



The Role of the ERP System in Limiting Creative Accounting Practices - A study by questionnaire with a sample of accounting practitioners in Algeria-

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Abstract: The study aims to determine the role of the enterprise resource planning system (ERP) in reducing creative accounting practices, so we used the deductive approach in order to explain the conceptual framework related to the enterprise resource planning system (ERP) and creative accounting, and we also used the inductive approach in order to interpret the results of the questionnaire distributed to practitioners of accounting professions in Algeria.

This study concluded that there is a correlation statistically significant at a significant level ($\alpha \leq 0,05$), between the ERP system and the practices of creative accounting and there are no statistically significant differences at a significant level ($\alpha \leq 0,05$), in the impact of the ERP system on the practices of creative accounting attributed to the personal variables (**the age, the educational level, the scientific specialization, the function and the professional experience**).

Key words: ERP, Creative Accounting, Accounting Practitioners, Algeria.

Jel Classification Codes :M41, M15

Introduction:

Every enterprises today strives to achieve accuracy in its operations while ensuring its timely implementation and without making mistakes that may cause it to have legal problems with customers, suppliers and the various organisms it deals with.

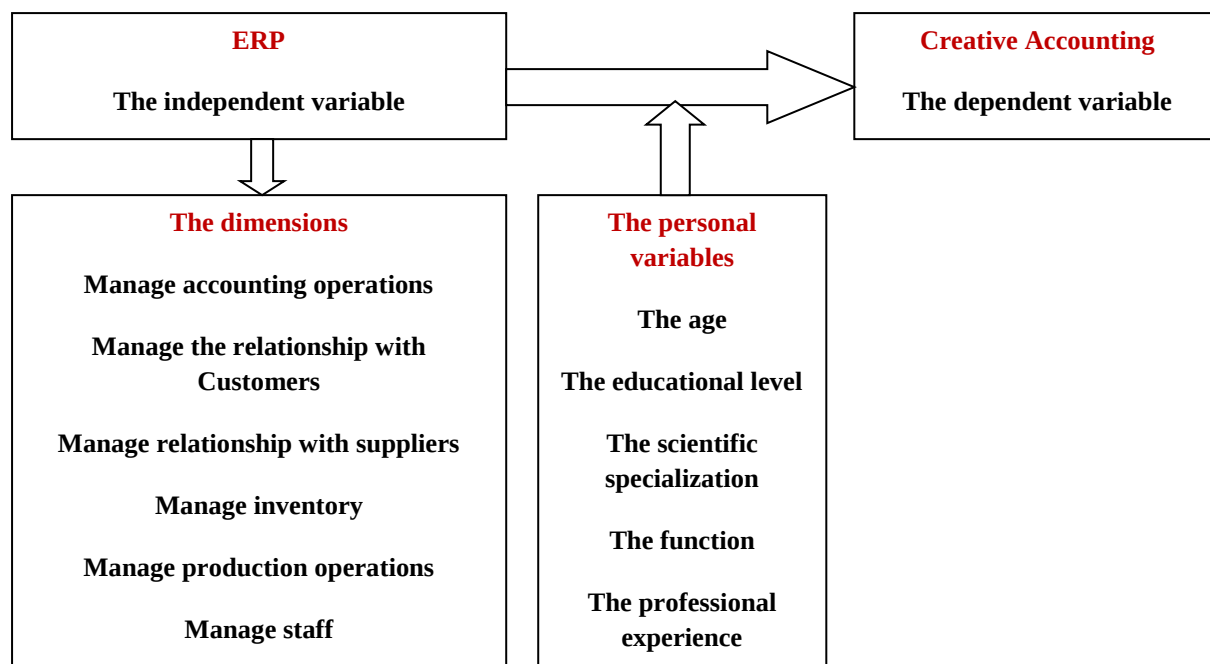
Each enterprises also seeks to maximize its profits and minimize its costs by using many ways and means to achieve this, and among these methods is creative accounting, which includes a set of techniques that accounting practitioners resort to in order to achieve the goals of the enterprise, but the practice of creative accounting without adherence to some conditions will negatively affect The operations of the enterprise from the legal side. The enterprise resource planning system (**ERP**) is one of the modern programs that help to practice creative accounting without the enterprise facing legal problems and judicial follow-ups.

The study problematic: In order to explain the various aspects of study, we formulate the problematic of study as follows:

What is the role of the ERP System in limiting creative accounting practices?

The model of study: According to the previous studies of (KIDAOUENE and GOURINE, 2018), (GAMOURA ,2018) (KHENNICHE & GUERDOUBA, 2018) and ((SLIMANI & BOUKRIF, 2017), we create the model of study as follows:

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Source: Prepared by researcher according to the previous studies

The hypotheses of study: according to the model of study, we formulate two main hypotheses as follows:

- ✓ **The first main hypothesis:** There is a correlation statistically significant at a significant level ($\alpha \leq 0,05$), between the ERP system and the practices of creative accounting;
- ✓ **The second main hypothesis:** There are statistically significant differences at a significant level ($\alpha \leq 0,05$), in the impact of the ERP system on the practices of creative accounting attributed to the personal variables (**the age, the educational level, the scientific specialization, the function and the professional experience**).

The objectives of study: This study derives its objectives from the following points:

- ✓ The essential role of the enterprise resource planning system (**ERP**) in facilitating and simplifying the operations of the enterprise;
- ✓ Benefits provided by creative accounting for economic enterprises;
- ✓ Determine the techniques used in creative accounting;
- ✓ Determine the role of the ERP system in limiting creative accounting practices.

The research methodology: We used the deductive approach in order to explain the concepts related to the ERP system and creative accounting, and we used the inductive approach in order to analyze the questionnaire distributed to a sample of practitioners of accounting professions in Algeria.

The sections of study: We divided the study into two parts as follows:

- ✓ Conceptual framework of ERP system and creative accounting;
- ✓ Practical framework of the study.

2. Conceptual framework of ERP system and creative accounting

2.1 Conceptual framework of ERP system

2.1.1 Definition of ERP system

The ERP system includes a commercial software package that promises the seamless integration of all the information circulating in the enterprise such as: finance, accounting, human resources, and customer information (BERREFAS & BENABOU, 2021, p. 35).

The ERP is a mega computer tool of the enterprise's information system. It is a tool that gathers and integrates, within a single database, all the data and management knowledge of the company (KHENNICHE & GUERDOUBA, 2018, p. 548).

The ERP (Enterprise Resource Planning) is a software package that allows planning of the resources necessary for the proper functioning of the enterprise (GAMOURA, 2018, p. 67).

The ERP is an integrated system that allows the enterprise to standardize its information system to link and automate its basic processes. It provides employees with the information needed to direct and control critical business activities along the supply chain, from procurement through production/operations to sales and delivery to the end customer. Employees only enter information once, which is then made available to all enterprise systems (SLIMANI & BOUKRIF, 2017, pp. 121,122).

2.1.2 Benefits of using ERP system: there are many benefits of using ERP system as follows (Gestisoft):

- ✓ More transparency and visibility in the distribution process to treat orders more accurately;
- ✓ Facilitate to control inventory and costs (multiple costing methods, differentiated pricing and follow-up series);
- ✓ A perfect control of finances (integrated cash flow management, accounting, supplier and customer accounts, reports);
- ✓ Tightened assembly and distribution (advance purchases, pickup & pack, custom pricing, inventory, orders);
- ✓ Data mining and real-time access to enterprise performance (budgeting, forecasts, analysis, reports)
- ✓ Optimization of customer experience and satisfaction (sales data, discussion follow-up, customer history).

2.2 Conceptual framework of creative accounting

2.2.1 Definition of creative accounting

The concept of creative accounting is used to show the business's income, assets, and liability in an unreal way, which leads to many collapses and financial scandals in many major economic facilities, such as Enron, Worldcom, Harkin, and MerillEndico (Taiseer Ali Khalaf, 2018, p. 121).

Creative accounting constitutes the instrument for fraudulent financial reporting that entails intentional misstatement by corporate management of financial result in order to mislead investors and other users of financial reports is considered as universal phenomenon (Omada, 2019, pp. 96,97).

Creative accounting is the application of certain methods to give the institution a better view in terms of the strength of its financial position, the size of its profits or its competitive advantage (ABBASSI, ZANOUDA, & CHAOUBI, 2022, pp. 781,782).

2.2.2 Techniques of creative accounting: there are many techniques of creative accounting, we present some techniques as follows:

- ✓ **Create over/under provisions or reserves:** It can make over provisions or reserves when revenues are high to bring down it to the normal level, the level that can easily be maintained in future years. Similarly, in critical time it can ignore making provisions to overstate the profit (Mirdan & Manhel, 2017, p. 941);
- ✓ **Profit Management:** this technique is very popular and widespread in the USA and is defined as profit manipulation with the intention of reaching its desired level (Eva & Tatiana, 2021, p. 44);
- ✓ **Off-balance sheet financing:** In off balance sheet financing, a company increased borrowing is not reflected in the financial statements. This enables the company to show

better gearing ratios, obtain additional borrowing, while still maintaining its gearing limits with its lenders (Adetoso & AJIGA, 2017, p. 57);

- ✓ **Avoid government regulations:** by choosing accounting methods that tend to reduce their reported profits (KIDAOUENE & GOURINE, 2018, p. 87).

3. Practical framework of the study

3.1 Community and sample of study

We distributed an electronic questionnaire to a sample of accounting professionals in Algeria (certified accountant, external auditor and accountant expert).

3.2 Characteristics of the study sample

3.2.1 Distribution of the sample members according to the age variable: for clarifying the distribution of the sample members according to the age variable, the table (1) explains them as follows:

Table 1. Distribution of the sample members according to the age variable

Age	Frequency	Percentage %
Under 30 years old	1	4.8%
Between 30 and 45 years old	10	47.6%
Over 45 years old	10	47.6%
The total	21	100%

Source: Prepared by researcher depending the outputs of SPSS 25 version

Through the table (1), we note that professionals aged less than 30 years have the lowest category (4.8%), because the National Accountability Council has suspended all exams for the accounting profession since its issuance of Law 10/01, as for the two categories aged between 30 and 45 years and over 45 years, their percentage was equal (47.6%).

3.2.2 Distribution of the sample members according to the educational level variable: for clarifying the distribution of the sample members according to the educational level variable, the table (2) explains them as follows:

Table 2. Distribution of the sample members according to the educational level variable

Educational level	Frequency	Percentage %
Bachelor's degree	8	38.1%
Master	7	33.3%
Magister	3	14.3%
PhD	3	14.3%
The total	21	100%

Source: Prepared by researcher depending the outputs of SPSS 25 version

Through the table (2), we note that all sample members have a university level, which enhances the credibility of their professional work.

3.2.3 Distribution of the sample members according to the scientific specialization variable: for clarifying the distribution of the sample members according to the scientific specialization variable, the table (3) explains them as follows:

Table 3. Distribution of the sample members according to the scientific specialization variable

Educational level	Frequency	Percentage %
Accounting	3	14.3%
Accounting and taxation	3	14.3%
Accounting and auditing	9	42.9%
Accounting and finance	6	28.6%
The total	21	100%

Source: Prepared by researcher depending the outputs of SPSS 25 version

Through the table (3), we note that the accounting and auditing specialization represents the largest percentage (42.9%), because this specialization is present in most Algerian universities due to the importance of the accounting and auditing profession in economic enterprises.

3.2.4 Distribution of the sample members according to the function variable: for clarifying the distribution of the sample members according to the function variable, the table (4) explains them as follows:

Table 4. Distribution of the sample members according to the function variable

Function	Frequency	Percentage %
Certified accountant	5	23.8%
External auditor	12	57.1%
Accountant expert	4	19%
The total	21	100%

Source: Prepared by researcher depending the outputs of SPSS 25 version

Through the table (4), we note that the majority of the sample members are external auditor (57.1%), because this category has the most widespread offices in Algeria compared to the certified accountant and the accountant expert.

3.2.5 Distribution of the sample members according to the professional experience variable: for clarifying the distribution of the sample members according to the professional experience variable, the table (5) explains them as follows:

Table 5. Distribution of the sample members according to the professional experience variable

Professional Experience	Frequency	Percentage %
Less than 5 years	6	28.6%
Between 10 and 5 years old	4	19%
More than 10 years	11	52.4%
The total	21	100%

Source: Prepared by researcher depending the outputs of SPSS 25 version

Through the table (5), we note that the majority of the sample members have more than 10 years of professional experience (52.4%), which will reflect positively on the credibility of their answers.

3.3 Internal consistency: in order to check the internal consistency of the study, we use Cronbach's alpha coefficient, table (6) shows the results of the Cronbach's alpha coefficient as follows:

Table 6. The results of the Cronbach's alpha coefficient

Variable	Dimensions	Number of paragraphs	Cronbach's alpha coefficient
Enterprise resource planning (ERP) Independent variable	Manage accounting operations	2	0.89
	Manage the relationship with Customers	2	0.90
	Manage relationship with suppliers	2	0.88
	Manage inventory	2	0.91
	Manage production operations	2	0.89
	Manage staff	2	0.91
Creative accounting Dependent variable		8	0.92

Total Cronbach's alpha coefficient	20	0.91
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Source: Prepared by researcher depending the outputs of SPSS 25 version

Through the table (6), we note that the total value of Cronbach's alpha coefficient amounted 0.91 (91%), it is an acceptable percentage to achieve the objectives of our study.

3.4 Data analysis and discussion of the study paragraphs

3.4.1 Findings related to the independent variable (ERP): the table (7) clarifies findings related to the independent variable (ERP) as follows:

Table 7. Findings related to the independent variable (ERP)

Paragraphs		The mean	The standard deviation	The degree of approval	The rank
Dimensions					
Manage accounting operations	The ERP system helps to record accounting operations in their different stages	4.14	0.91	High	1
	The ERP system facilitates the discovery of errors in the recording of accounting operations	3.66	1.11	High	10
Manage the relationship with Customers	The ERP system helps to determine the quantities of orders placed by customers	3.85	1.10	High	5
	The ERP system helps to determine the type of customer in terms of payment within the specified time	3.76	1.09	High	9
Manage relationship with suppliers	The ERP system helps to determine the supplier's commitment to deliver the order on time and on the agreed terms	4	1.04	High	3
	The ERP system helps determine the extent of the company's commitment to suppliers in terms of financial payments	3.57	1.16	High	12
Manage inventory	The ERP system facilitates the process of entering and exiting stock	3.57	0.92	High	11
	The ERP system can detect overruns when entering and exiting stock	3.76	0.99	High	8
Manage production operations	The ERP system helps determine the amount of raw materials used for production	3.90	0.88	High	4
	The ERP system allows determine the quantity of products that have been produced	4.04	0.92	High	2
Manage staff	The ERP system allows determine the days of presence and absence of staff	3.80	1.12	High	7
	The ERP system assists in the process of preparing staff salaries	3.85	1.15	High	6
Total of the mean and standard deviation		3.825	1.032	High	

Source: Prepared by researcher depending the outputs of SPSS 25 version

Through the table (7), we note that the total value of the mean and the standard deviation are high, this is evidence of the respondents' approval (practitioners of accounting professions in Algeria) for the benefits and facilities provided to them by the ERP system.

3.4.2 Findings related to the dependent variable (Creative accounting): the table (8) clarifies findings related to the dependent variable (Creative accounting) as follows:

Table 8. Findings related to the dependent variable (Creative accounting)

Paragraphs	The mean	The standard deviation	The degree of approval	The rank
Creative accounting is the exploitation of a loophole in the international accounting standards Ias/Ifirs, in order to obtain tax privileges	3.14	1.31	Medium	5
Creative accounting is the exploitation of a loophole in local laws regulating the accounting profession, in order to obtain tax privileges	3.52	1.43	High	1
Creative accounting is a positive behavior of the accountant	3.28	1.34	Medium	4
Creative accounting is a negative behavior of the accountant	2.85	1.42	Medium	8
The accountant carries out creative accounting under pressure from managers	3.42	1.20	High	2
The accountant does creative accounting as one of the accounting techniques	3.38	1.35	Medium	3
There are deterrent laws to punish any accountant who practices creative accounting	3.14	1.45	Medium	6
The practice of creative accounting is inconsistent with accounting hypotheses and principles	3.14	1.62	Medium	7
Total of the mean and standard deviation	3.23	1.39	Medium	

Source: Prepared by researcher depending the outputs of SPSS 25 version

Through the table (8), we note that the total value of the mean and the standard deviation are medium, due to the difference of opinions among practitioners of accounting professions in Algeria about the application of creative accounting in economic enterprises.

3.5 The test of the hypotheses of study

3.5.1 The test of the first main hypothesis: in order to test the first main hypothesis which state “there is a correlation statistically significant at a significant level ($\alpha \leq 0,05$), between the ERP system and the practices of creative accounting”, we have to test its sub-hypotheses.

3.5.1.1 The test of the first sub-hypothesis: this sub-hypothesis states “there is a correlation statistically significant at a significant level ($\alpha \leq 0,05$), between the manage accounting operations and the practices of creative accounting”, the table (9) clarifies the results of the analysis of regression as follows:

Table 9. The results of the analysis of regression for testing the first sub-hypothesis

The analysis of regression	Σ THE squares	The degrees of freedom	The mean of squares	The value of (F _c)	The value of (F _t)	Sig	R ²	R
Regression	6.942	1	6.942	9.121	4.38	0.007	0.324	0.570
The residual	14.461	19	0.761					
The total	21.403	20						

Source: Prepared by researcher depending the outputs of SPSS 25 version

Through the table (9), we note that a significant level is estimated (0.007), this value is less than (0.05), therefore we accept the first sub-hypothesis because there is correlation between the manage accounting operations and the practices of creative accounting.

3.5.1.2 The test of the second sub-hypothesis: this sub-hypothesis states “there is a correlation statistically significant at a significant level ($\alpha \leq 0,05$), between the manage the relationship with customers and the practices of creative accounting”, the table (10) clarifies the results of the analysis of regression as follows:

Table 10. The results of the analysis of regression for testing the second sub-hypothesis

The analysis of regression	Σ THE squares	The degrees of freedom	The mean of squares	The value of (F _c)	The value of (F _t)	Sig	R ²	R
Regression	5.215	1	5.215	4.38	4.38	0.023	0.244	0.494
The residual	16.188	19	0.852					
The total	21.403	20						

Source: Prepared by researcher depending the outputs of SPSS 25 version

Through the table (10), we note that a significant level is estimated (0.023), this value is less than (0.05), therefore we accept the second sub-hypothesis because there is correlation the manage the relationship with customers and the practices of creative accounting.

3.5.1.3 The test of the third sub-hypothesis: this sub-hypothesis states “there is a correlation statistically significant at a significant level ($\alpha \leq 0,05$), between the manage relationship with suppliers and the practices of creative accounting”, the table (11) clarifies the results of the analysis of regression as follows:

Table 11. The results of the analysis of regression for testing the third sub-hypothesis

The analysis of regression	Σ THE squares	The degrees of freedom	The mean of squares	The value of (F _c)	The value of (F _t)	Sig	R ²	R
Regression	6.512	1	6.512	8.308	4.38	0.010	0.304	0.552
The residual	14.892	19	0.784					
The total	21.403	20						

Source: Prepared by researcher depending the outputs of SPSS 25 version

Through the table (11), we note that a significant level is estimated (0.010), this value is less than (0.05), therefore we accept the third sub-hypothesis because there is correlation between the manage relationship with suppliers and the practices of creative accounting.

3.5.1.4 The test of the fourth sub-hypothesis: this sub-hypothesis states “**there is a correlation statistically significant at a significant level ($\alpha \leq 0,05$), between the manage inventory and the practices of creative accounting**”, the table (12) clarifies the results of the analysis of regression as follows:

Table 12. The results of the analysis of regression for testing the fourth sub-hypothesis

The analysis of regression	Σ THE squares	The degrees of freedom	The mean of squares	The value of (F _c)	The value of (F _t)	Sig	R ²	R
Regression	4.725	1	4.725	5.383	4.38	0.032	0.221	0.470
The residual	16.678	19	0.878					
The total	21.403	20						

Source: Prepared by researcher depending the outputs of SPSS 25 version

Through the table (12), we note that a significant level is estimated (0.032), this value is less than (0.05), therefore we accept the fourth sub-hypothesis because there is correlation between the manage inventory and the practices of creative accounting.

3.5.1.5 The test of the fifth sub-hypothesis: this sub-hypothesis states “**there is a correlation statistically significant at a significant level ($\alpha \leq 0,05$), between the manage production operations and the practices of creative accounting**”, the table (13) clarifies the results of the analysis of regression as follows:

Table 13. The results of the analysis of regression for testing the fourth sub-hypothesis

The analysis of regression	Σ THE squares	The degrees of freedom	The mean of squares	The value of (F _c)	The value of (F _t)	Sig	R ²	R
Regression	3.811	1	3.811	4.115	4.38	0.057	0.178	0.422
The residual	17.593	19	0.926					
The total	21.403	20						

Source: Prepared by researcher depending the outputs of SPSS 25 version

Through the table (13), we note that a significant level is estimated (0.057), this value is larger than (0.05), therefore we refuse the fifth sub-hypothesis because there is no correlation between the manage production operations and the practices of creative accounting.

3.5.1.6 The test of the sixth sub-hypothesis: this sub-hypothesis states “**there is a correlation statistically significant at a significant level ($\alpha \leq 0,05$), between the manage staff and the practices of creative accounting**”, the table (14) clarifies the results of the analysis of regression as follows:

Table 14. The results of the analysis of regression for testing the sixth sub-hypothesis

The analysis of regression	Σ THE squares	The degrees of freedom	The mean of squares	The value of (F_c)	The value of (F_t)	Sig	R^2	R
Regression	4.725	1	4.725	5.383	4.38	0.032	0.221	0.470
The residual	16.678	19	0.878					
The total	21.403	20						

Source: Prepared by researcher depending the outputs of SPSS 25 version

Through the table (14), we note that a significant level is estimated (0.032), this value is less than (0.05), therefore we accept the sixth sub-hypothesis because there is correlation between the manage staff and the practices of creative accounting.

3.5.2 The test of the second main hypothesis: : in order to test the second main hypothesis which state “there are statistically significant differences at a significant level ($\alpha \leq 0,05$), in the impact of the ERP system on the practices of creative accounting attributed to the personal variables (the age, the educational level, the scientific specialization, the function and the professional experience), we have to test its sub-hypotheses.

3.5.2.1 The test of the first sub-hypothesis: in order to test this sub-hypothesis which state “there are statistically significant differences at a significant level ($\alpha \leq 0,05$), in the impact of the ERP system on the practices of creative accounting attributed to the variable of age”, we test the One-Way ANOVA, the table (15) details the results of this test as follows:

Table 15. The results of the test One-Way ANOVA of the first sub-hypothesis

The variables	The dimensions	The source of variance	Σ THE squares	The degrees of freedom	The mean of squares	The value of (F_c)	Sig
The independent variable (ERP system)	Manage accounting operations	Between the groups	2.510	2	1.255	1.698	0.211
		Within the groups	13.300	18	0.739		
		The total	15.810	20			
	Manage the relationship with Customers	Between the groups	2.738	2	1.369	1.232	0.315
		Within the groups	20	18	1.111		
		The total	22.738	20			
	Manage relationship with suppliers	Between the groups	2.161	2	1.080	1.044	0.372
		Within the groups	18.625	18	1.035		
		The total	20.786	20			
	Manage inventory	Between the groups	2.317	2	1.158	1.562	0.237
		Within the groups	13.350	18	0.742		
		The total	15.667	20			

	Manage production operations	Between the groups	1.113	2	0.557	0.685	0.517
		Within the groups	14.625	18	0.813		
		The total	15.738	20			
	Manage staff	Between the groups	1.442	2	0.721	0.536	0.594
		Within the groups	24.225	18	1.346		
		The total	25.667	20			
The dependent variable (Creative accounting)		Between the groups	10.163	2	5.081	8.137	0.303
		Within the groups	11.241	18	0.624		
		The total	21.403	20			

Source: Prepared by researcher depending the outputs of SPSS 25 version

Through the table (15), we note that all values of significant level are larger than (0.05), therefore we refuse the first sub-hypothesis.

3.5.2.2 The test of the second sub-hypothesis:in order to test this sub-hypothesis which state “there are statistically significant differences at a significant level ($\alpha \leq 0,05$), in the impact of the ERP system on the practices of creative accounting attributed to the variable of educational level”, we test the One-Way ANOVA, the table (16) details the results of this test as follows:

Table 16. The results of the test One-Way ANOVA of the second sub-hypothesis

The variables	The dimensions	The source of variance	Σ THE squares	The degrees of freedom	The mean of squares	The value of (F _c)	Sig
The independent variable (ERP system)	Manage accounting operations	Between the groups	2.210	3	0.737	0.921	0.452
		Within the groups	13.300	17	0.800		
		The total	15.810	20			
	Manage the relationship with Customers	Between the groups	4.757	3	1.586	1.499	0.251
		Within the groups	17.981	17	1.058		
		The total	22.738	20			
	Manage relationship with suppliers	Between the groups	3.030	3	1.010	0.967	0.431
		Within the groups	17.756	17	1.044		
		The total	20.786	20			
	Manage inventory	Between the groups	1.833	3	0.611	0.751	0.537
		Within the groups	13.833	17	0.814		
		The total	15.667	20			
	Manage production operations	Between the groups	3.186	3	1.062	1.438	0.267
		Within the groups	12.552	17	0.738		

		The total	15.738	20			
	Manage staff	Between the groups	5.119	3	1.706	1.412	0.274
		Within the groups	20.548	17	1.209		
		The total	25.667	20			
The dependent variable (Creative accounting)		Between the groups	3.371	3	1.157	1.097	0.377
		Within the groups	17.932	17	1.055		
		The total	21.403	20			

Source: Prepared by researcher depending the outputs of SPSS 25 version

Through the table (16), we note that all values of significant level are larger than (0.05), therefore we refuse the second sub-hypothesis.

3.5.2.3 The test of the third sub-hypothesis: in order to test this sub-hypothesis which state “there are statistically significant differences at a significant level ($\alpha \leq 0,05$), in the impact of the ERP system on the practices of creative accounting attributed to the variable of scientific specialization”, we test the One-Way ANOVA, the table (17) details the results of this test as follows:

Table 17. The results of the test One-Way ANOVA of the third sub-hypothesis

The variables	The dimensions	The source of variance	Σ THE squares	The degrees of freedom	The mean of squares	The value of (F)	Sig
The independent variable (ERP system)	Manage accounting operations	Between the groups	5.546	3	1.849	3.062	0.256
		Within the groups	10.264	17	0.604		
		The total	15.810	20			
	Manage the relationship with Customers	Between the groups	9.016	3	3.005	3.723	0.232
		Within the groups	13.722	17	0.807		
		The total	22.738	20			
	Manage relationship with suppliers	Between the groups	3.355	3	1.118	1.091	0.380
		Within the groups	17.431	17	1.025		
		The total	20.786	20			
	Manage inventory	Between the groups	5.778	3	1.926	3.311	0.245
		Within the groups	9.889	17	0.582		
		The total	15.667	20			
	Manage production operations	Between the groups	5.141	3	1.714	2.749	0.075
		Within the groups	10.597	17	0.623		
		The total	15.738	20			
	Manage staff	Between the groups	5.944	3	1.981	1.708	0.203
		Within the groups	19.722	17	1.160		

		The total	25.667	20			
The dependent variable (Creative accounting)	Between the groups	2.651	3	0.884	0.801	0.510	
	Within the groups	18.753	17	1.103			
	The total	21.403	20				

Source: Prepared by researcher depending the outputs of SPSS 25 version

Through the table (17), we note that all values of significant level are larger than (0.05), therefore we refuse the third sub-hypothesis.

3.5.2.4 The test of the fourth sub-hypothesis:in order to test this sub-hypothesis which state “there are statistically significant differences at a significant level ($\alpha \leq 0,05$), in the impact of the ERP system on the practices of creative accounting attributed to the variable of function”, we test the One-Way ANOVA, the table (18) details the results of this test as follows:

Table 18. The results of the test One-Way ANOVA of the fourth sub-hypothesis

The variables	The dimensions	The source of variance	Σ THE squares	The degrees of freedom	The mean of squares	The value of (F_c)	Sig
The independent variable (ERP system)	Manage accounting operations	Between the groups	0.280	2	0.140	0.162	0.851
		Within the groups	15.529	18	0.863		
		The total	15.810	20			
	Manage the relationship with Customers	Between the groups	0.621	2	0.311	0.253	0.779
		Within the groups	22.117	18	1.229		
		The total	22.738	20			
	Manage relationship with suppliers	Between the groups	0.007	2	0.003	0.003	0.997
		Within the groups	20.779	18	1.154		
		The total	20.786	20			
	Manage inventory	Between the groups	0.437	2	0.219	0.259	0.775
		Within the groups	15.229	18	0.846		
		The total	15.667	20			
	Manage production operations	Between the groups	1.521	2	0.761	0.963	0.401
		Within the groups	14.217	18	0.790		
		The total	15.738	20			
	Manage staff	Between the groups	2.304	2	1.152	0.888	0.429
		Within the groups	23.363	18	1.298		
		The total	25.667	20			

The dependent variable (Creative accounting)	Between the groups	4.824	2	2.412	2.619	0.100
	Within the groups	16.579	18	0.921		
	The total	21.403	20			

Source: Prepared by researcher depending the outputs of SPSS 25 version

Through the table (18), we note that all values of significant level are larger than (0.05), therefore we refuse the fourth sub-hypothesis.

3.5.2.5 The test of the fifth sub-hypothesis:in order to test this sub-hypothesis which state “there are statistically significant differences at a significant level ($\alpha \leq 0,05$), in the impact of the ERP system on the practices of creative accounting attributed to the variable of professional experience”, we test the One-Way ANOVA, the table (19) details the results of this test as follows:

Table 19. The results of the test One-Way ANOVA of the fourth sub-hypothesis

The variables	The dimensions	The source of variance	Σ THE squares	The degrees of freedom	The mean of squares	The value of (F_c)	Sig
The independent variable (ERP system)	Manage accounting operations	Between the groups	3.965	2	1.982	3.013	0.874
		Within the groups	11.845	18	0.658		
		The total	15.810	20			
	Manage the relationship with Customers	Between the groups	2.359	2	1.180	1.042	0.373
		Within the groups	20.379	18	1.132		
		The total	22.738	20			
	Manage relationship with suppliers	Between the groups	6.254	2	3.127	3.873	0.060
		Within the groups	14.532	18	0.807		
		The total	20.786	20			
	Manage inventory	Between the groups	2.106	2	1.053	1.398	0.273
		Within the groups	13.561	18	0.753		
		The total	15.667	20			
	Manage production operations	Between the groups	1.660	2	0.830	1.062	0.367
		Within the groups	14.078	18	0.782		
		The total	15.738	20			
	Manage staff	Between the groups	2.419	2	1.209	0.936	0.410
		Within the groups	23.248	18	1.292		
		The total	25.667	20			
The dependent variable		Between the groups	9.989	2	4.995	7.877	0.203
		Within the groups	11.414	18	0.634		

(Creative accounting)						
	The total	21.403	20			

Source: Prepared by researcher depending the outputs of SPSS 25 version

Through the table (19), we note that all values of significant level are larger than (0.05), therefore we refuse the fourth sub-hypothesis.

Conclusion

Through our study, we reached the following results:

- ✓ There is a correlation statistically significant at a significant level ($\alpha \leq 0,05$), between the ERP system and the practices of creative accounting;
- ✓ There are no statistically significant differences at a significant level ($\alpha \leq 0,05$), in the impact of the ERP system on the practices of creative accounting attributed to the personal variables **(the age, the educational level, the scientific specialization, the function and the professional experience)**.

Through the results of study, we provide some recommendations for improving the exploitation of ERP and enhancing the creative accounting according to the Algerian laws and the international standards IAS/IFRS as follows:

- ✓ Requiring Algerian economic enterprises to use the enterprise resource planning system;
- ✓ Programming training courses for accountancy practitioners in Algeria in order to enhance their capabilities on the application of the enterprise resource planning system;
- ✓ Programming practical classes for university students specialized in the field of accounting and finance in order to enhance their applied capabilities;
- ✓ Programming training courses to educate accountancy practitioners in Algeria on how to use creative accounting without violating the local laws regulating the accounting profession and international accounting standards IAS/IFRS.

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