

Quantification Process, Sociometric, Numerical Scale 9 and Social Interpretation Research in Social Humanity under Artificial Intelligent Era

(Case study: The Measurement of Harmony Index in Bekasi City)

Jadi Suriadi

Wellbeing Institute, Indonesia
jadisuriadi@gmail.com

Abstract:

This research delves into the intricate measurement of the Harmony Index in Bekasi City within the context of the Artificial intelligence era, employing a quantification process, sociometric analysis, and a numerical scale of 9. The study explores the social dimensions that impact harmony and utilizes AI to extract insights from non-structural data, offering a comprehensive understanding of the community's goodness, benefits, and well-being. The variables Xi are assessed in terms of Perception, Participation, and Acceptability (PPA) perspectives, and their weighted scores contribute to the Harmony Index formula. Statistical analyses, including correlation, variance, and standard deviation, enable the evaluation of the data, leading to profound social interpretations. The study identifies regularities, response rates, and significance scores while categorizing respondents. This research enhances our understanding of harmony, informs policy recommendations, and paves the way for community betterment.

One significant outcome of the study is the categorization of respondents based on their levels of engagement, classifying them as engaged, moderate, or non-engaged. This categorization provides a nuanced understanding of how different segments of the community interact with the variables under investigation. Furthermore, the research successfully distilled essential insights from a vast pool of non-structural narrative data, narrowing down the analysis to the most relevant and informative content, ultimately enhancing the depth and quality of the findings.

Keywords: *Quantification Process, Sociometric, Numerical Scale 9, Social Interpretation, Artificial Intelligent Era*

Introduction

The advancement of Artificial Intelligence (AI) has catalyzed a paradigm shift in the way social scientists and researchers investigate and interpret complex phenomena within the realm of social humanity. The fusion of AI technologies with traditional research methodologies has opened up new avenues for the study of intricate social constructs, such as the quantification of human interactions or correlations, sociometric analysis, the utilization of numerical scales, and social interpretation. This research endeavors to delve into the amalgamation of these methodologies within the context of an empirical case study: the Measurement of Harmony Index in Bekasi City.

The Quantification Process in the field of social science has long been a challenge, as it involves the measurement and analysis of intricate and multifaceted aspects of human behavior and society. With the advent of AI, researchers can now employ sophisticated algorithms and data analysis techniques to quantify social phenomena in more precise and nuanced ways. This study explores how AI-based quantification processes enable us to gain a deeper understanding of the complex interplay of factors that contribute to harmony within a specific community.

Sociometric analysis, on the other hand, is a valuable tool for scrutinizing social networks and the relationships or correlations within them. The emergence of AI-driven sociometric tools has enhanced the capacity to uncover hidden patterns, identify key influencers, and discern the dynamics of social interactions. This research aims to illustrate how sociometric analysis, bolstered by AI capabilities, can shed light on the dynamics of harmony in the community of Bekasi City.

Particularly the Numeric Scale 9, provide a structured framework for measuring and quantifying subjective phenomena, such as the perception of harmony. The integration of AI in this context can streamline the data collection process and enhance the accuracy and reliability of the results. This study investigates the application of Numerical Scale 9 in gauging the residents' perception of harmony in Bekasi City, elucidating how AI aids in the collection, analysis, and interpretation of numerical data.

In general, social interpretation takes on a new dimension in the era of AI. The ability to process vast amounts of data and discern intricate patterns allows for more nuanced and data-driven interpretations of social phenomena. In the case of measuring the Harmony Index in Bekasi City, AI-driven social interpretation can provide deeper insights into the factors influencing harmony, thus enabling policymakers and researchers to make more informed decisions.

In this context, our case study on the Measurement of Harmony Index in Bekasi City serves as a practical illustration of how AI has transformed the research landscape in social humanity. By leveraging the quantification process, sociometric analysis, Numerical Scale 9, and social interpretation, this study aims to provide a comprehensive and data-driven understanding of harmony in Bekasi City, underscoring the transformative impact of AI in the field of social research and the potential for more informed decision-making and policy development.

This quantification process is crucial in social studies because it allows us to work with data that is more objective and can be analyzed statistically. It helps researchers see patterns, trends, and differences, making it easier to understand complex social issues and make informed decisions, such as whether there's a need for policies to improve happiness in the city. So, quantification simplifies complex social phenomena by converting them into numbers, making it easier for researchers to study, analyze, and draw meaningful insights from the data.

Literature Review

Quantification Process and Numerical Scale

Common objects of social study often revolve around public issues or policy issues that exist within complex and dynamic conditions. These issues are multifaceted and continually evolving, making them ripe subjects for in-depth social analysis. Here are some key aspects of such objects of study: Complex Interactions: Public issues and policy issues often involve various stakeholders, including individuals, communities, government bodies, and non-governmental organizations.

1. **Dynamic Nature:** Social issues rarely remain static. They evolve due to changing societal norms, economic conditions, technological advancements, and political developments.
2. **Multifaceted Factors:** Public and policy issues typically result from a confluence of factors, such as economic, cultural, environmental, and political elements.
3. **Impact on Society:** These issues often have a significant impact on society at large. Whether it's an economic crisis, healthcare policy, environmental sustainability, or social justice concerns, these issues affect people's lives, well-being, and access to resources.
4. **Policy Implications:** Public and policy issues are intimately tied to government actions and regulations. Researchers need to assess how existing policies and potential policy changes impact these issues and, in turn, how they influence public welfare.
5. **Public Perception and Discourse:** The public's perception of these issues, as well as the discourse surrounding them, can be dynamic and influential.
6. **Interdisciplinary Approach:** Given the complexity and dynamics, researchers often employ an interdisciplinary approach, drawing from fields like sociology, political science, economics, psychology, and more to gain a comprehensive understanding of these issues.
7. **Ethical and Moral Dimensions:** Many public and policy issues involve ethical and moral considerations, which can vary widely among different groups and individuals.
8. **Data Collection and Analysis:** Collecting and analyzing data related to these issues with the increasing availability of big data and the need for advanced data analytics and artificial intelligence to make sense of it all.
9. **Policy Recommendations:** Research in this domain often aims to inform and shape policy decisions.

In general terms, public and policy issues are prime subjects for social study due to their complex and dynamic nature. Understanding and addressing these issues require a holistic approach, incorporating

multiple disciplines and methodologies to provide valuable insights for informed decision-making and societal progress.

Quantification is essentially the process of turning something complex, like people's opinions or behaviors as like their perception, participation, and acceptability (PPA), into simple numbers that we can work with and analyze. It's like taking a detailed picture and converting it into a set of basic colors and shapes so we can better understand what's going on. There are highlighted several advantages of using a Numerical Scale 9, and they are indeed significant in social research and data analysis.

Statistical and Social Interpretation

Sociometric, as a method, involves the systematic study of social relationships, interactions, and networks within a population, typically encompassing a significant number of individuals. It focuses on the analysis of how individuals are connected, their social positions, and the patterns of communication and influence among them. Here's a breakdown of sociometric methods and their implications for inclusiveness and population-based studies;

1. **Inclusiveness:** Sociometric methods are inherently inclusive as they aim to encompass a wide range of individuals within a particular social context or community. Researchers often strive to collect data from a representative sample or even the entire population if feasible. Inclusiveness is vital in sociometric research to ensure that the findings reflect the diverse social connections and relationships present in the community.
2. **Population-Based Studies:** Sociometric methods are particularly suitable for population-based studies because they seek to explore social dynamics at a broader level. The data collected often involve interactions and relationships among a significant portion of the population rather than just a small sample. This comprehensive approach allows for a more holistic understanding of the social fabric within the study area.
3. **Network Analysis:** Sociometric methods often employ network analysis techniques to map and analyze social networks within a population. This approach goes beyond

individual-level data to examine the structural properties of the entire network, such as centrality, cohesion, and the flow of information or influence. Network analysis is valuable for population-based studies as it provides insights into the larger social system.

4. **Quantitative Data:** Sociometric methods usually rely on quantitative data, where individuals' social connections, interactions, and relationships are quantified and analyzed statistically.
5. **Qualitative Insights:** While sociometrics primarily deal with quantitative data, qualitative insights can also be incorporated to provide a more comprehensive understanding of the social dynamics within the population.

In the context of the case study on the Harmony Index in Bekasi City, the use of sociometric methods would likely involve collecting data from a significant portion of the city's population to assess social connections, interactions, and relationships that contribute to or hinder harmony. By studying these dynamics on a population level, the research aims to provide a holistic perspective on the factors influencing harmony within the community.

The statistical issues mentioned are important considerations when conducting research, particularly when working with data collected through sociometric methods or numerical scales like the Numerical Scale 9. The statistical issues in more detail namely, Quantification of Mean, Median, and Mode; Correlation and Variance for Validity and Reliability Test; and Standard Deviation to Check Variability. These statistical tools are valuable for analyzing and interpreting the research data, particularly when dealing with sociometric and Numerical Scale 9 data which can help to make valid and reliable inferences, understand central tendencies, identify patterns, and assess the consistency and variability of responses, which are crucial for drawing meaningful conclusions in your research on the Harmony Index in Bekasi City.

The statistical data collected in the research can provide the foundation for various social interpretations and insights. The elements that can be interpreted within the context of the Harmony Index in Bekasi City are response rate, scoring of significant category, people cohesiveness or agreement, proportion of non-engaged

people comparison and contestation beyond cluster identification, correlation of perception, participation, and acceptability scoring.

In the research, these interpretations will help to paint a comprehensive picture of how the community perceives and experiences harmony in Bekasi City. They can inform policy recommendations, community interventions, and strategies for fostering greater cohesion and well-being within the community. By understanding these elements, you can work toward a more harmonious and inclusive future for the city.

Harmony Index in the AI Era

The Harmony Index, with its multifaceted and complex nature, can benefit significantly from the application of Artificial Intelligence (AI). AI can play a pivotal role in simplifying and distilling the complexities of the Harmony Index in several ways:

1. Data Analysis and Interpretation :

AI can swiftly process and analyze vast datasets related to the Harmony Index, identifying patterns, correlations, and significant factors that contribute to harmony or discord within a community.

2. Pattern Recognition: AI can identify subtle patterns and trends within the data, making it easier to recognize underlying dynamics that influence harmony.
3. Data Visualization: AI-powered data visualization tools can create clear and intuitive representations of the Harmony Index.
4. Natural Language Processing (NLP): NLP techniques within AI can be employed to analyze open-ended responses and qualitative data, extracting key themes, sentiments, and actionable insights.
5. Prioritization of Factors: AI can help prioritize the most influential factors contributing to harmony, simplifying decision-making and policy development.
6. Real-Time Monitoring: AI systems can provide real-time updates on the Harmony Index, enabling continuous tracking of changes and the impact of interventions.

7. Customized Recommendations: AI can generate customized recommendations and strategies based on the specific context and challenges identified by the Harmony Index.
8. Accessibility: AI can make the Harmony Index more accessible to a wider audience by offering user-friendly interfaces and interactive tools for exploring the data.

By leveraging AI, researchers and policymakers can navigate the complexities of the Harmony Index more effectively, simplifying data processing, analysis, and interpretation. This, in turn, facilitates informed decision-making, targeted interventions, and the promotion of harmony within the community.

It has a set of 10 variables (X1 to X10) with associated weights based on a preliminary study. These weights indicate the relative importance of each variable in the context of the Harmony Index for Bekasi City. The percentages provided represent the contribution of each variable to the overall Harmony Index. Here is a summary of the variables and their respective weights:

1. Variable X1: Food availability and accessibility: 15.05%
2. Variable X2: Justice and well-being in the community: 14.95%,
3. Variable X3: Pluralism: 7.88%,
4. Variable X4: Education: 7.54%,
5. Variable X5: Citizenship: 7.58%,
6. Variable X6: Cultural assimilation: 11.00%,
7. Variable X7: Local wisdom: 11.00%,
8. Variable X8: Policies supporting religious diversity: 8.56%,
9. Variable X9: Community participation and religious organizations: 8.15%
10. Variable X10: Religious moderation: 8.29%

These weights provide a framework for assessing the relative impact of each variable when calculating the overall Harmony Index. The next steps in your research would involve collecting data on these variables, applying the assigned weights, and computing the Harmony Index to evaluate the state of harmony in Bekasi City.

Scoring each variable in Perception, Participation, and Acceptability perspectives by the community is a common approach in social research to assess the subjective experience and impact of various factors. Here's how you can score each variable in these three perspectives:

Perception:

- a. Perception scores assess how the community views each variable. It's essential to gather their subjective opinions and impressions.
- b. Administer surveys or questionnaires to community members to rate their perception of each variable.
- c. Assign a scoring system that allows respondents to rate their perception, such as using a Likert scale (1 to 9).
- d. Aggregate the perception scores for each variable to get an overall perception score for that variable.

Participation:

- a. Participation scores evaluate the extent to which community members actively engage with or are involved in each variable. This perspective assesses their level of participation or contribution.
- b. Use surveys or interviews to collect data on how individuals and groups participate in or contribute to each variable.
- c. Again, employ a scoring system to measure the degree of participation.
- d. Aggregate the participation scores for each variable to determine the overall participation score for that variable.

Acceptability:

- a. Acceptability scores gauge the level of acceptance or endorsement of each variable by the community. It reflects the community's willingness to embrace and support these factors.

- b. Utilize surveys, to collect data on how acceptable each variable is to the community.
- c. Employ a scoring system to measure acceptability.
- d. Combine the acceptability scores for each variable to establish an overall acceptability score for that variable.

After gathering data in each of these three perspectives (Perception, Participation, and Acceptability) for each of the ten variables, you can aggregate the scores to get an understanding of how the community perceives, participates in, and accepts these variables. The analysis of these scores can provide valuable insights into the community's relationship with each factor and its impact on the Harmony Index.

The Harmony Index (HI) formula provided is as follows:

$$HI = k1.X1 + k2.X2 + k3.X3 + k4.X4 + k5.X5 + k6.X6 + \dots + k10 * X10$$

The variable scores (X_i) are defined as a combination of Perception ($X(i.1)$), Participation ($X(i.2)$), and Acceptability ($X(i.3)$) scores. The variable score (X_i) is calculated as follows:

$$X_i = 20\% * X(i.1) + 40\% * X(i.2) + 40\% * X(i.3)]$$

Participation, and Acceptability scores for each variable. Perception carries 20% weight, while Participation and Acceptability each carry 40% weight in the calculation of the variable score (X_i). To calculate the overall Harmony Index (HI) for Bekasi City, it would use these variable scores and the specified weights. It would multiply each variable's score by its weight ($k_1, k_2, \dots, k_{10}$), sum these products, and this sum would represent the HI. This method allows us to take into account not only the variables but also the community's perception, participation, and acceptability of each variable when computing the overall Harmony Index.

Methodology

Wellbeing Methodology (WM) is an approach that seeks to comprehensively evaluate and enhance the goodness, benefits, and well-being of individuals, communities, or populations. It involves a systematic and multidimensional framework to assess and improve the quality of life and overall welfare of those under study. WM encompasses various tools, techniques, and data sources to gather

a holistic understanding of well-being, incorporating both objective and subjective aspects.

WM emphasizes participatory research, engaging individuals or communities in the assessment process to capture their unique perspectives and priorities. This collaborative approach ensures that well-being assessments are context-specific and culturally sensitive. Overall, WM offers a comprehensive and inclusive means of evaluating and enhancing the quality of life, with a focus on fostering individual and collective goodness, benefit, and well-being.

Phase of Preliminary Study

The preliminary study phase is a crucial and multifaceted stage in the research process. It involves a range of activities aimed at shaping the research project's direction and objectives. These activities include.

Literature Review; Researchers delve into existing studies, academic articles, and research reports related to their chosen topic. This extensive review of the literature enables them to gain a comprehensive understanding of what has already been explored in the field and identifies gaps that their research can address.

Field Observations: Field observations are conducted to gain firsthand insights into the real-world context of the study. Researchers might visit the research site to understand the dynamics, conditions, and variables that will be central to their investigation.

Interviews: Interviews with relevant experts, stakeholders, or potential participants are conducted to gather qualitative data and tap into their expertise. These interviews help refine research questions, explore perspectives, and gain valuable insights.

Activities and Methodology Selection: During this phase, researchers make critical decisions about the research design and methodology. They determine whether quantitative or qualitative methods are more appropriate and outline the steps required to collect, analyze, and interpret data.

AI Integration: In today's research landscape, communication with AI plays an increasingly significant role. Researchers explore AI tools and platforms to aid in data collection, analysis, and interpretation. AI can assist in processing large volumes of data, identifying patterns, and generating insights.

Ethical Considerations: Throughout the preliminary study, researchers pay close attention to ethical considerations. They ensure that data collection respects the rights, privacy, and well-being of participants, and they obtain necessary approvals and consents.

Resource Allocation: The phase includes an assessment of resource requirements, budget planning, and logistical considerations. Researchers allocate funding, personnel, and other resources to support the research project.

Timeline and Project Schedule: Establishing a timeline and project schedule is crucial for maintaining a well-structured research project. Milestones and deadlines are defined to keep the project on track and ensure it is completed within the designated timeframe.

By engaging in these activities and integrating AI tools, researchers can lay a strong foundation for their research endeavors. The preliminary study phase sets the stage for a well-structured and informed research project, ultimately leading to meaningful contributions and insights in the chosen field of study.

Data Mining

The phase of data mining in your research project involves the management of the survey instrument distribution and the facilitation of a smooth data collection process. It encompasses the gathering of various types of data, including identification data, scores related to Perception, Participation, and Acceptability (PPA) for each variable from the community, specific issue data, and non-structural data. Data of Respondents Identification Collect identification data anonymously, ensuring the privacy and confidentiality of respondents. This data can help categorize respondents into predefined clusters for analysis. Data of Scores of PPA for Each Variable: Gather data on how respondents score each variable in terms of Perception, Participation, and Acceptability.

Phase of Post-Survey and Data Analysis

The post-survey phase is a pivotal stage in the research process, focusing on the analysis of the data collected from the survey instrument. This phase is dedicated to extracting meaningful insights, concluding, and addressing the research questions and objectives. Here's an overview of the key activities and considerations during the post-survey data analysis:

- a. **Descriptive Statistics;** Descriptive statistics are employed to gain an overview of the data. Measures such as means, medians, standard deviations, and frequencies are calculated to provide a snapshot of the data's central tendencies and variability. Including to make sure that the data passed the validity and reliability test.
- b. **Qualitative Data Analysis;** For qualitative data, such as open-ended responses and non-structural data, qualitative analysis methods like content analysis or thematic coding are used to identify recurring themes, sentiments, and insights. Including to extract a lot of narrative data to 10 priority points. The introduction should clearly state the purpose of the paper.
- c. **Integration of Perception, Participation, and Acceptability Data;** For each variable are integrated into the analysis to compute the Harmony Index. This involves the application of the formula where the weighted variable scores are summed in WM.
- d. **Interpretation and Conclusion;** The analysis results are interpreted in the context of the research objectives and questions. Researchers conclude and provide answers to their research inquiries based on the data analysis. The post-survey phase often includes the formulation of policy recommendations and practical implications based on the research findings.

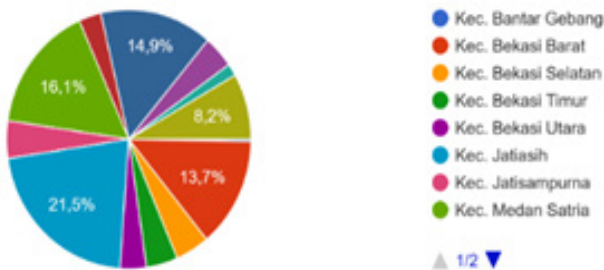
Analysis and Discussion

Data Analysis

The process of downloading data from the system involves accessing and extracting collected survey information, choosing the specific dataset, ensuring data integrity and security, making backups, organizing and documenting the data, and finally proceeding with the data analysis, following the research methodology and objectives, to extract valuable insights and conclusions.

Figure 1
Data of Respondents' Identification

1. Domisili Responden
983 jawaban



The respondents' identification is categorized into five distinct clusters based on key demographic variables: domicile, education, gender, occupation, and age. This clustering allows for a structured analysis that can reveal insights into how different demographic groups within the community perceive and engage with the variables under study, shedding light on potential variations in perceptions, participation, and acceptability, and contributing to a more nuanced understanding of the Harmony Index in Bekasi City.

Figure 2
Data of PPA Scores from Variables Xi

3. Berapa nilai yang saudara terima untuk ketersediaan dan kemudahan memperoleh makanan saat ini?
983 jawaban

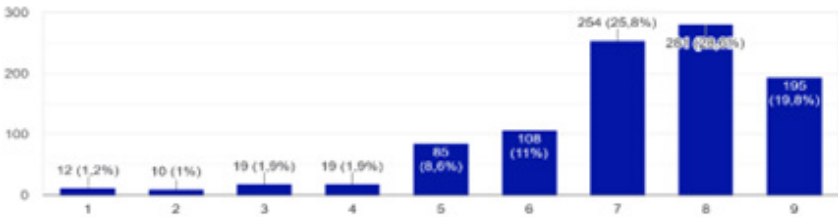


Figure 3

[illegible]

Non-Structural Data

Vol. 02, No. 02, January 2024

Secondly, the open-ended questions within the survey provide a rich source of qualitative feedback data. This open-question mining process involves extracting valuable suggestions, recommendations, and critiques from respondents, offering a deeper understanding of community perspectives and actionable insights that can inform and enhance the research findings.

Data Analysis

Data analysis for this research involves a multifaceted approach, encompassing quantitative and qualitative methods. It begins with the examination of structured data, including the PPA scores for each variable and demographic clusters, to assess how different groups perceive and engage with the variables. This quantitative analysis is complemented by the qualitative exploration of non-structural data, mined from open-ended questions and additional questionnaires, which provides nuanced insights and context. Integration of Perception, Participation, and Acceptability data, coupled with statistical tests and regression analysis, allows for a comprehensive assessment of the Harmony Index. The outcome of this data analysis phase will not only offer a comprehensive understanding of the research's central concepts but also provide a basis for policy recommendations and practical implications for fostering harmony in Bekasi City.

Analysis of Regularity

The analysis of regularity in the research is a commitment of stakeholders to examine patterns, trends, and consistencies within the collected data. This involves the identification of recurring behaviors, associations, or characteristics across various aspects of the research, such as community responses to specific variables, clusters, or demographic groups. By uncovering these regularities, researchers can gain valuable insights into the factors contributing to harmony within Bekasi City and understand how certain variables and community segments consistently influence the Harmony Index. This analysis of regularity enhances the robustness of the research findings and contributes to a more informed and data-driven understanding of the dynamics at play in the community. Based on "Permen PAN RB N.14 Tahun 2017" regularly is by yearly.

Analysis of Response Rate (RR)

The analysis of RR is a critical component of the research that assesses the level of engagement and participation from the community in the survey. This analysis involves the calculation and examination of the percentage of respondents who completed the survey out of the total target population. By evaluating the RR, researchers can gauge the representativeness and reliability of the data collected. A high RR indicates a more comprehensive and inclusive dataset, while a lower RR may raise concerns about potential biases. Understanding the factors influencing RR rates, such as demographic clusters or survey distribution methods, allows for a more thorough assessment of the research's external validity and the extent to which the findings can be generalized to the broader population of Bekasi City. Data is 982 responses from an estimated 10000 persons invited and RR 9,82%. It is categorized as low response with the common RR under online survey around 10% to 30%.

Analysis of Scoring Significance (SS)

The analysis of Scoring Significance (SS) is a vital step in the research, where the PPA scores are categorized and compared to a reference score (RS) set at 6.5 on a center position scale of 9. The RS includes a 30% markup from the midpoint of the scale. The SS analysis assesses the extent to which the PPA scores deviate from this reference score, allowing researchers to identify whether the community's perceptions, participation, and acceptability of the variables are significantly higher or lower than the established benchmark. This analysis provides a valuable context for understanding the impact of these variables on the Harmony Index and the degree to which they align with the desired level of harmony in Bekasi City. Data indicate 30 points examinations then 29 points (29 of 30) under "significant" instead of 1 in not-significant. The one is a score of acceptability (6,30 vs 6,5) of the well-being justice variable. The total index score indicates 7,39 (great category).

Analysis of Standard Deviation (SD)

The analysis of standard deviation (SD) in the research refers to the variation or spread in the PPA scores of the community for each variable on a scale of 9. The established standard for this scale is a score of 2.0. The analysis of SD allows researchers to assess how

much the responses diverge from the average score for each variable, indicating the level of variability in the community's perceptions, participation, and acceptability. A higher SD suggests greater dispersion in scores, while a lower SD indicates more consistency. This analysis provides valuable insights into the degree of agreement or disagreement within the community regarding the variables and their impact on the Harmony Index in Bekasi City. Data indicate that in 30-point examinations, all 30 of 30 have SD scores below 2.0. An SD (Standard Deviation) below 2.0 in the analysis of PPA scores for each variable can suggest two key insights:

1. **Cohesiveness of People:** A low SD indicates a high level of agreement or consensus among the community members regarding the variable in question. When the PPA scores cluster closely around a mean score and the SD is low, it signifies that the community tends to share similar perceptions, levels of participation, and acceptability for that variable. This cohesiveness suggests a common understanding or perspective among the community members regarding the variable.
2. **Non-Conflict Level:** A low SD can also imply that there is a reduced level of conflict or divergence in the community's views and engagement with the variable. When the SD is below 2.0, it indicates that the majority of respondents are in relative agreement, and there is less variation in their responses. This suggests that the community is generally aligned in their perceptions and participation, which can contribute to a non-conflict or harmonious environment about that variable.

In summary, an SD below 2.0 signifies a degree of cohesiveness and a lower likelihood of conflict in the community's perspectives and actions related to the variable being analyzed.

The proportion of Non-engaged People

In this research, respondents are grouped into distinct categories for acceptability scores, based on their scoring patterns. Those who score between 1 and 3 are identified as "non-engaged people," reflecting a lower level of engagement with the variables being examined. Respondents scoring between 4 and 6 falls into the

“moderate” category, representing individuals with a mid-range level of engagement. Those who score between 7 and 9 are categorized as “engaged,” indicating a high degree of involvement and positive connection with the variables in question.

This categorization allows for a more refined analysis of how different segments of the community engage with and perceive these variables, contributing to a deeper understanding of the Harmony Index in Bekasi City. Data indicate non-engaged proportions in each variable are 4,1%; 8,1%; 3,4%; 4,1%; 4,5%; 2,8%; 2,4%; 3,3%; 4,8%; 3,5% and average is 3,68%. It is quite small and far below to reference 10% in case of public issues. The data give very clear insight that the highest one is 8,1% for variable X2.

Correlation for Score of Perception Participation and Acceptability

The correlation analysis for the Score of Perception, Participation, and Acceptability provides valuable insights into the relationships between these variables. In your research, the findings indicate strong and medium correlations as follows:

1. The strong correlation range (0.639-0.804) between Score of Perception and Participation suggests a robust and positive association between how the community perceives the variables and their level of active engagement or participation. This implies that when the community holds more favorable perceptions, they are more likely to actively participate in activities related to these variables.
2. The medium correlation range (0.461-0.672) observed between Score of Perception and Acceptability indicates a moderate, positive connection between how the community perceives the variables and their level of acceptability. While not as strong as the Perception-Participation correlation, this suggests that a positive perception often goes hand in hand with a higher degree of acceptability among the community members.

Data of Non-Structural

Here is a summary of 10 points from 1009 suggestions, recommendations, and critiques from people to improve the harmonious life of society in Bekasi:

1. Increased tolerance and respect for each other. This can be done through socialization, education, and activities that bring people from different backgrounds together.
2. Improved welfare of the people. Social inequality can be one of the factors that disrupt the harmonious life of society. Therefore, the government needs to improve the welfare of the people, especially the poor.
3. Increased justice and law enforcement. Justice and fair and equitable law enforcement can provide a sense of security and comfort to the community.
4. Increased role of the government. The government needs to be more active and close to the people to listen to their aspirations and needs.
5. Increased role of the community. The community also needs to play an active role in maintaining social harmony. This can be done through social and cultural activities that bring people from different backgrounds together.
6. Improvement of infrastructure and public facilities. Improving infrastructure and public facilities can improve people's welfare and reduce social inequality.
7. Improvement of the quality of education. Quality education can increase people's understanding of tolerance and respect for each other. Education can also increase people's productivity and reduce stress that can lead to conflict.
8. Improvement of the quality of health. Good health can increase people's productivity and reduce stress that can lead to conflict. The government needs to improve public health through the development of health centers, hospitals, and other health programs.
9. Increased security. Security that is guaranteed can provide a sense of security and comfort to the community. The government needs to improve public security by increasing patrols, enforcing the law, and preventing crime.
10. Cultural preservation. Cultural preservation can strengthen the sense of togetherness and unity of the community. The government needs to preserve local culture through various

activities, such as cultural festivals, arts and cultural training, and cultural exhibitions.

Of course, these points are just proposals that need to be further discussed and refined. The government, community, and other stakeholders need to work together to achieve a harmonious social life in Bekasi.

Conclusion and Recommendation

Conclusion

The culmination of this study offers profound insights into the measurement of the Harmony Index in Bekasi City, underpinned by the framework of the Artificial Intelligence era. Through a meticulously designed quantification process, sociometric analysis, and a numerical scale of 9, we have gained a comprehensive understanding of the social dimensions that contribute to harmony within the community.

The analysis of variables Xi from the vantage point of Perception, Participation, and Acceptability (PPA) has illuminated the nuanced relationships between community perceptions and their engagement with these variables. The AI-driven extraction of non-structural data has added layers of depth and context to our comprehension of goodness, benefit, and well-being within Bekasi City.

Through the application of statistical analyses, including correlation, variance, and standard deviation, we have explored the data to uncover regularities, response rates, significance scores, cohesiveness, and proportion of non-engaged people and also dismiss from 1009 items of non-structural narratives data. These findings have allowed us to categorize respondents based on their levels of engagement and have provided valuable insights into the state of harmony within the community.

As we conclude this research, it is clear that harmony is a multifaceted construct that is deeply influenced by the perceptions, participation, and acceptability of the community members. The study's findings contribute to the body of knowledge surrounding social well-being and lay the groundwork for informed policy recommendations. We hope that this research serves as a catalyst for positive change and contributes to the enhancement of harmony in Bekasi City, ultimately benefiting the lives of its residents.

Recommendation

Serving as a pilot project, this research has provided valuable insights into the complex dynamics of harmony measurement, leveraging advanced quantification processes, sociometric analyses, and AI-driven data extraction from non-structural narratives. These insights are instrumental in fostering social well-being and understanding the interplay between perception, participation, and acceptability within the community. By implementing the study's methodologies and lessons learned, we can apply tailored interventions and policies that aim to enhance well-being and promote harmony across the diverse landscape of Indonesia. However, such an ambitious endeavor also requires careful planning, resources, and partnerships with local stakeholders, as well as a commitment to adapt and evolve the research framework to accommodate regional variations.

This pilot project sets a solid foundation for a nationwide initiative to improve the quality of life and harmony for communities across Indonesia, showcasing the potential of data-driven approaches and AI-enabled insights in the field of social sciences.

Reference:

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