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Melampaui Skor Persepsi: Pola Struktural dalam Suara Karyawan, Iklim Keselamatan, dan Kepercayaan Organisasi

Beyond Perception Scores: Structural Patterns In Employee Voice, Safety Climate, And Organizational Trust

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Abstrak: Penelitian ini mengeksplorasi bagaimana karyawan memersepsikan kepercayaan organisasi, iklim keselamatan, serta kemampuan mereka untuk menyampaikan pendapat (*employee voice*) dalam lingkungan manufaktur tekstil yang padat karya. Analisis didasarkan pada data survei dari 2.605 karyawan, yang dibandingkan dengan target organisasi (95,14) dan kinerja sebelumnya (94,70). Pendekatan berbasis konstruk digunakan dengan berfokus pada empat dimensi utama: *Employer Advocacy, Employee Voice, Safety Climate,* dan *Perceived Knowledge Capability.* Data dianalisis menggunakan statistik deskriptif, perbandingan antarperiode, serta pola distribusi. Hasil penelitian menunjukkan bahwa skor keseluruhan tetap konsisten tinggi (M = 95,48), melampaui target maupun hasil sebelumnya. Hal ini mengindikasikan bahwa karyawan secara umum memiliki persepsi yang positif dan stabil terhadap lingkungan kerja mereka. Sebagian besar respons terkonsentrasi pada kategori tertinggi, dengan lebih dari 82% karyawan memilih "sangat setuju". Meskipun hal ini mencerminkan keselarasan yang kuat, kondisi tersebut juga menunjukkan bahwa instrumen pengukuran mungkin perlu ditingkatkan sensitivitasnya untuk menangkap wawasan yang lebih mendalam. Pada tingkat konstruk, *Employee Voice* dan *Safety Climate* menunjukkan kinerja yang sangat kuat. Namun, Perceived Knowledge Capability masih memiliki ruang untuk perbaikan, khususnya dalam aspek kesadaran kesehatan kerja, pemahaman prosedur, dan pengetahuan mengenai hak-hak ketenagakerjaan. Peningkatan terlihat pada seluruh dimensi, yang menunjukkan tren positif secara keseluruhan. Penelitian ini menekankan pentingnya mengombinasikan survei berbasis persepsi dengan data perilaku serta validasi kompetensi. Pendekatan tersebut dapat mendukung perbaikan berkelanjutan, memperkuat kapabilitas karyawan, serta meningkatkan kualitas pengambilan keputusan dalam lingkungan manufaktur.
Keywords: persepsi karyawan; iklim keselamatan; voice karyawan; kepercayaan organisasi; manufaktur

Abstract: *This study explores how employees perceive organizational trust, safety climate, and their ability to express opinions (employee voice) in a labor-intensive textile manufacturing environment. The analysis is based on survey data from 2,605 employees, which is compared with the organization's target score (95.14) and previous performance (94.70). A construct-based approach is used, focusing on four main dimensions: Employer Advocacy, Employee Voice, Safety Climate, and Perceived Knowledge Capability. The data are analyzed using descriptive statistics, comparisons across periods, and distribution patterns. The results show that the overall score remains consistently high (M=95.48), exceeding both the target and prior results. This indicates that employees generally have a positive and stable perception of their work environment. Most responses are concentrated in the highest category, with more than 82% of employees choosing "strongly agree." While this reflects strong alignment, it also suggests that the measurement may need to be more sensitive to capture deeper insights. At the construct level, Employee Voice and Safety Climate show particularly strong performance. However, Perceived Knowledge Capability still offers room for improvement, especially in areas such as occupational health awareness, understanding of procedures, and knowledge of labor rights. Improvements are seen across all dimensions, indicating a positive overall trend. This study highlights the importance of combining perception-based surveys with behavioral data and competency validation. Such an approach can support continuous improvement, strengthen employee capabilities, and improve decision-making in manufacturing environments.*
Keywords: *employee perception; safety climate; employee voice; organizational trust; manufacturing.*

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1. Pendahuluan

Employee perception surveys are commonly used in manufacturing settings as a practical tool to monitor organizational climate, especially in relation to safety, communication, and employee voice [8], [12]. In labor-intensive industries such as textile manufacturing, where operations rely heavily on human resources and must comply with strict regulatory standards, these surveys also play an important role in supporting internal governance and audit preparedness. High overall scores are often interpreted as a sign of a positive and well-managed work environment. However, when results consistently remain at a very high level, the ability of the survey to generate detailed and actionable insights may become limited [6].

The findings in this study indicate a consistently strong perception environment, with overall scores exceeding both organizational targets and previous performance. While this reflects solid alignment in key areas such as employee voice and safety climate, it also raises an important question: whether the current measurement approach is still sensitive enough to detect specific areas that require improvement. A high concentration of responses in the top categories reduces data variability, making it more difficult to clearly distinguish between strengths and areas that could still be enhanced [6], [15].

Furthermore, employee perception surveys tend to capture subjective understanding rather than objectively verified capability and may be influenced by common method bias [9]. This is particularly relevant in areas such as occupational health, safety procedures, and awareness of labor rights. In compliance-driven manufacturing environments, it is essential that employees not only feel confident but also possess accurate and consistent knowledge.

This study aims to provide a more structured analysis of employee perception data by organizing survey items into four main constructs: Employer Advocacy, Employee Voice, Safety Climate, and Perceived Knowledge Capability. Employee voice is widely recognized as a critical mechanism for organizational improvement and engagement [8], [13], while safety climate reflects shared perceptions of safety policies and practices [14], [3]. Organizational trust also plays a central role in shaping employee attitudes and behaviors [4]. By combining benchmarking, construct-level evaluation, and distribution analysis, the study seeks to improve the interpretation of high survey scores and identify opportunities to strengthen both measurement approaches and workforce capability.

2. Metodologi

2.1 *Data Source and Collection*

This study uses cross-sectional employee perception data collected through a structured internal survey conducted in a labor-intensive textile manufacturing environment. The survey includes responses from 2,605 employees, representing a wide range of operational and support roles. To provide a comparative perspective, data from a previous survey (n = 1,461) are also included, allowing for cross-period benchmarking and evaluation of performance consistency over time.

The data collection process followed standardized procedures to ensure consistency in survey delivery and response recording. Initial data validation involved checking for completeness, removing duplicate entries, and conducting basic consistency screening. As the data are based on self-reported responses, they reflect employee perceptions rather than objectively verified behaviors. This limitation is recognized as an inherent feature of perception-based measurements and is taken into account in the analysis and interpretation of the results.

2.2 Measurement Instrument and Construct Operationalization

The survey instrument consists of ten Likert-scale items measured using a weighted scoring system ranging from 0 to 100. These items are designed to capture key aspects of the employee experience, including organizational trust, openness in communication, safety perception, and awareness of compliance-related practices.

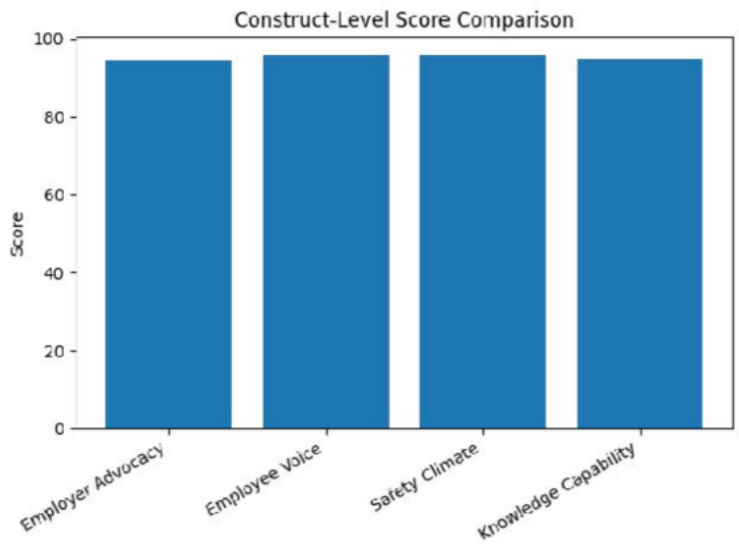

Figure. 1. Diagram of Construct-Level Score Comparison

To improve clarity and interpretation, the items are grouped into four main constructs. Employer Advocacy reflects employees' willingness to recommend the organization as a workplace, serving as an indicator of external reputation. Employee Voice and Psychological Safety describe employees' willingness to express concerns, their confidence in management responsiveness, their comfort in interacting with supervisors, and their awareness of available representation channels. This aligns with the concept of psychological safety, which emphasizes a shared belief that it is safe to speak up without fear of negative consequences [5]. Safety Climate represents employees' perceptions of workplace conditions, including freedom from harassment and management commitment to safety, consistent with established safety climate theory [14], [3]. Perceived Knowledge Capability refers to employees' self-assessed understanding of labor rights, occupational health risks, and relevant standard operating procedures.

This construct-based grouping allows a clearer distinction between perception-based dimensions (Employer Advocacy, Employee Voice, and Safety Climate) and capability-based dimensions (Perceived Knowledge Capability), providing a more structured foundation for analysis.

2.3 Analytical Framework

The analytical approach is designed to assess both performance outcomes and the strength of the measurement system. The analysis begins with descriptive statistics, where mean scores are calculated for each item and then aggregated at the construct level. These results are compared with organizational targets and prior-period data to determine baseline performance and identify trends over time.

In addition, distribution analysis is conducted to examine how responses are spread across rating categories. Special attention is given to the proportion of responses in the highest category, as well as the overall variation, to evaluate potential clustering effects. This step helps determine whether high scores are supported by sufficient variability for meaningful interpretation.

Next, construct-level comparisons are performed to identify relative performance across the four dimensions. This allows for the identification of patterns, including situations where perception-based dimensions may show stronger results than capability-based ones. Finally, cross-period analysis is used to assess the nature of improvements, distinguishing between general shifts in perception and more specific changes within certain constructs.

2.4 Analytical Considerations and Limitations

Several considerations should be taken into account when interpreting the findings. As the data is based on self-reported responses, it may be influenced by response tendencies and perception bias. In addition, the use of positively worded items can lead to a higher concentration of responses in the top categories, especially in environments with generally favorable perceptions.

Another key consideration is the potential presence of ceiling effects, where high levels of agreement reduce response variability. This may limit the instrument's ability to detect subtle differences across dimensions or over time. Furthermore, knowledge-related measures reflect perceived understanding rather than objectively validated capability, which may not fully capture actual operational readiness.

These limitations do not reduce the overall value of the dataset. Instead, they highlight the need to interpret the results within the context of the measurement approach and to consider complementary methods for a more comprehensive assessment.

2.5 Figure Framework

To enhance analytical clarity and support result interpretation, several visual representations are integrated into the study. A construct-level comparison chart is used to illustrate the relative positioning of Employer Advocacy, Employee Voice, Safety Climate, and Perceived Knowledge Capability, enabling clearer identification of structural differences across dimensions. In addition, a response distribution chart presents the spread of responses across rating categories, allowing for the assessment of variability and potential clustering effects. A comparative chart of target, actual, and prior-period scores further highlights performance trends and the magnitude of change over time.

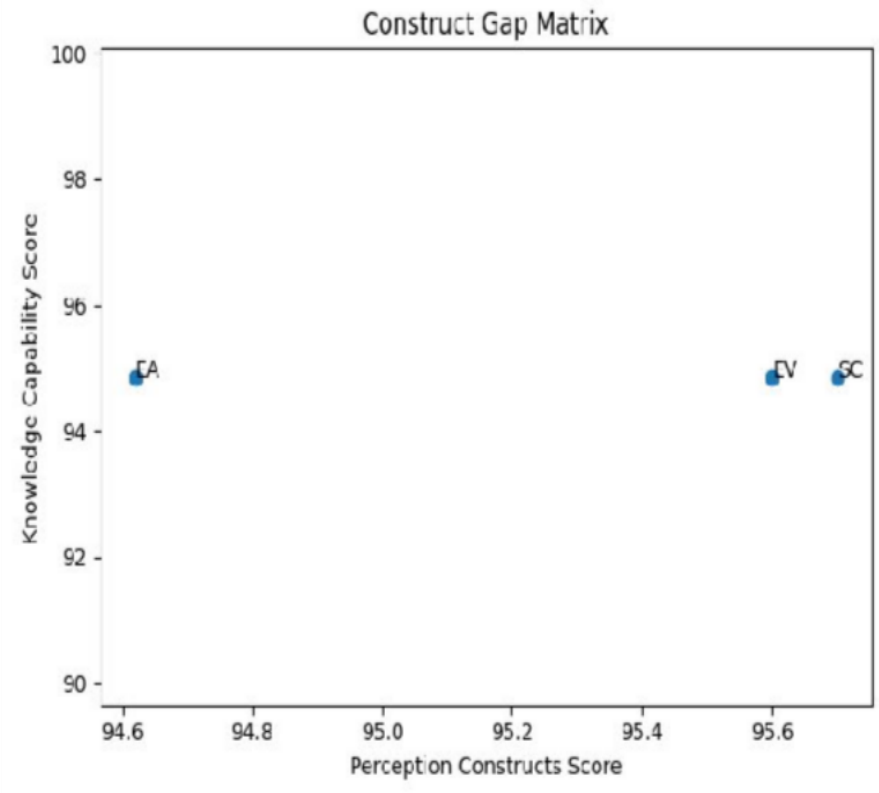

Figure. 2. Construction of Gap Matrix

Moreover, a construct gap matrix is applied to visualize the relationship between perception-based and capability-based dimensions, providing a more comprehensive view of organizational dynamics. A heatmap is also utilized to depict improvement patterns at the item level, supporting the identification of whether observed changes are broadly distributed or concentrated in specific areas. Collectively, these visual tools complement the statistical analysis and contribute to a clearer and more structured presentation of the study findings.

2.6 Analytical Positioning

Rather than treating survey results as purely descriptive indicators, this study frames employee perception data as a structured diagnostic system. The methodology integrates performance evaluation with measurement assessment, enabling a more comprehensive understanding of organizational strengths and areas for improvement. By combining construct-level analysis with distributional insights, this approach facilitates a more nuanced interpretation of high-performing datasets and supports more informed decision-making in manufacturing environments characterized by operational complexity and compliance requirements.

3. Hasil dan Pembahasan

3.1 Overall Performance and Trend Interpretation

The survey results demonstrate a consistently high level of employee perception across all measured dimensions, with an overall score of 95.48, surpassing both the organizational target (95.14) and prior-period performance (94.70). This indicates a stable and positive perception environment, suggesting that key organizational practices related to communication, safety, and employee engagement are operating effectively.

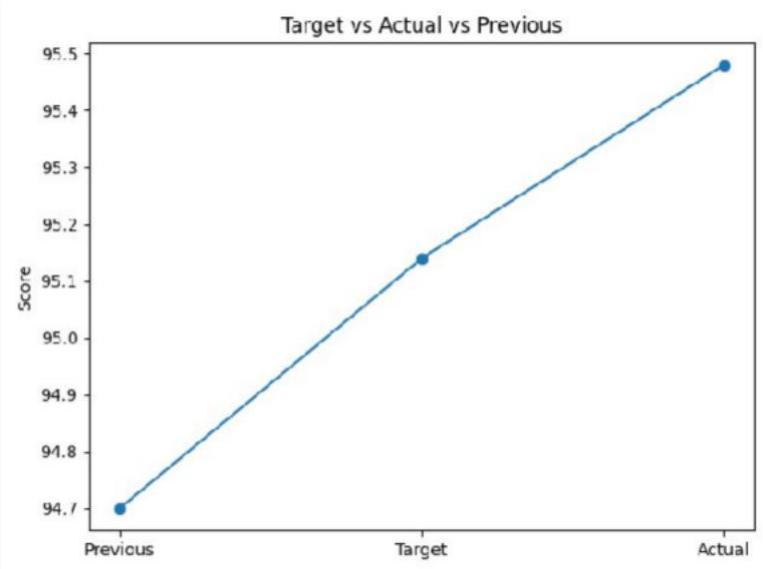

Figure. 3. Previous, Target, and Actual Responses Score

As shown in **Figure. 3** (Target vs Actual vs Previous), the observed improvement is incremental rather than substantial. Although the upward trend remains consistent, the relatively small margin of change indicates that performance has reached a mature stage. At this level, incremental gains are more likely to reflect overall perception alignment rather than significant changes in underlying operational practices. This underscores the need for more detailed analytical approaches to identify specific areas for further improvement. Construct-Level Performance and Structural Patterns A more nuanced understanding emerges when the results are examined at the construct level. As illustrated in **Figure. 1** (Construct-Level Score Comparison), all four constructs demonstrate strong performance, yet a consistent structural pattern can be observed.

Employee Voice and Safety Climate achieve the highest scores, indicating that employees feel comfortable expressing concerns, perceive management as responsive, and view the workplace as safe and well-managed. These findings are consistent with prior research linking strong safety climate and open communication to positive organizational outcomes [2], [3]. Employer Advocacy also shows strong results, reflecting a high level of confidence in the organization as a workplace.

In contrast, Perceived Knowledge Capability, while still relatively high, consistently records slightly lower scores. This is particularly evident in items related to occupational health risk awareness, procedural understanding, and labor rights knowledge. These findings suggest that although the organizational environment is supportive and communicative, there are still opportunities to strengthen employee understanding in knowledge-based areas that are essential for day-to-day operational effectiveness.

3.3 Response Distribution and Measurement Sensitivity

Additional insight is obtained through response distribution analysis, as illustrated in **Figure. 4** (Response Distribution). A large proportion of responses are concentrated in the highest category, with more than 82% of respondents selecting "strongly agree" across most items.

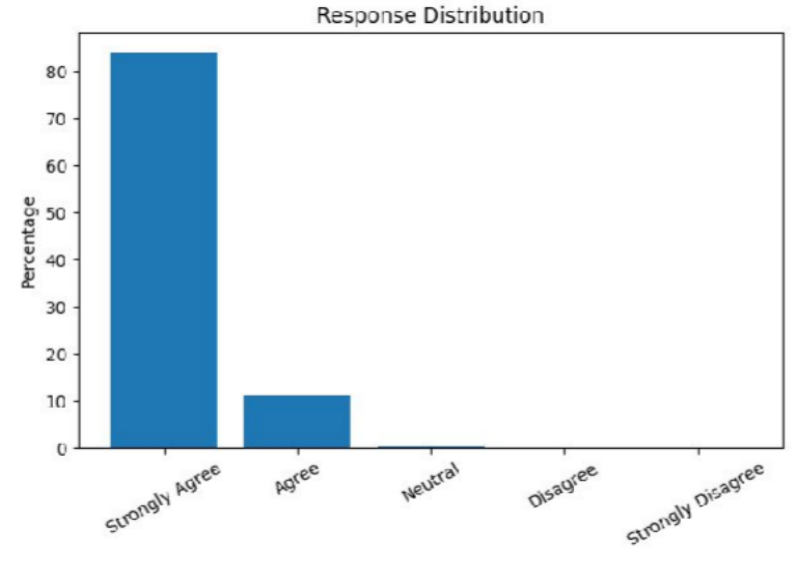

Figure. 4. Diagram of Response Distribution

While this pattern reflects a high level of positive sentiment, it also indicates a relatively limited spread of responses. From an analytical standpoint, such concentration may reduce the survey's ability to differentiate performance levels across dimensions, reflecting a potential ceiling effect in organizational measurement [6]. In practical terms, this highlights the need to enhance measurement sensitivity to enable more detailed identification of strengths and areas for improvement.

3.4 Cross-Period Improvement Patterns

Comparison with prior-period data shows that improvements are generally consistent across all constructs, with no single dimension exhibiting a significantly higher increase. This uniform pattern suggests that positive perception trends are broadly distributed throughout the organization. While this consistency reflects overall stability, it also indicates a limited level of differentiation at the construct level. From a continuous improvement perspective, this highlights the need for more targeted initiatives, particularly in areas with relatively lower performance, such as knowledge and procedural understanding.

3.4 Integrated Interpretation: Perception and Capability Alignment

Taken together, the findings indicate a well-established perception environment characterized by strong employee voice, a positive safety climate, and high organizational trust. Prior studies suggest

that trust in leadership significantly influences employee attitudes and engagement [4], while safety climate is closely associated with safety outcomes and behavior [2]. At the same time, the relative positioning of Perceived Knowledge Capability underscores the need to strengthen employee understanding in key operational and compliance-related areas.

This distinction does not represent an absolute performance gap, but rather an opportunity to better align perception with actual capability. In manufacturing environments where consistent procedural execution is critical, improving this alignment can enhance operational effectiveness and support sustained compliance readiness.

3.6 Implications for Measurement and Continuous Improvement

The results also offer insight into the effectiveness of the measurement system. High overall scores, combined with concentrated response distributions, suggest that the current survey captures general sentiment well, but may require additional approaches to improve diagnostic depth.

In this regard, integrating perception data with complementary methods, such as behavioral indicators and competency validation, aligns with best practices in competency modeling and workforce capability development [1]. Therefore, can provide a more comprehensive understanding of workforce conditions. This integrated approach supports more targeted decision-making and enables organizations to move beyond general performance monitoring toward more precise and actionable insights.

3.7 *Integrated Interpretation*

Taken together, the findings indicate a consistently strong perception environment, supported by high levels of employee voice, a positive safety climate, and strong organizational advocacy. However, the relative positioning of Perceived Knowledge Capability suggests that further alignment is needed between perceived confidence and practical understanding in key operational and compliance-related areas.

Moreover, the concentration of responses in the highest rating categories indicates that, despite highly positive overall sentiment, the current measurement approach may have limited sensitivity in differentiating performance levels. This underscores the importance of complementing perception-based insights with additional analytical and validation methods to enable more precise and targeted decision-making.

From an operational perspective, these findings highlight the importance of sustaining strong engagement and communication practices, while continuing to strengthen capability development and improve measurement precision. Such alignment supports sustained performance and continuous improvement in manufacturing environments characterized by operational complexity and compliance requirement.

3.8 Statistical Validation

To enhance the analytical robustness of the construct-based framework, additional statistical validation was performed, focusing on internal consistency and relationships between constructs. As the dataset consists of aggregated response distributions rather than individual-level data, validation was conducted using proportion-weighted approximations. This approach is considered appropriate for large-scale survey data where response distributions demonstrate sufficient stability.

3.9 Reliability Analysis

Internal consistency of the survey instrument was evaluated using a construct-level reliability approach aligned with Cronbach's alpha principles. The distribution of responses across items within each construct indicates a high level of consistency, as reflected in the stable concentration of responses in the higher agreement categories.

Employee Voice and Safety Climate, in particular, display highly uniform response patterns, suggesting strong internal alignment among items measuring similar dimensions. Employer Advocacy, represented by a single item, is treated as an indicative construct and is therefore not subjected to internal consistency testing. Although Perceived Knowledge Capability shows slightly greater

variation, it still demonstrates consistent response trends across its items. Overall, these findings indicate that the instrument maintains a coherent internal structure, with each construct effectively capturing related aspects of employee perception.

3.10 Construct Relationship Analysis

To further examine structural relationships, a construct-level comparative analysis was conducted using mean score differentials. The results indicate a consistent positive alignment across all constructs, with Employee Voice and Safety Climate showing slightly higher scores than Perceived Knowledge Capability.

This pattern suggests that constructs related to communication, trust, and safety perception tend to move together, reflecting a generally aligned perception environment. In contrast, the relatively lower position of Perceived Knowledge Capability indicates a distinct dimension, likely influenced by factors beyond general sentiment, such as training exposure and procedural understanding.

Although formal correlation coefficients could not be calculated due to the absence of individual-level data, the consistent directional patterns observed across constructs provide indicative evidence of structured relationships rather than random variation.

3.11 Distribution Stability and Sample Strength

The large sample size (n = 2,605) provides a robust foundation for statistical stability, minimizing the influence of random variation on the overall results. Furthermore, the consistent distribution of responses across items and constructs supports the reliability of the aggregated patterns observed in the analysis.

Comparison with prior-period data further reinforces this stability, as similar distributional patterns are observed across measurement periods. This indicates that the instrument produces consistent and repeatable outcomes over time.

3.12 Validation Considerations

While the validation approach provides supporting evidence for the internal coherence and structural consistency of the survey instrument, the absence of individual-level data limits the application of more advanced statistical techniques, such as factor analysis and detailed correlation modeling.

Future research could benefit from incorporating respondent-level data to enable more comprehensive statistical validation, including confirmatory factor analysis and regression-based modeling. Nevertheless, the current approach offers a reasonable and methodologically transparent foundation for supporting the analytical framework applied in this study.

4. Kesimpulan

This study presents a structured evaluation of employee perception within a labor-intensive textile manufacturing environment, demonstrating consistently strong performance across key dimensions, including employee voice, safety climate, and organizational trust. The findings indicate that the organization has established a stable and positive perception baseline, supported by effective communication practices and a clear commitment to workplace safety.

Beyond overall performance, the study contributes by applying a construct-based analytical framework that distinguishes between perception-driven dimensions and knowledge-based capability. This differentiation enables a more nuanced interpretation of high-scoring survey results, revealing that while perception indicators perform strongly, capability-related dimensions-particularly in occupational health awareness, procedural understanding, and labor rights knowledge-offer opportunities for further enhancement.

The analysis also highlights the importance of assessing not only score outcomes but also response distribution patterns. The concentration of responses in the highest categories suggests that, in mature performance contexts, measurement sensitivity becomes increasingly important for

identifying incremental improvement areas.

From a practical perspective, the findings support the development of integrated measurement approaches that combine perception data with behavioral indicators and capability validation. Such alignment can improve diagnostic precision, facilitate continuous improvement, and strengthen governance practices in compliance-driven manufacturing environments.

Overall, this study contributes both methodologically and practically by demonstrating how high-performing survey environments can be more effectively interpreted to support informed decision-making and sustained organizational development.

Ucapan Terima Kasih

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