

Motivating Human Resources Through A Strategic Choice By Managers, The Strategic Alliance, In The Context Of Small And Medium-Sized Enterprises In Antananarivo - Madagascar

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Abstract—The typology of the Malagasy private sector shows a majority of small and medium-sized enterprises, so to study their behavior is important in order to contribute to the country's economic and sustainable development. But in Madagascar today, a whole range of negative factors still affect and reduce the competitiveness of these enterprises. According to the survey carried out by Finance, Technology, Human resources, Management Consulting, these enterprises are encountering managerial problems. Antananarivo was chosen as the study area because most Malagasy small and medium-sized enterprises are concentrated in it. The question then arose: how could the managerial problems encountered by small and medium-sized enterprises be remedied? After a preliminary survey, it was found that there was a crucial problem in terms of motivation. A series of questions arose: In which area of human resources motivation is this thesis particularly concerned? The respondents' answers point to problems with the source of motivation. So, what new source of motivation could then improve human resources motivation in small and medium enterprises? The main objective of the research is to find a new source of motivation for small and medium-sized enterprises employees. The following research hypothesis was put forward: The use of strategic alliances influences the motivation of human resources in partner companies. The specific objectives of the thesis are to theoretically present and empirically verify the above hypothesis in an attempt to respond to the research problem. A specific methodological approach has been adopted in order to achieve the objectives of the thesis.

Keywords—motivation; human resources; strategic alliance; small and medium-sized enterprises; Antananarivo; Madagascar.

I. INTRODUCTION

The typology of the Malagasy private sector shows a large majority of Small and Medium-sized Enterprises, so studying their behavior is relevant in order to contribute to the country's development. According to the survey carried out by Finance, Technology, Human resources, Management Consulting [1], a range of negative factors still affect and considerably reduce the competitiveness of Small and Medium-sized Enterprises: financial and managerial problems. But as a business management researcher, the study will focus on the managerial problems of Small and Medium-sized Enterprises. A question arises: How can we remedy the managerial problems encountered by Small and Medium-sized Enterprises? To refine this issue, a pre-survey was carried out on a population of eighty-five (85) Small and Medium-sized Enterprises located in Antananarivo. The justification for this sample can be seen in the study methodology. Antananarivo was chosen as the study area because most Small and Medium-

sized Enterprises are concentrated in the capital. These eighty-five (85) Small and Medium-sized Enterprises were used to identify the final study sample. Once the data had been studied and processed, it was found that there was a crucial problem of human resources motivation in these companies. Another question then arises: How can we contribute to the motivation of human resources in Small and Medium-sized Enterprises in the Malagasy context? But another question also arises: In which area of HR motivation should we focus? The results of the pre-survey made it possible to identify motivational problems in human resources at the level of sources of motivation. Another question arises which will be attempted to answer throughout the study: What new sources of motivation, in addition to those already used by their managers, could improve the motivation of Human Resources in Small and Medium-sized Enterprises? The main objective of the study is to find a new source of motivation for Small and Medium-sized Enterprises employees. Theoretical research was used to establish the research hypothesis, which states that the use of strategic alliances by companies influences the motivation of their Human Resource.

II. MATERIALS AND METHODS

A. Materials (Heading 2)

1) Some theoretical insights into the strategic alliance and human resource motivation

In the face of globalization and digitalization, strategic alliances are an important lever for the competitiveness and growth of companies [2].

The strategic alliance concerns the agreement between the partners, which enables them to work towards common objectives while maintaining the autonomy, independence and interests of each firm. Strategic alliances are characterized by co-optation, co-sourcing, learning and the appropriation of new knowledge from the partner firm [3]. This strategic option is based on the exchange, sharing and combination of complementary resources and skills. The objectives are to share the risks and rewards of working together, rather than failing alone in the market [4], and to share the costs and risks of research and development operations, accelerate the innovation process and improve the quality of the services offered to customers [5].

Alliances currently offer many potential advantages for Small and Medium-sized Enterprises [6]. Since Small and Medium-sized Enterprises cannot always develop in isolation, the use of a strategic alliance can make this development possible, while respecting each partner company's need for autonomy. The alliance is a means of sharing resources (technology, patents, brands, production tools, distribution networks, etc.) that are necessary for the Small and Medium-sized Enterprises' development under privileged conditions [7]. The benefits of strategic alliances for Small and Medium-sized Enterprises are reduced costs, improved competitiveness, wider markets, improved profitability, increased information flows, better strategic positioning, etc. [8].

On an individual level, motivation is said to be the main factor in work performance. Given the individual's abilities (intellectual, physical, know-how) and the organization in place in the company (technical, human, administrative), motivation can have a direct impact on the individual performance of company members. Psychologists agree on the characteristics of motivation and distinguish four constituent elements of this construct: the triggering of behavior, the direction of behavior, the intensity of behavior and the persistence of behavior. There are several theories on motivation. There are the Maslow theories of needs, according to which motivation is the result of the satisfaction of hierarchical needs: physiological needs, safety needs, love needs (for social relations, affection, belonging to a group), esteem needs (for recognition), self-actualization needs (to progress, to develop, to blossom). A second theory of needs was developed a few years later by Alderfer, who suggests that an individual's motivation is caused by a tension (internal force), in this case the need to satisfy three types of needs: needs for existence (E), needs for social relations (R) and needs for personal development (D). Then there is Herzberg's bi-factorial theory, which proposes a list of motivating factors, namely achievement (a job well done), recognition of achievement, the work itself (purpose of the work), responsibility, promotion or advancement, and the possibility of development. Then there is the theory of cognitive evaluation based on the work of Deci and Ryan. Their fundamental hypothesis is that intrinsic motivation is triggered by needs that each individual develops to a greater or lesser extent, namely the need to feel competent and self-determined. Hackman and Oldham's job characteristics theory looks at the joint effects of the motivating forces of the need for personal development and the characteristics of the job on motivation and job satisfaction. In addition, there is Adams' equity theory, which explains motivation at

work by the individual's willingness to compare his personal situation with that of others. There is also Atkinson's achievement motive theory. The achievement motive is the stimulus or force that drives the individual to direct his behavior towards goals that he values. There is also the cognitive-intermittent approach of Vroom, who proposes a theory of motivation at work that is not limited to the trade-offs between expectations of success and error as envisaged by Atkinson. He takes up the fundamental concepts of valence and expectation introduced by Lewin, Peak, Rotter and Tolman. There is also goal-setting theory, socio-cognitive theory of Bandura and control theory of Carver and Sheier [9]. It should be noted that these theories propose different sources of motivation for human resources at work.

2) *Theoretical construction of the research hypothesis: Using strategic alliances to motivate the human resources of partner companies*

The theoretically constructed research hypothesis can be summarized as follows:

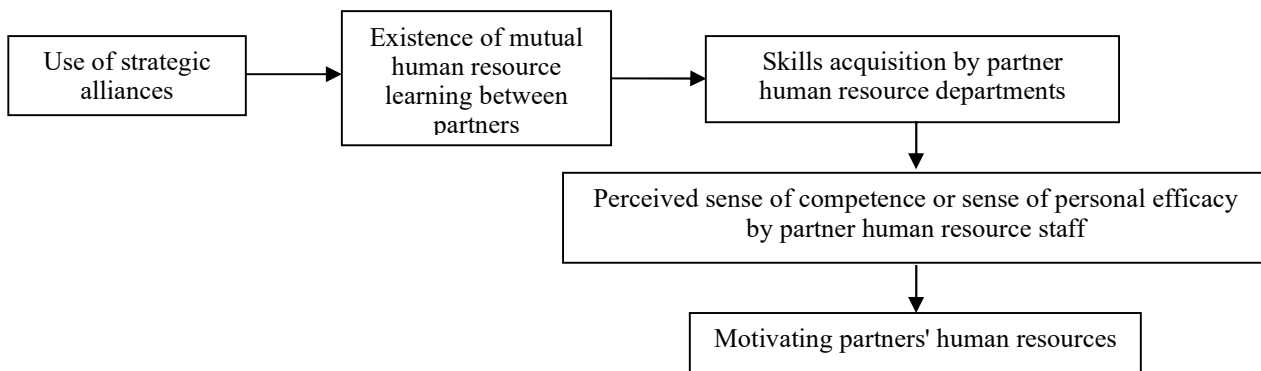


Fig. 1. Contribution of the strategic alliance to the motivation of human resources

For the theoretical construction of this hypothesis, the following elements were considered:

a) *The use of strategic alliances enables skills to be acquired through mutual learning between partners.*

The concept of competence is associated with knowledge, know-how or interpersonal skills [10], with the ability of players to learn and perform tasks [11], with aptitudes, skills and knowledge [12], with capacities for action and structured behaviour in relation to a goal and in a given type of situation [13]. The dichotomous approach proposes two types of competence: individual competence and organisational competence or key competence [14]. The strategic alliance is a means of capturing complementary skills [...] [7]. The strategic alliance [...] is based on the reciprocal exchange, sharing, acquisition or transfer of resources or skills between the partners [8]. This cooperation may allow both access to the partner's skills and the development of new shared skills [14]. During the learning cycles, the partners increase their understanding of each other's contributions, competitive position, strengths and weaknesses, culture and strategic objectives [4]. Strategic alliances enable partners to acquire skills through organisational learning; they enable the acquisition of new objective or subjective knowledge [6]. To achieve its objectives, an SME, in the context of a strategic alliance, must acquire the know-how and knowledge of the different partners present in the alliance [3].

b) *Apprenticeships help create a sense of competence*

As well as satisfying immediate basic or vocational training needs, expressed in terms of specific knowledge and skills to be acquired, learning also makes it possible to satisfy individual and collective human needs for identity and personal and collective growth. Learning is not simply an accumulation of new knowledge, but rather a process by which many of the fundamental values and beliefs from which someone operates are modified. Learning experiences can also lead to a greater actualization of potential and an increased sense of competence [...] [15].

c) The feeling of competence or personal effectiveness contributes to the motivation of the partners' human resources

Skills can be a motivational tool [13]. The following factors should be considered as sources of influence on motivation: personal characteristics such as feelings of self-efficacy and learning orientation [...] [16]. The level of motivation, affective states and actions of individuals are based more on what they believe they are capable of doing than on their actual objective capabilities. This is the feeling of competence or sense of self-efficacy, equivalent to the feeling of being able to control the situation and achieve the desired goal, which largely determines motivation and cognitive engagement in a learning or problem-solving activity, effort and perseverance in the face of difficulties, emotional and affective reactions and learning outcomes [15]. People with a low sense of self-efficacy in a particular domain avoid difficult tasks that they perceive as threatening; on the other hand, a high sense of self-efficacy increases achievement and personal well-being in a number of ways [17].

B. Methods

The general sampling diagram can be seen in the figure on next page.

This sampling system identifies, among other things, the Small and Medium-sized Enterprises to be studied and the companies using the practice of bilateral strategic alliances, although the sampling frames corresponding to these dimensions do not yet exist at National Institute of Statistics of Madagascar's office. It should be noted that in Madagascar, the practice of strategic alliances exists but has not yet been the subject of a scientific study [18]. The final research sample is made up of people involved in strategic alliances. The fieldwork includes the pre-survey, the pre-test and the field survey. As for the research instrument, the main ones adopted are the questionnaire, the five-level Likert attitude scale to evaluate the behavior of the measurement indicators and, finally, the tests for drawing up the final questionnaire for the final field study. The Pearson correlation study was used to analyze the results. The type of variable analysis applied to the results of the second survey phase of the final field study was bivariate analysis.

The research system is Leibnizian, using hypothetico-deductive logic to guide reasoning and ideas. Statistical methods are also used to study and analyze results.

The variables studied are as follows, with their respective codes: Dependent variable: Allied partners' perceived human resources motivation (1); Independent variable: Use of strategic alliances by Small and Medium-sized Enterprises; Explanatory variables: Mutual learning perceived at the human resources level of allied partners after their use of strategic alliances (7), acquisition of skills perceived at the human resources level of allied partners after their use of strategic alliances (8), feeling of competence perceived at the HR level of allied partners after their use of strategic alliances (9).

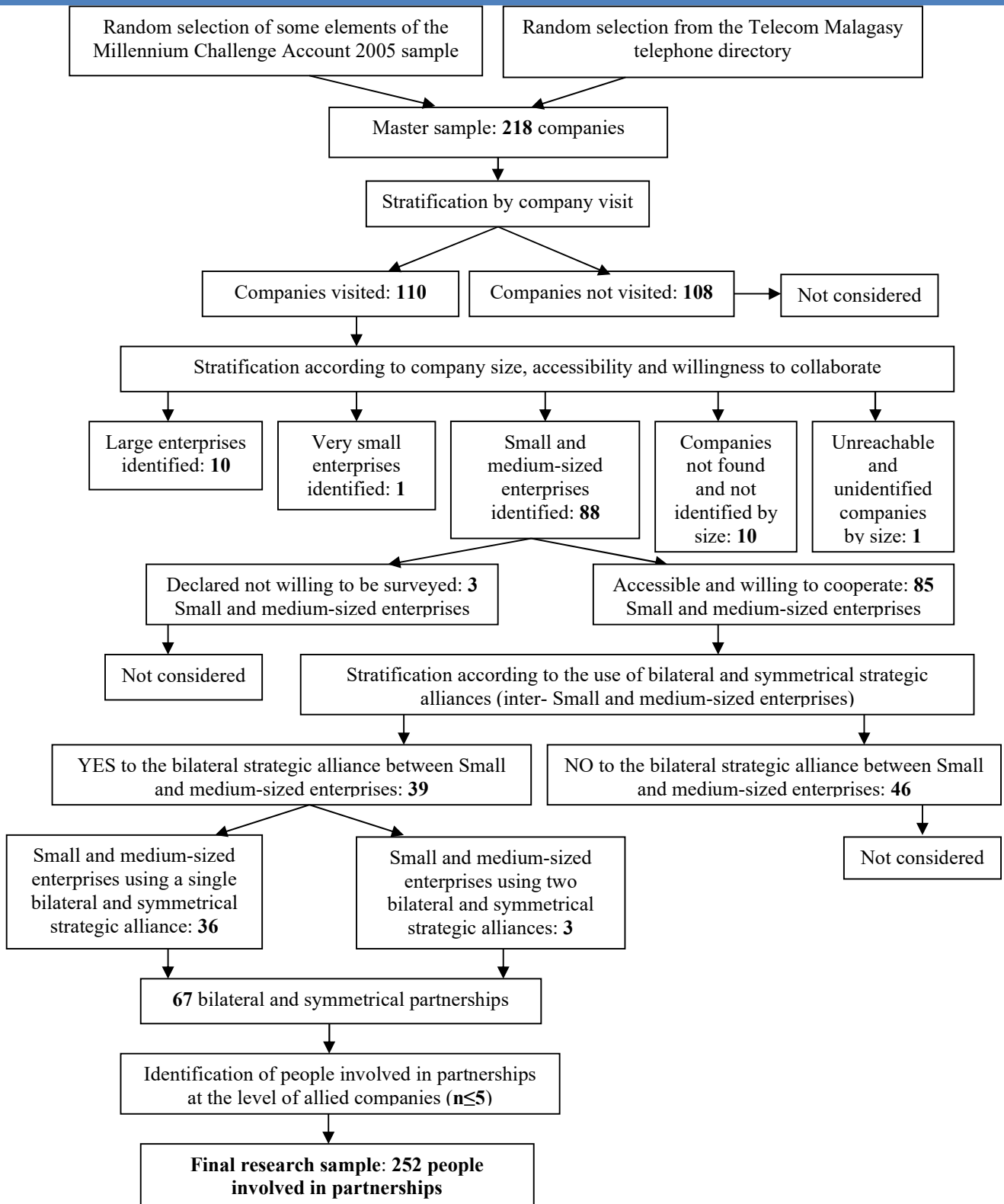


Fig. 1. General summary of the research sample

Several measurement indicators with their respective codes are associated with these variables: (i) Indicators measuring human resources motivation: Level of willingness on the part of the individual, without any particular calculations, out of duty or guided by affect (code: 1.1); Level of striving by the individual to achieve the company's objectives (Level of commitment by the individual to the objective) (1.2); Level of interest by the individual in his task (1.3); Level of effort expended by the individual (1.4); Level of adaptation sought by the individual to events or environmental constraints (1.5); (ii) Indicators for measuring mutual learning perceived at the human resources level of the allied partners: Level of knowledge newly acquired by the individual after social interactions and back and forth between tacit and explicit types of knowledge, after exchanges, debates and discussions with others (7.1); Level of improvement in the individual's ability to solve a problem of any kind (7.2); Level of improvement in the individual's actual current ability to achieve expected results and in the level of his or her knowledge and understanding of his or her tasks and the company's objectives (7.3); Level of transfer of skills between employees as perceived by the individual (7.4); Levels of appropriation of the partner company's human resources know-how, exchange, transfer, sharing, combination of resources and complementary skills between the partners' human resources as perceived by the individual (7.5); (iii) Indicators for measuring the acquisition of skills perceived at the level of the human resources of the allied partners: Level of knowledge newly acquired by the individual and corresponding to a particular field, as well as the state of his or her newly acquired experience (8.1); Level of adaptability newly acquired by the individual (8.2); Level of improvement in the individual's ability to take decisions and initiatives in new areas of responsibility (8.3); Level of improvement in the individual's ability to deal with the unexpected, to develop new solutions for unpredictable situations (8.4); Level of combination of tacit and complementary knowledge held by the firms and that of the exchange of knowledge between the partners' human resources (8.5); (iv) Indicators measuring the existence of a feeling of competence or sense of personal efficacy perceived at the level of the allied partners' human resources: Level of confidence of the individual in his or her ability to successfully accomplish a task or set of tasks (9.1); Level of expenditure of physical, intellectual and/or mental energy by the individual in carrying out his or her tasks, their persistence in the face of obstacles as well as challenges and difficulties (9.2); Level of optimism of the individual in the face of the pressing demands of situations and of his/her capacity to influence the course of events concerning him/her (9.3); Level of perseverance of the individual in the face of challenges and difficulties and despite obstacles, adversities, frustrations and failures (9.4); Level of concentration of the individual on his/her tasks in the face of the pressing demands of situations (9.5); Level of control of the individual in the face of threatening situations (9.6).

For the three figures that follow each other for the indicators to be studied, e.g. 1.1.3, the first relates to the variable studied; the second relates to the rank of the measurement indicator for the variable; and the third relates to the level of appreciation of the measurement indicator by the respondents according to the Likert attitude scale from 1 to 5 (1: Very weak; 2: Weak; 3: Medium, 4: Strong, 5: Very strong).

For the purposes of the analysis, in order to confirm the hypothesis, there should be an effective correlation between variables 1 (Perceived motivation at the level of allied partners' human resources), 7 (Perceived mutual learning at the level of allied partners' human resources), 8 (Perceived acquisition of skills at the level of allied partners' human resources) and 9 (Perceived feeling of competence at the level of allied partners' human resources). Each variable in the study has two or more measurement indicators. Interpretation principle no. 1 of the research is based on the fact that in order to be able to assess the conformity of the research hypothesis, the correlations identified between the variables must first include the actual presence of at least one indicator for each variable. Then, according to interpretation principle no. 2, respondents' ratings of the indicators must range from 3 (average) to 5 (very strong) in order to judge whether the research hypothesis is confirmed. This is the following table:

TABLE I. INTERPRETATION PRINCIPLE 2 OF THE RESEARCH HYPOTHESIS

Variables	Variable codes	Indicator codes	Principles of interpretation	Level of perception concerned by the indicator according to the principles of interpretation
Consideration of the existence of motivation in the human resources surveyed	1	1.1, 1.2, 1.3, 1.4, 1.5	The motivation of the human resources staff surveyed is shown by responses ranging from 3 to 5 on the attitude scale for the following indicators	1.1.3, 1.1.4, 1.1.5, 1.2.3, 1.2.4, 1.2.5, 1.3.3, 1.3.4, 1.3.5, 1.4.3, 1.4.4, 1.4.5, 1.5.3, 1.5.4, 1.5.5
Consideration of the existence of mutual learning as perceived by the human resources staff surveyed	7	7.1, 7.2, 7.3, 7.4, 7.5	The existence of mutual learning between the human resources of the allied partners will be judged on the basis of response 3 on the attitude scale.	7.1.3, 7.1.4, 7.1.5, 7.2.3, 7.2.4, 7.2.5, 7.3.3, 7.3.4, 7.3.5, 7.4.3, 7.4.4, 7.4.5, 7.5.3, 7.5.4, 7.5.5
Consideration of the existence of skill acquisition as perceived by the human resources staff surveyed	8	8.1, 8.2, 8.3, 8.4, 8.5	Response 3 on the attitude scale will be used to judge whether the human resources of allied partners have acquired skills.	8.1.3, 8.1.4, 8.1.5, 8.2.3, 8.2.4, 8.2.5, 8.3.3, 8.3.4, 8.3.5, 8.4.3, 8.4.4, 8.4.5, 8.5.3, 8.5.4, 8.5.5
Consideration of the existence of a feeling of competence as perceived by the human resources staff surveyed	9	9.1, 9.2, 9.3, 9.4, 9.5, 9.6	Response 3 on the attitude scale will be used to judge the existence of a feeling of competence perceived by the human resources of the allied partners.	9.1.3, 9.1.4, 9.1.5, 9.2.3, 9.2.4, 9.2.5, 9.3.3, 9.3.4, 9.3.5, 9.4.3, 9.4.4, 9.4.5, 9.5.3, 9.5.4, 9.5.5, 9.6.3, 9.6.4, 9.6.5

¹Source: Personal research, 2020

The variables and results of the pre-survey can be seen in the thesis corresponding to this research. Only the measurement indicators for the variables from the results of the second survey phase of the final field study are included here in the confirmatory analysis of the research hypotheses.

III. RESULTS AND DISCUSSIONS

A. Results

The results of the Pearson coefficient table analyses will be presented here. The results of the bivariate dependence analyses of the variables will also be presented. The Chi-2 tests performed on the survey data using Stat Box software eliminated certain non-significant indicators, which will be excluded from the study: 1.1.2, 1.2.1, 1.2.2, 1.3.1, 1.3.2, 1.4.2, 1.5.1, 7.1.1, 7.2.1, 7.3.1, 7.4.1, 7.5.1, 8.1.1, 8.2.1, 8.3.1, 8.5.1 and 9.1.1.

The table below was drawn up for the bivariate study of the variables and indicators involved in the research hypothesis. It is derived from the Chi-2 test and will condition the entire analysis and interpretation of the results. It is the relationship between the existence of human resource motivation (variable 1), the existence of mutual learning among the partners' human resources (variable 7), the existence of skill acquisition among the partners' human resources (variable 8) and the existence of a feeling of competence (variable 9) that is studied for the hypothesis. The proposition is confirmed by the effective combination of variables 1, 7, 8 and 9 from level 3 of the respondents' answers. The confirmatory analysis will only concern variables with indicators at levels 3 to 5 of the attitude scale. The variables will be studied in pairs, according to the logic of the research hypothesis. The aim is to find new sources of motivation for the field of study.

In relation to the data in the table above, six (06) relationships to be studied for the analysis of H_0 are the following, which constitute the new research sub-hypotheses and which are visible in the following sub-headings:

1) "Consideration of the existence of mutual learning as perceived by the human resources staff surveyed" and "Consideration of the existence of skill acquisition as perceived by the human resources staff surveyed"

For the specific study of this relationship, the following table is highlighted:

TABLE II. SUMMARY TABLE OF THE INDICATORS CONSIDERED FOR THE STUDY OF THE CORRELATION BETWEEN THE VARIABLES "CONSIDERATION OF THE EXISTENCE OF MUTUAL LEARNING AS PERCEIVED BY THE HUMAN RESOURCES STAFF SURVEYED" AND "CONSIDERATION T OF THE EXISTENCE OF SKILL ACQUISITION AS PERCEIVED BY THE HUMAN RESOURCES STAFF SURVEYED"

Variables	Indicator involved	Level of perception concerned by the indicator according to the principles of interpretation
"Consideration of the existence of mutual learning as perceived by the human resources staff surveyed"	7.1, 7.2, 7.3, 7.4, 7.5	7.1.3, 7.1.4, 7.1.5, 7.2.3, 7.2.4, 7.2.5, 7.3.3, 7.3.4, 7.3.5, 7.4.3, 7.4.4, 7.4.5, 7.5.3, 7.5.4, 7.5.5
"Consideration of the existence of skill acquisition as perceived by the human resources staff surveyed"	8.1, 8.2, 8.3, 8.4, 8.5	8.1.3, 8.1.4, 8.1.5, 8.2.3, 8.2.4, 8.2.5, 8.3.3, 8.3.4, 8.3.5, 8.4.3, 8.4.4, 8.4.5, 8.5.3, 8.5.4, 8.5.5

²Source: Personal research, 2020

With reference to the general table of Pearson correlation coefficients and taking into account only the relationships between the indicators shown in the table above, this table can be drawn up:

TABLE III. EXTRACT FROM THE PEARSON CORRELATION COEFFICIENTS TABLE FOR THE STUDY OF THE RELATIONSHIP BETWEEN THE VARIABLES "CONSIDERATION OF THE EXISTENCE OF MUTUAL LEARNING AS PERCEIVED BY THE HR STAFF SURVEYED" AND "CONSIDERATION OF THE EXISTENCE OF SKILL ACQUISITION AS PERCEIVED BY THE HR STAFF SURVEYED".

	8.1.3	8.1.4	8.1.5	8.2.3	8.2.4	8.2.5	8.3.3	8.3.4	8.3.5	8.4.3	8.4.4	8.4.5	8.5.3	8.5.4	8.5.5
7.1.3	0,93	-0,81	-0,16	0,86	-0,76	-0,15	0,89	-0,79	-0,08	0,86	-0,78	-0,05	0,89	-0,79	-0,12
7.1.4	-0,81	0,93	-0,28	-0,75	0,87	-0,27	-0,78	0,88	-0,23	-0,75	0,87	-0,29	-0,79	0,90	-0,24
7.1.5	-0,16	-0,28	1,00	-0,15	-0,26	0,96	-0,14	-0,22	0,71	-0,15	-0,21	0,79	-0,11	-0,25	0,82
7.2.3	0,90	-0,79	-0,15	0,94	-0,84	-0,14	0,99	-0,83	-0,17	0,96	-0,83	-0,15	0,92	-0,80	-0,15
7.2.4	-0,78	0,88	-0,22	-0,83	0,94	-0,25	-0,87	0,93	-0,15	-0,84	0,92	-0,20	-0,80	0,92	-0,26
7.2.5	-0,15	-0,23	0,86	-0,14	-0,24	0,90	-0,14	-0,24	0,74	-0,14	-0,24	0,83	-0,15	-0,27	0,96
7.3.3	0,89	-0,78	-0,14	0,93	-0,83	-0,14	0,98	-0,83	-0,17	0,95	-0,82	-0,15	0,93	-0,81	-0,14
7.3.4	-0,79	0,89	-0,23	-0,83	0,95	-0,25	-0,88	0,94	-0,15	-0,85	0,93	-0,21	-0,81	0,91	-0,23
7.3.5	-0,11	-0,27	0,86	-0,10	-0,28	0,90	-0,10	-0,28	0,74	-0,10	-0,28	0,83	-0,15	-0,23	0,86
7.4.3	0,49	-0,50	-0,06	0,54	-0,55	-0,05	0,54	-0,50	-0,12	0,52	-0,49	-0,11	0,53	-0,53	-0,06
7.4.4	-0,09	0,21	-0,21	-0,16	0,28	-0,24	-0,17	0,24	-0,09	-0,15	0,23	-0,15	-0,14	0,27	-0,25
7.4.5	-0,33	0,21	0,29	-0,31	0,18	0,32	-0,30	0,19	0,22	-0,31	0,19	0,27	-0,32	0,18	0,34
7.5.3	0,85	-0,74	-0,14	0,81	-0,72	-0,13	0,85	-0,77	-0,05	0,83	-0,76	-0,02	0,86	-0,75	-0,14
7.5.4	-0,75	0,86	-0,23	-0,74	0,86	-0,26	-0,77	0,89	-0,26	-0,74	0,88	-0,32	-0,77	0,89	-0,27
7.5.5	-0,06	-0,27	0,76	-0,01	-0,32	0,80	-0,04	-0,28	0,65	-0,05	-0,28	0,73	-0,05	-0,31	0,84

³Source: Personal research, 2020

In bold, the significant values (off the diagonal) at the alpha=0.05 threshold (two-tailed test).

In relation to this table of Pearson correlation coefficients, taking into account the significance level of 5%, and considering only the relationships between the variables "Consideration of the existence of mutual learning perceived by the human resources surveyed" and "Consideration of the existence of skill acquisition perceived by the human resources surveyed", a total of 225 values are identified, of which 204 are significant and 21 non-significant. The correlations between the indicators in the table will not be detailed in this research, only those between the two variables studied. The study will then be limited to identifying the significance of the relationships according to the percentages of values obtained in the table above. 90.67% of the values in the table are significant compared with 9.33% that are not significant.

An analysis of the Pearson correlation coefficients between the variables "Consideration of the existence of mutual learning as perceived by the human resources staff surveyed" and "Consideration of the existence of skill acquisition as perceived by the human resources staff surveyed" revealed 90.67% significant dependence, compared with 9.33% non-significant dependence. The relationship is therefore considered to be significant at 90.67% and insignificant at 9.33%. It should be noted that significance at the alpha threshold represents the existence of a correlation or link between the two variables. Interpretation principle no. 3 is formulated for the bivariate study of variables: If at least one of the indicators of one variable correlates with at least one of the indicators of the other variable, the two are considered to be linked. However, the significant values in bold include positive and negative values. Positive values imply a positive correlation between the indicators and the variables; negative values, on the other hand, show a negative correlation or opposition between them. For this first relationship, the objective is to see if there is a positive correlation between the variables studied, so the study will only focus on the case of significant positive variables. Visibly, it can be observed that at least one indicator of the variable "Consideration of the existence of mutual learning perceived by the human resources surveyed", at a given level of the attitude scale is positively correlated with at least one indicator of the variable "Consideration of the existence of skill acquisition perceived by the human resources surveyed", at a given level of the attitude scale. Referring to interpretation principle no. 3, it can be seen that the variables "Consideration of the existence of mutual learning perceived by the human resources staff surveyed" and "Consideration of the existence of skill acquisition perceived by the HR staff surveyed" are positively correlated. In other words, learning and skills acquisition perceived by the partners' human resources are positively correlated.

2) *"Consideration of the existence of mutual learning as perceived by the human resources staff surveyed" - "Consideration of the existence of a feeling of competence as perceived by the human resources staff surveyed"*

For the specific study of this relationship, the following table is highlighted:

TABLE IV. SUMMARY TABLE OF INDICATORS TO BE CONSIDERED FOR THE STUDY OF THE CORRELATION BETWEEN THE VARIABLES " CONSIDERATION OF THE EXISTENCE OF MUTUAL LEARNING AS PERCEIVED BY THE HUMAN RESOURCES STAFF SURVEYED" AND "CONSIDERATION OF THE EXISTENCE OF A FEELING OF COMPETENCE AS PERCEIVED BY THE HUMAN RESOURCES STAFF SURVEYED".

Variables	Indicator involved	Level of perception concerned by the indicator according to the principles of interpretation
Consideration of the existence of mutual learning as perceived by the human resources staff surveyed	7.1, 7.2, 7.3, 7.4, 7.5	7.1.3, 7.1.4, 7.1.5, 7.2.3, 7.2.4, 7.2.5, 7.3.3, 7.3.4, 7.3.5, 7.4.3, 7.4.4, 7.4.5, 7.5.3, 7.5.4, 7.5.5
Consideration of the existence of a feeling of competence as perceived by the human resources staff surveyed	9.1, 9.2, 9.3, 9.4, 9.5, 9.6	9.1.3, 9.1.4, 9.1.5, 9.2.3, 9.2.4, 9.2.5, 9.3.3, 9.3.4, 9.3.5, 9.4.3, 9.4.4, 9.4.5, 9.5.3, 9.5.4, 9.5.5, 9.6.3, 9.6.4, 9.6.5

⁴Source: Personal research, 2020

With reference to the general table of Pearson correlation coefficients and taking into account only the relationships between the indicators shown in the table above, the following table can be drawn up:

TABLE V. EXTRACT FROM THE PEARSON CORRELATION COEFFICIENTS TABLE FOR THE STUDY OF THE RELATIONSHIP BETWEEN THE VARIABLES "CONSIDERATION OF THE EXISTENCE OF MUTUAL LEARNING AS PERCEIVED BY THE HUMAN RESOURCES STAFF SURVEYED" AND "CONSIDERATION OF THE EXISTENCE OF A FEELING OF COMPETENCE AS PERCEIVED BY THE HUMAN RESOURCES STAFF SURVEYED"

	7.1.3	7.1.4	7.1.5	7.2.3	7.2.4	7.2.5	7.3.3	7.3.4	7.3.5	7.4.3	7.4.4	7.4.5	7.5.3	7.5.4	7.5.5
9.1.3	0,81	-0,70	-0,15	0,91	-0,79	-0,14	0,90	-0,80	-0,10	0,54	-0,15	-0,31	0,83	-0,69	-0,16
9.1.4	-0,71	0,79	-0,18	-0,66	0,75	-0,20	-0,66	0,74	-0,20	-0,46	0,23	0,14	-0,66	0,69	-0,10
9.1.5	-0,03	-0,18	0,48	-0,24	0,02	0,51	-0,24	0,05	0,45	-0,15	-0,10	0,25	-0,15	-0,04	0,38
9.2.3	0,84	-0,72	-0,15	0,90	-0,78	-0,15	0,91	-0,79	-0,15	0,51	-0,11	-0,32	0,80	-0,71	-0,05
9.2.4	-0,73	0,78	-0,13	-0,65	0,73	-0,19	-0,66	0,72	-0,15	-0,39	0,15	0,17	-0,62	0,71	-0,19
9.2.5	-0,04	-0,13	0,41	-0,25	0,04	0,49	-0,25	0,06	0,44	-0,19	-0,05	0,23	-0,16	-0,02	0,37
9.3.3	0,80	-0,70	-0,12	0,89	-0,76	-0,15	0,90	-0,77	-0,15	0,51	-0,11	-0,35	0,76	-0,68	-0,03
9.3.4	-0,70	0,77	-0,17	-0,69	0,75	-0,15	-0,70	0,76	-0,15	-0,44	0,19	0,18	-0,63	0,73	-0,23
9.3.5	-0,07	-0,13	0,48	-0,22	0,00	0,50	-0,22	0,00	0,50	-0,16	-0,11	0,28	-0,12	-0,09	0,43
9.4.3	0,84	-0,72	-0,16	0,92	-0,80	-0,15	0,91	-0,81	-0,11	0,52	-0,12	-0,33	0,79	-0,71	-0,02
9.4.4	-0,76	0,81	-0,13	-0,69	0,76	-0,16	-0,69	0,77	-0,19	-0,42	0,18	0,18	-0,63	0,74	-0,23
9.4.5	-0,01	-0,17	0,44	-0,23	0,03	0,47	-0,23	0,03	0,47	-0,17	-0,07	0,24	-0,14	-0,06	0,40
9.5.3	0,84	-0,72	-0,15	0,90	-0,78	-0,15	0,91	-0,79	-0,15	0,51	-0,11	-0,32	0,80	-0,71	-0,05
9.5.4	-0,69	0,75	-0,13	-0,68	0,76	-0,19	-0,69	0,75	-0,16	-0,42	0,18	0,16	-0,63	0,72	-0,20
9.5.5	-0,11	-0,08	0,43	-0,22	0,00	0,51	-0,21	0,02	0,45	-0,15	-0,10	0,25	-0,15	-0,04	0,38
9.6.3	0,81	-0,70	-0,16	0,89	-0,77	-0,15	0,90	-0,78	-0,15	0,49	-0,10	-0,34	0,78	-0,69	-0,06
9.6.4	-0,73	0,78	-0,13	-0,66	0,74	-0,19	-0,68	0,74	-0,15	-0,39	0,17	0,17	-0,62	0,71	-0,19
9.6.5	-0,02	-0,16	0,44	-0,24	0,02	0,52	-0,24	0,04	0,46	-0,18	-0,09	0,26	-0,14	-0,05	0,39

⁵Source: Personal research, 2020

In relation to this table of Pearson correlation coefficients, 82.96% of the values entered are significant compared to 17.04% which are not significant. Analysis of the Pearson correlation coefficients between the variables "Consideration of the existence of mutual learning as perceived by the human resources staff surveyed" and "Consideration of the existence of a feeling of competence as perceived by the human resources staff surveyed" reveals 82.96% significant dependency, compared with 17.04% non-significant dependency. The relationship is therefore considered to be significant at 82.96% and non-significant at 17.04%. For this second relationship, it can be observed that at least one indicator of the variable "Consideration of the existence of mutual learning as perceived by human resources respondents", at a given level of the attitude scale, is positively correlated with at least one indicator of the variable "Consideration of the existence of a feeling of competence as perceived by human resources respondents", at a given level of the attitude scale. Referring then to interpretation principle no. 3, it can be seen that the two variables are positively correlated. In other words, learning and the feeling of competence perceived by the partners' human resources are positively correlated.

3) "Consideration of the existence of mutual learning as perceived by the human resources staff surveyed" - "Consideration of the existence of human resources motivation in the human resources surveyed "

For the specific study of this relationship, the following table is highlighted:

TABLE VI. SUMMARY TABLE OF INDICATORS TO BE CONSIDERED FOR THE STUDY OF THE CORRELATION BETWEEN THE VARIABLES "CONSIDERATION OF THE EXISTENCE OF MUTUAL LEARNING AS PERCEIVED BY THE HUMAN RESOURCES STAFF SURVEYED" AND "CONSIDERATION OF THE EXISTENCE OF MOTIVATION IN THE HUMAN RESOURCES SURVEYED"

Variables	Indicator involved	Level of perception concerned by the indicator according to the principles of interpretation
Consideration of the existence of mutual learning as perceived by the human resources staff surveyed	7.1, 7.2, 7.3, 7.4, 7.5	7.1.3, 7.1.4, 7.1.5, 7.2.3, 7.2.4, 7.2.5, 7.3.3, 7.3.4, 7.3.5, 7.4.3, 7.4.4, 7.4.5, 7.5.3, 7.5.4, 7.5.5
Consideration of the existence of motivation in the human resources surveyed	1.1, 1.2, 1.3, 1.4, 1.5	1.1.3, 1.1.4, 1.1.5, 1.2.3, 1.2.4, 1.2.5, 1.3.3, 1.3.4, 1.3.5, 1.4.3, 1.4.4, 1.4.5, 1.5.3, 1.5.4, 1.5.5

⁶Source: Personal research, 2020

With reference to the general table of Pearson correlation coefficients and the table above, the following table can be drawn up:

TABLE VII. EXTRACT FROM THE PEARSON CORRELATION COEFFICIENTS TABLE FOR THE STUDY OF THE RELATIONSHIP BETWEEN THE VARIABLES "CONSIDERATION OF THE EXISTENCE OF MUTUAL LEARNING AS PERCEIVED BY THE HUMAN RESOURCES STAFF SURVEYED" AND "CONSIDERATION OF THE EXISTENCE OF MOTIVATION IN THE HUMAN RESOURCES SURVEYED".

	1.1.3	1.1.4	1.1.5	1.2.3	1.2.4	1.2.5	1.3.3	1.3.4	1.3.5	1.4.3	1.4.4	1.4.5	1.5.3	1.5.4	1.5.5
7.1.3	0,14	-0,21	0,15	0,12	-0,16	0,10	0,07	-0,13	0,10	0,05	-0,06	0,04	0,19	-0,14	0,03
7.1.4	-0,16	0,22	-0,11	-0,20	0,19	-0,06	-0,11	0,18	-0,12	-0,09	0,07	0,00	-0,24	0,20	-0,06
7.1.5	-0,08	0,06	-0,04	0,04	0,02	-0,06	-0,03	-0,04	0,08	-0,07	0,06	-0,05	-0,02	-0,06	0,09
7.2.3	0,14	-0,08	-0,01	0,17	-0,07	-0,05	0,12	-0,03	-0,06	0,10	0,00	-0,07	0,21	-0,09	-0,08
7.2.4	-0,16	0,08	0,04	-0,25	0,10	0,08	-0,14	0,05	0,06	-0,14	0,02	0,08	-0,24	0,14	0,04
7.2.5	-0,08	0,09	-0,04	0,05	0,01	-0,05	-0,08	0,02	0,04	-0,07	0,05	0,00	-0,08	-0,03	0,10
7.3.3	0,14	-0,07	-0,03	0,17	-0,06	-0,07	0,12	-0,04	-0,06	0,11	-0,01	-0,07	0,22	-0,09	-0,07
7.3.4	-0,17	0,08	0,04	-0,26	0,11	0,08	-0,15	0,06	0,05	-0,15	0,01	0,10	-0,24	0,12	0,06
7.3.5	-0,08	0,05	0,02	0,05	-0,04	0,00	-0,08	0,02	0,04	-0,07	0,09	-0,05	-0,08	0,01	0,05
7.4.3	0,11	-0,04	-0,06	0,10	-0,01	-0,06	0,09	-0,04	-0,03	0,11	-0,02	-0,09	0,09	-0,04	-0,01
7.4.4	0,11	-0,02	-0,06	0,03	-0,02	0,00	0,10	-0,03	-0,05	0,06	0,12	-0,17	0,12	0,11	-0,23
7.4.5	-0,22	0,06	0,12	-0,15	0,05	0,06	-0,22	0,08	0,09	-0,20	-0,10	0,28	-0,21	-0,07	0,27
7.5.3	0,16	-0,16	0,06	0,08	-0,06	0,02	0,11	-0,09	0,01	0,09	-0,02	-0,05	0,15	-0,11	0,02
7.5.4	-0,20	0,15	-0,02	-0,24	0,14	0,03	-0,13	0,11	-0,02	-0,13	0,00	0,09	-0,25	0,17	-0,01
7.5.5	-0,04	0,07	-0,06	0,20	-0,08	-0,07	-0,09	0,02	0,05	-0,08	0,11	-0,07	0,08	-0,07	0,02

⁷Source: Personal research, 2020

In relation to this table of Pearson's correlation coefficients, 24% of the values shown are significant compared with 76% which are not significant. Analysis of the Pearson correlation coefficients between the variables "Consideration of the existence of mutual learning perceived by the human resources staff surveyed" and "Consideration of the existence of motivation in the human resources surveyed" reveals 24% significant dependency, compared with 76% non-significant dependency. This relationship is therefore considered to be significant at 24% and non-significant at 76%. For this third relationship, despite the fact that it is declared non-significant at 76%, the objective is still to determine the possibility of the existence of a positive correlation between the variables studied for the 24% of its significance; the study will then focus solely on the case of positive significant variables. Referring to interpretation principle no. 3, it can be seen that the variables "Consideration of the existence of mutual learning perceived by the human resources staff surveyed" and "Consideration of the existence of motivation in the human resources

surveyed" are positively correlated. In other words, motivation and mutual learning perceived by the partners' human resources are positively correlated.

4) "Consideration of the existence of skills acquisition as perceived by the human resources staff surveyed" - "Consideration of the existence of a feeling of competence as perceived by the human resources staff surveyed"

For the specific study of this relationship, the following table is highlighted:

TABLE VIII. SUMMARY TABLE OF INDICATORS TO BE CONSIDERED FOR THE STUDY OF THE CORRELATION BETWEEN THE VARIABLES "CONSIDERATION OF THE EXISTENCE OF SKILLS ACQUISITION AS PERCEIVED BY THE HUMAN RESOURCES STAFF SURVEYED" AND "CONSIDERATION OF THE EXISTENCE OF A FEELING OF COMPETENCE AS PERCEIVED BY THE HUMAN RESOURCES STAFF SURVEYED"

Variables	Indicator involved	Level of perception concerned by the indicator according to the principles of interpretation
Consideration of the existence of skills acquisition as perceived by the human resources people surveyed	8.1, 8.2, 8.3, 8.4, 8.5	8.1.3, 8.1.4, 8.1.5, 8.2.3, 8.2.4, 8.2.5, 8.3.3, 8.3.4, 8.3.5, 8.4.3, 8.4.4, 8.4.5, 8.5.3, 8.5.4, 8.5.5
Consideration of the existence of a feeling of competence as perceived by the human resources staff surveyed	9.1, 9.2, 9.3, 9.4, 9.5, 9.6	9.1.3, 9.1.4, 9.1.5, 9.2.3, 9.2.4, 9.2.5, 9.3.3, 9.3.4, 9.3.5, 9.4.3, 9.4.4, 9.4.5, 9.5.3, 9.5.4, 9.5.5, 9.6.3, 9.6.4, 9.6.5

⁸Source: Personal research, 2020

With reference to the general table of Pearson correlation coefficients and the table above, the following table can be drawn up:

TABLE IX. EXTRACT FROM THE PEARSON CORRELATION COEFFICIENTS TABLE FOR THE STUDY OF THE RELATIONSHIP BETWEEN THE VARIABLES "CONSIDERATION OF THE EXISTENCE OF SKILL ACQUISITION PERCEIVED BY THE HUMAN RESOURCES STAFF SURVEYED" AND "CONSIDERATION OF THE EXISTENCE OF A FEELING OF COMPETENCE PERCEIVED BY THE HUMAN RESOURCES STAFF SURVEYED".

	8.1.3	8.1.4	8.1.5	8.2.3	8.2.4	8.2.5	8.3.3	8.3.4	8.3.5	8.4.3	8.4.4	8.4.5	8.5.3	8.5.4	8.5.5
9.1.3	0,83	-0,71	-0,15	0,85	-0,75	-0,14	0,90	-0,74	-0,17	0,87	-0,74	-0,15	0,82	-0,71	-0,15
9.1.4	-0,73	0,81	-0,18	-0,66	0,76	-0,20	-0,66	0,78	-0,26	-0,68	0,77	-0,23	-0,70	0,78	-0,18
9.1.5	-0,03	-0,18	0,48	-0,17	-0,04	0,51	-0,24	-0,09	0,65	-0,17	-0,09	0,57	-0,07	-0,13	0,48
9.2.3	0,84	-0,72	-0,15	0,86	-0,76	-0,15	0,91	-0,75	-0,18	0,88	-0,74	-0,16	0,85	-0,74	-0,15
9.2.4	-0,73	0,78	-0,13	-0,66	0,73	-0,15	-0,66	0,77	-0,25	-0,68	0,78	-0,21	-0,70	0,77	-0,17
9.2.5	-0,04	-0,13	0,41	-0,18	0,00	0,44	-0,25	-0,07	0,62	-0,18	-0,07	0,55	-0,11	-0,09	0,47
9.3.3	0,79	-0,69	-0,12	0,85	-0,74	-0,15	0,88	-0,72	-0,19	0,85	-0,71	-0,17	0,82	-0,72	-0,12
9.3.4	-0,68	0,76	-0,17	-0,70	0,77	-0,15	-0,68	0,80	-0,25	-0,70	0,80	-0,22	-0,72	0,79	-0,17
9.3.5	-0,07	-0,13	0,48	-0,14	-0,07	0,50	-0,22	-0,15	0,71	-0,14	-0,14	0,63	-0,06	-0,14	0,48
9.4.3	0,84	-0,72	-0,16	0,90	-0,79	-0,15	0,93	-0,77	-0,18	0,90	-0,76	-0,16	0,85	-0,75	-0,12
9.4.4	-0,76	0,81	-0,13	-0,72	0,79	-0,16	-0,70	0,82	-0,25	-0,72	0,83	-0,22	-0,73	0,80	-0,17
9.4.5	-0,01	-0,17	0,44	-0,16	-0,04	0,47	-0,23	-0,11	0,67	-0,16	-0,11	0,59	-0,09	-0,10	0,44
9.5.3	0,84	-0,72	-0,15	0,86	-0,76	-0,15	0,91	-0,75	-0,18	0,88	-0,74	-0,16	0,85	-0,74	-0,15
9.5.4	-0,69	0,75	-0,13	-0,67	0,74	-0,16	-0,67	0,79	-0,25	-0,69	0,79	-0,22	-0,71	0,78	-0,17
9.5.5	-0,11	-0,08	0,43	-0,17	-0,02	0,45	-0,24	-0,09	0,65	-0,17	-0,09	0,57	-0,10	-0,11	0,48
9.6.3	0,81	-0,70	-0,16	0,85	-0,75	-0,15	0,90	-0,74	-0,18	0,87	-0,73	-0,16	0,85	-0,73	-0,16
9.6.4	-0,73	0,78	-0,13	-0,68	0,75	-0,15	-0,68	0,79	-0,25	-0,70	0,80	-0,21	-0,72	0,79	-0,17
9.6.5	-0,02	-0,16	0,44	-0,16	-0,03	0,46	-0,24	-0,10	0,66	-0,16	-0,10	0,58	-0,09	-0,12	0,49

⁹Source: Personal research, 2020

In relation to this table, 86.67% of the values entered are significant, compared with 13.33% that are not significant. Analysis of the Pearson correlation coefficients between the variables "Consideration of the existence of skills acquisition perceived by the human resources staff surveyed" and "Consideration of the existence of a feeling of competence perceived by the human resources staff surveyed" reveals 86.67% significant dependency, compared with 13.33% non-significant dependency. It can therefore be estimated that this relationship is significant at 86.67% and non-significant at 13.33%. For this fourth relationship, referring to interpretation principle no. 3, it can be seen that the variables "Consideration of the existence of skill acquisition perceived by the human resources staff surveyed" and "Consideration of the existence of a feeling of competence perceived by the human resources staff surveyed" are positively correlated. In other words, the acquisition of skills and the feeling of competence perceived by the partners' human resources are positively correlated.

5) "Consideration of the existence of skill acquisition as perceived by the human resources staff surveyed" - "Consideration of the existence of motivation in the human resources surveyed"

For the specific study of this relationship, the following table is highlighted:

TABLE X. SUMMARY TABLE OF INDICATORS TO BE CONSIDERED FOR THE STUDY OF THE CORRELATION BETWEEN THE VARIABLES "CONSIDERATION OF THE EXISTENCE OF SKILL ACQUISITION AS PERCEIVED BY THE HUMAN RESOURCES STAFF SURVEYED" AND "CONSIDERATION OF THE EXISTENCE OF MOTIVATION IN THE HUMAN RESOURCES SURVEYED".

Variables	Indicator involved	Level of perception concerned by the indicator according to the principles of interpretation
Consideration of the existence of skills acquisition as perceived by the HR people surveyed	8.1, 8.2, 8.3, 8.4, 8.5	8.1.3, 8.1.4, 8.1.5, 8.2.3, 8.2.4, 8.2.5, 8.3.3, 8.3.4, 8.3.5, 8.4.3, 8.4.4, 8.4.5, 8.5.3, 8.5.4, 8.5.5
Consideration of the existence of motivation in the human resources surveyed	1.1, 1.2, 1.3, 1.4, 1.5	1.1.3, 1.1.4, 1.1.5, 1.2.3, 1.2.4, 1.2.5, 1.3.3, 1.3.4, 1.3.5, 1.4.3, 1.4.4, 1.4.5, 1.5.3, 1.5.4, 1.5.5

¹⁰Source: Personal research, 2020

With reference to the general table of Pearson correlation coefficients and the table above, the following table can be drawn up:

TABLE XI. EXTRACT FROM THE PEARSON CORRELATION COEFFICIENTS TABLE FOR THE STUDY OF THE RELATIONSHIP BETWEEN THE VARIABLES "CONSIDERATION OF THE EXISTENCE OF SKILL ACQUISITION PERCEIVED BY THE HUMAN RESOURCES STAFF SURVEYED" AND "CONSIDERATION OF THE EXISTENCE OF MOTIVATION IN THE HUMAN RESOURCES STAFF SURVEYED"

	8.1.3	8.1.4	8.1.5	8.2.3	8.2.4	8.2.5	8.3.3	8.3.4	8.3.5	8.4.3	8.4.4	8.4.5	8.5.3	8.5.4	8.5.5
1.1.3	0,11	-0,14	-0,08	0,16	-0,18	-0,08	0,14	-0,15	-0,10	0,13	-0,15	-0,09	0,12	-0,17	-0,02
1.1.4	-0,21	0,22	0,06	-0,15	0,16	0,05	-0,09	0,17	-0,09	-0,13	0,18	-0,02	-0,17	0,18	0,06
1.1.5	0,17	-0,14	-0,04	0,05	-0,02	-0,04	-0,01	-0,08	0,20	0,05	-0,10	0,10	0,09	-0,05	-0,04
1.2.3	0,12	-0,20	0,04	0,16	-0,24	0,05	0,17	-0,24	0,02	0,16	-0,24	0,04	0,15	-0,23	0,04
1.2.4	-0,18	0,20	0,02	-0,11	0,14	0,01	-0,07	0,19	-0,16	-0,11	0,20	-0,09	-0,13	0,16	0,02
1.2.5	0,12	-0,08	-0,06	0,01	0,03	-0,05	-0,05	-0,03	0,18	0,01	-0,05	0,08	0,04	0,00	-0,06
1.3.3	0,07	-0,11	-0,03	0,11	-0,16	-0,02	0,12	-0,13	-0,10	0,11	-0,12	-0,09	0,12	-0,15	-0,09
1.3.4	-0,11	0,16	-0,04	-0,07	0,11	-0,02	-0,02	0,12	-0,13	-0,05	0,13	-0,07	-0,11	0,14	0,00
1.3.5	0,08	-0,10	0,08	-0,01	0,01	0,04	-0,08	-0,03	0,24	-0,03	-0,05	0,15	0,02	-0,04	0,08
1.4.3	0,05	-0,09	-0,07	0,10	-0,13	-0,07	0,11	-0,13	-0,09	0,10	-0,16	-0,08	0,09	-0,13	-0,07
1.4.4	-0,06	0,07	0,06	-0,05	0,06	0,05	-0,01	0,04	0,02	-0,05	0,05	0,10	-0,05	0,07	0,06
1.4.5	0,04	0,00	-0,05	-0,01	0,04	-0,05	-0,07	0,05	0,05	-0,01	0,05	-0,06	-0,02	0,03	0,00
1.5.3	0,19	-0,24	-0,02	0,20	-0,23	-0,08	0,22	-0,23	-0,09	0,20	-0,22	-0,08	0,19	-0,22	-0,08

	8.1.3	8.1.4	8.1.5	8.2.3	8.2.4	8.2.5	8.3.3	8.3.4	8.3.5	8.4.3	8.4.4	8.4.5	8.5.3	8.5.4	8.5.5
1.5.4	-0,09	0,15	-0,06	-0,08	0,12	-0,03	-0,09	0,15	-0,04	-0,08	0,16	-0,08	-0,13	0,17	-0,02
1.5.5	-0,04	0,01	0,09	-0,08	0,05	0,10	-0,07	0,01	0,13	-0,08	0,02	0,17	-0,01	-0,02	0,09

¹¹Source: Personal research, 2020

In relation to this table of Pearson correlation coefficients, 31.11% of the values entered are significant, compared with 68.89% which are not significant. Analysis of the Pearson correlation coefficients between the variables "Consideration given to the existence of skill acquisition perceived by the human resources staff surveyed" and "Consideration given to the existence of motivation at the level of the human resources surveyed" revealed a significant dependency of 31.11%, compared with a non-significant dependency of 68.89%. This relationship is therefore considered to be significant at 31.11% and non-significant at 68.89%. For this fifth relationship, despite the fact that it is declared non-significant at 68.89%, the objective is still to determine the possibility of the existence of a positive correlation between the variables studied for the 31.11% of its significance; the study will then focus solely on the case of positive significant variables. Referring to interpretation principle no. 3, it can be seen that the variables "Consideration of the existence of skill acquisition perceived by the human resources surveyed" and "Consideration of the existence of motivation at the level of the human resources surveyed" are positively correlated. In other words, motivation and the acquisition of skills perceived by the partners' human resources are positively correlated.

6) "Consideration of the existence of a feeling of competence perceived by the human resources staff surveyed" - "Consideration of the existence of motivation in the human resources surveyed"

For the specific study of this relationship, the following table is highlighted:

TABLE XII. SUMMARY TABLE OF INDICATORS TO BE CONSIDERED FOR THE STUDY OF THE CORRELATION BETWEEN "CONSIDERATION OF THE EXISTENCE OF A FEELING OF COMPETENCE PERCEIVED BY THE HUMAN RESOURCES STAFF SURVEYED" AND "CONSIDERATION OF THE EXISTENCE OF MOTIVATION IN THE HUMAN RESOURCES SURVEYED"

Variables	Indicator involved	Level of perception concerned by the indicator according to the principles of interpretation
Consideration of the existence of a feeling of competence as perceived by the human resources people surveyed	9.1, 9.2, 9.3, 9.4, 9.5, 9.6	9.1.3, 9.1.4, 9.1.5, 9.2.3, 9.2.4, 9.2.5, 9.3.3, 9.3.4, 9.3.5, 9.4.3, 9.4.4, 9.4.5, 9.5.3, 9.5.4, 9.5.5, 9.6.3, 9.6.4, 9.6.5
Consideration of the existence of motivation in the human resources surveyed	1.1, 1.2, 1.3, 1.4, 1.5	1.1.3, 1.1.4, 1.1.5, 1.2.3, 1.2.4, 1.2.5, 1.3.3, 1.3.4, 1.3.5, 1.4.3, 1.4.4, 1.4.5, 1.5.3, 1.5.4, 1.5.5

¹²Source: Personal research, 2020

With reference to the Pearson correlation coefficient table and the table above, the following table can be drawn up:

TABLE XIII. EXTRACT FROM THE PEARSON CORRELATION COEFFICIENT TABLE FOR THE STUDY OF THE RELATIONSHIP BETWEEN THE VARIABLES "CONSIDERATION OF THE EXISTENCE OF A FEELING OF COMPETENCE PERCEIVED BY THE HUMAN RESOURCES STAFF SURVEYED" AND "CONSIDERATION OF THE EXISTENCE OF MOTIVATION IN THE HUMAN RESOURCES STAFF SURVEYED".

	1.1.3	1.1.4	1.1.5	1.2.3	1.2.4	1.2.5	1.3.3	1.3.4	1.3.5	1.4.3	1.4.4	1.4.5	1.5.3	1.5.4	1.5.5
9.1.3	0,21	-0,13	-0,02	0,05	-0,04	0,01	0,16	-0,05	-0,07	0,07	0,03	-0,08	0,12	-0,06	-0,02
9.1.4	-0,17	0,40	-0,33	-0,08	0,32	-0,32	-0,14	0,32	-0,26	-0,05	0,22	-0,20	-0,09	0,26	-0,25
9.1.5	-0,14	-0,36	0,54	-0,05	-0,38	0,49	-0,11	-0,36	0,51	-0,12	-0,31	0,43	-0,13	-0,26	0,42
9.2.3	0,25	-0,13	-0,06	0,26	-0,10	-0,10	0,20	-0,05	-0,10	0,20	-0,05	-0,09	0,27	-0,10	-0,10
9.2.4	-0,27	0,44	-0,31	-0,27	0,43	-0,29	-0,22	0,36	-0,24	-0,20	0,28	-0,18	-0,23	0,33	-0,21
9.2.5	-0,03	-0,39	0,52	-0,06	-0,43	0,56	-0,04	-0,38	0,49	-0,13	-0,26	0,41	-0,14	-0,29	0,46
9.3.3	0,30	-0,15	-0,08	0,24	-0,12	-0,05	0,25	-0,13	-0,06	0,18	-0,02	-0,11	0,28	-0,15	-0,05

	1.1.3	1.1.4	1.1.5	1.2.3	1.2.4	1.2.5	1.3.3	1.3.4	1.3.5	1.4.3	1.4.4	1.4.5	1.5.3	1.5.4	1.5.5
9.3.4	-0,28	0,39	-0,24	-0,27	0,39	-0,23	-0,22	0,36	-0,24	-0,20	0,21	-0,10	-0,26	0,36	-0,19
9.3.5	-0,12	-0,31	0,50	-0,03	-0,36	0,45	-0,13	-0,32	0,49	-0,11	-0,23	0,36	-0,12	-0,26	0,42
9.4.3	0,24	-0,14	-0,04	0,25	-0,10	-0,08	0,19	-0,06	-0,09	0,19	-0,04	-0,10	0,27	-0,10	-0,10
9.4.4	-0,20	0,41	-0,33	-0,28	0,41	-0,26	-0,15	0,33	-0,26	-0,20	0,27	-0,17	-0,23	0,29	-0,13
9.4.5	-0,13	-0,36	0,57	-0,04	-0,41	0,51	-0,14	-0,36	0,54	-0,12	-0,28	0,42	-0,13	-0,23	0,38
9.5.3	0,25	-0,13	-0,06	0,23	-0,08	-0,10	0,18	-0,05	-0,08	0,17	-0,03	-0,09	0,27	-0,10	-0,10
9.5.4	-0,28	0,39	-0,25	-0,25	0,37	-0,24	-0,20	0,33	-0,22	-0,18	0,21	-0,12	-0,23	0,34	-0,22
9.5.5	-0,03	-0,33	0,44	-0,05	-0,38	0,49	-0,03	-0,36	0,45	-0,12	-0,20	0,34	-0,13	-0,31	0,49
9.6.3	0,29	-0,15	-0,07	0,25	-0,14	-0,04	0,27	-0,09	-0,12	0,19	-0,04	-0,10	0,26	-0,15	-0,04
9.6.4	-0,25	0,42	-0,31	-0,27	0,43	-0,29	-0,22	0,36	-0,24	-0,20	0,28	-0,18	-0,23	0,35	-0,21
9.6.5	-0,14	-0,35	0,55	-0,05	-0,39	0,50	-0,14	-0,35	0,52	-0,12	-0,29	0,44	-0,13	-0,24	0,40

¹³Source: Personal research, 2020

In relation to this table of Pearson correlation coefficients, 73.33% of the values entered are significant, compared with 26.67% which are not significant. An analysis of the Pearson correlation coefficients between the variables "Consideration given to the existence of a feeling of competence perceived by the human resources staff surveyed" and "Consideration of the existence of motivation in the human resources surveyed" reveals 54.17% significant dependency, compared with 45.83% non-significant dependency. It can therefore be estimated that this relationship is significant at 73.33% and non-significant at 26.67%. For this sixth relationship, referring to interpretation principle no. 3, it can be seen that the variables "Consideration of the existence of a feeling of competence perceived by the human resources staff surveyed" and "Consideration of the existence of motivation in the human resources surveyed" are positively correlated. In other words, motivation and the feeling of competence perceived by the partners' human resources are positively correlated.

B. Discussions

1) Confirmatory analysis of hypotheses

Confirmatory analysis of the research hypothesis and modelling are carried out at the level of bivariate analysis of the variables and their measurement indicators. The research hypothesis is always studied on the basis of Fig. 1. To study this hypothesis, the variables are coded again, according to interpretation principle 2.

These are the following elements: E: "Existence of mutual learning perceived by the human resources of the partners via the bilateral strategic alliance of their companies"; F: "Existence of acquisition of competences perceived by the human resources of the partners via the bilateral strategic alliance of their companies"; G: "Existence of feeling of competences perceived by the human resources of the partners via the bilateral strategic alliance of their companies" and D: "Existence of motivation at the level of the human resources of the partners". The study of the following bivariate relationships is necessary for the study of the research hypothesis: E-F, E-G, E-D, F-G, F-D, G-D.

In the case of E-F, the existence of a significant correlation at 90.67% and a non-significant correlation at 9.33% is assumed. After studying the positive significant values, these variables are declared to be positively correlated. In the case of E-G, the existence of a significant correlation at 82.96% and a non-significant correlation at 17.04% is accepted. After studying the positive significant values, these variables are declared to be positively correlated. In the case of E-D, the existence of a significant correlation at 24% and a non-significant correlation at 76% is accepted. After studying the positive significant values, these variables are declared to be positively correlated. In the case of F-G, the existence of a significant correlation at 86.67% and a non-significant correlation at 13.33% is accepted. After studying the positive significant values, these variables are declared to be positively correlated. In the case of F-D, the existence of a significant correlation at 31.11% and a non-significant correlation at

68.89% is accepted. After studying the positive significant values, these variables are declared to be positively correlated. In the case of G-D, the existence of a significant correlation at 73.33% and a non-significant correlation at 26.67% is accepted. After studying the positive significant values, these variables are declared to be positively correlated.

Clearly, the six relationships studied are all positively correlated with each other, so the research hypothesis is considered to be confirmed: the bilateral strategic alliance between Small and Medium-sized Enterprises contributes to the motivation of the partners' human resources, in the case of the Small and Medium-sized Enterprises in the sample, which is representative of this type of company in the case of Madagascar.

2) New contributions, limitations and prospects

The new contributions concern the results of the study, the corresponding bivariate analyses and the confirmatory analyses of the research hypothesis. The other types of positive and negative correlations not studied also constitute new contributions to the study, and the analyses concerning them constitute perspectives for the research. As for the limitations of the research, they concern, first of all, the theoretical limitations; the researcher confined himself to studying the relationship between human resource motivation and the strategic alliance despite the diversity of managerial domains that can be explored. The concept of involvement will not be studied in this research. Secondly, with regard to the limits of the variables to be studied, there is the limitation of the study of those contributing to the confirmation or invalidation of the hypotheses. The present research proves to be interesting in that it links a strategic element, contributing to the survival and development of Small and Medium-sized Enterprises and the community in general (who are the beneficiaries of this development: Small and Medium-sized Enterprises employees, their customers, their suppliers, the State, students, etc.), and the motivation of human resources (one of the levers of individual and organizational performance), so the pursuit of the research is encouraged both by the researcher himself and by others.

3) Confrontations with authors' research

References [4], [7], [8], [6], [19], [20], [21], [14], [3] have studied the fact that the use of strategic alliances allows the mutual learning of the partners' human resources towards the acquisition of skills by the partners' human resources. As to references [22], [23], [24], [25], [26], [27], [28], [3], [13], [29], [30] and [31], they have in turn asserted that learning is a process of skills acquisition. References [32] and [15], for their part, have shown that the acquisition of skills by the partners' human resources enables the partners' human resources to perceive a sense of competence or a sense of personal efficacy. With regard to references [13], [25], [27], [16], [15] and [17], they presented that the perception of a sense of competence or a sense of personal efficacy by the partners' human resources enables the motivation of the partners' human resources.

Most of these authors have studied the strategic alliances of companies and in the context of Small and Medium-sized Enterprises, but in their research, they have not specifically detailed the causal relationship between the variables studied as demonstrated in the researcher's research.

With regard to research into the motivation of human resources at work [9], it can be seen that no researcher had yet studied the use of strategic alliances as a source of motivation for human resources.

It should be noted that no studies have yet been carried out on the practice of strategic alliances in Madagascar.

IV. CONCLUSIONS

This research made it possible to study the relationship between the strategic alliance and the motivation of the human resources of the partner Small and Medium-sized Enterprises in Madagascar, within the framework of the search for a new source of motivation which could make it possible to motivate this unit of study more and to contribute to the development of the Malagasy Small and Medium-sized Enterprises. After the confirmatory analysis of the research hypothesis, and the generalization of the studies according to the analysis of Pearson's correlation coefficients, it was found that the hypothesis was confirmed after the analysis of the six relationships set out above; the bilateral strategic alliance between Small and Medium-sized Enterprises then contributes to the motivation of the partners' human resources, in the case of the Small and Medium-sized Enterprises in the sample. But it can also be noted; in terms of new contributions to the study, all the other types of results obtained. As far as the

limitations of the research are concerned, these relate to the theoretical framework and the variables to be studied. The research objectives have been achieved in this study. The research is interesting because it can serve as a model for Small and Medium-sized Enterprises managers who have not yet used strategic alliances. Several other relationships between the indicators of the variables studied have not yet been subjected to in-depth analysis in this research, so further research is encouraged, both by the researcher himself and by other Management Science researchers.

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