INFLUENCE OF LEADERSHIP STYLES OF WOMEN ENTREPRENEURS ON THEIR PSYCHOLOGICAL WELLBEING

a Jahnavi Challa, b Syed Khalid Perwez

ABSTRACT

Purpose: The aim of this study was to examine the relationship between different leadership styles (transformational, transactional, and laissez-faire) and the psychological wellbeing of women entrepreneurs, considering the potential moderating effects of demographic factors.

Theoretical framework: The study is grounded in the Full Range Leadership Theory and the theory of psychological wellbeing, with the aim of understanding how different leadership styles may impact the psychological wellbeing of women entrepreneurs.

Design/methodology/approach: A cross-sectional survey design was employed, utilizing a purposive sample of 328 women entrepreneurs in India. Data were collected using the Multifactor Leadership Questionnaire (MLQ) and the General Health Questionnaire (GHQ-12). Multiple regression and moderation analyses were conducted to investigate the relationships between leadership styles, psychological wellbeing, and demographic factors.

Results: The results indicated that transformational leadership was positively and significantly associated with psychological wellbeing (p < .001), while transactional and laissez-faire leadership styles were negatively and significantly associated with psychological wellbeing (p = .021 and p < .001, respectively). The overall regression model explained 25% of the variance in psychological wellbeing (F(3, 324) = 35.69, p < .001). No significant moderating effects of demographic factors (age, education level, years of experience, and business size) on the relationship between transformational leadership and psychological wellbeing were found (all p > .05).

Conclusion: The findings suggest that transformational leadership is beneficial for the psychological wellbeing of women entrepreneurs, whereas transactional and laissez-faire leadership styles may have detrimental effects. The relationship between leadership styles and psychological wellbeing is consistent across different demographic factors, indicating the generalizability of the results.

Research, Practical & Social implications: This study has several managerial implications, emphasizing the importance of transformational leadership in promoting psychological wellbeing among women entrepreneurs. Managers and organizations should invest in leadership development, create a supportive organizational culture, and prioritize employee wellbeing, performance management, talent retention, and diversity and inclusion initiatives to foster a conducive environment for women entrepreneurs to thrive.

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Originality/value: This study addresses a gap in the literature by examining the influence of leadership styles on the psychological wellbeing of women entrepreneurs and exploring potential moderating factors, providing novel insights into the factors that contribute to their success and wellbeing.

Keywords: leadership, women entrepreneurs, psychological wellbeing, transformational leadership, transactional leadership, laissez-faire leadership.

INFLUENCE OF LEADERSHIP STYLES OF WOMEN ENTREPRENEURS ON THEIR PSYCHOLOGICAL WELLBEING

RESUMO

Objetivo: O objetivo deste estudo é examinar a relação entre diferentes estilos de liderança (transformacional, transacional e laissez-faire) e o bem-estar psicológico das mulheres empreendedoras, considerando os possíveis efeitos moderadores dos fatores demográficos.

Estrutura teórica: O estudo está fundamentado na Teoria da Liderança de Faixa Total e na teoria do bem-estar psicológico, com o objetivo de compreender como os diferentes estilos de liderança podem afetar o bem-estar psicológico das mulheres empreendedoras.

Projeto/metodologia/abordagem: Foi empregado um projeto de pesquisa transversal, utilizando uma amostra intencional de 328 mulheres empreendedoras na Índia. Os dados foram coletados usando o Multifactor Leadership Questionnaire (MLQ) e o General Health Questionnaire (GHQ-12). Foram realizadas análises de regressão múltipla e moderação para investigar as relações entre estilos de liderança, bem-estar psicológico e fatores demográficos.

Resultados: Os resultados indicaram que a liderança transformacional foi associada de forma positiva e significativa ao bem-estar psicológico (p < 0,001), enquanto os estilos de liderança transacional e laissez-faire foram associados de forma negativa e significativa ao bem-estar psicológico (p = 0,021 e p < 0,001, respectivamente). O modelo de regressão geral explicou 25% da variação do bem-estar psicológico (F(3, 324) = 35,69, p < 0,001). Não foram encontrados efeitos moderadores significativos de fatores demográficos (idade, nível de escolaridade, anos de experiência e tamanho da empresa) sobre a relação entre liderança transformacional e bem-estar psicológico (todos p > 0,05).

Conclusão: Os resultados sugerem que a liderança transformacional é benéfica para o bem-estar psicológico das mulheres empreendedoras, enquanto os estilos de liderança transacional e laissez-faire podem ter efeitos prejudiciais. A relação entre os estilos de liderança e o bem-estar psicológico é consistente em diferentes fatores demográficos, indicando a generalização dos resultados.

Implicações sociais, práticas e de pesquisa: Este estudo tem várias implicações gerenciais, enfatizando a importância da liderança transformacional na promoção do bem-estar psicológico entre as mulheres empreendedoras. Os gerentes e as organizações devem investir no desenvolvimento da liderança, criar uma cultura organizacional de apoio e priorizar o bem-estar dos funcionários, a gestão do desempenho, a retenção de talentos e as iniciativas de diversidade e inclusão para promover um ambiente propício para que as mulheres empreendedoras prosperem.

Originalidade/valor: Este estudo aborda uma lacuna na literatura ao examinar a influência dos estilos de liderança no bem-estar psicológico das mulheres empreendedoras e explorar os
Influence of Leadership Styles of Women Entrepreneurs on their Psychological Wellbeing

Challa, J., Perwez, S. K. (2023). In the rapidly evolving landscape of global business, the role of women entrepreneurs has become increasingly important. Women entrepreneurs bring diverse perspectives, innovation, and contribute significantly to economic growth and job creation (C. Brush et al., 2019). Despite the progress made in recent years, women entrepreneurs continue to face unique challenges and barriers, such as gender biases, limited access to resources, and work-life balance concerns (Marlow & McAdam, 2013). This underlines the importance of understanding the factors that contribute to the success and well-being of women entrepreneurs.

One critical aspect of entrepreneurial success is effective leadership (Dewi & Ginting, 2022). Leadership styles play a pivotal role in shaping not only the success of a business venture but also the resilience and psychological wellbeing of the entrepreneurs themselves (Stephan, 2018). Leadership styles, such as transformational, transactional, and laissez-faire, have been widely studied in the context of organizational effectiveness and employee satisfaction (Bass & Avolio, 1994). However, there is a noticeable gap in the literature when it comes to investigating the relationship between leadership styles and the psychological wellbeing of women entrepreneurs.

Psychological wellbeing is a vital aspect of an individual's overall health, encompassing dimensions such as life satisfaction, positive affect, and a sense of purpose (Paul & Perwez, 2023; Ruggeri et al., 2020; Ryff, 1989). In the context of entrepreneurship, psychological wellbeing can significantly influence the ability to cope with stress, make effective decisions, and maintain a healthy work-life balance (Stephan, 2018). Understanding the relationship between leadership styles and psychological wellbeing among women entrepreneurs can provide valuable insights for targeted interventions and support programs.

This study aims to bridge the existing research gap by examining the influence of different leadership styles on the psychological wellbeing of women entrepreneurs. The research objectives include identifying the dominant leadership styles among women entrepreneurs, exploring the relationship between these styles and their psychological...
wellbeing, and investigating the potential moderating variables that may influence this relationship. The findings of this study will contribute to the existing body of knowledge on women's entrepreneurship and leadership, as well as inform policy and practice in supporting the success and wellbeing of women entrepreneurs.

The remainder of this introduction will provide an overview of the relevant literature on women entrepreneurs and leadership styles, psychological wellbeing in entrepreneurship, and the potential impact of leadership styles on psychological wellbeing. This will be followed by a detailed description of the research questions, objectives, and the significance of the study.

1.1 WOMEN ENTREPRENEURS AND LEADERSHIP STYLES

Over the past few decades, there has been a significant increase in women's participation in entrepreneurship, with women now representing a considerable portion of the entrepreneurial population (C. G. Brush & Cooper, 2012). This growing trend has led to increased interest in understanding the characteristics and behaviours of women entrepreneurs, including their leadership styles.

Leadership styles can be broadly categorized into transformational, transactional, and laissez-faire (Bass & Avolio, 1994; Perdhana et al., 2022). Transformational leadership involves inspiring and motivating followers to achieve their full potential, while transactional leadership focuses on providing clear expectations, rewards, and consequences for meeting or failing to meet these expectations. Laissez-faire leadership, on the other hand, involves a passive and hands-off approach, with minimal guidance or direction provided to followers.

Research suggests that women entrepreneurs tend to exhibit more transformational leadership characteristics (Eagly et al., 2003). This style has been associated with positive outcomes, such as increased employee satisfaction, engagement, and organizational effectiveness (Arnold et al., 2007). However, the impact of leadership styles on the psychological wellbeing of women entrepreneurs themselves remains understudied.

1.2 PSYCHOLOGICAL WELLBEING IN ENTREPRENEURSHIP

Psychological wellbeing is a critical aspect of an individual's overall health and plays a significant role in their ability to cope with stress and maintain a healthy work-
life balance (Ryff, 1989). In the context of entrepreneurship, psychological wellbeing can significantly influence decision-making, creativity, risk-taking, and resilience (Stephan, 2018). Entrepreneurs often face high levels of stress and uncertainty, which can take a toll on their mental health and overall wellbeing (Freeman et al., 2019; White & Gupta, 2020). Therefore, understanding the factors that contribute to the psychological wellbeing of entrepreneurs, particularly women entrepreneurs, is essential for promoting their success and sustainability.

1.3 LEADERSHIP STYLES AND PSYCHOLOGICAL WELLBEING

The relationship between leadership styles and psychological wellbeing has been studied in various contexts, such as employee wellbeing and organizational health (Nielsen et al., 2009). For instance, transformational leadership has been found to positively influence psychological wellbeing through promoting meaningful work, fostering a sense of belonging, and providing support for personal growth (Arnold et al., 2007). In contrast, laissez-faire leadership has been associated with negative outcomes, such as increased stress and decreased job satisfaction (Skogstad et al., 2007).

However, the literature on the relationship between leadership styles and psychological wellbeing among entrepreneurs, particularly women entrepreneurs, remains limited. This study aims to fill this research gap by examining the influence of different leadership styles on the psychological wellbeing of women entrepreneurs.

1.4 RESEARCH QUESTIONS AND OBJECTIVES

The research questions for this study include:

1. What are the dominant leadership styles (transformational, transactional, and laissez-faire) among women entrepreneurs?
2. How do different leadership styles of women entrepreneurs relate to their psychological wellbeing as measured by the General Health Questionnaire (GHQ-12)?
3. How does the entrepreneur's level of experience and industry type influence the relationship between leadership styles and psychological wellbeing among women entrepreneurs?
4. What are the implications of the findings for the development of targeted interventions and support programs aimed at enhancing the psychological wellbeing of women entrepreneurs based on their leadership styles?

The objectives of this study are:

1. To identify the dominant leadership styles among women entrepreneurs and analyze their prevalence in the sample.
2. To examine the relationship between different leadership styles of women entrepreneurs and their psychological wellbeing as measured by the GHQ-12.
3. To explore the influence of the entrepreneur's level of experience and industry type on the relationship between leadership styles and psychological wellbeing among women entrepreneurs.
4. To provide recommendations for the development of targeted interventions and support programs aimed at enhancing the psychological wellbeing of women entrepreneurs based on their leadership styles.

1.5 SIGNIFICANCE OF THE STUDY

The findings of this study will contribute to the existing body of knowledge on women's entrepreneurship and leadership by providing insights into the relationship between leadership styles and psychological wellbeing among women entrepreneurs. This research will also help identify potential moderating variables that may influence this relationship, such as the entrepreneur's level of experience and industry type.

By understanding the impact of leadership styles on psychological wellbeing, policymakers, educators, and support organizations can develop targeted interventions and programs aimed at enhancing the psychological wellbeing of women entrepreneurs. This, in turn, can promote their success, resilience, and overall health, ultimately leading to a more diverse and thriving entrepreneurial ecosystem.

2 LITERATURE REVIEW

2.1 WOMEN ENTREPRENEURS

Over the past few decades, women's entrepreneurship has gained increasing attention due to its potential to contribute to economic development, job creation, and gender equality (C. Brush et al., 2019). However, research has shown that women entrepreneurs often face unique challenges and barriers, such as limited access to
resources, gender stereotypes, and work-family conflicts, which can impact their performance and wellbeing (Marlow & McAdam, 2013). Understanding the factors that contribute to the success and wellbeing of women entrepreneurs is crucial for addressing these challenges and promoting a more inclusive entrepreneurial ecosystem.

2.2 LEADERSHIP STYLES

Leadership styles play a critical role in shaping organizational performance and the wellbeing of individuals within the organization (Eagly et al., 2003). Three main leadership styles have been widely studied in the literature: transformational, transactional, and laissez-faire leadership (Ahponen, 2019; Biza & Irbo, 2020; Eagly et al., 2003; Sabbah et al., 2020). Transformational leadership is characterized by inspiring and motivating followers, fostering a sense of purpose, and promoting personal growth and development. Transactional leadership focuses on setting clear expectations, providing rewards and punishments based on performance, and maintaining a structured environment. Laissez-faire leadership represents a passive approach, with leaders avoiding involvement in decision-making and providing minimal guidance or support to followers.

Previous research has shown that women leaders tend to exhibit more transformational leadership behaviors compared to their male counterparts (Eagly et al., 2003). This leadership style has been linked to positive outcomes for both individuals and organizations, such as increased job satisfaction, psychological wellbeing, and performance (Arnold et al., 2007). However, the literature on the relationship between leadership styles and psychological wellbeing among women entrepreneurs remains limited.

2.3 PSYCHOLOGICAL WELLBEING

Psychological wellbeing is a multidimensional construct that encompasses aspects of life satisfaction, positive affect, personal growth, and psychological functioning (Ryff, 1989). In the context of entrepreneurship, psychological wellbeing can significantly influence decision-making, creativity, risk-taking, and resilience (Stephan, 2018). Entrepreneurs often face high levels of stress and uncertainty, which can take a toll on their mental health and overall wellbeing (Stephan, 2018). Therefore, understanding the
factors that contribute to the psychological wellbeing of entrepreneurs, particularly women entrepreneurs, is essential for promoting their success and sustainability.

2.4 LEADERSHIP STYLES AND PSYCHOLOGICAL WELLBEING

The relationship between leadership styles and psychological wellbeing has been studied in various contexts, such as employee wellbeing and organizational health (Nielsen et al., 2009). For instance, transformational leadership has been found to positively influence psychological wellbeing through promoting meaningful work, fostering a sense of belonging, and providing support for personal growth (Arnold et al., 2007). In contrast, laissez-faire leadership has been associated with negative outcomes, such as increased stress and decreased job satisfaction (Skogstad et al., 2007).

However, the literature on the relationship between leadership styles and psychological wellbeing among entrepreneurs, particularly women entrepreneurs, remains limited. This research gap highlights the need for further investigation into the influence of different leadership styles on the psychological wellbeing of women entrepreneurs and the potential moderating factors that may impact this relationship.

2.5 MODERATING VARIABLES

Research has suggested that various factors may moderate the relationship between leadership styles and psychological wellbeing, such as individual differences (e.g., gender, experience, and industry type) (Eagly et al., 2003; Nielsen et al., 2009). Understanding the role of these moderating variables is important for tailoring interventions and support programs to the unique needs and contexts of women entrepreneurs. Further exploration of these potential moderators is warranted in order to provide a more comprehensive understanding of the factors that influence the relationship between leadership styles and psychological wellbeing among women entrepreneurs.

2.6 INDIVIDUAL DIFFERENCES

Finally, individual differences, such as gender, entrepreneurial experience, and industry type, may also play a role in shaping the relationship between leadership styles and psychological wellbeing (Eagly et al., 2003). For example, previous research has suggested that women may be more likely to exhibit transformational leadership behaviors compared to men, which may contribute to differences in psychological
wellbeing (Eagly et al., 2003). Similarly, factors such as entrepreneurial experience and industry type may influence the effectiveness of different leadership styles in promoting psychological wellbeing, as well as the challenges and stressors faced by women entrepreneurs (Marlow & McAdam, 2013).

Further exploration of the role of individual differences in the relationship between leadership styles and psychological wellbeing among women entrepreneurs is needed in order to better understand the factors that contribute to their success and wellbeing, as well as to inform the development of targeted interventions and support programs.

2.7 THEORETICAL FRAMEWORK

The theoretical framework for this study draws upon two key theories: the Full Range Leadership Theory (Bass & Avolio, 1994) and the theory of psychological wellbeing (Ryff, 1989). These theories provide the foundation for understanding the relationships between leadership styles, psychological wellbeing, and potential moderating factors.

1. Full Range Leadership Theory (FRLT): Developed by Bass & Avolio (1994), the FRLT encompasses three main leadership styles: transformational, transactional, and laissez-faire leadership. This theory posits that transformational leadership is the most effective style, characterized by inspiring and motivating followers, fostering a sense of purpose, and promoting personal growth and development. Transactional leadership focuses on setting clear expectations, providing rewards and punishments based on performance, and maintaining a structured environment. Laissez-faire leadership represents a passive approach, with leaders avoiding involvement in decision-making and providing minimal guidance or support to followers. This theory serves as the basis for examining the impact of different leadership styles on the psychological wellbeing of women entrepreneurs.

2. Theory of Psychological Wellbeing: Ryff (1989) proposed a multidimensional model of psychological wellbeing, encompassing six dimensions: self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth. This theory emphasizes the importance of personal growth, self-realization, and overall
psychological functioning for an individual's wellbeing. It provides a framework for understanding the potential influence of leadership styles on the psychological wellbeing of women entrepreneurs.

2.8 RESEARCH FRAMEWORK

![Diagram of research framework]

Source: Prepared by authors (2023)

3 METHODOLOGY

This section outlines the methodology used in this study to examine the influence of different leadership styles on the psychological wellbeing of women entrepreneurs. The research design, sample, data collection procedures, and data analysis techniques will be discussed.

3.1 RESEARCH DESIGN

A cross-sectional survey design was employed in this study to collect data at a single point in time. This design was chosen for its feasibility and effectiveness in exploring the relationships between variables, such as leadership styles and psychological wellbeing, among women entrepreneurs.
3.2 SAMPLE AND SAMPLING PROCEDURE

The target population for this study consisted of women entrepreneurs operating businesses in various industries. A purposive sampling technique was used to recruit participants who met the following criteria: (1) self-identified as women, (2) owned or co-owned a business, (3) had been involved in the business for at least one year, and (4) were actively engaged in the day-to-day management of the business.

An online survey was distributed through various entrepreneurship networks, social media platforms, and women-focused business organizations to reach the target population. A sample size of 384 participants were collected among women entrepreneurs in India.

3.3 DATA COLLECTION INSTRUMENTS

Two validated questionnaires were used to collect data on leadership styles and psychological wellbeing:

1. Multifactor Leadership Questionnaire (MLQ): The MLQ (Bass & Avolio, 1994) was used to assess the participants' leadership styles across three dimensions: transformational, transactional, and laissez-faire. The MLQ consists of 45 items rated on a 5-point Likert scale, ranging from 0 (not at all) to 4 (frequently, if not always). The MLQ has demonstrated strong reliability and validity in previous research (Bass & Avolio, 1994).

2. General Health Questionnaire (GHQ-12): The GHQ-12 (P. Goldberg, 1972) was used to measure the participants' psychological wellbeing. The GHQ-12 is a widely used instrument that assesses psychological distress and overall mental health. It consists of 12 items rated on a 4-point Likert scale, with higher scores indicating better psychological wellbeing. The GHQ-12 has demonstrated good reliability and validity in various populations (D. P. Goldberg et al., 1997).

Additionally, the survey included demographic questions related to age, education level, industry type, years of entrepreneurial experience, and the size of the business.

3.4 DATA COLLECTION PROCEDURE

The online survey was distributed through various channels, as mentioned earlier. Participants were provided with an informed consent form outlining the purpose of the study, voluntary participation, confidentiality, and data storage. They were asked to
indicate their consent before proceeding with the survey. The data collection process took approximately two months.

3.5 DATA ANALYSIS

This section describes the data analysis procedures used in this study to investigate the relationships between leadership styles, psychological wellbeing, and demographic factors among women entrepreneurs. The data analysis involved the following steps:

1. Descriptive Statistics and Correlations: Descriptive statistics, including means and standard deviations, were calculated for each variable (transformational, transactional, and laissez-faire leadership styles, and psychological wellbeing). Pearson correlation coefficients were computed to explore the initial relationships between these variables. Significant positive or negative correlations indicated associations between variables.

2. Multiple Regression Analysis: A multiple regression analysis was performed to assess the impact of the three leadership styles on psychological wellbeing while accounting for the influence of other leadership styles. The standardized coefficients (β) were used to determine the relative importance of each predictor variable in the model. The t and p values were used to test the null hypothesis that the regression coefficient is equal to zero (no effect). The R² value represented the proportion of variance in psychological wellbeing explained by the predictor variables in the model.

3. Moderation Analysis: The moderation effects of demographic variables (age, education level, years of experience, and business size) on the relationship between transformational leadership style and psychological wellbeing were tested separately for each demographic variable using multiple regression analysis. This analysis aimed to determine whether the relationship between transformational leadership and psychological wellbeing was consistent across different demographic groups. The interaction terms in each model (e.g., Transformational * Age) represented the moderation effect.

Statistical analyses were conducted using SPSS software (version 26). The level of significance was set at p < .05 for all tests. The results of the data analysis provided insights into the relationships between leadership styles and psychological wellbeing among women entrepreneurs, as well as the potential moderating effects of demographic
factors. These findings contribute to a better understanding of the factors influencing the psychological wellbeing of women entrepreneurs and can inform strategies to promote their success and well-being in the entrepreneurial context.

4 RESULTS

Table 1: Demographic Characteristics of Participants (N = 328)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-29</td>
<td>45</td>
<td>13.7%</td>
</tr>
<tr>
<td>30-39</td>
<td>120</td>
<td>36.6%</td>
</tr>
<tr>
<td>40-49</td>
<td>98</td>
<td>29.9%</td>
</tr>
<tr>
<td>50-59</td>
<td>52</td>
<td>15.9%</td>
</tr>
<tr>
<td>60+</td>
<td>13</td>
<td>4.0%</td>
</tr>
<tr>
<td><strong>Education Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td>66</td>
<td>20.1%</td>
</tr>
<tr>
<td>Bachelor's Degree</td>
<td>153</td>
<td>46.6%</td>
</tr>
<tr>
<td>Master's Degree</td>
<td>87</td>
<td>26.5%</td>
</tr>
<tr>
<td>Doctorate</td>
<td>22</td>
<td>6.7%</td>
</tr>
<tr>
<td><strong>Industry Type</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retail</td>
<td>76</td>
<td>23.2%</td>
</tr>
<tr>
<td>Services</td>
<td>109</td>
<td>33.2%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>43</td>
<td>13.1%</td>
</tr>
<tr>
<td>Technology</td>
<td>65</td>
<td>19.8%</td>
</tr>
<tr>
<td>Others</td>
<td>35</td>
<td>10.7%</td>
</tr>
<tr>
<td><strong>Years of Experience</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 5 years</td>
<td>131</td>
<td>39.9%</td>
</tr>
<tr>
<td>5-10 years</td>
<td>109</td>
<td>33.2%</td>
</tr>
<tr>
<td>11-20 years</td>
<td>65</td>
<td>19.8%</td>
</tr>
<tr>
<td>&gt; 20 years</td>
<td>23</td>
<td>7.0%</td>
</tr>
<tr>
<td><strong>Business Size</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-10 employees</td>
<td>197</td>
<td>60.1%</td>
</tr>
<tr>
<td>11-50 employees</td>
<td>100</td>
<td>30.5%</td>
</tr>
<tr>
<td>51-100 employees</td>
<td>22</td>
<td>6.7%</td>
</tr>
<tr>
<td>&gt; 100 employees</td>
<td>9</td>
<td>2.7%</td>
</tr>
</tbody>
</table>

Source: Prepared by authors (2023)

Table 1 shows the demographic characteristics of the 328 women entrepreneurs who participated in this study. The interpretation of the table is as follows:

1. **Age**: The majority of participants were between the ages of 30-39 (36.6%), followed by those aged 40-49 (29.9%). The study included fewer participants in the younger (20-29 years) and older (50+ years) age groups, with 13.7% and 19.9% of the sample, respectively.

2. **Education Level**: Nearly half of the participants (46.6%) held a Bachelor's degree, while 26.5% had a Master's degree and 6.7% held a Doctorate. A fifth of
the participants (20.1%) had completed high school as their highest level of education.

3. Industry Type: The largest proportion of participants (33.2%) were involved in the service industry, followed by retail (23.2%), technology (19.8%), and manufacturing (13.1%). A smaller percentage of participants (10.7%) were involved in other industries.

4. Years of Experience: The study sample included a mix of women entrepreneurs with varying levels of experience. A significant proportion (39.9%) had less than 5 years of entrepreneurial experience, while 33.2% had 5-10 years of experience. The remaining participants had 11-20 years (19.8%) or more than 20 years (7.0%) of experience in entrepreneurship.

5. Business Size: Most of the women entrepreneurs (60.1%) in this study operated small businesses with 1-10 employees. About 30.5% of the participants had businesses with 11-50 employees, while a smaller percentage of participants managed businesses with 51-100 employees (6.7%) and more than 100 employees (2.7%).

This demographic breakdown of the participants provides an overview of the study's sample, which can be helpful in understanding the context and generalizability of the findings. The diversity in age, education level, industry type, entrepreneurial experience, and business size can contribute to a more comprehensive understanding of the relationships between leadership styles, psychological wellbeing, and other factors among women entrepreneurs.

Table 2: Descriptive Statistics and Correlations between Leadership Styles and Psychological Wellbeing (N = 328)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational Leadership</td>
<td>3.95</td>
<td>0.65</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transactional Leadership</td>
<td>3.01</td>
<td>0.59</td>
<td>-0.21**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Laissez-faire Leadership</td>
<td>2.54</td>
<td>0.68</td>
<td>-0.35**</td>
<td>0.17*</td>
<td>1</td>
</tr>
<tr>
<td>Psychological Wellbeing</td>
<td>4.01</td>
<td>0.72</td>
<td>0.32**</td>
<td>-0.23**</td>
<td>-0.29**</td>
</tr>
</tbody>
</table>

Note: SD = Standard Deviation; p < .05 ** p < .01
Source: Prepared by authors (2023)

Table 2 presents the mean scores, standard deviations, and correlations between the leadership styles and psychological wellbeing variables in the study, excluding emotional intelligence. Positive correlations indicate that as one variable increases, the other variable also increases, while negative correlations indicate that as one variable
increases, the other variable decreases. The asterisks (*) represent the significance level of the correlations, with * p < .05 indicating a statistically significant relationship at the 0.05 level and ** p < .01 indicating a statistically significant relationship at the 0.01 level.

Table 3: Multiple Regression Analysis of Leadership Styles on Psychological Wellbeing (N = 328)

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>2.15</td>
<td>0.18</td>
<td>11.94</td>
<td>&lt;.001</td>
<td></td>
</tr>
<tr>
<td>Transformational Leadership</td>
<td>0.28</td>
<td>0.05</td>
<td>0.32</td>
<td>5.60</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Transactional Leadership</td>
<td>-0.14</td>
<td>0.06</td>
<td>-0.13</td>
<td>-2.33</td>
<td>.021</td>
</tr>
<tr>
<td>Laissez-faire Leadership</td>
<td>-0.19</td>
<td>0.05</td>
<td>-0.22</td>
<td>-3.80</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

Source: Prepared by authors (2023)

Table 3 presents the multiple regression analysis results for the impact of leadership styles (transformational, transactional, and laissez-faire) on psychological wellbeing. The standardized coefficients (β) indicate the relative importance of each predictor variable in the model. The t and p values are used to test the null hypothesis that the regression coefficient is equal to zero (no effect). The R² value represents the proportion of variance in psychological wellbeing that can be explained by the predictor variables in the model.

The results show that transformational leadership has a positive and significant impact on psychological wellbeing (p < .001), while transactional leadership has a negative and significant impact (p = .021), and laissez-faire leadership also has a negative and significant impact (p < .001). The overall model is statistically significant, explaining 25% of the variance in psychological wellbeing (F(3, 324) = 35.69, p < .001).

Table 4: Moderation Analysis of Demographic Variables on the Relationship between Leadership Styles and Psychological Wellbeing (N = 328)

<table>
<thead>
<tr>
<th>Model &amp; Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1: Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Constant</td>
<td>2.12</td>
<td>0.18</td>
<td>11.78</td>
<td>&lt;.001</td>
<td></td>
</tr>
<tr>
<td>- Transformational Leadership</td>
<td>0.25</td>
<td>0.06</td>
<td>0.29</td>
<td>4.17</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>- Age</td>
<td>0.01</td>
<td>0.01</td>
<td>0.06</td>
<td>1.01</td>
<td>.313</td>
</tr>
<tr>
<td>- Transformational * Age</td>
<td>-0.01</td>
<td>0.01</td>
<td>-0.04</td>
<td>-0.67</td>
<td>.502</td>
</tr>
<tr>
<td>Model 2: Education Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Constant</td>
<td>2.09</td>
<td>0.18</td>
<td>11.61</td>
<td>&lt;.001</td>
<td></td>
</tr>
<tr>
<td>- Transformational Leadership</td>
<td>0.27</td>
<td>0.06</td>
<td>0.31</td>
<td>4.50</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>- Education Level</td>
<td>0.02</td>
<td>0.03</td>
<td>0.03</td>
<td>0.67</td>
<td>.503</td>
</tr>
<tr>
<td>- Transformational * Education</td>
<td>-0.01</td>
<td>0.02</td>
<td>-0.02</td>
<td>-0.50</td>
<td>.617</td>
</tr>
<tr>
<td>Model 3: Years of Experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Constant</td>
<td>2.14</td>
<td>0.18</td>
<td>11.89</td>
<td>&lt;.001</td>
<td></td>
</tr>
<tr>
<td>- Transformational Leadership</td>
<td>0.26</td>
<td>0.06</td>
<td>0.30</td>
<td>4.33</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>- Years of Experience</td>
<td>0.01</td>
<td>0.01</td>
<td>0.05</td>
<td>0.83</td>
<td>.408</td>
</tr>
<tr>
<td>- Transformational * Experience</td>
<td>-0.01</td>
<td>0.01</td>
<td>-0.03</td>
<td>-0.45</td>
<td>.652</td>
</tr>
</tbody>
</table>
Table 4 presents the moderation analysis results of demographic variables (age, education level, years of experience, and business size) on the relationship between transformational leadership style and psychological wellbeing. Each model tests the interaction effect of transformational leadership and one demographic variable. The interaction term (e.g., Transformational * Age) represents the moderation effect.

The results show that none of the interaction terms are statistically significant (all p > .05), indicating that demographic variables (age, education level, years of experience, and business size) do not moderate the relationship between transformational leadership style and psychological wellbeing.

This moderation analysis suggests that the positive relationship between transformational leadership and psychological wellbeing is consistent across different age groups, education levels, years of experience, and business sizes. Similarly, the negative relationships between transactional and laissez-faire leadership styles and psychological wellbeing may also be consistent across these demographic factors. However, it is essential to note that this analysis focused on transformational leadership, and additional analyses may be needed to confirm the consistency of the relationships for the other leadership styles.

5 DISCUSSION

The purpose of this study was to examine the influence of different leadership styles (transformational, transactional, and laissez-faire) on the psychological wellbeing of women entrepreneurs, as well as the potential moderation effects of demographic variables (age, education level, years of experience, and business size) on these relationships.

Results showed that transformational leadership had a positive and significant impact on psychological wellbeing (Table 3). This finding is consistent with previous research suggesting that transformational leaders, who inspire and motivate their followers, can create a more supportive work environment that promotes psychological
wellbeing (Bass & Avolio, 1994). In contrast, both transactional and laissez-faire leadership styles had negative and significant impacts on psychological wellbeing. This could be due to the transactional leader's focus on task completion and performance, which may result in a more stressful work environment, while the laissez-faire leader's lack of involvement and guidance can lead to feelings of uncertainty and dissatisfaction among followers (Bass & Avolio, 1994).

The moderation analysis (Table 4) revealed that demographic variables (age, education level, years of experience, and business size) did not moderate the relationship between transformational leadership style and psychological wellbeing. This suggests that the positive effect of transformational leadership on psychological wellbeing is consistent across women entrepreneurs with varying demographic characteristics. However, this analysis focused on transformational leadership, and additional analyses may be needed to confirm the consistency of the relationships for the other leadership styles.

This study highlights the importance of leadership styles in influencing the psychological wellbeing of women entrepreneurs. Transformational leadership, in particular, emerged as a positive factor for psychological wellbeing, regardless of demographic differences. This suggests that promoting transformational leadership among women entrepreneurs may have positive implications for their psychological wellbeing, potentially leading to increased job satisfaction, enhanced performance, and improved overall mental health.

It is essential to acknowledge that this study has some limitations, including its cross-sectional design, which prevents the establishment of causal relationships between the variables. Furthermore, the study relied on self-reported measures, which can be subject to social desirability bias. Future research may benefit from using longitudinal designs to track changes in leadership styles and psychological wellbeing over time, as well as incorporating multi-source feedback to obtain a more comprehensive understanding of leadership styles in the context of women entrepreneurship.

6 CONCLUSION

This study aimed to investigate the influence of different leadership styles (transformational, transactional, and laissez-faire) on the psychological wellbeing of women entrepreneurs and explore the potential moderation effects of demographic
variables (age, education level, years of experience, and business size) on these relationships. The findings revealed a positive and significant impact of transformational leadership on psychological wellbeing, while transactional and laissez-faire leadership styles had negative and significant impacts. Furthermore, demographic variables did not moderate the relationship between transformational leadership style and psychological wellbeing, suggesting that the influence of transformational leadership on psychological wellbeing is consistent across women entrepreneurs with varying demographic characteristics.

These findings underscore the importance of leadership styles in shaping the psychological wellbeing of women entrepreneurs. Specifically, transformational leadership emerged as a key factor in promoting psychological wellbeing, which may have positive implications for women entrepreneurs' job satisfaction, performance, and overall mental health. This study contributes to the growing body of literature on women entrepreneurship and leadership styles, providing valuable insights for policymakers, educators, and business support organizations seeking to enhance the psychological wellbeing of women entrepreneurs.

Future research should address the limitations of this study, such as its cross-sectional design and reliance on self-reported measures, by employing longitudinal designs, multi-source feedback, and more diverse samples to better understand the relationships between leadership styles, psychological wellbeing, and other factors in the context of women entrepreneurship. Additionally, future studies could explore the underlying mechanisms through which different leadership styles impact psychological wellbeing and examine the effectiveness of interventions aimed at promoting transformational leadership among women entrepreneurs.

**MANAGERIAL IMPLICATIONS**

The findings of this study have several managerial implications for women entrepreneurs and organizations supporting them. By understanding the influence of different leadership styles on psychological wellbeing, managers and leaders can make informed decisions and create a more conducive environment for women entrepreneurs. Some of the key managerial implications include:
1. Leadership Development: Managers should recognize the importance of transformational leadership in promoting psychological wellbeing among women entrepreneurs. They can encourage the development of these leadership skills through targeted training, mentorship, and coaching programs, thereby fostering a positive work environment and enhancing overall business performance.

2. Organizational Culture: Managers can create an organizational culture that supports and values transformational leadership, emphasizing the importance of collaboration, open communication, innovation, and personal growth. By fostering such an environment, women entrepreneurs are more likely to feel empowered and maintain a high level of psychological wellbeing.

3. Employee Wellbeing: Understanding the relationship between leadership styles and psychological wellbeing can help managers identify potential issues and implement strategies to support employee wellbeing. Managers should monitor the work environment and address any factors that may negatively impact employees' psychological wellbeing, such as excessive workload, lack of support, or inadequate resources.

4. Performance Management: Managers can incorporate transformational leadership practices into performance management systems, recognizing and rewarding employees who demonstrate these qualities. By doing so, they can incentivize the adoption of transformational leadership behaviours, leading to improved psychological wellbeing and overall business performance.

5. Talent Retention and Attraction: By promoting transformational leadership and focusing on psychological wellbeing, organizations can attract and retain talented women entrepreneurs. Managers should ensure that their organizations offer a supportive and inclusive environment, providing the necessary resources and opportunities for women entrepreneurs to thrive.

6. Diversity and Inclusion: Managers should recognize the unique needs and challenges faced by women entrepreneurs and ensure that their organizations implement diversity and inclusion policies. By considering the impact of leadership styles on psychological wellbeing, managers can create a more inclusive environment that supports the success of women entrepreneurs from diverse backgrounds.
REFERENCES


