.12437>
- Presbitero, A., & Teng-Calleja, M. (2020). Employee intention to stay in an organization: Examining the role of calling and perceived supervisor support through the theoretical lens of work as calling. *Journal of Career Assessment*, 28(2), 320-336. Retrieved November 14, 2023, from <https://journals.sagepub.com/doi/abs/10.1177/1069072719858389>
- Province of Cotabato (2018). Geography. Cotabato Province. Retrieved June 28, 2024 from <https://cotabato.gov.ph/about/geography/>

- Public Services International, (2023). New social protection floors in the Philippines to cover CHWS, contractual gov't employees. Public Services International. Retrieved September 13, 2023, from <https://publicservices.international/resources/news/new-social-protection-floors-in-the-philippines-to-cover-chws-contractual-govt-employees?id=13994&lang=en>
- Punzalan, J., Abaid, Mikhale J., Luaton II, P., & Roxas, M., Sapit, N., & Torrazo, L., (2023). Social Support, Work-Family Conflict and Job Satisfaction of Teachers During COVID-19 Pandemic. *North American Journal of Psychology*. 25. 1-6. Retrieved November 14, 2023, from https://www.researchgate.net/publication/368880416_Social_Support_Work-Family_Conflict_and_Job_Satisfaction_of_Teachers_During_COVID-19_Pandemic
- Qader, S., Lefebvre, V., Tatem, A., Pape, U., Himelein, K., Ninneman, A., Bengtsson, L., & Bird, T., (2021). Semi-automatic mapping of pre-census enumeration areas and population sampling frames. *Humanities and Social Science Communications* 8, 3 (2021). Retrieved September 15, 2023, from <https://doi.org/10.1057/s41599-020-00670-0>
- Rabbani, G., Siddique, A. B., & Sarker, M. (2017). Census data quality in Bangladesh: An analysis of the 2011 population and housing census. *Journal of Population and Social Studies*, 25(3), 163-182.
- Rabbani, M., Rahman, S., & Tasneem, D., (2022). Trust and Citizen Participation in Community-Based Monitoring System: An Experimental Evidence from Bangladesh. *Journal of Behavioral and Experimental Economics*. 98. 101884. 10.1016/j.socec.2022.101884. Retrieved September 9, 2023, from https://www.researchgate.net/publication/360115921_Trust_and_Citizen_Participation_in_Community-Based_Monitoring_System_An_Experimental_Evidence_from_Bangladesh
- Raub, S., Borzillo, S., Perretten, G., & Schmitt, A. (2021). New employee orientation, role-related stressors and conflict at work: Consequences for work attitudes and performance of hospitality employees. *International journal of hospitality management*, 94, 102857. Retrieved September 20, 2023, from <https://www.sciencedirect.com/science/article/pii/S0278431920304096>
- Reyes, C., & Mandap, A., (2022). Monitoring Child Poverty and Exclusion through the Community-Based Monitoring System (CBMS). *DLSU Business & Economics Review* 32(1) 2022 p. 14-29. Retrieved September 12, 2023, from <https://docplayer.net/234919762-Monitoring-child-poverty-and-exclusion-through-the-community-based-monitoring-system-cbms.html>
- Reyes, C. M., Vargas, A. R. P., & Arboneda, A. A. (2021). Evidence-based local planning and budgeting using CBMS (No. 2020-50). PIDS Discussion Paper Series. Retrieved November 14, 2023 from <https://www.econstor.eu/handle/10419/241039>
- Riego de Dios, E. (2020). Supervisory relationship, organizational climate and satisfaction of employees in a local community college. Riego de Dios, EE (2020). Supervisory Relationship, Organizational Climate and Satisfaction of Employees in a Local Community College. *International Journal of Academic Management Science Research*, 4(2), 164-170.
- Robino, C., (2022). Community-Based Monitoring System. International Development Research Centre, Canada. Retrieved September 10, 2023, from <https://collab-dev.aer.ph/wp-content/uploads/2022/02/The-CBMS-AER-2022-1.pdf>
- Ruhle, S. A., & Süß, S. (2020). Presenteeism and absenteeism at work—an analysis of archetypes of sickness attendance cultures. *Journal of Business and Psychology*, 35, 241-255. Retrieved September 12, 2023, from <https://link.springer.com/article/10.1007/s10869-019-09615-0>
- Sahoo, S., Mehra, A., & Sarkar, S. (2020). Work stress and employee well-being: A review.

- International Journal of Management Reviews, 22(4), 399-421.
- Saldanha V., (2023). Impact of Training and Development on Employee Performance. PulseHRM. Retrieved September 18, 2023, from <https://pulsehrm.com/impact-of-training-and-development-on-employee-performance/>
- Saleem, F., Malik, M., & Qasim, A., (2022). Supervisor Support, Self-Efficacy, and Employee Performance: The Mediating Role of Office De-Clutter. *Adm. Sci.*, 12, 177. Retrieved September 15, 2023, from <https://doi.org/10.3390/ad-msci12040177>
- Salin, D. (2020). Organizational change and employee well-being. In *Handbook of Well-being* (pp. 1-16). DEF Publishers.
- Samoa Bureau of Statistics and Ministry of Agriculture and Fisheries, (2019). Samoa Agriculture Census 2019 Field Supervisor Manual of Instruction. Food and Agriculture organization. Retrieved September 11, 2023, from https://www.fao.org/fileadmin/templates/ess/ess_test_folder/World_Census_Agriculture/WCA_2020/WCA_2020_new_doc/SAM_MAN_ENG_2019.pdf
- Sanchez-Cespedes, L., Leasure, D., Tejedor-Garavito, N., Cruz, G., Velez, G., Mendoza, A., Salazar, Y., Esch, T., Tatem, A., & Bohórquez, M., (2023). Social cartography and satellite-derived building coverage for post-census population estimates in difficult-to-access regions of Colombia, *Population Studies*, DOI: 10.1080/00324728.2023.2190151.
- Sareen, H., Mishra, K., & Taneja, G. (2016). Challenges faced by field workers in collecting data from rural India: A qualitative study. *Journal of family medicine and primary care*, 5(1), 87-91.
- Schooley, S., (2023). Employees Reveal How Stress Affects Their Jobs. *Business News Daily*. Retrieved September 16, 2023, from <https://www.businessnewsdaily.com/2267-workplace-stress-health-epidemic-perventable-employee-assistance-programs.html>
- Setiyani, A., Djumarno, D., Riyanto, S., & Nawangsari, L. (2019). The effect of the work environment on flexible working hours, employee engagement, and employee motivation. *International Review of Management and Marketing*, 9(3), 112-116.
- Shail, M. S. (2019). Using micro-learning on mobile applications to increase knowledge retention and work performance: a review of literature. *Cureus*, 11(8). Retrieved September 16, 2023, from <https://www.cureus.com/articles/21612-using-micro-learning-on-mole-applications-to-increase-knowledge-retention-and-work-performance-a-review-of-literature>
- Simeon, L., (2021). Better social protection to boost Philippine labor market. *The Philippine Star*. Retrieved September 25, 2023, from <https://www.philstar.com/business/2021/09/24/2129213/better-social-protection-boost-philippine-labor-market>
- Spreitzer, M. (1995). Psychological Empowerment in the Workplace: Dimensions, Measurement, and Validation. *Academy of Management Journal*. www.jstor.org, 38, 1442-1465. <https://doi.org/10.2307/256865>
- Stoop, I. A., Billiet, J. B., Koch, A., & Fitzgerald, R. (2010). Improving survey response: Lessons learned from the European Social Survey. John Wiley & Sons.
- Sullivan, T., (2020). Who, What, When, and Where of the Census. Springer Link. Retrieved November 11, 2023, from https://link.springer.com/chapter/10.1007/978-3-030-40578-6_2.
- Susanto, P., Hoque, M., Jannat, T., Emely, B., Zona, M., & Islam, M., (2022). Work-Life Balance, Job Satisfaction, and Job Performance of SMEs Employees: The Moderating Role of Family-Supportive Supervisor Behaviors. *Frontiers in Psychology*. Volume 13 - 2022. Retrieved September 20, 2023, from <https://doi.org/10.3389/fpsyg.2022.906876>
- Svoboda, D., Callen, M. J., & Chaudhary, S. (2017). Improving the performance of

- enumerators in household surveys: Evidence from a randomized experiment in Tanzania. *Journal of Development Economics*, 126, 1-15.
- Tadesse, B. T., & Abegaz, A. A. (2019). Determinants of enumerator performance in agricultural surveys in Ethiopia: Evidence from Amhara region. *Cogent Economics & Finance*, 7(1), 1705845.
- Thomas, L., (2021). Importance of a Work-Life Balance. *News Medical Life Sciences*. Retrieved September 22, 2023, from <https://www.news-medical.net/health/Importance-of-a-Work-Life-Balance.aspx#:~:text=The%20benefits,benefit%20from%20achieving%20this%20balance.>
- U.S. Census Bureau (2019). *Census Employee Handbook for Enumerators and Recruiting Assistants-2020 Census Peak Operations*. U.S. Department of Commerce Economics and Statistics Administration. Retrieved September 19, 2023, from https://www2.census.gov/foia/records/D-590_2020-census.pdf
- U.S. Census Bureau (2022). *Census Bureau Releases Results of Post-Enumeration Survey for Puerto Rico From 2020 Census*. U.S. Census Bureau. Press Release Number CB22-CN.12. Retrieved September 15, 2023, from <https://www.census.gov/news-room/press-releases/2022/2020-post-enumeration-survey-results-puerto-rico.html>
- UNDP Drylands Development Centre (2020). *Community-Based Resilience Assessment (CoBRA) Conceptual Framework and Methodology*. United Nations Development Programme. Retrieved September 7, 2023, from https://www.undp.org/sites/g/files/zskgke326/files/publications/CoBRRA_Conceptual_Framework.pdf
- United Nations Development Programme (2023). *PSA holds data collection training for the BARMM digitization program*. UNDP. Retrieved September 9, 2023, from <https://www.undp.org/philippines/blog/psa-holds-data-collection-training-barmm-digitalization-program>
- Vanderstukken, A., Schreurs, B., den Broeck, A., & Proost, K., (2019). Should supervisors communicate goals or visions? The moderating role of subordinates' psychological distance. *Journal of Applied Sociology*. Retrieved September 16, 2023, from <https://doi.org/10.1111/jasp.12626>
- Van Eys, P., (2022). *The Costs of Presenteeism and Absenteeism in the Workplace*. Pathways. Retrieved September 12, 2023, from <https://www.pathways.com/pathways-at-work/blog/costs-of-presenteeism-and-absenteeism>
- Vertzonis, M., (2022). *Define enumeration areas for a census count*. ArcGIS. Retrieved September 22, 2023, from <https://www.esri.com/arcgis-blog/products/survey123/field-mobility/define-enumeration-areas-for-a-census-count/>
- Victorian Government (2019, December). *Victorian Family Violence Data Collection Framework*. Victorian Government. Retrieved September 16, 2023, from <https://www.vic.gov.au/victorian-family-violence-data-collection-framework/data-collection-challenges-and-improvements>
- Wilson, S., Dickinson, H., & Clark, S. (2014). Factors affecting the performance of enumerators in household surveys: evidence from randomized experiments in Ghana. *Journal of Development Effectiveness*, 6(2), 99-114.
- World Health Organization (2021). *Long working hours increasing deaths from heart disease and stroke: WHO, ILO*. World Health Organization. Retrieved September 10, 2023, from <https://www.who.int/news/item/17-05-2021-long-working-hours-increasing-deaths-from-heart-disease-and-stroke-who-ilo>
- World Health Organization (2022). *Mental health at work*. World Health Organization. Retrieved September 13, 2023, from <https://www.who.int/news-room/fact-sheets/detail/mental-health-at-work>
- Yang, X., Feng, Y., Meng, Y., & Qiu, Y. (2019). Career adaptability, work engagement, and

- employee well-being among Chinese employees: The role of guanxi. *Frontiers in Psychology*, 10, 1029. Retrieved September 15, 2023, from <https://www.frontiersin.org/articles/10.3389/fpsyg.2019.01029/full>
- Yin, Y., Sun, S., Song, L., Jin, C., & Wang, Y., (2022). Emotional labour strategies and job burnout: A meta-analysis of Chinese employees. *Asian Association of Social Psychology*. Retrieved September 20, 2023, from <https://doi.org/10.1111/ajsp.12554>.
- Yusuf, S. O., Abdulkadir, T. S., & Danjuma, I. A. (2019). Factors affecting enumerator performance in household surveys in Nigeria. *Advances in Social Sciences Research Journal*, 6(7), 427-437.