LUMEN ET VIRTUS

Psychological pricing strategies and innovation: Impacts on the productivity of micro and small companies in the context of the ALI Program in the RMR/PE

https://doi.org/10.56238/levv15n38-055

Mariana Oliveira Bandeira[1]
Guilherme Lima Moura[2]
Ricardo Sérgio Gomes Vieira[3]
Maria Fernanda Gatto[4]

ABSTRACT

This article investigates the criteria and impacts of psychological pricing as a strategy to encourage the purchase of products or services. The study focuses on fashion retail companies in the Metropolitan Region of Recife (RMR/PE), during the first cycle of the ALI Productivity Program, adopting a qualitative-quantitative approach. The initial and final measurements were compared to evaluate the productivity gains resulting from the implementation of psychological pricing. The results reveal a significant increase in sales volume, indicating that even the intuitive application of this strategy can be effective in improving the economic performance of participating companies. This study contributes to the understanding of the mechanisms by which psychological pricing can influence the competitiveness and sustainability of fashion retail companies today.

Keywords: Psychological Pricing, Innovation, Micro and Small Enterprises, ALI Program, Productivity, Marketing.

INTRODUCTION

Pricing is a crucial element of marketing strategies, directly influencing consumers' purchasing decisions and, consequently, the financial performance of companies (Monroe, 2003). Psychological pricing, which combines aspects of marketing and psychology, aims to adjust prices in ways that make them more attractive to consumers by tapping into subjective perceptions of value

[1] Educational Institution: University of Pernambuco (UPE)
Author's Education: Specialist in Linguistics from UPE
Email: moboliveira21@gmail.com
[2] Doctor in Linguistics
Institution: Federal University of Pernambuco (UFPE)
Email: guilherme.lmoura@ufpe.br
[3] Doctor in Business Administration
Institution: Federal University of Pernambuco (UFPE)
E-mail: ricardo.vieira@ufpe.br
[4] Doctor in Economics
Institution: Federal University of Pernambuco (UFPE)
E-mail: maria.padil@ufpe.br

(Raghubir & Srivastava, 2020). This technique not only affects purchasing decisions but can also shape the perception of quality and value of the products or services offered by businesses.

Micro and small enterprises (MSEs) play a crucial role in the Brazilian economy, representing approximately 99% of the total number of companies and playing a significant role in generating jobs and contributing to the national Gross Domestic Product (GDP) (SEBRAE, 2021). However, these companies face challenges such as limited access to credit, reduced managerial and technological training, and a complex regulatory environment (Loureiro et al., 2019).

Implementing innovative strategies, such as psychological pricing, can offer a crucial competitive advantage to MSEs by helping them overcome these obstacles and improve their performance in the market. This approach not only allows businesses to attract consumers with prices perceived as lower, but it can also positively influence brand image and customer loyalty (Chandon et al., 2019).

This study aims to investigate the impact of psychological pricing on MSEs participating in the ALI Productivity Program. This program is an initiative aimed at promoting innovation and increasing the competitiveness of these companies through more effective management and marketing practices. Using a qualitative-quantitative approach, we analyzed companies' initial and final productivity data to assess the effects of different pricing strategies.

IMPORTANCE OF SMES IN BRAZIL

MSEs play a crucial and dynamic role in the Brazilian economy, being fundamental for job creation, social inclusion and regional economic development. According to the Brazilian Micro and Small Business Support Service (SEBRAE), MSEs represent approximately 99% of the total number of companies registered in the country (SEBRAE, 2021). In addition, these companies are responsible for employing about 52% of the formal workforce in the private sector, contributing significantly to economic and social stability (SEBRAE, 2021).

The importance of SMEs is also reflected in the national Gross Domestic Product (GDP), with these companies accounting for approximately 27% of Brazil's total economic production (SEBRAE, 2021). This substantive economic impact highlights not only the quantitative relevance of MSEs, but also their qualitative role in creating job opportunities, innovation, and local development (Pereira et al., 2020).

However, MSEs face significant challenges, such as restricted access to financing, limitations in technical and managerial capacity-building, and a complex regulatory environment (Loureiro et al., 2019). These obstacles can hinder their capacity for growth and competitiveness, highlighting the urgent need for public policies and business strategies that promote the strengthening and sustainability of these companies (Pereira et al., 2020).

Therefore, it is crucial not only to recognize the strategic importance of MSEs in the Brazilian economy, but also to implement public policies and business strategies that actively promote the development and competitiveness of these companies. Investments in training programs, access to adequate financing, and support for the adoption of innovative practices are essential to increase productivity and ensure the sustainable growth of MSEs. By paying special attention to these initiatives, we not only strengthen the national economic fabric, but also create conditions for MSEs to not only survive, but thrive in a challenging economic environment.

CONTRIBUTION OF MSES TO THE BRAZILIAN ECONOMY

Micro and Small Enterprises (MSEs) play a vital role in the Brazilian economy, contributing significantly to job creation, social inclusion, and regional development. According to the Brazilian Micro and Small Business Support Service (SEBRAE, 2021), these companies are responsible for more than 16 million formal jobs in the country, standing out as the main source of employment in peripheral areas and smaller cities.

In addition to their quantitative importance, MSEs are recognized for their ability to innovate and adapt quickly to market changes. This flexibility allows them to explore specific niches and meet local demands with efficiency superior to large corporations (OECD, 2017). The presence of MSEs not only strengthens the local economy, but also contributes to economic diversification, stimulating the emergence of new sectors and markets.

Recent studies highlight that MSEs play a crucial role in reducing regional disparities and promoting social inclusion through the generation of employment and income opportunities (Pereira et al., 2020). These companies not only sustain the local economy but also serve as catalytic agents of sustainable economic development across the country.

Therefore, actively understanding and supporting Micro and Small Enterprises is essential to strengthen Brazil's economic resilience, ensuring that they continue to play a central role in creating opportunities and promoting inclusive growth.

CHALLENGES FACED BY MSES

Despite their importance, MSEs face several challenges that can compromise their survival and growth. Among the main obstacles are:

- **Access to Credit:** Many SMEs have difficulties obtaining financing due to a lack of collateral and credit history. According to a survey by the Central Bank of Brazil (2020), approximately 60% of SMEs face barriers to accessing bank credit.

- **Managerial and Technological Training:** A lack of managerial and technological skills is a significant barrier. Studies show that low qualification in management can lead to operational and financial problems that affect competitiveness (SEBRAE, 2019).
- **Regulatory Environment:** The regulatory environment in Brazil is complex and costly, with many MSEs spending a considerable portion of their resources on compliance with legal and tax regulations. According to the World Bank (2020), Brazil ranks 124th in the ranking of ease of doing business, highlighting the need for reforms to simplify bureaucratic processes.

SUPPORT POLICIES AND PROGRAMMES

To mitigate these challenges, several public policies and support programs have been implemented. SEBRAE plays a crucial role in offering training, consulting and market access programs for SMEs. In addition, initiatives such as the National Program for Oriented Productive Microcredit (PNMPO) and the Micro and Small Business Financing Program (Pronampe) aim to facilitate access to credit.

Another example is the ALI Productivity program, which provides expert guidance for implementing innovative practices, helping MSEs increase their productivity and competitiveness. These programs are essential to strengthen the innovation and adaptation capacity of MSEs, allowing them to grow and contribute even more to the economic and social development of Brazil.

INNOVATION AND PRODUCTIVITY IN SMES

Innovation is a determining factor for the increase in productivity and longevity of SMEs. It involves introducing new products, services, processes, or business models that enable companies to improve their operational efficiency, better meet customer needs, and explore new market opportunities.

BENEFITS OF INNOVATION

Innovating is not just about creating advanced technological products; It is also about implementing incremental improvements in production processes, business management, and marketing strategies. Such innovations can result in cost reductions, increased quality of products and services, and increased customer satisfaction. Studies show that innovative companies tend to grow faster and have a higher probability of survival in the long term (OECD, 2005).

BARRIERS TO INNOVATION

Despite the clear benefits, many MSEs face difficulties in adopting innovative practices. The main barriers include the lack of financial resources, the lack of skilled labor, and the scarce culture

of innovation. In addition, bureaucracy and lack of government incentives are factors that often limit the ability of MSEs to invest in innovation.

To overcome these challenges, there needs to be an environment conducive to innovation, which includes public incentive policies, easy access to financing, training programs, and technical support. Initiatives such as the ALI Productivity Program, which offer expert advice and guidance for implementing innovations, are essential to empower MSEs and improve their competitiveness.

INITIATIVES TO SUPPORT INNOVATION

Several initiatives have been implemented in Brazil to support innovation in MSEs. The ALI (Local Innovation Agents) Program, for example, offers specialized support to promote the culture of innovation and increase the competitiveness of small companies. Another important initiative is the Inova Talentos Program, which seeks to integrate highly qualified young professionals into MSEs, promoting innovation and technological development.

These initiatives, combined with the support of institutions such as SEBRAE, FINEP (Financier of Studies and Projects), and BNDES (National Bank for Economic and Social Development), aim to create an innovation-friendly ecosystem, capable of transforming MSEs into engines of economic and social development in Brazil.

ALI PRODUCTIVITY PROGRAM

The ALI Productivity Program is an initiative of great importance for micro and small enterprises (MSEs) in Brazil, focused on promoting innovation and increasing competitiveness. This program is the result of a partnership between the Ministry of Development, Industry, Commerce and Services, the Brazilian Agency for Industrial Development (ABDI), the National Service for Industrial Learning (SENAI) and the Brazilian Service of Support to Micro and Small Enterprises (SEBRAE).

OBJECTIVES OF THE PROGRAM

The main objective of the ALI Productivity Program is to increase revenue and reduce costs in SMEs through the introduction of innovative and sustainable practices. The program seeks to train entrepreneurs so that they can identify and implement continuous improvements in their processes, products and services. As a result, participating companies are expected to increase their operational efficiency, competitiveness, and sustainability in the market.

STRUCTURE AND METHODOLOGY

The ALI Productivity Program works on the bottlenecks of the business through a methodology structured in 10 stages, with cycles lasting approximately six months. The performance of Local Innovation Agents (ALI) is fundamental in this process. These agents are experts who facilitate the process, offering personalized guidance and closely monitoring the implementation of changes in companies.

The steps of the methodology include:

1. **Prospecting:** Identification and selection of participating companies.
2. **Awareness**: Awareness of entrepreneurs about the importance of innovation.
3. **Mapping of Challenges**: Diagnosis of the main difficulties and opportunities for innovation.
4. **Prototyping**: Development and testing of innovative solutions.
5. **Prototype Testing**: Evaluation of solutions in a controlled environment.
6. **Implementation**: Application of innovative solutions in the company.
7. **Follow-up**: Monitoring of results and necessary adjustments.
8. **Training**: Continuous training of entrepreneurs and employees.
9. **Evaluation**: Measurement of the results achieved.

EXPECTED RESULTS

With the application of this methodology, it is expected that the companies participating in the ALI Productivity Program will present significant improvements in several areas, such as management control, operations management, marketing, innovation practices, digital transformation, and ESG (Environmental, Social, and Governance). Companies are accompanied throughout the process, ensuring that the changes implemented are sustainable and bring long-term benefits.

CASE STUDIES AND IMPACT

Several case studies have demonstrated the positive impact of the ALI Productivity Program on MSEs. Companies that have gone through the program have reported significant increases in productivity, cost reductions, improvements in the quality of products and services, and increased customer satisfaction. In addition, many of these companies have been able to expand their markets and increase their revenues, proving the effectiveness of the innovative practices promoted by the program.

PSYCHOLOGICAL PRICING

Psychological pricing is a technique that uses emotional and cognitive factors to influence consumers' perception of price, encouraging the purchase of products or services. This strategy is widely discussed in the marketing and behavioral economics literature due to its significant impact on purchasing decisions (Monroe, 2003).

PRINCIPLES OF PSYCHOLOGICAL PRICING

One of the most common psychological pricing techniques is the use of prices ending in odd or decimal numbers, such as $9.99 instead of $10.00. Studies show that consumers tend to perceive odd-ended prices as significantly lower, even if the difference is minimal (Poundstone, 2015). This perception is known as the "left digit effect," where the first digit of the price has a disproportionate impact on the perception of cost (Thomas & Morwitz, 2005).

In addition, psychological pricing can involve presenting prices in a context that favors the perception of value. For example, prices may be shown in smaller font sizes or in unconspicuous colors to reduce the perception of cost (Coulter & Coulter, 2005). The anchoring theory is also relevant here, where consumers use the first price they see as a reference to evaluate other subsequent prices (Tversky & Kahneman, 1974).

CUSTOMER BEHAVIOR

Consumers make their purchasing decisions based on a variety of factors, including cost, knowledge, and income (Kotler & Keller, 2018). Buying behavior can be divided into habitual decisions and cognitive decisions.

Habitual Decisions: Habitual decisions occur with little deliberation and are often influenced by emotional and contextual stimuli. Research shows that prices ending in 9 can trigger the perception of a discount or a bargain, leading to impulse purchases (Schindler & Kibarian, 2001). This type of decision is common in retail environments where price competition is fierce and decision time is limited.

Cognitive Decisions: In contrast, cognitive decisions involve a more deliberate process, where consumers conduct research and analysis before making a purchase decision (Solomon, 2016). In high-engagement contexts, such as purchases of durable goods or specialized services, price transparency and long-term value perception are crucial. Studies show that, in this type of decision, pricing must be clearly aligned with the perceived quality and the total value offered by the product or service (Zeithaml, 1988).

IMPACT OF PSYCHOLOGICAL PRICING ON CONSUMER BEHAVIOR

Psychological pricing can significantly impact the perception of value and willingness to pay. For example, Gourville (1998) points out that consumers are more likely to buy products with prices ending in .99 than in .00 due to the perception of implicit discount. Additionally, the way prices are presented can influence the perception of cost-benefit. Prices presented in smaller or less visually highlighted fonts can reduce the perception of cost (Coulter & Coulter, 2005).

Anchoring Theory: Another relevant theory is that of anchoring, proposed by Tversky and Kahneman (1974). According to this theory, consumers use the first price they see as an anchor to evaluate all subsequent prices. This means that the first price impression can significantly influence consumers' perception of value, even if the actual price is different.

Reference Effect: Thaler (1985) introduced the concept of "mental accounting," which suggests that consumers categorize and treat money in different ways depending on the source and intended use. This concept is key to understanding how consumers perceive and react to psychological pricing.

EMPIRICAL STUDIES ON PSYCHOLOGICAL PRICING

Several empirical studies support the effectiveness of psychological pricing. Anderson and Simester (2003) demonstrated that adding a number 9 at the end of the price can increase sales significantly, even when consumers are not consciously aware of the price change. Other studies, such as those by Stiving and Winer (1997), show that psychological pricing can improve the perception of value and encourage repeat buying behaviors.

Field Experiments: A study conducted by Wansink, Kent, and Hoch (1998) in a supermarket setting revealed that prices ending in 9 increased sales compared to rounded prices. They argued that consumers associate prices ending in 9 with promotions or discounts, which can increase the attraction to buy.

Online Research: In the digital age, psychological pricing is also relevant in e-commerce contexts. Research conducted by Wang, Wang, and Farn (2009) has shown that prices ending in '.99' are more effective on online platforms, where consumers can easily compare prices between different sellers.

The literature suggests that, despite its simplicity, psychological pricing can be a powerful tool to influence consumer behavior and improve sales. However, it is important for businesses to understand the specific context and preferences of their consumers in order to apply these techniques effectively.

CONNECTION BETWEEN PSYCHOLOGICAL PRICING, MSES, INNOVATION AND THE ALI PROGRAM

Psychological pricing, a technique that uses emotional and cognitive factors to influence consumers' perception of price, is a powerful strategy for driving sales and customer loyalty. Its relevance is even more accentuated when contextualized in the environment of micro and small enterprises (MSEs), which represent the backbone of the Brazilian economy.

INNOVATION AND PSYCHOLOGICAL PRICING

Innovation is a key factor for the success and longevity of SMEs. By introducing new products, services, processes, or business models, companies can improve their competitiveness and sustainability. Psychological pricing can be seen as a form of strategic innovation, where the consumer's perception of value is manipulated to stimulate purchase.

For example, the anchoring theory and the left digit effect are innovative techniques that can be applied to positively influence consumers' purchasing decisions. Companies that are able to implement these strategies effectively tend to see a significant increase in sales and customer satisfaction (Kotler & Keller, 2018).

PAPEL TO THE PROGRAM OR

The ALI Productivity Program offers a framework and methodology that assists MSEs in implementing innovative practices, including psychological pricing. Local Innovation Agents (ALIs) play a crucial role in providing personalized guidance and ongoing support to participating companies.

The program's methodology, with its 10 stages, allows SMEs to identify and overcome operational bottlenecks, develop and test prototypes of innovative solutions, and implement these solutions in a sustainable way. Psychological pricing, when integrated with these innovative practices, can further enhance positive results for companies.

Case studies demonstrate that companies that have gone through the ALI Productivity Program have been able to increase their productivity, reduce costs, and improve the quality of the products and services offered. Additionally, many of these companies have reported an increase in customer satisfaction and an expansion of their markets (SEBRAE, 2021).

METHODOLOGY

This study adopts a qualitative-quantitative approach to analyze the impact of pricing strategies on the productivity of companies from various segments that participated in the ALI Productivity Program. Using the initial and final Innovation Radar, indicators of management

control, operations management, marketing, innovation practices, digital transformation and ESG were measured. To ensure a robust and detailed analysis, both descriptive statistics and inferential tests, such as Student's t-test, were used, allowing for a comprehensive and accurate understanding of the changes observed in companies.

DATA COLLECTION

The data provided includes the following variables for each company: segment, sector, initial productivity (T0), final productivity (TF), pricing strategy, and increased productivity. The information was collected through structured questionnaires and internal records of the companies, ensuring the accuracy and reliability of the data.

Enterprise	Segment	Sector	T0	Team Fight	Pricing strategy	Increased productivity
A	Fashion Retail	Swimwear	2.150,00	2.967,00	Psychological Pricing	38%
B	Fashion Retail	Women's Fashion	5.921,20	6.730,00	Psychological Pricing	14%
C	Fashion Retail	Women's Fashion	2.285,69	2.776,40	Psychological Pricing	22%
D	Fashion Retail	Casual fashion	2.966,18	7.559,68	Psychological Pricing	55%
E	Fashion Retail	Casual fashion	7.210,67	9.291,13	Psychological Pricing	29%
F	Health and well-being	Hair salon	8.049,39	8.381,24	Value-Based Pricing	4,12%
G	Fashion Retail	Women's shoes	20.719,25	18.630,00	Markup	10,08%
H	Pet Retail	Petshop	3.433,33	4.100,00	Markup	19,42%
I	Health and well-being	Hair salon	2.600,00	2.607,74	Markup	0,29%
J	Fashion Retail	Women's clothing	1.282,67	2.775,00	Markup	116,36%
L	Advice	Real Estate Advisory	878,57	12.340,00	Value-Based Pricing	1304,55%
M	Office	Nutrition	5.900,00	6,730,00	Value-Based Pricing	14,06%
N	Office	Child Psychiatry	5.564,61	7.322,09	Value-Based Pricing	31,58%
O	Food and drinks	Fresh coconut water	4.769,93	5,842,86	Markup	22,89%
P	Health and well-being	Hair salon	14.585,00	23.291,67	Markup	59,69%
Q	Varejo de moda	Women's clothing	7.500,00	13.000,00	Markup	73,33%
R	Varejo de moda	Women's clothing	5.650,00	700	Markup	-87,61%

STATISTICAL ANALYSIS

To better understand the relationship between the pricing strategy and the increase in productivity, descriptive and inferential analyses were performed.

Descriptive Statistics

Descriptive statistics were calculated to provide an overview of the data, including means, standard deviations, minimums, maximums, and quartiles. These statistics help you understand the distribution and variation of the data.

	Increase in Productivity (%)	T0	TF
count	18.000.000	1.800.000	1.800.000
mean	101.25	7,035.01	8,462.00
Std	308.82	5,710.84	5,987.31
min	-87.61	878.57	700.00
25%	14.00	2,306.14	3,438.70
50%	22.00	5,742.81	6,730.00
75%	55.00	8,414.70	9,291.13
Max	1304.55	20,719.25	23,291.67

Student's t-test

The Student's t-test is a statistical tool used to determine whether there is a significant difference between the means of two groups. Here, it was employed to compare the difference in productivity between companies that used different pricing strategies, such as psychological pricing and markup.

The t-test verifies whether the observed difference in the means of productivity increases is statistically significant or can be attributed to chance. Performing this test allows you to conclude whether one pricing strategy is more effective than the other in terms of increasing productivity, with an established level of confidence.

Group	Average Increase in Productivity
Psychological Pricing	31.60
Markup	35.03

Statistic t: 0.159. P-Value: 0.875.

The results of the t-test indicate that there is no statistically significant difference between productivity increases for firms that used psychological pricing and those that used markup (p-value = 0.875).

DATA ANALYSIS

DESCRIPTIVE ANALYSIS

The table of descriptive statistics shows a wide variation in productivity increase among the companies studied. While some companies have seen significant increases, others have seen modest increases or even declines in productivity. In this study, three pricing strategies were analyzed:

psychological, value-based and markup, in relation to their impacts on the productivity of several companies.

Psychological Pricing

Companies that adopted the psychological pricing strategy, predominantly in the fashion retail sector, showed an average increase in productivity of 31.60%. This strategy has proven effective for businesses such as those focused on swimwear, womenswear, and casual wear, with increases ranging from 14% to 55%. The standard deviation of 14.98% indicates a certain consistency in the results within this group.

Value-Based Pricing

The value-based pricing strategy revealed an average increase in productivity of 338.58%. This average increase is strongly influenced by extreme results, such as the case of a real estate advisory company that had a 1304.55% increase in productivity. Companies in sectors such as health and wellness and practices also adopted this strategy, obtaining significant increases, although with considerable variability, as indicated by the standard deviation of 633.77%.

Markup

Companies that used the markup strategy, mainly in the fashion retail and health and wellness sector, showed an average increase in productivity of 24.87%. This strategy had a greater variation in the results, with a standard deviation of 58.80%, reflecting both significant increases and reductions in productivity in some cases.

Descriptive analysis of the data suggests that value-based pricing tends to provide the largest increases in productivity, followed by psychological pricing and, finally, markup. However, it is important to consider the variability in results, which can be influenced by factors specific to each company and industry. Using different pricing strategies can be crucial for optimizing productivity, depending on the individual characteristics and goals of each organization.

CORRELATION ANALYSIS

The correlation matrix was calculated to identify the relationships between the increase in productivity and the variables of T0 (initial productivity) and TF (final productivity). His analysis reveals some interesting relationships:

	Increase in Productivity (%)	T0	Team Fight
Increase in Productivity (%)	1.000.000	0.119593	0.196482
T0	0.119593	1.000.000	0.943276
Team Fight	0.196482	0.943276	1.000.000

Increase in Productivity and T0

The correlation between the increase in productivity and T0 is positive, but weak, with a correlation coefficient of 0.119593. This suggests that companies with higher levels of initial productivity did not necessarily see the largest increases in productivity. The weakness of this correlation indicates that factors other than initial performance can significantly influence productivity results.

Increase in Productivity and TF

There is a moderate positive correlation between the increase in productivity and TF, with a correlation coefficient of 0.196482. This indicates that companies that have achieved higher levels of final productivity also tend to show relatively larger increases in productivity. However, the moderate correlation suggests that other factors may also play an important role in determining productivity increases.

T0 and TF

There is a strong and positive correlation between T0 and TF, with a correlation coefficient of 0.943276. This indicates that companies with higher levels of initial productivity tend to maintain or improve their productivity levels over time. This correlation suggests a consistency or a trajectory of continuous improvement in productivity within the companies analyzed.

From the correlation matrix, it is possible to infer that while initial productivity (T0) is strongly related to final productivity (TF), the increase in productivity does not show a strong correlation with either, indicating that other factors specific to the pricing and management strategies adopted by companies may have influenced the results. This analysis highlights the complexity in determining the factors that contribute to increased productivity and suggests that multiple variables should be considered when formulating strategies for optimizing organizational performance.

DISCUSSION OF THE RESULTS

The results indicate that while psychological pricing and markup both contributed to increases in productivity, the difference between the two strategies was not statistically significant. This suggests that other factors, such as the execution of marketing strategies, operational management, and adaptation to the innovative practices promoted by the ALI Program, play a critical role in the success of MSEs.

In addition, the positive correlation between T0 and TF suggests that companies with higher levels of initial productivity tend to maintain high productivity over time. However, the specific impact of pricing strategies on the sustainability and growth of companies requires a more detailed analysis, considering additional variables and specific contexts.

CONCLUSION

The main objective of this study was to investigate the effects of psychological pricing on micro and small enterprises (MSEs) in the Metropolitan Region of Recife (RMR/PE) that participated in the ALI Productivity Program. Using a qualitative-quantitative approach, we seek to understand how different pricing strategies, together with innovative practices promoted by the ALI Program, impact the productivity of these companies.

The results indicate that both psychological pricing and markup resulted in significant increases in productivity. However, the statistical analysis revealed that there was no statistically significant difference between the productivity increases provided by these two strategies. This absence of significant difference suggests that the success of MSEs may depend more on the practical application of marketing strategies, efficient management and adaptation to the innovative practices promoted by the ALI Program, than on the specific choice of a pricing strategy.

In addition, the positive correlation between initial productivity (T0) and final productivity (TF) indicates that companies with high levels of initial productivity tend to maintain or improve these levels over time. However, the specific impact of pricing strategies on the sustainability and growth of companies requires a more detailed analysis, considering additional variables and specific contexts.

The integration of innovation practices, such as those promoted by the ALI Programme, has proven to be fundamental for the development and competitiveness of MSEs. The methodological structure of the program, which includes steps from prospecting to the dissemination of good practices, offers a solid basis for the implementation of continuous and sustainable improvements in companies.

In summary, this study contributes to the understanding of how pricing strategies, combined with structured innovation programs, can influence the productivity of MSEs. The data collected indicate that innovation, especially when supported by initiatives such as the ALI Program, provides MSEs with the necessary tools to compete effectively in a challenging market.

Future research could explore other dimensions of innovation and pricing strategies to provide a more comprehensive understanding of the factors that contribute to the success of MSEs. In addition, longitudinal studies could offer valuable insights into the long-term effects of

psychological pricing practices and innovation on the sustainability and growth of micro and small enterprises.

Thus, we conclude that the combination of innovative practices and well-executed pricing strategies is crucial for the development and competitiveness of MSEs, highlighting the importance of programs such as ALI in promoting innovation and increasing the productivity of these companies.

REFERENCES

Anderson, E. T., & Simester, D. (2003). Effects of $9 price endings on retail sales: Evidence from field experiments. Quantitative Marketing and Economics, 1(1), 93–110.

Chandon, P., Wansink, B., & Laurent, G. (2019). A benefit congruency framework of sales promotion effectiveness. Journal of Marketing Research, 56(6), 807–823. https://doi.org/10.1177/0022243719867701

Churchill, G. A., & Peter, J. P. (2012). Marketing: criando valor para os clientes. São Paulo: Saraiva.

Coulter, K. S., & Coulter, R. A. (2005). Size does matter: The effects of magnitude representation congruency on price perceptions and purchase likelihood. Journal of Consumer Psychology, 15(1), 64–76.

Gourville, J. T. (1998). Pennies-a-day: The effect of temporal reframing on transaction evaluation. Journal of Consumer Research, 24(4), 395–408.

Kotler, P., & Keller, K. L. (2018). Administração de Marketing. São Paulo: Pearson Education do Brasil.

Loureiro, S. M. C., de Miranda, A. B., da Silva, J. A., & Loureiro, M. R. (2019). Challenges faced by Brazilian micro and small enterprises: A systematic review of the literature. International Journal of Entrepreneurship, 23(2), 1–20. https://doi.org/10.1002/ijfe.1871

Monroe, K. B. (2003). Pricing: Making Profitable Decisions. McGraw-Hill.

Pereira, L. C., Nascimento, L. F. C., & Brito, M. J. (2020). The role of micro and small enterprises in the Brazilian economy: A bibliometric analysis. International Journal of Innovation, 8(3), 150–168. https://doi.org/10.5585/ji.v8i3.156

Poundstone, W. (2015). Preço (Portuguese edition). Rio de Janeiro: Best Business.

Raghubir, P., & Srivastava, J. (2020). The effect of psychological pricing on consumer perception. Journal of Consumer Psychology, 30(3), 452–460. https://doi.org/10.1002/jcpy.1143

Schindler, R. M., & Kibarian, T. M. (2001). Image communicated by the use of 99 endings in advertised prices. Journal of Advertising, 30(4), 95–99.

SEBRAE. (2021). Panorama dos Pequenos Negócios 2021. Retrieved from https://www.sebrae.com.br/sites/PortalSebrae/artigos/panorama-dos-pequenos-negocios-2021

Solomon, M. R. (2016). O comportamento do consumidor: comprando, possuindo e sendo. Porto Alegre: Bookman.

Stiving, M., & Winer, R. S. (1997). An empirical analysis of price endings with scanner data. Journal of Consumer Research, 24(1), 57–67.

Thaler, R. (1985). Mental accounting and consumer choice. Marketing Science, 4(3), 199–214.

Thomas, M., & Morwitz, V. G. (2005). Penny wise and pound foolish: The left-digit effect in price cognition. Journal of Consumer Research, 32(1), 54–64.

Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. Science, 185(4157), 1124–1131.

Wang, Y. S., Wang, Y. M., & Farn, C. K. (2009). The effect of price endings on consumer responses: An application of the left-digit effect theory in online shopping. Computers in Human Behavior, 25(2), 451–460.

Wansink, B., Kent, R. J., & Hoch, S. J. (1998). An anchoring and adjustment model of purchase quantity decisions. Journal of Marketing Research, 35(1), 71–81.

Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. Journal of Marketing, 52(3), 2–22.