

Exploring The Impact of Authentic Leadership: A Statistical Analysis of Supervisor Qualities and Employee Retention Rates in U.S. Manufacturing

William Adams, Campbellsville University

Rose Carter, Campbellsville University

Kathy Edwards, Campbellsville University

Abstract

Using the Authentic Leadership Questionnaire, this study analyzes the influence of authentic leadership on employee retention rates within a manufacturing facility in South Carolina, United States. Through a comprehensive statistical analysis, the study examines the correlation between supervisor qualities emblematic of authentic leadership—such as self-awareness, internalized moral perspective, balanced processing of information, and relational transparency—and the propensity of employees to remain within their organizations. Utilizing a dataset comprising responses from over 103 manufacturing employees, the research employs quantitative methods to explore the impact of these leadership qualities on retention rates. This study contributes to the existing body of knowledge by providing empirical evidence that underscores the importance of authentic leadership in fostering a stable and committed workforce in the manufacturing sector. Implications for management practices and future research directions will also be discussed, suggesting that organizations may benefit from implementing programs that emphasize the cultivation of authenticity in their leaders.

Keywords: Authentic leadership, employee retention, manufacturing, leadership development

Introduction

Talent retention poses a significant challenge for organizations across various sectors and understanding the elements that contribute to employee commitment and longevity has become essential. This interest is especially pronounced in the manufacturing sector, characterized by its unique operational demands and workforce dynamics. Among the countless factors influencing employee retention, leadership style emerges as a pivotal element, shaping the organizational environment and, consequently, the employee's decision to stay. Among the leadership styles explored, authentic leadership, with its emphasis on genuineness, ethics, and transparent relationships, stands out as a potentially influential factor in fostering employee commitment and reducing turnover.

This study investigates the relationship between authentic leadership and employee retention within a manufacturing facility located in South Carolina, United States, aiming to provide empirical evidence regarding how supervisors' qualities impact organizational commitment. The study employs the Authentic Leadership Questionnaire (ALQ) to evaluate the presence of authentic leadership qualities among supervisors and examines their correlation with employee retention rates. The ALQ assesses four core dimensions of authentic leadership: self-awareness, internalized moral perspective, balanced processing of information, and relational transparency. These dimensions reflect a leadership approach that prioritizes ethical standards, encourages open communication, and facilitates a deeper connection between leaders and their teams. While prior research has explored authentic leadership and its relationship to employee retention in various contexts, relatively few studies have examined this dynamic specifically within the U.S. manufacturing sector. By focusing on a manufacturing facility in South Carolina, this study addresses this gap and provides empirically grounded insights that can guide leadership development and talent management strategies in similar organizational environments.

Literature Review

Employee Retention

Human resource management continues to evolve and presents new challenges for companies in employee retention, particularly in the millennial generation. Lee et al. (2022) studied the impact of generational differences on employee retention and motivation, while emphasizing the customization of retention strategies. The results suggest that a one-size-fits-all approach may not be effective in today's complex workforce and programs should be structured to meet the diverse needs of different age groups. Azami et al. (2023) expanded upon this issue by focusing on what inspires millennial employees to stay with small and medium-sized companies in the Klang Valley of Malaysia. This study highlights the unique motivations faced by this demographic segment and offers key insights for businesses that want to improve their retention strategies.

Shah et al. (2021) explored HR practices and how specific measures such as training, compensation, and rewards influence employee loyalty, which plays an important role in improving retention. In addition, their study provides a valid foundation for organizations trying to fine tune their HR approaches with the end goal of improved retention outcomes. Chatzoudes and Chatzoglou (2022) expanded upon this discussion by developing a connective framework that combines various insights from the literature on employee retention. Their efforts help to bridge the gap between academic theories and practical strategies that can be implemented by HR professionals and strengthen our understanding of the factors that encourage employees to stay with their companies.

The role of leadership in retaining employees was investigated by Tanuwijaya and Jakaria (2022), with emphasis on how transformational and toxic leadership styles impact retention, and job satisfaction was identified as the primary factor. Notably, this

study offers new insights into the influence that leadership behavior can have on employee retention, guiding organizations as they navigate the complex relationship between the styles of the leaders and the commitment levels of the employees. Furthermore, Xuecheng et al. (2022) expanded the discussion through the integration of leadership theories with social exchange theory to provide a better understanding of how leadership and social dynamics can be used to enhance retention strategies and offer practical insights for organizations.

All these studies collectively illustrate a detailed picture of employee retention and cover a wide range of factors from leadership styles and HR practices to the unique challenges produced by generational differences in the workplace. These insights offer valuable guidance for both scholars and practitioners as they seek to keep valuable employees engaged and committed to their organizations.

Manufacturing Retention

Employee retention is a common challenge faced by organizations across many industries and all of them want to foster and retain a dedicated workforce. This challenge calls attention to the changing dynamics of the global job market, ever-changing expectations of employees, and technological advancements, which significantly impact worker engagement and loyalty. In the manufacturing industry, retention issues become urgent and unique. The combination of skilled labor with the integration of new technology is required for operational efficiency and innovation. Employee retention is a key element to maintain organizational stability, competitive advantage, and operational excellence. Therefore, one must understand the distinctive factors affecting retention in the manufacturing industry to craft strategies that meet the needs and challenges specifically faced by this industry.

In the manufacturing sector, there are diverse variables that influence job satisfaction, engagement, organizational initiatives, and the overall work environment, including employee well-being and turnover intentions. Santhanam and Srinivas (2019) presented the essential role of employee happiness and engagement in reducing burnout and turnover, prescribing a workplace environment that promotes well-being and satisfaction as key strategies. Skelton et al. (2019) further built on this analysis by examining the relationship between job satisfaction, job embeddedness, and turnover intentions among manufacturing employees in the southeastern United States of America. They found that a sense of belonging, and contentment are of paramount importance in retaining employees and organizational strategic directions must target activities that emphasize job satisfaction and embeddedness to improve retention.

Specific organizational initiative, like performance management, rewards, and recognition, influence retention, which was explored within Malaysia's manufacturing sector (Subramaniam et al., 2019). Their findings reinforce the powerful effects of these initiatives on employees' desire to stay with their companies and highlight the importance of customized strategies in creating a stable and dedicated workforce. Zulkefli (2023) also conducted a study in Malaysia but investigated the impact of the work environment on retention within manufacturing and construction companies. This

study confirmed the influence of workplace conditions on employee loyalty and enriched our understanding of the role environmental factors play in retention, particularly within specific geographical and industrial contexts, while offering ideas for organizations seeking to create a more favorable work environment.

This collection of studies highlights the complex factors that influence employee turnover and well-being within the manufacturing industry and presents a lack of existing literature in this area involving manufacturing firms in the United States of America. Job satisfaction, employee engagement, targeted organizational initiatives, and the quality of the work environment all play a consequential role in maintaining a content and loyal workforce. The evidence points to the need to improve job satisfaction, provide a sense of belonging, and implement specific organizational actions such as effective performance management and offering appropriate rewards and recognition. Companies that want to decrease turnover and improve employee welfare are advised to adopt an integrated approach that addresses these key factors, which would lead to a more engaged, satisfied, and productive workforce.

Authentic Leadership

After reviewing manufacturing employee retention strategies, it is necessary to investigate the concept of authentic leadership as an influencing factor on their success. Authentic leadership, characterized by transparent, genuine, and ethical leadership behaviors, promotes a work environment that encourages employee loyalty and enhances organizational performance. The effectiveness of retention strategies may be supported by the presence of authentic leaders who can create a culture of trust, respect, and engagement. Authentic leadership plays a role in motivating and retaining employees in the manufacturing sector, and this study seeks to address a gap in the current understanding of retention dynamics.

In the healthcare sector, Baek et al. (2019) evaluated the impact of authentic leadership on job satisfaction and organizational commitment among nurses, with tenure being a moderating factor. The findings indicate that the influence of authentic leadership can vary within the length of tenure, which offers insights for managing leadership dynamics within healthcare work settings. Labrague et al. (2021) also focused on the nursing sector to examine the influence of authentic leadership on nurses' motivation for leadership roles, with the work environment and self-efficacy acting as mediators. On a similar note, Gatling et al. (2016) and Jun et al. (2023) explored how authentic leadership not only fosters organizational commitment, but also reduces turnover intentions, which highlights the critical role of leadership in retention strategies.

Baquero (2023) proposed that workplace well-being is a central factor in the relationship between authentic leadership and employee engagement, specifically applying social contagion theory to illustrate the complex interactions between leadership practices, engagement, and well-being. In the hospitality industry, Du et al. (2021) presented a model that examines how authentic leadership influences employee engagement through psychological pathways with an emphasis on the roles of leader-

member exchange and power distance. These studies address a gap in the literature by detailing the psychological tools through which authentic leaders affect engagement and provide relevant insights for enhancing leadership practices in the hospitality sector.

Ali et al. (2021) explored the relationship between authentic leadership and employee performance, with a focus on the moderating role of cultural work ethics, specifically in the Islamic culture. This investigation presents a unique perspective by combining leadership principles with cultural ethics, revealing how these factors collectively shape the effectiveness of leadership. Jang (2022) expanded the discussion on authentic leadership by exploring its impact on task performance and magnifying our understanding of the direct effects on performance, while emphasizing the importance of psychological capital and performance pressure. Malik et al. (2023) investigated the HEXACO personality model's role in developing authentic leadership qualities and their impact on task performance, which offered a different perspective on the traits that contribute to the emergence of authentic leadership and its organizational outcomes.

Research indicates that authentic leadership is associated with various positive outcomes, including followers' satisfaction with their supervisor, perceived team effectiveness, psychological ownership, work engagement, and follower basic need satisfaction. Peus et al. (2012) conducted a study involving over three hundred individuals from diverse professions, revealing that authentic leadership positively influences followers' satisfaction with their supervisor, followers' organizational commitment, and followers' extra effort. Leroy et al. (2015) surveyed over two hundred followers and thirty team leaders in twenty-five Belgian service organizations, finding a positive relationship between authentic leadership and follower basic need satisfaction. Giallonardo et al. (2010) explored the effects of authentic leadership in a sample of one hundred seventy nurses, revealing that it predicts job satisfaction and work engagement. Finally, Alok and Israel (2012) investigated the impact of authentic leadership on organizational-based psychological ownership and work engagement in a sample of one hundred seventeen working professionals in India, concluding that authentic leadership positively influences organizational-based psychological ownership and work engagement.

In conclusion, authentic leadership has made a significant impact across various sectors and plays an important role in improving employee performance, engagement, organizational commitment, and ethical behavior. This review underscores the valuable contributions of authentic leadership to organizational behavior and management and advocates for further exploration within the manufacturing sector. In this key industry, the researchers aim to guide manufacturers to develop more effective strategies for fostering a committed and high-performing workforce.

Purpose of the Study

The investigation employs quantitative research methodology, analyzing responses from over 103 manufacturing employees to gauge the influence of authentic leadership on their propensity to remain within the organization. This approach allows for a detailed examination of the statistical relationships between the leadership

qualities of supervisors and the retention rates of employees, providing insights into the specific attributes of leadership that are most effective in promoting a stable workforce.

By contributing to the body of knowledge on leadership and employee retention, this study aims to highlight the importance of authentic leadership in the manufacturing sector. It posits that authentic leadership can serve as a key driver in enhancing employee satisfaction and loyalty, thereby reducing turnover rates. Furthermore, the findings of this research offer practical implications for management practices, suggesting that organizations might benefit from developing and implementing programs aimed at fostering authentic leadership qualities among their leaders. Through such initiatives, companies can cultivate work environments that not only support operational success but also promote a committed and engaged workforce. The project concludes by discussing the broader implications of these findings for management theory and practice and proposes directions for future research in the field of leadership and employee retention.

Hypotheses

This study utilized the Authentic Leadership Questionnaire (ALQ) and we developed the following hypotheses to determine the impact of authentic leadership qualities on employee retention in a manufacturing facility located in South Carolina, U.S.A.

H0: There is no significant relationship between follower perceptions of authentic leadership qualities of supervisors and the employee retention rates in their respective areas.

H1: There is a significant relationship between follower perceptions of authentic leadership qualities of supervisors and the employee retention rates in their respective areas.

Methodology

Survey Instrument

The Authentic Leadership Questionnaire (ALQ) is a tool comprising sixteen items designed to assess an individual's authentic leadership behaviors. These items are categorized into four distinct dimensions of authentic leadership: Transparency, Ethical/Moral, Balanced Processing, and Self-Awareness (Avolio et al., 2018).

The ALQ serves as a gauge for the frequency of leadership behaviors. Participants express the frequency with which they observe the relevant leadership behavior using the following scale: Not at all (0), once in a while (1), sometimes (2), fairly often (3), and frequently, if not always (4). The ALQ offers flexibility in its administration, allowing individuals to complete it as a self-assessment using the self-form, evaluate someone else using the rater form, or utilize a multi-rater (360-degree) assessment by combining both the self and rater forms (Avolio et al., 2018).

The ALQ has garnered support from various studies. Clapp-Smith, Vogelgesang, and Avey (2009) conducted a confirmatory factor analysis, revealing a satisfactory fit in

the ALQ factor structure. Additionally, Caza et al. (2010) conducted a validation study with working adults in New Zealand, further affirming the ALQ's validity. Their findings contribute additional evidence supporting the validity of the ALQ in diverse cultural contexts, supplementing the original validation results by Walumbwa et al. (2008) for Chinese and U.S. populations.

In a more recent investigation conducted by Lyubovnikova et al. (2017), additional support for the higher-order construct of authentic leadership and the Authentic Leadership Questionnaire (ALQ) was established. The researchers utilized a Confirmatory Factor Analysis (CFA) to compare the fit of the higher-order authentic leadership model against a first-order authentic leadership model. The results indicated that the higher-order model exhibited a superior fit, as evidenced by a chi-square (χ^2) difference test ($\Delta \chi^2 = 224.443$), which was statistically significant at the one-hundredths (0.01) level.

Research Methodology

Data Collection and Sample: The sample consisted of employees from a manufacturing company in South Carolina. The primary goal of collecting and analyzing the ALQ survey data was to explore the correlation between supervisors' authentic leadership qualities and the retention rates of employees in their areas. By understanding this relationship, the research aimed to identify how authentic leadership impacts employee retention within the manufacturing company. The findings aimed to identify how supervisors' authentic leadership qualities relate to employee retention rates, offering insights into the impact of leadership on employee retention within the company.

Employee retention rates were calculated based on departmental data, providing valuable insights into the workforce stability of the manufacturing company in South Carolina. The retention percentages for each department were derived from the ratio of employees retained over a defined period to the total number of employees initially present in each department. The analysis revealed distinct retention rates across 15 departments, with some achieving high stability while others experienced a lower retention rate.

The study utilized the ALQ to assess leadership qualities across 15 distinct departments within the organization. 119 surveys were initially collected. However, 16 surveys were excluded from the final analysis due to incomplete data, resulting in 103 fully completed and valid responses. The exclusion of incomplete surveys is a standard practice in survey research, designed to preserve the integrity and accuracy of the analysis by ensuring that only comprehensive data sets are included. This approach enhances the validity of the findings by eliminating potential biases introduced by partial responses.

The final sample of 103 completed surveys, representing 15 distinct departments, provides a robust and diverse dataset that is well-suited for analyzing the relationships between authentic leadership qualities and organizational outcomes. The clustering of responses across multiple departments allows for a more nuanced

understanding of how authentic leadership manifests in different organizational contexts. Additionally, the use of the ALQ, a well-established and validated instrument (Avolio et al., 2018), further strengthens the reliability and consistency of the results, ensuring that the study's findings are both credible and applicable within the sector of interest.

Instrument: The research utilized the ALQ to collect primary data from employees at a manufacturing company in South Carolina. The objective was to examine the relationship between the authentic leadership qualities of supervisors and employee retention rates in their respective areas.

Data collection for the survey was conducted on-site by a member of the research team to ensure accessibility and participation. The ALQ survey was distributed to employees during the employees scheduled break times, providing a convenient opportunity for completion without disrupting workflow. To minimize potential bias and ensure an open environment, supervisors were not present during the distribution or completion of the surveys. Instead, a Human Resources representative accompanied the researcher to explain the purpose of the ALQ survey and to emphasize that participation was entirely voluntary. No motivational or encouraging speech was given to employees, further maintaining neutrality in the data collection process. This approach ensured that participants felt comfortable and free from external influence, preserving the integrity and reliability of the responses collected.

The ALQ survey consisted of 16 questions designed to assess the employee's perception of their leader's style, focusing on four core dimensions of authentic leadership (Avolio et al., 2018):

1. Self-Awareness: The leader's understanding of their strengths, weaknesses, and impact on others.
2. Internalized Moral Perspective: The leader's ability to act in alignment with their core values and ethical standards.
3. Balanced Processing of Information: The leader's ability to objectively analyze information before making decisions.
4. Relational Transparency: The leader's openness in sharing information and expressing their true self.

Respondents rated each statement on the five-point Likert scale to evaluate how closely each statement fits the employee's perception of their leader's style. The survey instrument used a five-point Likert scale to evaluate how closely each statement fit the employee's perception of their leader's style:

- Not at all (0)
- Once in a while (1)
- Sometimes (2)
- Fairly often (3)
- Frequently, if not always (4)

In addition to leadership-related questions, demographic information such as production department, gender, age, shift, and years of employment was collected. This demographic data was used to categorize survey responses, allowing for a more nuanced analysis of how different employee groups perceived their supervisors' leadership styles.

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Results of the Study

The descriptive statistics for the study provide key insights into the data distribution for the four dimensions of authentic leadership: Transparency, Moral/Ethical, Balanced Processing, and Self-Awareness. These statistics help summarize and interpret the data, offering a snapshot of central tendencies, variability, and distribution characteristics.

The departmental means (Table 1) for the four dimensions range from 3.069 (Self-Awareness) to 3.443 (Moral/Ethical), suggesting that employees generally rate their supervisors moderately high in authentic leadership qualities. The medians are close to the means, indicating a relatively symmetric distribution of scores. Modes are unavailable due to unique or non-repeating values in the dataset, which is common in smaller samples.

Table 1: Descriptive Statistics

<i>Transparency</i>		<i>Moral/Ethical</i>	
Mean	3.326	Mean	3.443
Standard Error	0.112	Standard Error	0.120
Median	3.375	Median	3.462
Standard Deviation	0.432	Standard Deviation	0.464
Sample Variance	0.187	Sample Variance	0.216
Kurtosis	0.121	Kurtosis	1.840
Skewness	-0.453	Skewness	-1.136
Range	1.600	Range	1.750
Minimum	2.40	Minimum	2.25
Maximum	4.00	Maximum	4.00
Sum	49.896	Sum	51.645
Count	15	Count	15

<i>Balanced Processing</i>		<i>Self Awareness</i>	
Mean	3.201	Mean	3.069
Standard Error	0.107	Standard Error	0.159
Median	3.167	Median	3.068
Standard Deviation	0.416	Standard Deviation	0.616
Sample Variance	0.173	Sample Variance	0.380
Kurtosis	0.276	Kurtosis	1.596
Skewness	-0.512	Skewness	-0.835
Range	1.522	Range	2.458
Minimum	2.28	Minimum	1.54
Maximum	3.80	Maximum	4.00
Sum	48.022	Sum	46.034
Count	15	Count	15

Self-Awareness has the highest standard deviation (0.616), suggesting greater variability in how this quality is perceived among supervisors compared to other dimensions. Self-Awareness also shows the widest range (2.46), indicating the most variation in scores. Transparency and Balanced Processing exhibit lower variability, with standard deviations of 0.432 and 0.416, respectively. This suggests more consistent perceptions of these dimensions among employees.

The skewness and kurtosis values provide additional insights into the shape of the data distribution. Transparency and Balanced Processing have negative skewness values close to zero (-0.453 and -0.512), indicating slight left skewness but relatively balanced distributions. Moral/Ethical and Self-Awareness display more pronounced negative skewness (-1.136 and -0.835), suggesting that scores for these dimensions are slightly clustered toward the higher end of the scale. Kurtosis values for Moral/Ethical (1.840) and Self-Awareness (1.696) indicate a moderately peaked distribution, whereas Transparency (0.121) and Balanced Processing (0.276) suggest a more normal spread. These metrics provide a foundation for deeper analysis, such as regression, by offering context for interpreting the relationships between variables.

To evaluate the proposed hypothesis, a regression analysis was conducted to explore the relationship between authentic leadership dimensions and employee retention. The dependent variable in the study was the employee retention rate, while the independent variables consisted of the four dimensions of authentic leadership as measured by the ALQ: Self-Awareness, Relational Transparency, Internalized Moral Perspective (referred to as Moral/Ethical in the regression output), and Balanced Processing. The ALQ responses were aggregated by department/supervisor and mean values computed for each ALQ dimension.

The results of the regression analysis (Table I) yielded significant findings, indicating a strong association between high levels of authentic leadership and

increased employee retention. The Multiple R value, representing the correlation coefficient, was calculated at 0.8901. This indicates a strong positive correlation between the independent variables (the dimensions of authentic leadership) and the dependent variable (employee retention).

Table 2: Summary of Regression Statistics for the Relationship Between Authentic Leadership and Employee Retention

<i>Regression Statistics</i>	
Multiple R	0.8901
R Square	0.7923
Adjusted R Square	0.7092
Standard Error	0.0606
Observations	15

The R Square value, which explains the proportion of variance in employee retention that can be attributed to the authentic leadership qualities, was 0.7923. This suggests that approximately 79.23% of the variance in employee retention can be explained by the authentic leadership dimensions assessed by the ALQ. The Adjusted R Square value was slightly lower at 0.7092, which adjusts the R Square value for the number of predictors in the model. This value still indicates a strong model fit, reinforcing the conclusion that the authentic leadership qualities of supervisors significantly influence employee retention. The Standard Error of 0.0606 indicates that the observed values deviate from the predicted values by approximately 6%, suggesting that the model provides a reliable prediction of employee retention based on authentic leadership dimensions.

The ANOVA table (Table II) provides additional insights regarding the model's significance. The F-statistic of 9.5351 and a corresponding Significance F value of 0.0019 indicate that the model is statistically significant. These results confirm that the independent variables collectively explain a significant amount of variance in employee retention which supports the rejection of the null hypothesis (H_0) and provides robust evidence for the alternative hypothesis (H_1), affirming that authentic leadership is a significant predictor of employee retention.

While the overall model is statistically significant, none of the specific dimensions—self-awareness, relational transparency, internalized moral perspective (moral/ethical), or balanced processing—had a statistically significant impact on employee retention when evaluated independently within the model.

Table 3: ANOVA and Coefficients for Regression Analysis of Authentic Leadership and Employee Retention

ANOVA				
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>
Regression	4	0.1399	0.03498	9.53513
Residual	10	0.0367	0.00367	
Total	14	0.1766		
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	0.0218	0.2502	0.0870	0.9324
Transparency	0.1331	0.1277	1.0422	0.3218
Moral/Ethical	-0.0832	0.1002	-0.8301	0.4258
Balanced Processing	0.2279	0.1870	1.2184	0.2510
Self-Awareness	-0.0287	0.1271	-0.2257	0.8260
	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-0.5357	0.5792	-0.5357	0.5792
Transparency	-0.1514	0.4176	-0.1514	0.4176
Moral/Ethical	-0.3063	0.1400	-0.3063	0.1400
Balanced Processing	-0.1888	0.6445	-0.1888	0.6445
Self-Awareness	-0.3120	0.2546	-0.3120	0.2546

The coefficient for Transparency (0.1331) indicates a positive relationship with employee retention, suggesting that higher levels of relational transparency in leadership might contribute to better retention outcomes. However, the p-value for this coefficient (0.3218) exceeds the typical significance threshold of 0.05, indicating that this relationship is not statistically significant within this sample. The coefficient for Moral/Ethical Perspective (-0.0832) shows a slight negative relationship with retention, implying that this dimension alone may not have a straightforward impact on employee retention rates. The corresponding p-value (0.4258) reinforces that this relationship is not significant. The coefficient for Balanced Processing (0.2279) reflects a relatively stronger positive association with retention compared to the other dimensions. This suggests that leaders who demonstrate balanced processing—carefully evaluating diverse viewpoints before making decisions—may positively influence retention. However, the p-value (0.2510) remains above the significance threshold, indicating insufficient evidence to establish a statistically significant relationship for this variable alone. The Self-Awareness coefficient (-0.0287) shows a minimal, negative relationship with employee retention. The high p-value (0.8260) confirms that this relationship is not statistically significant within the dataset.

The lack of statistical significance in the individual coefficients within the model indicates collinearity, which can mask the individual independent variables effect on the dependent variable. When the independent variables are highly correlated, it is difficult to isolate the individual independent variable effect. The presence of collinearity within the statistically significant regression model highlights the multifaceted nature of

authentic leadership. While each dimension contributes to the overall construct, no single dimension alone appears to drive employee retention. This suggests that the collective interaction of the dimensions of authentic leadership is more impactful than their isolated effect and speaks to the importance of developing all dimensions of authentic leadership comprehensively rather than focusing on any single dimension.

These findings align with the theoretical framework of authentic leadership, which posits that the combined effect of self-awareness, relational transparency, moral/ethical perspectives, and balanced processing fosters trust, engagement, and a positive work environment. As such, organizations aiming to improve retention through leadership should prioritize holistic leadership development that integrates all dimensions rather than seeking to optimize individual traits separately. Future research with larger sample sizes could further explore the interrelationships between these dimensions and their collective impact on employee retention.

The findings from this study contribute to a deeper understanding of the complex relationship between authentic leadership and employee retention. While the overall construct of authentic leadership strongly correlates with employee retention, the lack of statistical significance for individual dimensions suggests that the impact of authentic leadership on retention is more nuanced and may require a holistic approach to leadership development. The results imply that organizations would benefit from a comprehensive leadership development program. One that cultivates self-awareness, transparency, ethical behavior, and balanced decision-making processes, rather than focusing on a single leadership trait. By fostering a balanced approach to leadership, organizations can create an environment that promotes trust, engagement, and ultimately, higher retention rates.

Limitations of the Study

While this study provides valuable insights into the relationship between authentic leadership and employee retention within the manufacturing sector, there are several limitations which should be acknowledged. The research was conducted at a single manufacturing facility in South Carolina. As only one site was involved in this study, the generalizability of the findings to other areas, industries, or regions is limited. The unique characteristics of this facility may not reflect those of other manufacturing settings or other business settings, potentially affecting the broader applicability of the results.

The study relied on self-reported data collected through the Authentic Leadership Questionnaire (ALQ), which can introduce bias in the responses. Employees' views on their supervisors' leadership qualities and their intentions to stay could be shaped by individual differences, personal biases, or the desire to provide socially acceptable answers. Thus, the data may not fully capture the objective reality of leadership behaviors or the true factors driving retention. Additionally, the exclusion of 16 incomplete surveys from the final analysis, although necessary to maintain data integrity, could have introduced nonresponse bias. Those who did not fully complete the

survey may have different characteristics from those who did, potentially skewing the results and limiting the sample's representativeness.

Another limitation is the cross-sectional design of the study, which captures a snapshot in time but does not account for changes in leadership behaviors, employee attitudes, or retention rates over time. A longitudinal approach would be more suitable for exploring the causal relationships between authentic leadership and employee retention, as it could monitor how these variables change and interact over extended periods.

Lastly, while the study focused on the four dimensions of authentic leadership, it did not consider other leadership styles or organizational factors that might also affect employee retention. Other unexamined variables may interact with or mediate the relationship between authentic leadership and retention, suggesting that the study's findings represent only part of a more complex dynamic.

Future research should address these limitations by incorporating more diverse and representative samples, employing longitudinal designs, and considering additional variables that might impact employee retention. This would strengthen the findings' reliability and applicability, offering a more comprehensive understanding of how authentic leadership contributes to employee commitment and reduces turnover.

Implications

The significant implications of the study's findings have an impact on theory and practice in leadership and employee retention, specifically within the manufacturing sector. From a theoretical perspective, the strong positive correlation between authentic leadership and employee retention reinforces the significance of the leadership style as a critical factor influencing organizational findings. This research contributes to the existing body of knowledge of leadership and employee retention in manufacturing companies by providing empirical evidence that authentic leadership plays a critical role in nurturing employee commitment and improving employee retention. These insights support the broader understanding that leadership behaviors directly impact employees' decisions to remain with an organization, emphasizing the need for further exploration into how different leadership styles influence retention across various sectors.

Practically, the results suggest that organizations, especially within the manufacturing industry, should prioritize the development and implementation of leadership development programs that emphasize the cultivation of authentic leadership qualities. By investing in programs that enhance self-awareness, promote transparency, encourage ethical decision-making, and support balanced information processing, organizations can create a more trusting and engaging work environment. This, in turn, is likely to lead to higher employee satisfaction, stronger organizational commitment, and ultimately, improved retention rates.

Moreover, the study's findings indicate that focusing on a holistic approach to leadership development, rather than targeting individual leadership traits in isolation, can be more effective in achieving desired outcomes in employee retention.

Organizations should consider integrating authentic leadership principles into their overall management practices and HR strategies to create a workplace culture that not only values but also actively promotes these leadership behaviors.

For policymakers and organizational leaders, these implications highlight the need to adopt a long-term perspective on leadership development, recognizing that fostering authentic leadership is not only helpful for single leader effectiveness but also for the stability and success of the organization. By doing so, organizations can better navigate the challenges of talent retention, particularly in sectors where workforce stability is crucial for maintaining operational efficiency and competitive advantage.

Finally, these findings also suggest potential areas for further research, particularly in examining the impact of authentic leadership in other industries and cultural contexts. Future studies should explore how the principles of authentic leadership can be adapted and applied in different settings to further understand their role in enhancing employee retention globally.

Recommendations for Future Research

Future research should be expanded with larger, more diverse samples that focus on deepening the understanding of the impact of authentic leadership on employee retention, particularly in the manufacturing sector. In addition, the inclusion of larger and more diverse sample sizes that span across other industries and geographic regions would strengthen the connection. Including other sectors, like healthcare and technology, would also enhance external validity and enable future researchers to analyze different organizational contexts. Longer-term studies would further strengthen the cause-and-effect relationships between authentic or inauthentic leaders and the retention of their followers. Furthermore, deeper insight could be gained by investigating other moderating and mediating variables such as organizational culture and employee engagement. This insight could be used to design more effective organizational leadership development programs.

Another recommendation would be to compare authentic leadership with other leadership styles, such as transformational and servant leadership, to see how each style affects employee retention. Moreover, the research could be extended beyond manufacturing and include other industries like healthcare, retail, and education, which also face retention challenges. This research, which is specific to certain sectors, could address the individual needs of the different types of workers. Future studies could also introduce cultural differences and investigate how they shape the practices of authentic leadership and impact employee retention on a global scale, leading to a more nuanced understanding of international leadership.

Ultimately, future research should assess the effectiveness of leadership development programs that focus on authentic leadership qualities and how they impact employee retention, job satisfaction, and organizational commitment. If an organization is looking to enhance leadership practices and reduce turnover, this could provide practical recommendations that could be implemented.

Conclusion

This study utilized the Authentic Leadership Questionnaire (ALQ) to explore the impact of authentic leadership on employee retention across 15 departments in a South Carolina manufacturing facility. The analysis revealed a strong positive correlation between the authentic leadership qualities of supervisors and the retention of their employees, emphasizing the significance of key leadership dimensions such as self-awareness, relational transparency, internalized moral perspective, and balanced processing. The regression analysis results show that authentic leadership is a significant predictor of employee retention, but no single dimension alone drives retention.

Given these findings, embedding authentic leadership into the organization's core values will enable companies to address current retention challenges and position themselves for sustained long term success. Manufacturing organizations should invest in leadership programs that focus on authentic leadership qualities at all management levels, which would foster an engaging work environment built on trust and lead to improved organizational performance. A leadership development framework rooted in authenticity will improve retention, enhance job satisfaction, foster team cohesion, and improve long-term organizational performance.

References

- Ali, A., Mushtaq, S., Asif, M., Maqbool, M., & Khalid, U. (2021). The effect of authentic leadership on employee performance: a moderating role of Islamic work ethics. *Humanities & Social Sciences Reviews*, 9(22), 185-194. <https://doi.org/10.18510/hssr.2021.9219>
- Alok, K., & Israel, D. (2012). Authentic leadership & work engagement. *Indian Journal of Industrial Relations*, 47(3), 498-510.
- Avolio, B. J., Wernsing, T., & Gardner, W. L. (2018) Revisiting the development and validation of the Authentic Leadership Questionnaire: Analytical clarifications. *Journal of Management*, 44(2), 399-411.
- Azami, N., Azmee, D., Keng, N., Qing, N., Shen, N., & Han, L. (2023). Factors affecting employee retention among SMEs' millennial employees in Klang Valley, Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 13(3), 868-888. <https://doi.org/10.6007/ijarbss/v13-i3/16455>
- Baek, H., Han, K., & Ryu, E. (2019). Authentic leadership, job satisfaction and organizational commitment: the moderating effect of nurse tenure. *Journal of Nursing Management*, 27(8), 1655-1663. <https://doi.org/10.1111/jonm.12853>
- Baquero, A. (2023). Authentic leadership, employee work engagement, trust in the leader, and workplace well-being: a moderated mediation model. *Psychology Research and Behavior Management*, 16, 1403-1424. <https://doi.org/10.2147/prbm.s407672>

- Caza, A., Bagozzi, R. P., Woolley, L., Levy, L., & Caza, B. B. (2010). Psychological capital and authentic leadership: measurement, gender, and cultural extension. *Asia-Pacific Journal of Business Administration*, 2(1), 53–70.
- Chatzoudes, D. and Chatzoglou, P. (2022). Factors affecting employee retention: proposing an original conceptual framework. *International Journal of Economics and Business Administration*, 1, 49-76. <https://doi.org/10.35808/ijeba/748>
- Clapp-Smith, R., Vogelgesang, G., & Avey, J. (2009). Authentic leadership and positive psychological capital: The mediating role of trust at the group level of analysis. *Journal of Leadership & Organizational Studies*, 15(3), 227-240.
- Du, J., Ma, E., Lin, X., & Wang, Y. (2021). Authentic leadership and engaging employees: a moderated mediation model of leader–member exchange and power distance. *Cornell Hospitality Quarterly*, 63(4), 479-489. <https://doi.org/10.1177/19389655211033540>
- Gatling, A., Kang, H., & Kim, J. (2016). The effects of authentic leadership and organizational commitment on turnover intention. *Leadership & Organization Development Journal*, 37(2), 181-199. <https://doi.org/10.1108/lodj-05-2014-0090>
- Giallonardo, L. M., Wong, C. A. & Iwasiw, C L. (2010). Authentic leadership of preceptors: predictor of new graduate nurses' work engagement and job satisfaction. *Journal of Nursing Management*, 18(8), 993-1003.
- Jang, E. (2022). Authentic leadership and task performance via psychological capital: the moderated mediation role of performance pressure. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.722214>
- Jun, K., Hu, Z., & Sun, Y. (2023). Impact of authentic leadership on employee turnover intention: perceived supervisor support as mediator and organizational identification as moderator. *Frontiers in Psychology*, 14. <https://doi.org/10.3389/fpsyg.2023.1009639>
- Labrague, L., Sabei, S., AL-Rawajfah, O., AbuAlRub, R., & Burney, I. (2021). Authentic leadership and nurses' motivation to engage in leadership roles: the mediating effects of nurse work environment and leadership self-efficacy. *Journal of Nursing Management*, 29(8), 2444-2452. <https://doi.org/10.1111/jonm.13448>
- Lee, C., Lim, H., Seo, D., & Kwak, D. (2022). Examining employee retention and motivation: the moderating effect of employee generation. *Evidence-Based HRM a Global Forum for Empirical Scholarship*, 10(4), 385-402. <https://doi.org/10.1108/ebhrm-05-2021-0101>
- Leroy H., Anseel F., Gardner W. L., & Sels L., (2015). Authentic leadership, authentic followership, basic need satisfaction, and work role performance: A cross-level study. *Journal of Management*, 41(6), 1677-1697.

- Lyubovnikova, J., Legood, A., Turner, N., & Mamakouka, A. (2017). How authentic leadership influences team performance: The mediating role of team reflexivity. *Journal of Business Ethics*, 141(1), 59-70.
- Malik, M., Burhan, Q., & Khan, M. (2023). The role of HEXACO in the development of authentic leadership and its consequences on task performance. *Leadership & Organization Development Journal*, 44(1), 52-71.
- Peus, C., Wesche, J. S., Streicher, B., Braun, S., & Frey, D. (2012). Authentic leadership: an empirical test of its antecedents, consequences, and mediating mechanisms. *Journal of Business Ethics*, 107(3), 331–348.
- Santhanam, N. and Srinivas, S. (2019). Modeling the impact of employee engagement and happiness on burnout and turnover intention among blue-collar workers at a manufacturing company. *Benchmarking: An International Journal*, 27(2), 499-516. <https://doi.org/10.1108/bij-01-2019-0007>
- Shah, A., Durrani, S., & Ishtiaq, M. (2021). Relationship between human resource management practices and employee's retention. *International Review of Management and Business Research*, 10(1), 400-409. [https://doi.org/10.30543/10-1\(2021\)-35](https://doi.org/10.30543/10-1(2021)-35)
- Skelton, A., Nattress, D., & Dwyer, R. (2019). Predicting manufacturing employee turnover intentions. *Journal of Economics Finance and Administrative Science*, 25(49), 101-117. <https://doi.org/10.1108/jefas-07-2018-0069>
- Subramaniam, C., Choo, L., & Johari, J. (2019). What makes employees want to stay? A study in the Malaysian manufacturing sector. *Global Business and Organizational Excellence*, 38(5), 33-43. <https://doi.org/10.1002/joe.21949>
- Tanuwijaya, J. and Jakaria, J. (2022). The transformational and toxic leadership effect on employee retention. *Jurnal Manajemen Dan Pemasaran Jasa*, 15(1), 123-134. <https://doi.org/10.25105/jmpj.v15i1.13348>
- Walumbwa, F. O., Avolio, B. J., Gardner, W. L., Wernsing, T. S., & Peterson, S. J. (2008). Authentic leadership: Development and validation of a theory-based measure. *Journal of Management*, 34(1), 89-126.
- Xuecheng, W., Iqbal, Q., & Saina, B. (2022). Factors affecting employee's retention: integration of situational leadership with social exchange theory. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.872105>
- Zulkefli, N. (2023). The relationship between work environment and employee retention in construction and manufacturing firms in Semenyih, Selangor, Malaysia. *JEV*, 4(1). <https://doi.org/10.61688/jev.v4i1.65>