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Effect of adaptation on the performance of the Algerian small and medium-sized enterprises “SMEs”: Neo-institutional perspective of organizations

تأثير التكيف على أداء "المؤسسات الصغيرة والمتوسطة" الجزائرية: النظرية المؤسساتية الجديدة للمنظمات

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Abstract

This study investigates the adaptation of Algerian SMEs to their environment by accomplishing adaptation programs, either upgrade programs. We determine the effect of the adaptation program of SMEs to their environment on the performance of SMEs. This research is quantitative and is based on a purely statistical method. The study is done on a large sample of 11 320 SMEs, response rate was 8%. In addition, a quantitative questionnaire was developed. For data analysis, we have mobilized two groups of SMEs, the first group of SMEs beneficiaries of the upgrade program, and the other is none. We compare those two groups. For statistical analysis, we analyze variance: ANOVA and MANOVA. The research has shown that the upgrade programs of Algerian SMEs improve performance. However, the study has some significant practical contributions, including theoretical contributions. Theoretically, we tested the neo-institutional perspective of organizations in the context of developing countries.
research, and the most important results reached in two paragraphs.

Keywords :
Performance, adaptation or upgrade programs, a neo-institutional, perspective of organizations, Algerian SMEs.

ملخص

تهدف هذه الدراسة إلى البحث عن أثر تكيف المؤسسات الجزائرية الصغيرة والمتوسطة على الأداء في محيط أعمال صعب من خلال إنجاز برامج التكيف أو التأهيل. هذا البحث كمي وقائم على منهج إحصائي بحت. أجريت الدراسة على عينة كبيرة من 11320 مؤسسة صغيرة المتوسطة، وبلغ معدل الاستجابة 8٪. بالاعتماد على تطوير استبيان كمي. لتحليل البيانات استعملنا مجموعتين من المؤسسات الصغيرة والمتوسطة، المجموعة الأولى منها المستفيدة من برنامج التأهيل، والأخرى ليست مستفيدة من هذا البرنامج بتاتا. نقارن بين هاتين المجموعتين بالتحليل الإحصائي للتباين ANOVA و MANOVA.

أظهر البحث أن برامج تأهيل أو تكيف المؤسسات الجزائرية الصغيرة والمتوسطة تعمل على تحسين الأداء. إلى جانب ذلك، فإن الدراسة لديها بعض المساهمات العملية الهامة، بما في ذلك المساهمات النظرية؛ من الناحية النظرية، قمنا باختبار نظرية المؤسسات الجديدة للمنظمات على سياق الدول النامية.

الكلمات المفتاحية الأداء، برامج التكييف أو التأهيل، النظرية المؤسساتية الجديدة، المؤسسات الصغيرة والمتوسطة الجزائرية.

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INTRODUCTION

Small and Medium-sized Enterprises "SMEs" are the most vulnerable to environmental changes forcing them to be flexible and adaptive (Jones, 2003; Krasniqi et al., 2015). Although SMEs' performance levels have been attributed to management factors (Stegall et al., 1976. Albert, 1981), external environmental factors have a significant effect on the viability of SMEs (Mashhadi et al., 2012; Ayyagari et al., 2014). These external environmental problems harm the business world. Exogenous factors are the economic, legal and regulatory issues, the tangible and intangible resources, the institutions of government and nongovernmental support and socio-cultural forces, etc. However, the environmental factors can also be defined as the source of the trends and events that create opportunities and threats for enterprises (Lenz, 1978; Mutalemwa, 2015).

Indeed, given that SMEs are identified as drivers of growth, creating jobs and wealth, they need an upgrade program (Ayyagari et al., 2014). The objectives of this upgrade program are for the enterprise to become more competitive efficient and win back their markets. These markets are flooded with foreign goods of low cost and good quality (Julien, 1994). The main objective of upgrading programs is to adapt the structures of the enterprise to its environment. While adjusting the immediate environment to the enterprise, upgrading SMEs development programs raises the enterprise's competitiveness and enhances its performance (Bennaceur et al., 2005; Amroune, 2022).

Please assume that the upgrade is an adaptive mechanism of the enterprise to its environment. The importance of this program is related to the economic, social and economic interest of this sector (ANDPME, 2007; Amroune, 2014). Adaptation in Algeria, commonly called "upgrade," first appeared with the pilot project of UNIDO and the program of the former Ministry of Industry and Restructuring "MIR" in 2000. Then, the former Ministry of SMEs and Handicrafts "MSMEH" drew support programs for SME development, in cooperation with foreign partners, including the United Nations Industrial Development Organization "UNIDO," the World Bank "WB," the French Development Agency "FDA," the European Commission "EC" under the MEDA program called "EDSME" and GTZ "German cooperation Agency," this according to MIR and UNIDO (2003), Amroune (2016).

Faced with open and changing environmental conditions, the issue of the vulnerability of the small and medium-sized enterprises sets institutional change. Meyer and Rowan (1977), DiMagio and Powel (1983) argue that the concept of adaptation of the organization to its environment reflects the organizational isomorphism, the legitimacy of the organization in a social environment, standards and values. However, the concept of organizational isomorphism is the one that better explains the adaptation of the organization to the requirements of the new institutional environment. DiMagio and Powell (1983) have argued that the process by which organizations are complying with environmental pressures is called an isomorphism.

Organizations often develop operational practices and similar behaviour patterns because of their conjunction with an institutional field, making them a mimetic isomorphism, a coercive isomorphism, or a normative isomorphism (DiMaggio and Powell, 1983). They argue that the restrictive environment pushes an organization in population to resemble other organizations facing the same set of environmental conditions. To ensure a similar performance to all SMEs and make them competitive, the Algerian government has accomplished the adaptation programs of Algerian SMEs.

Schindehutte and Morris (2001), De Waal and Knott (2013) argue that adaptation is necessary for most SMEs to ensure their performance and competitiveness. These SMEs are actively seeking to adapt over time. Learning ability and adaptation become vital skills to ensure its growth. One of the reasons supporting the adaptability for small businesses is that SMEs innovate faster and are generally less involved in retained earnings or dividend payments. Bird (1989), Schindehutte and Morris (2001) concluded that adaptation has implications for the performance of SMEs. Indeed, the tendency to adapt over time is positively associated with the growth of profits and sales or increased yields compared to key competitors. Similarly, for high levels of adaptation, Woo et al. (1991) found that adaptation changes the relationship between the hostility of the environment and the performance of the SMEs.

Therefore, the present study aims to investigate the effect of upgrade programs or commonly known adaptation programs on the performance of Algerian SMEs in the vision of the neo-institutional perspective of organizations.

As adaptive behaviour is a continuous series of evaluations and adjustments, Naman (1994) attests that adaptation is linked to performance. Each activity of the adaptation initiative should improve performance by some incremental maneuver. For example, Stoica and Schindehutte (1999) Andries and Debackere (2007) confirm that the relationship between adaptability and performance in small businesses is nonlinear. They add that a very high or deficient adaptive capacity harms performance. They also show that most enterprises that adapt necessarily do not have high performance. For example, Stoica and Schindehutte (1999) Sánchez et al. (2011) reveal the gap between adapting behaviours and performance. They argue that adaptation is not constant; enterprises adapt better than others at certain times.

Schindehutte and Morris (2001) announce that entrepreneurs constantly recognize the need to adapt the business elements continually. At the same time, the tendency to adjust varies among entrepreneurs and businesses.

Schon (1971) confirms that the instability and turbulence of the environment make the traditional problem of the scarcity of resources particularly ineffective in achieving a process of adaptation. Schindehutte and Morris (2001), Hsu et al. (2015), Castilla-Polo and Ggallardo-Vázquez (2016) demonstrate that the resources, both tangible and intangible and related activities of the upgrade program contribute to the ability of adaptation, this knowing that the adaptation program is composed of tangible and intangible resources. So the power of the environment is consistently decisive and judges the organization's quality to adapt to its environmental context. For SMEs to develop more adaptive capacity, Schindehutte and Morris (2001), De Waal and Knott (2013) reveal that these enterprises have adaptation strategies, adapt more over time, and display higher performance than putting less emphasis on adaptation. Therefore, we advance our next hypothesis.

Hypothesis H_1: SMEs beneficiaries of an adaptation program for Algerian SMEs are more performing than those who are not beneficiaries of this program.

However, in our hypothesis, we use two groups: a group of SMEs beneficiaries of an upgrade program and a group of SMEs taken randomly. To test the theory, we compare the two groups. This assumption allows us to examine the performance improvement from a group of SMEs randomly

selected to another group of SMEs beneficiaries of an upgrade program. Thus, in this comparison, we consider SMEs randomly chosen as a reference to measure the performance of SMEs beneficiaries of the upgrade program Amroune et al. (2017).

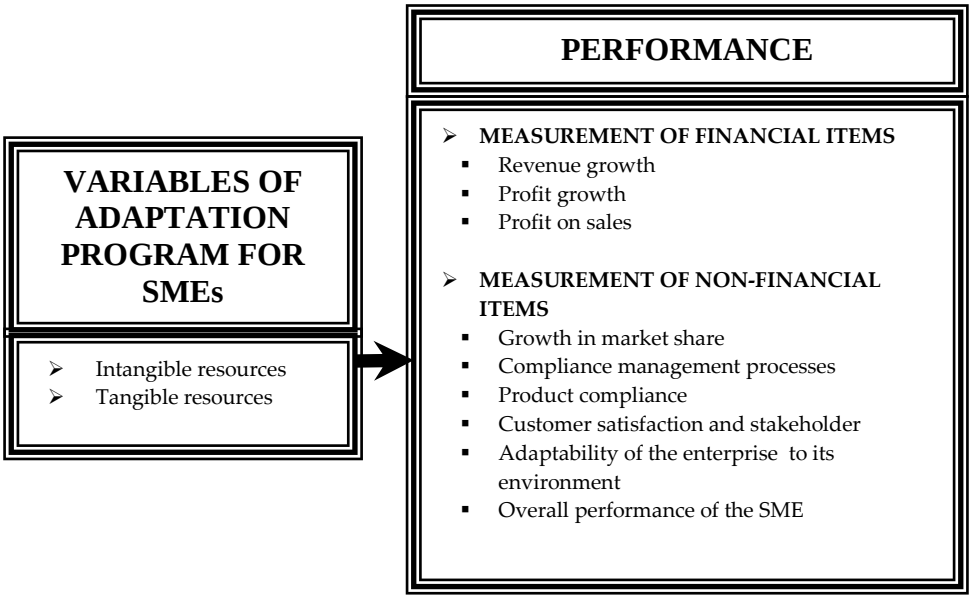


Figure 1: Theoretical model
Source: by authors

2. RESEARCH METHODOLOGY

The research is quantitative and is based on a purely statistical method. For data collection, we developed a quantitative questionnaire. However, to analyze the data, we used two sub-samples of the same population of Algerian SMEs.

2.1 Population and sample of the study

In Algeria, with a population of around 1 200 000 SMEs, we are interested in a sample of 11 320 SMEs. This sample is divided into two sub-samples.

2.1.1 First subsample

The first sub-sample comprises SMEs that have benefited from an adaptation program. This sub-sample includes 1 540 SMEs. Three organizations have contributed to the development of this sub-sample. These organizations are United Nations Industrial Development Organization "UNIDO," the European Commission, which MEDA1 and MEDA2 programs charge. Finally, the National Agency for Development of SMEs in Algeria, which deals later these programs, is ANDPME.

2.1.2 Second subsample

This second sub-sample, initially random, includes SMEs that are non-beneficiaries of one of the three upgrade programs. Originally, the sample was around 14 000 SMEs listed in the directory of the enterprise Kompass International, a subsidiary of Algeria. In addition, the second sub-sample of SMEs group selected randomly will allow us to compare the performance of these two sub-samples between them. Subsequently, after the data analysis, we determine the actual effect of an adaptation program on the performance of the SMEs beneficiary of such program.

So, the final sample, including the first and the second sub-sample, includes 8 360 selected enterprises from the database of the company Kompass International, Algeria subsidiary. We also added 1 420 potential enterprises established from the directories of the Ministry of Industry, SMEs and Investment Promotion, over 1 540 SME beneficiaries of an adaptation program. Thus, on the survey day, the final sample includes 11 320 Algerian enterprises.

2.3 Research tool

A quantitative questionnaire made data collection. This questionnaire reproduces the theoretical model of our present research (see **Figure 1**). After developing this questionnaire, it was subjected to content and construct validation process. However, the questionnaire is composed of three sections. The first section relates to measuring general information about enterprises and entrepreneurs. The second section covers the measurement of performance. The performance is the dependent variable. The third section covers the measurement of tangible and intangible resources of the enterprise. These latter variables compose the independent variables.

In this research, we focus on measuring the dependent variable, the performance. This last variable is composed of financial measures and non-financial measures. As for the items measuring the latter variable, three (3) items count the financial element. However, six items measure the non-financial items.

The questionnaire is designed to measure SMEs that have benefited from an adaptation program and SMEs that have not received from an adaptation program. After, the questionnaire was developed on the website and hosted by servers in the *SurveyMonkey* Company.

2.4 Data collection

We used an all-out strategy in data collection, but this collection was made mainly by emailing operations. This operation aims to send an email with the linked Web to enterprises registered in the database of Kompass International Company, an Algerian subsidiary. This web link is: **https://www.surveymonkey.com/s/entreprise-algerie**
Using the Kompass International Company servers, we sent 11230 emails. These emails were sent to Algerian entrepreneurs and business managers. The result of the data collection is 1014 SMEs that responded to our questionnaire, representing an 8.95% response rate.

3. DATA ANALYSIS

In data analysis, we start first by purifying the questionnaire. After that, by purifying the survey, we will proceed to verify our hypothesis.

3.1 Purification of the questionnaire

In total, the preliminary questionnaire includes 85 items. The goal of the purification of the questionnaire is to reduce the number of items and retain only the items that capture the maximum variance. The purification of the questionnaire has been made in two stages. In the first stage, we used exploratory factor analysis. In this analysis, we selected items with a load factor of over 0.50.

In the second step, we used the analysis of the reliability of the internal consistency. This analysis uses the size of the factor of internal reliability of

Cronbach's Alpha "α." In this analysis, we selected the factors with a value of around 0.70.

As a result, in the first stage, 19 items were eliminated. However, in the second stage, 20 items have been eliminated. In short, we have 39 items, in a total of 85 items, were destroyed. So, we have 46 items that capture the maximum variance. These items make up 39 independent variables and the remaining 7 forms the items dependent variable. In this research, we are interested in the dependent variable that measures the performance of SMEs. The performance measure contains two items measuring the element of financial performance and five items measuring the component of non-financial performance.

3.2 Verification of the hypothesis

However, our hypothesis seeks to verify whether the Algerian SMEs beneficiaries of an adaptation program are more successful than those that do not. By verifying this hypothesis, we will use a basic statistical technique. This technique uses the "ANOVA" analysis of variances. The statistical method, "one-way ANOVA," discusses the significance of the F of Fisher. The ANOVA wants to compare two means or more or between two groups or more. The objective is to test the null hypothesis.

Similarly, to verify the hypothesis, ANOVA is used in two steps. In the first step, we use the analysis with aggregate performance in one variable. However, the performance is distributed over seven items in the second step. We use the ANOVA for the dependent variable of our theoretical model, the performance of SME.

Premises of ANOVA

To perform the ANOVA test, it is interesting to observe a few assumptions:

1) It is essential to ensure the normal distribution of variables;
2) It is essential to ensure the homogeneity of variances;
3) The subjects in each sample are different, and they are drawn randomly from the population.

We have two groups "sub-samples" drawn at random from the population. A group of SMEs, which did not benefit from an adaptation program, includes

223 SMEs. Another group of SME beneficiaries of an adaptation program encloses 198 SMEs. So the third premise is verified. For the normality of the sample, after a graphical review of our 7 items for the two groups on SPSS 26 Software, the distribution of the two samples is normal. Furthermore, according to Dagnelie (2006 and 2007), ANOVA is not very sensitive to the normal distribution, especially with a large sample. However, it is necessary to be careful with small samples.

In addition, for the equality of variances of the two samples, we will proceed to the statistical Levene test, and we'll make sure of the significance of each variable. In **Table 1** and **Table 2**, the statistical Levene test is not verified for the two performance representations. The level of significance is less than $p < 0.05$, Sig. = 0.0005, so the homogeneity of variances test is not considered. But still, we could continue our analysis, and the results will not be based on a large scale. **Table 1** shows the test of homogeneity of variances for aggregate performance. **Table 2** shows the variance homogeneity test distributed on seven items measuring the performance of Algerian SMEs.

Table 1: Homogeneity of variance test for aggregate performance

Levene Statistics	**df1**	**df2**	**Sig.**
47.533	1	419	0.0005

Source: by authors usingSPSS Software

Table 2: Test of homogeneity of variances on the performance distributed on 7 items

Variables (Items of performance)		Levene Statistics	**df1**	**df2**	**Sig.**
q1	Growth in market share	73.069	1	418	0.0005
q2	Compliance management processes in the operation of our business	57.157	1	418	0.0005
q3	Compliance of our products compared to our competitors	67.729	1	419	0.0005
q4	Customer satisfaction and satisfaction of our business partners	60.221	1	418	0.0005
q5	Adapting our business to its contextual environment	69.697	1	419	0.0005

q6	Evolution in earnings on equity	52.117	1	419	0.0005
q7	Evolution of profit on sales	59.894	1	419	0.0005

Source: by authors using SPSS Software

However, the ANOVA analysis is used to verify the significance of the mean difference. But this analysis does not say where the difference lies. So, a comparison of means has to be made on the dependent variable, performance, in the two groups: the group of SMEs non-beneficiaries of an adaptation program and the group of SMEs beneficiaries of an adaptation program.

3.3 Data analysis for the test of the hypothesis

The analysis of the data on our hypothesis is done in two steps.

First step

In this step, the performance of the two groups is aggregated. We calculated the average of seven variables measuring performance for both groups: group 1 non-beneficiary SMEs of an adaptation program and group 2 of SMEs beneficiaries. **Table 3a** shows the descriptive statistics of these two groups: the size of each group, the mean of the performance in each group, the standard deviation, standard error and the minimum and maximum performance.

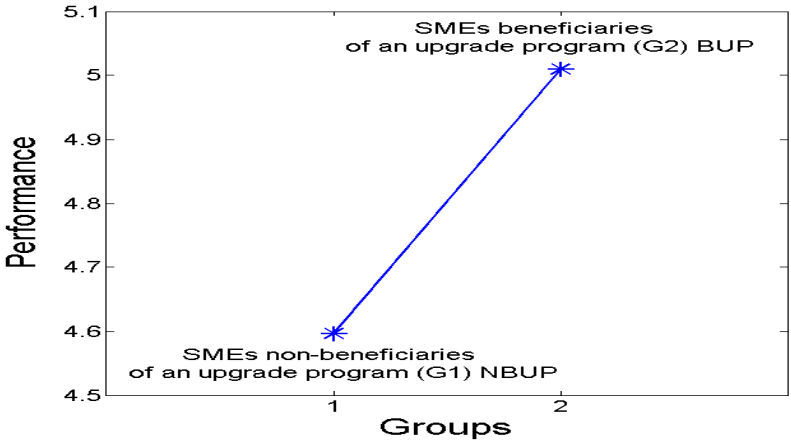
Likewise, **Table 3b** shows the results of the one-way ANOVA test. In its last column, this table indicates the level of bilateral significance. The story bilaterally demonstrates the significance of the difference of means. Then, the probability of reaching a difference of the means is 0.0005, which is widely < 0.05. So the contrast of the means is significant. For example, group 1 of non-beneficiary SMEs of an upgrade program is different from that of group 2 of SMEs beneficiaries of an upgrade program. **Table 3b** shows intergroup and intra-group effects in the ANOVA test pane. The intergroup impact is due to the categorical variable. However, the intra-group result is due to the variation in each group. The table also indicates the two degrees of freedom and the total of two effects: intra-groups and inter-groups.

The F value is 13.389 with a significance level of the difference in the average of about 0.0005 < 0.05. So, the probability of having the value of F when the null hypothesis is true is minimal. Therefore, we reject the null hypothesis and accept the alternative hypothesis. This hypothesis proves that there is a significant difference in averages. However, we are seeking what performance is superior to the other? The performance concern: of group 1, of non-beneficiary SMEs of an adaptation program, and group 2, SME beneficiaries of an adaptation program.

Table 3a and **Table 3b** give the following results to answer this question.

- The first result is calculating the mean difference, and we look at the meaning of this difference.
- Mean performance of group 1 is Pt1: Ut1 = 4.5964
- Mean performance of group 2 is Pt2: Ut2 = 5.0094
- Difference UD = Ut1 - Ut2 = - 0.413 < 0, this difference is significant: Ut1 - Ut2 < 0, which implies Ut2> Ut1 then Pt2> Pt1
  Second, the F of Fisher = 13.389 is significant at a level of 0.0005 < 0.05.
- The negative value in the performance difference indicates that the performance of Group 2 of SMEs beneficiaries of an adaptation program is more excellent than Group 1 of SMEs non-beneficiaries of an adaptation program "Pt2 > Pt1". This is shown in **Figure 2**. This figure demonstrates that there is an improvement in the performance of Group 2 compared to Group 1.

Figure 2: Graphical presentation of improved aggregate performance of Group 2.



Source: by authors using Matlab Software

Table 3a: Descriptive statistics for aggregate performance

Standard Deviation	Standard Error	Min	Max
1.32387	0.08865	1.00	7.00
0.93138	0.06619	1.00	7.00
1.17298	0.05717	1.00	7.00

Source: by authors using SPSS Software

Table 3b: ANOVA one way test

	Sum of squares	df	Mean square	F	Sig.	Decision
Intergroups	17.894	1	17.894	13.389	0.0005	Significant
Intra-groups	559.973	419	1.336			
Total	577.867	420				

Source: by authors using SPSS Software

Second step

In the second step, the performance measurement is distributed on the 7 items. This allows us to see the evolution of the improvement on each item. Subsequently, the performance will be spread over the seven items measuring the business performance of non-beneficiary SMEs of an adaptation program and the group of SME beneficiaries of an adaptation program. **Table 4** shows the descriptive statistics for each item, N of group, mean, standard deviation, standard error and the minimum and maximum in the performance measurement scale.

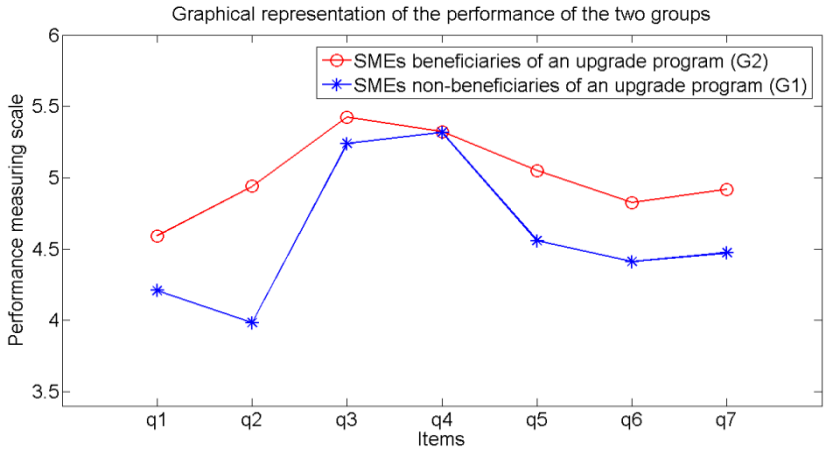
Similarly, **Table 4 (**Please see the Table 4 in the appendices**)** gives the MANOVA test for the two groups and each pair of items. We have 7 pairs of items; note that the significance level is bilateral. The latter affect the difference of the mean. For all items, the probability of reaching a mean

difference is in the order of 0.005, which is widely < 0.05, except for two items: the item of compliance of our products compared to those of our competitors and the item of satisfaction customers and our business partners. These last two items are not significant. For example, the significance level was 0.183 and 0.963, more than p > 0.05. The other five items are significant at a level less than 0.005. So these five remaining items differentiate the two groups. This significance is bilateral. It does not tell us where the difference (s) lies in group 1 or 2.

So the average difference is significant for the other 5 items, namely: growth in market share, compliance management processes in the functioning of our SMEs, adapting our SMEs to its contextual environment, evolution in profit on sale and expansion in net profit on equity. Thus, **group 1** is different from the performance of group 2 for all past 5 pairs of variables, but it does not make a difference for the other two variables. However, we seek, what group performance is superior to the other, **group 1** or **group 2**? So, a unilateral analysis is required. This analysis lets us know which group is higher than the other group.

In **Figure 3**, we see that the seven items measuring performance in **group 2** of SMEs beneficiaries of an upgrade program are above the graph of **group 1** of SMEs non-beneficiaries of an upgrade program for the five items: q1, q2, q5, q6 and q7. However, the two items q3 and q4 do not make a difference.

Figure 3: Graphical representation of the performance of the two groups



Source: by authors using Matlab Software

4. DISCUSSION OF RESULTS AND CONCLUSION

4.1 DISCUSSION

We recall that our research is based on a purely quantitative method with the administration of a quantitative questionnaire. The study aims to identify the effect of the adaptation program on the performance of Algerian SMEs. Statistical analysis was performed on two sub-samples of the same population.

Furthermore, this technical statistic was made by analyzing variance "ANOVA and MANOVA." this technical statistic has been used in two steps. In the first step, the performance is aggregated. However, in the second step, the performance is distributed over all the items measuring this variable. But before starting this analysis, we conducted a purification of the questionnaire. The latter presented the research tool. We have only retained in this purification items that capture the maximum of variance.

The objective of this research is to verify the integrity of our hypothesis statistically. So for our findings, the hypothesis was fully supported (see **Table 5**).

Table 5: Summary of the decision of hypothesis testing

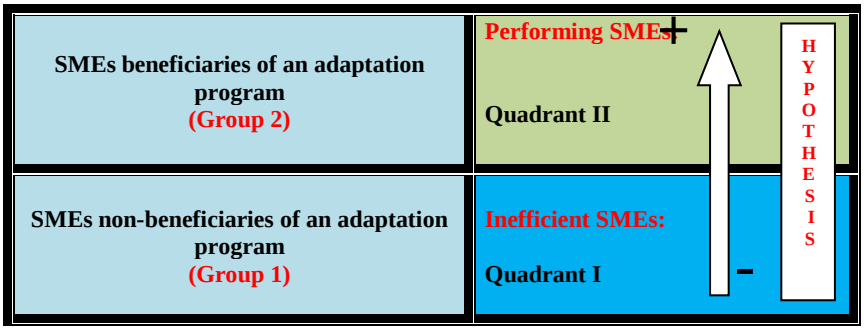
Hypothesis	**Statement of the hypothesis**	**Decision of verification**
Hypothesis	SMEs beneficiaries of an adaptation program are more efficient than those that do not: the case of Algerian SMEs.	**Supported**

For the result of our hypothesis, we incorporated two groups: the first group is the group of SMEs beneficiaries of an upgrade program. This group is taken from the sample of SMEs after performing an upgrade program. The second group contains the sample of non-beneficiary SMEs of an upgrade program. The results come from the analysis of variance "ANOVA." In this ANOVA, we proved that the group of SMEs beneficiaries of an upgrade

program is more efficient than the group of SMEs non-beneficiaries; this is presented in an arrow from quadrant I to quadrant II of **Figure 4**

The study allowed us to test two samples, a sample of beneficiary SMEs of an upgrade program and a sample of non-beneficiaries SMEs. This sample is extracted randomly from the entire population of Algerian SMEs. The sample of beneficiary SMEs of an upgrade program is selected from the population group of SMEs growing and do not have financial difficulties. After purifying our questionnaire and selecting items that capture the maximum variance, data analysis was made on the dependent variable performance of our theoretical model. As a result, we found that the upgrade programs improve the performance of Algerian SMEs. The result of this analysis is shown in **Figure 4**. This result confirms that the beneficiary SMEs of an upgrade program are more successful than those that do not.

Figure 4: Discussion framework of the two hypotheses 1 and 2.



Source: by authors

Ultimately, the research confirms that the adaptation program of Algerian SMEs improves performance. As a result, these SMEs received an adaptation program contrasting SMEs that do not have benefit from this program.

Our results corroborate well with the observations of Smallbone and Welter (2009), Dec and Masiukiewicz. (2014) and Ceptureanu (2015). These observations confirm that Central European countries such as the Baltic States, Hungary, the Czech Republic and Poland are characterized by a more advanced stage of development of SMEs for their adaptation to a changing environment. However, in terms of resources, O'Regan et al.

(2005) argue that SMEs are less likely to influence their environment and rely on their internal resources to pursue competitive advantage. This competitive advantage improves their ability to adapt to an extreme environment.

However, for Asian countries, drawing on the work of White and Linden (2002), Shridhar (2006), Tambunan (2007), Habaradas (2008) and Ahlstrom and Ding (2014), who studied the case respectively of entrepreneurial development in Indonesia, Malaysia, India and China confirm that in those countries a multitude of government programs improve competitiveness, performance and adaptation of SMEs. The results of these programs have been convincing.

4.2 CONCLUSION

Knowing that the upgrade program is only an adaptation mechanism of the enterprise to its environment, adaptation is a mediating variable between the upgrade and performance of SMEs, according to Amroune, Hafsi, Bernard and Plaisent (2014c). So, the result of our research turned out that adaptation is a guarantee for the performance of the enterprise, including the case of Algerian SMEs.

Theoretically, we assume that the neo-institutional perspective of organizations is an adaptation theory to a given environment, according to its founder Philip Selznick (1957). Meyer and Rowan (1977), Dimagio and Powel (1983) show that the concept of adaptation of the organization to its environment reflects the organizational isomorphism, norms, values, and legitimacy in a societal environment. Dimagio and Powell (1983) have argued that the concept that drives organizations to adapt to environmental constraints is an organizational isomorphism. This isomorphism takes several forms, namely: mimetic isomorphism, normative isomorphism or coercive isomorphism.

So, organizations are trying to adapt to the trouble of their internal groups by the isomorphism concept. In the case of Algerian SMEs, this concept is well illustrated in the results of our present study, because two groups emerged, the group of SMEs that are adapted and those that are not adapted. The group of adapted SMEs holds a different entity relative to the group of SMEs that are not adapted. So, the adapted performance characteristics of

SMEs look alike, especially in terms of performance results. So we have shown that the adjusted SMEs group performance is better against SMEs that are not adapted.

This adaptation reflects the concept of normative isomorphism primarily. Algerian public authorities have set rules and standards for normative isomorphism to adhere to this adaptation program. All SMEs must conform either to adherence to these programs or even meet standards in realizing adaptation program activities.

For mimetic isomorphism, it has been proven in the field that Algerian SMEs that have benefited from an adaptation program see their performance improves. This fact has prompted other SMEs of the population to come to imitate recent SMEs to see their performance progresses.

For the coercive isomorphism, the Algerian SMEs adaptation program is not obligatory. Membership in the program is strictly voluntary. However, the government does not oblige Algerian SMEs to join this program. So we find that the concept of coercive isomorphism does not apply in the case of the adaptation of Algerian SMEs. Thus, we conclude that the adaptation of Algerian SMEs through the concept of isomorphism in the neo-institutional perspective is well highlighted, except for the idea of coercive isomorphism.

Practically, in connection with the neo-institutional perspective and the adaptation of SMEs, it is now recognized in emerging and developing countries that the "new role" of the state is to develop an appropriate institutional framework to which entrepreneurs meet positively to create economic value, enhance growth and ensure the performance of SMEs. In Algeria, the political powers providers of the formal institutional framework must also work to facilitate networking, sharing resources, ensuring SMEs' legitimacy, and further homogenization of development programs within SMEs to provide a well good organizational isomorphism. In our design, these are the guarantors of favorable entrepreneurship development in Algeria.

Ultimately, the principal limit of our research remains the retrospective to the extent of our various independent and dependent variables. However, for our proposals for further investigations, it would be interesting to study the role of the entrepreneur in this organizational change and its effect on the

success of the implementation of an adaptation program. We also recommend repeating the analysis of this study from the perspective of population ecology theory. The aim is to clear up the analytical difference between this theory and our present theory: the neo-institutional perspective of organizations. The neo-institutional view seeks why organizations are alike, but the population ecology theory seeks why organizations differ. The population ecology theory could then enlighten us about the differences in the two groups of SMEs, the object of our study.

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Table 4: Descriptive statistics for aggregate performance and MANOVA test

Descriptive statistics for aggregated performance							**MANOVA Test**						
Items		Group	N	Mean	Standard Deviation	Standard Error		df	Sum of squares	Mean square	F	Sig.	decision
q1	Growth in market share	Group of non-beneficiary SMEs of an upgrade program	222	4.2089	1.832	0.12301	Intergroups	1	15.349	15.349	6.441	0.012	**S**
		Group of SMEs beneficiaries of an upgrade program	198	4.5918	1.134	0.08064	Intra-groups	418	996.056	2.383			
		Total	420	4.3894	1.5536	0.07581	Total	419	1011.405				
q2	Compliance management processes in the operation of our business	Group of non-beneficiary SMEs of an upgrade program	222	3.9821	1.591	0.10683	Intergroups	1	95.901	95.901	52.362	0.0005	**S**
		Group of SMEs beneficiaries of an upgrade program	198	4.9394	1.021	0.07261	Intra-groups	418	765.566	1.831			
		Total	420	4.4334	1.433	0.06997	Total	419	861.467				
q3	Compliance of our products ompared to our competitors	Group of non-beneficiary SMEs of an upgrade program	223	5.2390	1.684	0.11277	Intergroups	1	3.598	3.598	1.783	0.183	**NS**
		Group of SMEs beneficiaries of an upgrade program	198	5.4242	1.047	0.07445	Intra-groups	419	845.780	2.019			
		Total	421	5.3261	1.422	0.06931	Total	420	849.379				
q4	Customer satisfaction and satisfaction of our business	Group of non-beneficiary SMEs of an upgrade program	222	5.3169	1.641	0.11014	Intergroups	1	.004	.004	.002	0.963	**NS**
		Group of SMEs beneficiaries of an upgrade program	198	5.3232	1.011	0.07190	Intra-groups	418	796.819	1.906			

	partners	Total	420	5.3199	1.379	0.06729	Total	419	796.823				
q5	Adapting our business to its contextual environment	Group of non-beneficiary SMEs of an upgrade program	223	4.5571	1.630	0.10922	Intergroups	1	25.533	25.533	13.090	0.0005	**S**
		Group of SMEs beneficiaries of an upgrade program	198	5.0505	1.072	0.07624	Intra-groups	419	817.298	1.951			
		Total	421	4.7892	1.4165	0.06904	Total	420	842.830				
q6	Evolution in earnings on equity	Group of non-beneficiary SMEs of an upgrade program	223	4.4114	1.625	0.10883	Intergroups	1	17.915	17.915	8.975	0.003	**S**
		Group of SMEs beneficiaries of an upgrade program	198	4.8247	1.126	0.08006	Intra-groups	419	836.352	1.996			
		Total	421	4.6058	1.426	0.06951	Total	420	854.267				
q7	Evolution of profit on sales evolution of profit on sales	Group of non-beneficiary SMEs of an upgrade program	223	4.4726	1.664	0.11144	Intergroups	1	20.836	20.836	10.079	0.002	**S**
		Group of SMEs beneficiaries of an upgrade program	198	4.9184	1.129	0.08027	Intra-groups	419	866.183	2.067			
		Total	421	4.6823	1.453	0.07083	Total	420	887.019				