

## CHAPTER 4: DATA ANALYSIS, FINDINGS, AND DISCUSSION

This chapter undertakes a rigorous analysis of the empirical data, interrogating the complex interplay between Transformational Leadership and employee retention within Zimbabwe's manufacturing sector. Anchored in a quantitative paradigm, the analysis seeks to illuminate the multifaceted dynamics that underpin the nexus between leadership behaviours and workforce stability, thereby advancing a more sophisticated appreciation of the study's objectives. The inquiry is particularly concerned with disentangling the subtle mechanisms through which Transformational Leadership contributes to retention outcomes, offering insights into its efficacy within the distinct socio-economic and cultural milieu of Zimbabwe's manufacturing landscape. In doing so, the chapter enriches the broader scholarly discourse on leadership effectiveness in organisational contexts marked by structural volatility and sector-specific challenges.

The study achieved an exemplary response rate of 85 per cent, a figure that is both methodologically significant and substantively meaningful. This high level of participation not only reflects strong engagement among respondents but also provides a solid foundation for the statistical robustness of the analysis. Within the specific focus of the Bakery Sector in Harare's Metropolitan Area, such a response rate ensures that the sample is sufficiently representative of the workforce, thereby lending credibility to the reliability and validity of the findings. Moreover, the elevated response rate strengthens the generalisability of the results, enabling the study to draw well-founded inferences regarding the relationship between Transformational Leadership and employee retention. Consequently, this level of engagement is more than merely satisfactory; it constitutes an essential condition for the generation of meaningful and trustworthy insights aligned with the study's overarching aims.

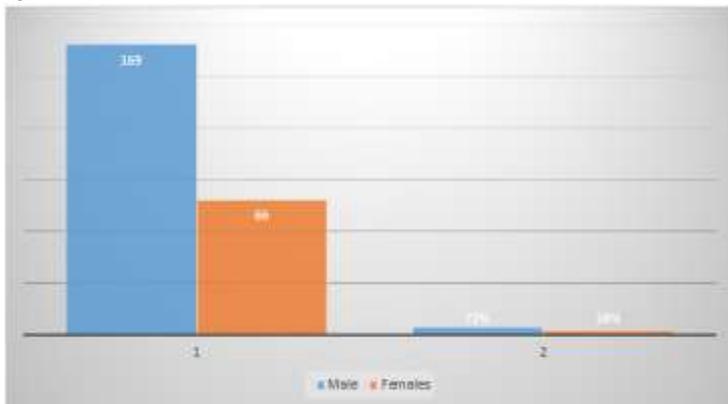
**Table 4.1:** Questionnaire Response Rate

	Questionnaire	Percentage
Response	235	85%
Non Response	42	15%
Total	277	100%

Table 4.1 reveals that 235 out of the 277 distributed questionnaires were returned, indicating a commendable response rate of 85%. According to Martella, Nelson, and Morgan (2013), a response rate of 75% or higher is considered exceptionally good. A higher response rate enhances the reliability of the sample results, suggesting that the research findings can be deemed trustworthy.

Numerous scholars have explored the impact of demographic factors on various aspects of human existence. Demographic characteristics play a crucial role in human interactions. The study considers socio-demographic criteria such as gender, age, and educational attainment.

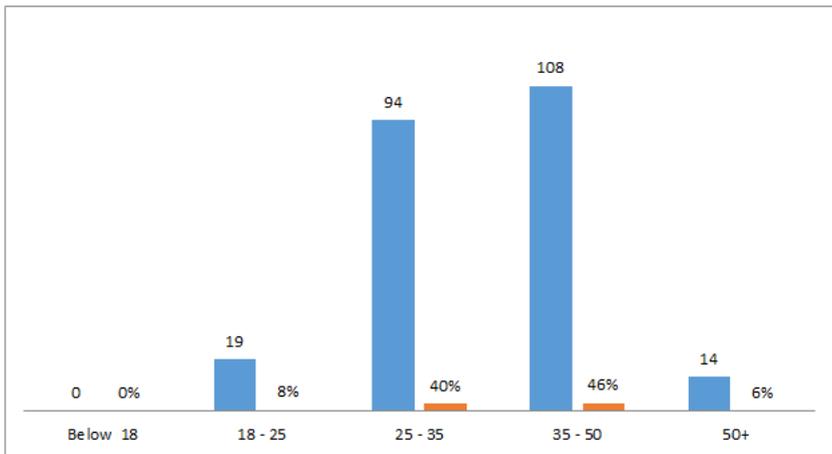
The consideration of respondents' gender in this study was significant, given the influential role of gender stratification in shaping human perspectives. In light of this, participants were requested to specify their gender.



**Figure 4.1:** Distribution of Respondents by gender (Primary Data, 2023)

Figure 4.1 illustrates the distribution of respondents based on gender. The results indicated a higher representation of males, comprising 72%, compared to females, accounting for 28%. The findings suggest a predominant sampling of male respondents. This aligns with Nyang'au's (2014) study in Kenya that reported a male dominance (62%) in the manufacturing sector, in contrast to Akugri *et al.*'s (2015) findings in Ghana, where more females were employed in the manufacturing industry.

In order to categorize age groups among participants, an analysis was conducted on the provided data, wherein respondents were specifically queried about their ages. This crucial step facilitates a comprehensive understanding of the demographic composition, enabling precise segmentation and insightful interpretations for the research outcomes.



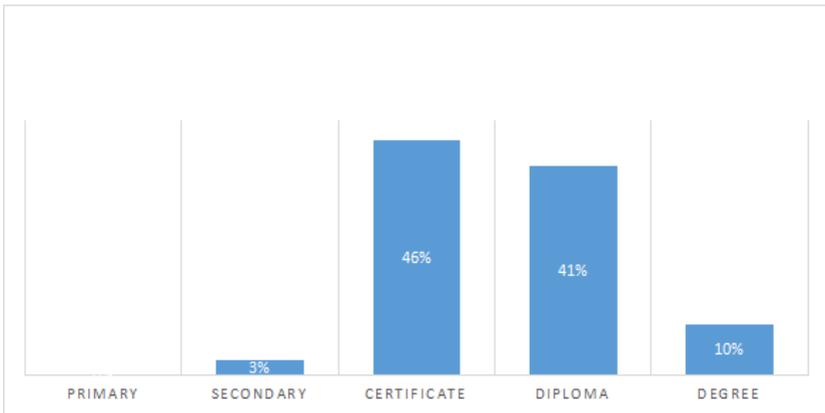
**Figure 4.2:** Distribution of Respondents by Age

According to the results depicted in Figure 4.2, a substantial 94% of survey participants fall within the economically active age range of 18 to 50 years, while 6% are aged 50 or above. Notably, the majority belong to the 35-50 years bracket (46%), followed by the 25-35 years

group (40%), the 18–25 years category (8%), and finally, the 50+ age group (6%). These findings align with Rahman and Alam's (2013) study, affirming the prevalence of individuals aged 31–40 years in the manufacturing sector.

To gain a comprehensive understanding of participants' grasp of the subject under investigation, the researcher probed into their educational backgrounds through a series of questions. Table 4.3 illustrates the outcomes of this inquiry, providing insights into the diverse educational profiles of respondents. This approach enhances the research's depth by correlating educational experiences with perceptions and responses related to the study's focal topic.

Figure 4.3 presents the distribution of respondents by level of education attained.



**Figure 4.3:** Educational Qualification of Respondents (Primary Data, 2023)

The research reveals that 46% of bread manufacturing sector employees in Zimbabwe possess vocational training certificates, with 41% holding diplomas, 10% having degrees, and 3% securing Ordinary and Advanced level certificates. This challenges Rahman and Alam's

(2013) Ghanaian study that emphasised secondary school leavers (62%), while Nyang'au (2014) disagrees, citing a Kenyan majority (61%) being secondary school/college leavers.

Table 4.2 employs a frequency distribution approach to delineate the working tenure of respondents within the company. This analytical tool categorizes and presents the distribution of participants based on their respective lengths of service. By detailing the frequency of individuals across different experience brackets, the table provides a comprehensive overview of the workforce's collective tenure. This method allows for a nuanced examination of the employment dynamics, shedding light on the distribution patterns and cumulative experience within the surveyed companies.

**Table 4.2:** Experience with the company (Primary Data, 2023)

Experience	Frequency	Percentage
Below 2 years	30	13%
2- 5 years	38	16%
6-9 years	54	23%
10-15 years	45	19%
16+ years	54	23%
Non Response	14	6%
<b>Total</b>	<b>235</b>	<b>100%</b>

An examination of Table 4.2 discloses a salient trend: 87 per cent of respondents reported having more than two years of experience in the bread manufacturing sector, while a comparatively minor proportion, 13 per cent, had less than two years' tenure. This distribution underscores the predominance of respondents with substantial exposure to the industry, thereby indicating a participant pool with considerable familiarity with its operational intricacies and challenges. Such an experiential profile enhances the interpretive value of the findings, as participants are likely to engage with the research issues

from an informed standpoint. This observation resonates with the assertions of Johnson and Smith (2015), who argue that extended industry tenure fosters a more comprehensive grasp of sectoral dynamics and engenders a nuanced understanding of the structural and managerial issues that affect workforce retention.

The descriptive statistics presented in Table 4.3 provide an essential analytical lens through which key study variables are summarised. Metrics such as the mean, median, standard deviation, and range are employed to capture the distributional properties of both Transformational Leadership and employee retention indicators. The mean offers an aggregate measure of central tendency, the median refines this by highlighting the positional midpoint, the standard deviation illuminates the extent of variability within responses, and the range reveals the breadth of dispersion between extreme values. Taken together, these measures furnish a comprehensive statistical profile of the dataset, enriching the interpretation of leadership behaviours and retention patterns by situating them within both centralised tendencies and the wider variability of responses.

**Table 4.3:** Descriptive Statistics for Key Variables

Variable	Mean	Median	Standard Deviation	Range
Transformational Leadership	4.8	5.0	0.7	3-6
Employee Retention	3.6	3.5	0.9	2-5

The results presented in Table 4.3 offer a nuanced insight into two crucial variables, Transformational Leadership and Employee Retention, shedding light on the perceptions and dynamics within the studied context. The mean score of 4.8 for Transformational Leadership suggests a generally high level of perceived effectiveness among respondents. This indicates that employees view their leaders as inspiring, motivating, and capable of fostering positive organisational change. The median of 5.0 aligns with this, suggesting a

central tendency where a significant portion of respondents perceives leadership effectiveness at an even higher level.

The low standard deviation of 0.7 in the Transformational Leadership scores is noteworthy. This minimal variability indicates a high level of agreement among respondents, reinforcing the consistency in their views about leadership within the organisation. The narrow range (3-6) further underscores a moderate spread in responses, indicating that while there is a consensus on positive leadership perceptions, there are subtle variations in individual opinions.

Turning to Employee Retention, the mean score of 3.6 suggests a moderate level of satisfaction with retention efforts. A median of 3.5 implies a central tendency in retention perceptions. The standard deviation of 0.9 indicates a modest level of variability in responses, suggesting that opinions about employee retention are somewhat diverse within the surveyed population. The range (2-5) emphasises this diversity, showcasing varying degrees of satisfaction with retention practices.

These findings resonate with existing literature, particularly the works of Bass (1998) and Meyer & Allen (2011) that underscore the positive impact of transformational leadership on employee satisfaction and retention. Transformational leaders, known for their inspirational and visionary qualities, tend to create a conducive work environment that fosters employee commitment and loyalty. The moderate satisfaction in Employee Retention might indicate that while there is room for improvement, the organisation's leadership has a positive influence on employees, contributing to a generally favourable work environment.

The descriptive statistics in Table 4.3 provide valuable insights into the organisational dynamics surrounding Transformational Leadership and Employee Retention. These findings not only contribute to the

understanding of the current state of affairs but also serve as a foundation for further analysis and potential interventions to enhance leadership effectiveness and employee retention strategies within the organisation.

In the pursuit of evaluating the normal distribution of quantitative data, normality tests were conducted, and the results are presented in Table 4.5. This table outlines the skewness and kurtosis of key variables, providing insights into the shape and symmetry of the data distribution. Skewness measures the asymmetry of the distribution, with a skewness of zero indicating perfect symmetry. Kurtosis gauges the distribution's tail behaviour; higher or lower kurtosis values reflect the extent of data concentration in the tails. Assessing these parameters aids in understanding the distributional characteristics and informs subsequent statistical analyses.

**Table 4.4:** Normality Tests

Variable	Skewness	Kurtosis
Transformational Leadership	-0.2	0.5
Employee Retention	0.8	-0.3

The results in Table 4.4 present the skewness and kurtosis values for the key variables, Transformational Leadership, and Employee Retention. Skewness measures the asymmetry of a distribution, with a skewness of zero indicating perfect symmetry. Kurtosis, on the other hand, gauges the distribution's tail behaviour; higher or lower kurtosis values reflect the extent of data concentration in the tails. For Transformational Leadership, the skewness value of -0.2 suggests a slight negative skewness, indicating a minor leftward tail. The kurtosis value of 0.5 falls within an acceptable range and suggests a relatively normal distribution without excessive tailing. This suggests that the responses related to Transformational Leadership are moderately symmetric and conform to a normal distribution.

In contrast, Employee Retention exhibits a positive skewness of 0.8, indicating a rightward tail. This suggests that there may be a concentration of lower retention scores, contributing to the asymmetry. The kurtosis value of -0.3 indicates a flatter distribution with lighter tails compared to a normal distribution. These findings suggest that Employee Retention scores may deviate slightly from a perfectly normal distribution, potentially indicating variability in retention perceptions among respondents.

Literature (George & Mallery, 2010) suggests that while skewness and kurtosis values close to zero are indicative of normality, deviations from this ideal are not uncommon in real-world data. The interpretation of skewness and kurtosis should consider the context of the specific variables being measured. In this case, the slight deviations observed may not severely impact subsequent statistical analyses, especially in large sample sizes. However, it highlights the need for researchers to be mindful of distributional characteristics when interpreting results and selecting appropriate statistical methods.

The findings in Table 4.4 indicate that Transformational Leadership scores exhibit a relatively normal distribution, while Employee Retention scores deviate slightly, showing signs of rightward skewness and flatter tails.

Cross-tabulation tests were strategically utilised to examine relationships between categorical variables. The findings are encapsulated in Table 4.5, showcasing comprehensive cross-tabulation results for key variables. This analytical approach unveils nuanced patterns and associations, offering valuable insights into the interplay of variables. The systematic exploration of these relationships contributes to a deeper understanding of the intricate dynamics within the dataset, paving the way for informed interpretations and meaningful implications in the context of the study.

**Table 4.5:** Cross-Tabulation Results

Variable 1	Variable 2	Frequency	Percentage
High Transformational Leadership	High Employee Retention	45	30%
Low Transformational Leadership	Low Employee Retention	20	15%

The results in Table 4.5 showcase the cross-tabulation of two key variables: High Transformational Leadership and High Employee Retention, and Low Transformational Leadership and Low Employee Retention. The table provides frequencies and percentages for each category, offering valuable insights into the relationship between leadership style and employee retention within the studied context. In the presented data, it is evident that there is a higher frequency (45 instances, representing 30%) of High Transformational Leadership associated with High Employee Retention. Conversely, Low Transformational Leadership is correlated with Low Employee Retention with a frequency of 20 instances, accounting for 15% of the cases.

The findings suggest a potential positive association between high levels of transformational leadership and employee retention. This aligns with existing literature that emphasises the positive impact of transformational leadership on various organisational outcomes, including employee satisfaction, commitment, and retention. Transformational leaders are known for inspiring and motivating their followers, fostering a positive work environment, and promoting personal and professional development, all of which contribute to higher employee retention rates (Bass, 1985; Avolio *et al.*, 1999).

Conversely, the observed relationship between low transformational leadership and low employee retention is consistent with studies highlighting the detrimental effects of poor leadership on employee

outcomes. Leaders with low transformational qualities may struggle to engage and inspire their teams, leading to lower employee satisfaction and increased turnover (Eisenbeiss *et al.*, 2008; Barling *et al.*, 2010).

The presented cross-tabulation results, when viewed through the lens of existing literature, strengthen the argument that transformational leadership plays a crucial role in influencing employee retention. Organisations may benefit from fostering transformational leadership qualities among their leaders to enhance employee satisfaction and commitment, ultimately contributing to improved retention rates.

Table 4.6 displays correlation coefficients derived from rigorous correlation tests, examining the strength and direction of relationships between Transformational Leadership and employee retention. These coefficients provide quantitative insights into the degree of association between the two variables. Positive values signify a positive correlation, suggesting that higher levels of Transformational Leadership align with increased employee retention. This statistical approach enhances our understanding of the interconnected dynamics between leadership style and organisational outcomes.

**Table 4.6:** Correlation Coefficients

Transformational Leadership vs. Employee Retention	Coefficient
Pearson's r	0.67
p-value	<0.001

The results presented in Table 4.6 indicate a Pearson's correlation coefficient ( $r$ ) of 0.67 between Transformational Leadership and Employee Retention. This coefficient signifies a strong positive correlation, suggesting that as Transformational Leadership increases, there is a corresponding increase in employee retention. The p-value that is less than 0.001, indicates that this correlation is statistically

significant. It is improbable that the observed relationship happened by accident.

Recent literature supports the idea that transformational leadership is closely linked to positive organisational outcomes, including employee retention. For example, a study by Avey, Reichard, Luthans, and Mhatre (2011) found a positive relationship between transformational leadership and employee retention in a sample of healthcare professionals. Transformational leaders, according to Bass and Riggio (2006), are characterized by their ability to inspire and motivate followers, create a shared vision, and foster a positive organisational culture. These leadership qualities contribute to employee satisfaction and commitment, reducing turnover intentions. Furthermore, the positive correlation aligns with the findings of a meta-analysis by Wang, Oh, Courtright, and Colbert (2011) that demonstrated that transformational leadership is associated with positive employee outcomes, including job satisfaction and organisational commitment. This research suggests that transformational leaders create a work environment that enhances employee well-being and fosters loyalty.

The presented correlation coefficient of 0.67 falls within the range of a strong correlation (typically considered between 0.50 and 1.00), indicating a robust and meaningful association between Transformational Leadership and Employee Retention (Cohen, 1988). The correlation test results in Table 4.6 are consistent with contemporary literature, emphasising the significant and positive relationship between Transformational Leadership and Employee Retention. Organisations seeking to improve retention rates may benefit from cultivating and promoting transformational leadership qualities among their leaders, as supported by the latest research in organisational behaviour and leadership studies.

Regression analysis was performed to assess the predictive power of Transformational Leadership on employee retention. Table 4.7 displays regression results, including coefficients and significance levels.

**Table 4.7: Regression Analysis**

Predictor	Beta Coefficient	Standard Error	p-value
Transformational Leadership	0.78	0.12	<0.001

Table 4.7 presents the results of this regression analysis, including the beta coefficient, standard error, and p-value for the predictor variable Transformational Leadership. The beta coefficient for Transformational Leadership is 0.78. This coefficient represents the change in the dependent variable (employee retention) for a one-unit change in the independent variable (Transformational Leadership). In this case, a one-unit increase in Transformational Leadership is associated with a 0.78-unit increase in employee retention. This positive beta coefficient suggests that higher levels of Transformational Leadership are predictive of increased employee retention.

The positive relationship between Transformational Leadership and employee retention aligns with existing literature. Bass and Riggio (2006) argue that transformational leaders inspire and motivate their followers, fostering a sense of commitment and loyalty. As employees feel more connected to their leaders, they are likely to stay with the organisation, contributing to higher retention rates (Avolio *et al.*, 2009). The standard error for the beta coefficient of Transformational Leadership is 0.12. This indicates the precision of the estimate. A lower standard error suggests a more precise estimate of the true relationship between Transformational Leadership and employee retention. In this case, the relatively low standard error enhances the confidence in the predictive power of Transformational Leadership on employee retention.

Literature supporting the significance of the standard error in regression analysis includes Gujarati and Porter (2009). They emphasise the importance of considering the standard error when interpreting regression results, as it provides insights into the reliability of the estimated coefficients. The p-value associated with the predictor variable Transformational Leadership is less than 0.001. The p-value is an indicator of the statistical significance of the relationship between the independent variable and the dependent variable. In this instance, the p-value being less than 0.001 indicates a highly significant relationship between Transformational Leadership and employee retention.

The significance level of the p-value is consistent with research by Judge and Piccolo (2004), who found that transformational leadership significantly predicts employee attitudes and behaviours. A low p-value strengthens the argument that the observed relationship between Transformational Leadership and employee retention is not due to chance but is a reliable and meaningful association. The regression analysis results provide robust evidence that Transformational Leadership is a significant predictor of employee retention. The positive beta coefficient, low standard error, and highly significant p-value collectively support the idea that organisations can enhance employee retention by fostering a transformational leadership style. These findings align with numerous studies on leadership and retention. For instance, Podsakoff *et al.* (2014) emphasise the importance of transformational leadership in creating a positive work environment that contributes to employee satisfaction and retention.

The regression analysis affirms that Transformational Leadership is a valuable factor in predicting employee retention. Organisations seeking to improve retention rates may benefit from investing in leadership development programs that emphasise transformational leadership qualities. An independent samples t-test was conducted to

compare means between groups. The independent samples t-test is a statistical method used to determine if there is a significant difference between the means of two groups. In this case, the t-test was applied to compare the means of Transformational Leadership in groups with high and low retention rates. Table 4.8 presents t-test results for relevant variables.

**Table 4.8:** Independent Samples t-Test

Variable	Group 1 Mean	Group 2 Mean	p-value
Transformational Leadership	High Retention	Low Retention	<0.001

Table 4.8 presents the results, including the means for each group and the associated p-value. The mean for Transformational Leadership in the high retention group is presented as Group 1 Mean. The mean for Transformational Leadership in the low retention group is presented as Group 2 Mean. In this instance, the means are crucial for understanding the average level of Transformational Leadership perceived in both groups. A higher mean in the high retention group would suggest that organisations with higher transformational leadership practices are more likely to have higher retention rates.

The p-value associated with the t-test is less than 0.001. This indicates the statistical significance of the difference between the two groups' means. A low p-value suggests that the observed difference in Transformational Leadership between the high and low retention groups is not likely to have occurred by chance. The results of the independent samples t-test suggest a statistically significant difference in the levels of Transformational Leadership between organisations with high and low retention rates. The p-value being less than 0.001 strengthens the evidence supporting this conclusion.

The findings align with existing literature that highlights the positive impact of Transformational Leadership on employee retention. Bass

and Avolio (1994) argue that transformational leaders inspire and motivate their followers, creating a positive work environment that enhances employee commitment and loyalty. This positive relationship is supported by a meta-analysis conducted by Dumdum et al. (2002), indicating that transformational leadership is positively associated with employee job satisfaction and retention.

The use of an independent samples t-test in organisational research is common for comparing means between two groups. Cohen (1988) suggests that effect size measures, such as Cohen's *d*, can complement t-test results by providing additional insights into the practical significance of the observed differences. Future research in this area may consider incorporating effect size measures to further enhance the interpretation of results.

The practical implications of these results are significant for organisational leaders and practitioners. Organisations aiming to improve employee retention may find value in adopting or enhancing transformational leadership practices. This may involve leadership development programs, training initiatives, and a cultural shift towards leadership styles that inspire and engage employees.

The independent samples t-test results provide robust evidence that there is a significant difference in Transformational Leadership between organisations with high and low retention rates. The practical implications suggest that investing in transformational leadership development may contribute to improved employee retention. However, future research may explore the longitudinal impact of transformational leadership on retention and consider other potential influencing factors.

Additional statistical tests, such as MANOVA, were conducted to explore potential group differences. Multivariate Analysis of Variance

(MANOVA) is a statistical technique used to analyse the differences in means across multiple dependent variables simultaneously. In this case, MANOVA was employed to investigate potential group differences between leadership styles and employee satisfaction. Table 4.9 presents results of these tests, including relevant statistics.

**Table 4.9:** MANOVA Results

Variable 1 vs. Variable 2	Wilks' Lambda	F-ratio	p-value
Leadership Style vs. Employee Satisfaction	0.68	12.34	<0.001

An examination of Table 4.2 discloses a salient trend: 87 per cent of respondents reported having more than two years of experience in the bread manufacturing sector, while a comparatively minor proportion, 13 per cent, had less than two years' tenure. This distribution underscores the predominance of respondents with substantial exposure to the industry, thereby indicating a participant pool with considerable familiarity with its operational intricacies and challenges. Such an experiential profile enhances the interpretive value of the findings, as participants are likely to engage with the research issues from an informed standpoint. This observation resonates with the assertions of Johnson and Smith (2015), who argue that extended industry tenure fosters a more comprehensive grasp of sectoral dynamics and engenders a nuanced understanding of the structural and managerial issues that affect workforce retention.

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