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## Article

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# PSYCHOLOGICAL PROFILE OF THE LEADER AND INVESTMENT DECISION PRACTICE OF THE SMALL AND MEDIUM-SIZED ENTERPRISE (SME) IN THE CONTEXT OF THE COVID-19 HEALTH CRISIS IN IVORY COAST

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## ABSTRACT

This article examines the different investment decision practices of the leader of small and medium-sized enterprises (SMEs) during the COVID-19 health crisis and highlights the influence of the leader's psychological profile on these practices. Thus, primary data was collected from the interview guide and questionnaires submitted to 112 executives. The results obtained through the tests indicate the existence of a direct link (significant influence) between certain psychological profiles of the leader and investment decision-making practices in times of crisis.

**Keywords:** Crisis, psychological profile, investment decision-making practices, SME manager

## INTRODUCTION

All continents are facing a COVID-19 pandemic, which poses dramatic health, political and social challenges (Oudda, et al., 2020), as well as a situation of economic instability (Bakour and Ouassou, 2020) which affects various key sectors of the global economy, in particular, SMEs in commerce, industry, tourism, transport. SMEs play a fundamental role in the Ivorian economic fabric (more than 98% of the companies listed and contribute 20% to the gross domestic product, INIE 1/09/2015. Until 2018, 6,000 SMEs / SMIs provide 10 % of jobs), but these remain the most impacted by the effects of COVID-19 worsening their situation, causing the cessation of activities with the consequent increase in unemployment and the bankruptcy of some SMEs. Therefore, facing this crisis, investment becomes a secondary concern. However, the study by MC Connell and Muscarella (1985), for decades, considers investment as an engine of growth, and it becomes a source of value creation if it is well chosen by evaluating its profitability using normative tools. For this purpose, investment decision-making processes are, in a crisis, different from what they usually are (Stubbart, 1987). Accordingly, research into the practice of investment decision-making in times of crisis draws our attention. Many authors (Ang, 1991 and 1992; Julien and Marschenay, 1996; Jarvis et al., 2000) note the central role of the SME manager for companies of such sizes, managers and organizations form one single entity. Merton et al.; Teyssier (2011) show that decisions to invest are mainly based on the characteristics of the leader. From that moment on, a crisis would affect the SME if the manager is exposed to disease (COVID-19 virus), which could affect his psychological state. Marschenay (1997), Torres and Plane (2003) highlight the inseparable character of the small size of the entity with the psychological profile of the leader. According to the work of Ben Boubakary et al (2017), theoretical models that explain the importance of investment decisions before actual investment in an entity have been developed in management science. Given our research object, which is the SME and especially its specificity relating to its restricted and limited means (Boubakary and Zerbib, 2016), but also the importance of investment decision tools to the performance of an entity then, as part of this study, we opt for the approach based on resources and competences. Some research has explained through characteristics the socio-demographic and socio-cultural profile of the SME manager how his profile could affect the performance of his entity (Bayad et al., 2006; Ndjambou and Sassine, 2014). The psychological profile of the leader also appears to be important in investment decision-making practices. This profile allows managers to be motivated by mobilizing the resources and skills necessary to achieve the growth of its structure (Boubakary and Zerbib, 2016). During these decades, the economic, and financial literature relating to investment has been interested in the effects of environmental uncertainty on the decision to invest, to our knowledge, small work has dealt with the psychological profile of the manager and its consequences on its decision to invest in an uncertain environment. Since the health crisis, the restrictive measures, and containment procedures to eradicate the spread of this severe and fatal pneumonia (Fabeil et al, 2020) have negatively impacted turnover and, in turn, the investments of SMEs. But these measures have also favoured investment decisions through the acquisition of new tools in the field of NICT. According to Thiam and Ndiaye (2020), the least connected and equipped countries must invest more in technological news to better cope with the effects of the pandemic and reduce the digital bill. Although the personality of the leader is important in making investment decisions to achieve growth (Fansi, 2010), his psychological profile becomes more fundamental for the SME. So how does the personality of the leader determine his investment decision-making practices in

times of crisis? Is there a link between the psychological factors of the leader and his investment decision-making practices in times of crisis? This article aims to identify, in a context of crisis, the practices of SME managers in terms of investment decisions and to highlight the influence of psychological factors on their practices. To answer our question, we propose this review of the literature and the development of hypotheses, the methodology of the survey, and the results of our research model.

## 1. Review of the literature and development of hypotheses

### 1.1. Definition and perception of the crisis by SME managers

According to Lagadec (1991), crisis is a dislocation of universes; it is the transition from a stable state to an unstable state through a trigger event. Crisis refers to the fact that an unknown situation suddenly arises, causing a rupture whose effects are very noticeable. For Goldstein (2003), crisis generates constraints on individual and collective behaviour: effect of pressure and stress which act on the psychology of decision-makers. Etymologically, the word crisis (krisis in Greek) means decision, to decide, to judge. The negative connotation of the crisis appears in the political (ministerial crisis), economic (the crisis of 1929, 2008), and health (COVID-19). Some authors define crisis as accidents or unmanageable events. We opt for the definition of crisis by Goldstein (2003), resulting in too rapid decision-making.

In recent years, Ivory Coast has been marked by military-political upheavals with its procession of post-electoral crisis, added to the COVID-19 pandemic leading to an unstable SME environment. Therefore, mutations are permanent and follow one another, accompanied by weak control of uncertainty, instability becomes intense (Salloum, 2015). How do the leaders perceive this instability? In finance, instability is expressed by the notion of uncertainty which encompasses risky, indeterminate, and turbulent situations. Starting from the distinction made between risk and uncertainty by Frank Knight (1921), the manager perceives a crisis context as risky if he can find solutions to prevent or cover the contingencies that occur (precisely quantifying the situation by the probabilities; it is possible to cover this risk by means of an insurance contract or an equivalent hedging method). Otherwise, crisis context is said to be uncertain if the possible solutions would depend on the behaviour, the psychological state of the leader, and the attitude of the stakeholders. (Cannot objectively or subjectively affect probabilities). Under these conditions, our SME managers perceive the context of the COVID-19 health crisis as an uncertain environment.

### 1.2. Investment decision-making practices in a context of crisis

Investment decision-making practices are the means (tool, method, process) used by managers when making an investment decision in physical assets.

In a context of crisis, these practices are provoked by unconscious reasons outside all scientific rationality. According to contingency theory, practices mean both “available or pre-established standards” and “standards used or applied”. Thus, actual investment decision-making practices are defined by two dimensions:

- the "objective" dimension where we have pre-established standards that allow the manager to decide optimally: Normative investment decision-making practices. During these practices, the uncertainty possibly due to political, economic, social or health crises weighs on future cash-flows with unfavourable consequences on the evolution of selling prices, production costs, market share. Of the entity and this has a negative impact on the economic performance of SMEs. To this end, Saporta (1986) considers that the survival of the SME is intimately

linked to its uncertain environment; for Raymond and St-Pierre (2005) the survival of the SME is threatened. Such a context requires responsive decisions despite the limited information and resources available to the entity (Khalifé and De Montmorillon, 2018). There are a multitude of rational investment decision-making models in times of uncertainty: the risk-informed investment decision model; the real options investment decision model, which considers flexibility and irreversibility; the investment decision model considering the manager's attitude to risk.

These Cartesian models of investment decisions are not universal. Criteria adopted by one entity in one environment may be inadequate in other types of business and environments. Thus, Pezet (2000) considers that taking risk into account in investment decisions is not enough; the environment of the firm, the mentality of the actors, and the evaluation instrument must be considered in the decision models. However, given the specificity and realities of SMEs, these rational decision-making approaches are neglected in favour of alternative methods.

The subjectivity of investment decision practice corresponds to the adaptation of standards to the objectives, skills and context of the manager in order to obtain satisfactory decisions (Chapelier, 1997): the intuitive practice of investment decisions. In a crisis, it is difficult to implement the standards of technical and human resources to analyze the possible solutions to make a decision. This context does not allow time to think, seek additional information, verify hypotheses, and do tests. The leader should use intuition rather than logical reasoning. Thus, research on decision-making in situations (Lebraty, 2010; Lebraty and Pastorelli-Nègre, 2004) conceives of intuition as the way or the speed with which experiences make it possible to make decisions; the practice called the "avoidance" model. In the decision-making process in times of crisis, Forgues (1993; 1996) notes the rejection of responsibilities, compliance with existing procedures, time savings, the decision not to decide, or the denial of reality. Avoidance is for decision-makers to avoid risk by shifting their responsibility to external experts; the political model refers to the theory of the behaviour of an entity. The SME operates in an environment where there are power relations between it and the different parties, which constitute sources of the crisis. From that moment, on decision-making is therefore a function of the vision, objectives and particular interests of the parties. Maintaining the stability of the entity requires that there is no pre-established alternative to be retained, but rather a decision resulting from negotiations and compromises according to the powers and interests of the conflicting actors (Allison, 1969); Michael Cohen et al. (1972). Here, the trash can represent a decision-making framework, namely: coordination meeting, management committee, seminar, panel. Faced with a crisis, the manager finds himself faced with the problems to be solved in a situation where the usual decision-making procedures no longer work. Therefore, the emotional aspects of the crisis, and the level of stress, will be a handicap for the leader of the entity. This is where the psychological profile of the leader comes in when making investment decisions.

### 1.3. The psychological profile of the leaders

Bouhaoula (2007) defines a psychological profile as a set of values, characteristics, beliefs and motivations that create a vision of the entity among SME managers. Here, we rely on the empirical studies of Fayole (2017), Messeghem and Sammut (2011), Gasse and Tremblay (2004), then Gartner (1989), which explain the behaviour (use of decision tools) or the performance of entities by the manager's personality traits by retaining six recurring psychological characteristics:

Table 1. The psychological profile of the leader

| Personality traits                                    | Definition  | Authors  |
|---|---|--|
| Tolerance of ambiguity and uncertainty                | The ability to manage uncertainty, to make decisions in unclear situations (lack of information or contradictory information)   | Budner, 1962; Klein, 2003; Blawatt, 1995   |
| Risk attitude (aversion and inclination to take risk) | Personality trait that defines a person's overall attitude to risks and influences their perception of risk<br>"Conscious state of mind in the face of uncertainty which can have a positive or negative effect on objectives"          | Hillson, 2005; Schanniger, 1976; Kahneman and Lavallo, 1993; Muller, 1985; Mills, 2003 |
| Self-confidence                                       | It is the right opinion we have of ourselves, which makes us feel good about ourselves.<br>Have a positive outlook on the outcome of our actions  | Charreaux, 1998; Alluche et al., 2000; Cova, 1993; Godbout, 2010                       |
| Locus of control (the place of control)               | A personality trait that determines the belief that the consequences of our actions are a function of what our actions (internal control) or environmental factors (external control)   | Rotter 1990; Fournier et al., 1995; Montgomery et al., 2010                            |
| Need for fulfillment                                  | The need to excel, to transcend, and achieve a certain personal goal.   | Patrick legoherel et al., 2003; Ben boubakary et al., 2017                             |
| Emotional stability                                   | It is controlling optimism (ability to take things in a positive way), serenity (ability to go through difficulties with calm), energy (the ability to invest), and concentration (the fact of focusing your mind on the tasks at hand) | Gasse et Tremblay (2004)   |

Source: inspired by Tamzini, K. Mehrez El Lazhar Ayed. (2016),

#### 1.4. Psychological profile of the manager and investment decision-making practices

Polycarpou (1992) indicates that the characteristics, personality and capacities of the leader influence the analysis of information, decision making and the overall organization of the structure. The manager's rationality being limited; he cannot obtain all the information in an uncertain environment before any investment decision is made (Herbert, 1967). Hence the cognitive psychological approach to decision-making considers the manager's uncertainty. In the context of COVID-19, decision-maker uncertainty manifests itself in both health and net cash flow. The most important thing is that the leader is and remains in good health, but above all, in this difficult period, he must have a high psychological state to continue to create value through adequate investment decision-making practices. Hence the main hypothesis: In a

context of crisis, the psychological dimensions of the leader influence his investment decision-making practice.

Uncertainty is a difficultly structured situation to which we cannot associate any probability, even subjective, so an individual with a low tolerance for uncertainty will perceive very undesirable crisis situations. It will be difficult for him to decide or act in accordance with this uncertain environment (Budner, 1962). Gasse and Tremblay (2004) add that individuals tolerant of uncertainty bear the stress generated by this situation more, which gives them a great capacity for adaptation.

H1: In a context of instability (COVID-19), the manager's tolerance for uncertainty significantly influences the practice of investment decisions.

For Hodder (1986), a leader accustomed to a decision model, if he has confidence in himself, whatever the crisis environment, he can continue to practice this decision tool. The more you get used to a method, the more apt you are to use it. Trust plays a fundamental role in the appropriation of decision-making tools, particularly in the relationship between the individual and the performance of the company (Charreaux, 1998; Mothe, 1999; Allouche, 2000)

H2: In a context of crisis, the manager's self-confidence significantly influences the practice of investment decisions.

Patrick legoherel et al. (2003) and Ben boubakary et al. (2017) note that the need for personal fulfillment is a main characteristic of the leader. According to Poon et al. (2006), individuals who have a strong desire for accomplishment exploit entrepreneurial actions (decision to invest) more than those who have a low desire for accomplishment.

H3: In a context of crisis (COVID-19), the leader's need for personal fulfillment significantly influences the practice of investment decisions.

A determined leader shows a willingness to take risks and be proactive, so he does not hesitate to make investment decisions for growth (McClland, 1961; Morris and Sexton, 1996). According to Volle (1995), a manager's risk is his perception of uncertainty which can have negative effects on his usual decisions, thus promoting alternative decision-making. Perren's research (2000) on sixteen micro-entities specifies that the predisposition to take risks is a determining factor of the manager's willingness to obtain material, financial and intangible resources to increase his entity and therefore to make investment decisions. Suitable to go beyond the stage of micro-entity:

H4: In a context of crisis (COVID-19), the predisposition of the leader to take risks significantly influences the practice of investment decisions.

The success, performance and growth of SMEs through investment decisions are the personal responsibility of managers since they are at the center of all decisions (Covin, 1991). To this end, leaders who exhibit low emotional stability find it difficult to assume the role of manager. Strong anxiety, strong depression combined with negative moods such as anger, hostility and depression can influence the ability to make decisions. According to Costa and McCrae (2002), through positive thinking, leaders who have high emotional stability are better able to cope with problems and high stress. They are calm, confident, and stay focused on their work (decision maker).

H5: In a context of crisis (COVID-19), the manager's emotional stability significantly influences the practice of investment decisions.

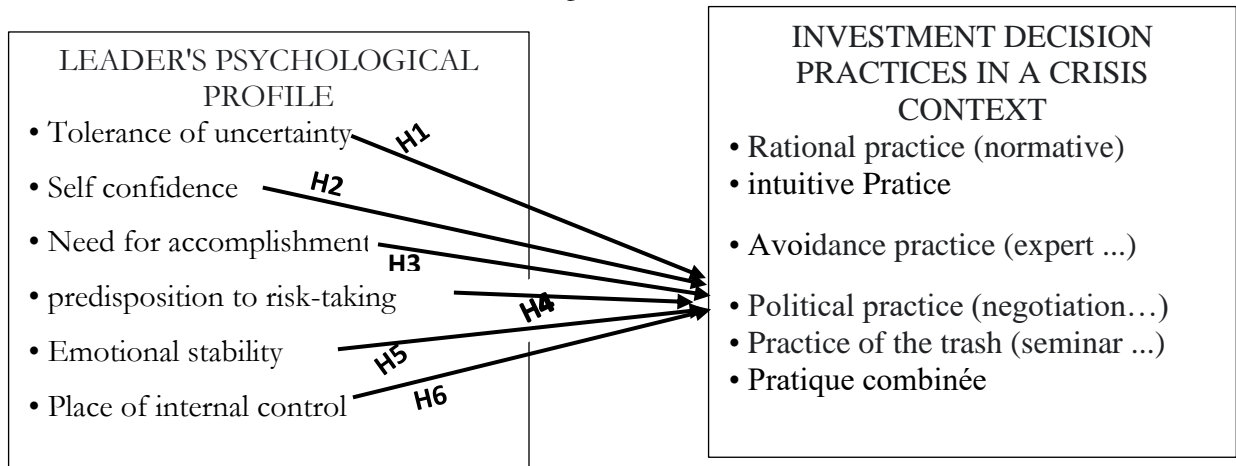
The need to maintain or increase market share leads SME managers to create value through investment decisions. In entrepreneurship, internal needs positively influence the entrepreneurial dynamics of firms (Cherchem and Fayolle; 2010) and therefore, investment decisions. According to Brockhaus (1980), people with a high level of locus of control think they easily influence the environment. In the psycho-managerial dimension of the trait



approach, Basso (2006) believes that the leader with this trait takes, whatever the nature of the context, investment decisions (act in an entrepreneurial manner). Individuals who have a high level of internal control opt for new opportunities to initiate new processes (Pandey and Tewary, 1979):

H6: In times of crisis (COVID-19), the place of internal control significantly influences the practice of investment decisions.

Conceptual research model



Source: adapted from the model of Bayad et al. (2006) and Ben Boukary et al. (2017)

## 2. Research methodology

We adopt the hypothetico-deductive approach and carry out a survey of 112 heads of SMEs from the cities of Abidjan, Yamoussoukro and San -Pédro. First, from the interview guide five semi-structured interviews: minimum size principle respected, it is a question of understanding the phenomenon and not of estimating values (Nicolas E., 2004). For the second step, the administration of questionnaires to managers chosen using the non-probabilistic method and, more precisely in a reasoned manner by combining the snowball method and the convenience method (Sogbossi, 2014). Data processing uses SPSS software. For analysis, the nominal qualitative nature of the independent and dependent variables requires the chi-square test. The ACM highlights a typology of investment decision-making practices. The overall test of the model requires multinational logistic regression of decision practice because this method does not assume a linear relationship between the variables and does not require a normal distribution of the variables (Howell, 1998).

## 2.1. Sample characteristics

Table 2. The distribution of the sample of owner-managers of SMEs

| Cities       | Questionnaires |             |           |             |             |             |
|--------------|----------------|-------------|-----------|-------------|-------------|-------------|
|              | Distributed    |             | Recovered |             | Exploitable |             |
|              | Samples        | Percentages | Samples   | Percentages | Samples     | Percentages |
| Abidjan      | 53             | 47,3 %      | 43        | 44,3 %      | 37          | 47,4 %      |
| Yamoussoukro | 24             | 21,4 %      | 23        | 23,7%       | 19          | 24,4 %      |
| San-pédro    | 35             | 31,3 %      | 31        | 32 %        | 22          | 28,2 %      |
| Total        | 112            | 100 %       | 97        | 100 %       | 78          | 100 %       |

Source: Survey data

Ultimately, out of 112 questionnaires administered, 78 were correctly completed, for a return rate of 71%. We have chosen three cities in the Ivory Coast in order to improve the external validity of the results and also to highlight the differences in the perception of the leaders according to the cities of the country. The managers solicited are those of SMEs in the agro-food sector, including 5 <headcount <100 employees, of visible form of existence through an identifiable location. 35 <age of manager <60 years and SME's duration of existence> 5 years

## 2.2. Operationalization of manifest or observable variables

Generally, given the low level of education of our SME managers, the measurement of observable variables, nominal and independent, favours three-point Likert-type scales (1 = agree; 2 = don't know; 3 = no agreement), which have already been applied in the work of Ouattara (1997) and Sogbossi (2010) on small business leaders in Africa. Their one-dimensionality is verified by factor analyzes, and their reliability is tested by Cronbach's alpha (value greater than 0.6).

Table 3. Scale for measuring the explanatory variables

| Measured variable             | Scale used                         | Number of items | Example items  |
|-------------------------------|------------------------------------|-----------------|--|
| Tolerance to uncertainty      | Gasse and Tremblay (2004)          | 6               | I can't decide without having all the information  |
| Self confidence               | Gasse and Tremblay (2004)          | 6               | When I make a business decision, I'm confident<br>As soon as I see an opportunity, I don't hesitate to make a decision |
| Need for accomplishment       | Robichaud, McGraw and Roger (2001) | 4               | As soon as I see an opportunity, I don't hesitate to make a decision   |
| predisposition to risk-taking | Gasse and Tremblay (2004)          | 6               | I am not afraid to take the initiative, I like risky activities  |
| Emotional stability           | Brunet and al. (1997)              | 13              | I am totally incapable of doing anything.  |
| Place of internal control     | Roger and Othmane (2011)           | 8               | I'm able to dominate extreme or stressful situations   |

Source: Adapted from Ben Boubakary et al. (2017)

Crisis investment decision practice (PDIPC) is the multinomial qualitative dependent variable ( $y_i$ ) with five modalities: normative practice, intuitive practice, avoidance practice, political practice, trash practice, and combined practice. We take a subjective measure of PDIPC because we are not dealing with normative work in corporate finance (Schatt, 2008). Instead, it is to understand what SME leaders really do when making investment decisions in a crisis environment. The method simply consists of asking managers to tick the box (es) of the questionnaire corresponding to their method of making an investment decision in the context of a COVID-19 health crisis.

### 3. Results and discussions

Before testing our model globally, it is wise to reassure ourselves that the explanatory variables are not strongly correlated. For this, we carry out a test using the Eviews 7 software.

#### 3.1. Correlation of independent (explanatory) variables

We note that all the correlation coefficients are all lower than the threshold recommended by Lind et al (2007) which is 0.8. Thus, we avoid the problem of multi-collinearity between the explanatory variables. Similarly, the work of Abouna et al. (2020) confirms the non-collinearity of the independent variables: tolerance for uncertainty, self-confidence, need for accomplishment, predisposition to risk-taking, emotional stability, locus of internal control.

#### 3.2. Typology of investment decision-making practices in times of crisis.

Table 4. Identification of investment decision-making practices in times of crisis

| Uncertain investment decision-making practices         | Leaders |            |
|--|---------|------------|
|  | Samples | Percentage |
| Normative practice (rational, pre-established methods) | 07      | 09 %       |
| Intuitive practice (experience, innate, 6th sense ...) | 28      | 36 %       |
| "Avoidance" practice (use of experts ...)              | 05      | 6 %        |
| Political practice (compromise, consensus)             | 10      | 13 %       |
| Practice of the "trash" (seminar, working group, etc.) | 08      | 10 %       |
| Combined practice (combination of the above practices) | 20      | 26 %       |
| Total  | 78      | 100 %      |

Source: Survey data

We find that during the COVID-19 crisis, 36% of executives used intuition in their investment decision-making, 26% combined decision-making methods, 13% and 10% of executives respectively employ the practice policies and working groups to decide on their investment. However, the pre-established methods and the use of experts are practiced by 9% and 6% of managers, respectively.

Table 5. Chi-square test for validation of the relationship psychological profile - investment decision practice in times of crisis (PDIPC)

| Profile-Practice Relationship D.I P.C | Pvalue $\leq$ 0,05 | OBSERVATION |
|---------------------------------------|--------------------|-------------|
| Uncertainty tolerance - PDIPC         | 0,014              | valid       |
| Self-confidence - PDIPC               | 0,07               | invalid     |
| Need for fulfillment - PDIPC          | 0,009              | valid       |
| Risk-taking predisposition - PDIPC    | 0,035              | valid       |
| Emotional stability - PDIPC           | 0,002              | valid       |
| Place of internal control - PDIPC     | 0,062              | invalid     |

Source: The author

There are many links between certain psychological characteristics and the practice of decision-making in times of crisis. But no relationship between self-confidence, the locus of internal control and the practice of investment decision-making in times of COVID-19 crisis, respectively.

Table 6: Overall estimate of the model

| Model of specifications tests |     |       | Summary of models |                      |                      | Correct percentages |
|-------------------------------|-----|-------|-------------------|----------------------|----------------------|---------------------|
| Chi-square                    | dof | Sig   | -2log-likelihood  | R-deux de cox & Snel | R-deux de Nagelkerke |                     |
| 95,04                         | 5   | 0,000 | 56,258            | 0,587                | 0,746                | 80,08               |

Source : The Author

The Nagelkerke R-squared being equal to 74.60%, the model explains at 74.6% the practice of investment decisions in times of crisis. The model is therefore acceptable. This is confirmed by the total percentage of 80%, indicating the overall estimate of the model. Our model is therefore satisfactory in 80% of cases. If the leader presents the psychological profile of the model, his investment decision practice in times of crisis depends on it 80% of cases.

### 3.3. Hypothesis testing

Table 7. Result of the multinomial logistic regression of the practice of investment decision-making in times of crisis on the variables of the psychological profile.

| Independent Variables                            | $\beta$ | ES    | Wald   | ddl | Signif | Exp ( $\beta$ ) |
|--|---------|-------|--------|-----|--------|-----------------|
| The manager's tolerance for uncertainty          | 3,622   | 0,697 | 12,615 | 1   | 0,001  | 37,398          |
| H2: The manager's self-confidence                | 0,275   | 0,872 | 0,195  | 1   | 0,564  | 1,316           |
| H3: The leader's need for accomplishment         | 4,521   | 0,996 | 23,412 | 1   | 0,000  | 91,884          |
| H4: Predisposition to risk taking                | 3,102   | 0,987 | 12,031 | 1   | 0,002  | 22,952          |
| H5: The manager's emotional stability            | 2,382   | 0,825 | 9,200  | 1   | 0,001  | 10,823          |
| H6: The place of internal control of the manager | 4,263   | 0,988 | 19,153 | 1   | 0,000  | 70,920          |

Source: The author

On reading this table, the manager's tolerance for uncertainty has a significant influence on the practice of investment decisions in times of crisis:

( $\beta = 3.622 > 1$  sign = 0.001 < 0.05). Leaders with a low tolerance for uncertainty do not hesitate to turn to experts, so they opt for the practice of avoidance, this corroborates the thought of Budner (1962) that it is difficult for these leaders to take decisions in uncertainty. So, the H1 hypothesis is confirmed.

On the other hand, self-confidence has no effect on decision-making in a crisis context ( $\beta = 0.275 < 1$  sign = 0.564 > 0.05), because the leader having confidence in his decision-making methods does not hardly thinks of adapting it to the current situation since it is very accustomed to such practices. We all know that habit gives man a second nature (Aristotle in Ethics at Nicomaque, cited by René Antoine Gauthier et al., 1972). Hypothesis H2 is invalidated.

As for the need for accomplishment variables, the leader who has a high degree of them permanently modifies his investment decision-making practices achieving the assigned objectives regardless of the context. Thus, the need for accomplishment influences the practice of investment decisions ( $\beta = 2.382 > 1$  sign = 0.000 < 0.05). Therefore, Cherchem and Fayole (2010) believe that an SME manager with this psychological trait is able to meet any challenge by seeking investment opportunities. Hypothesis H3 is confirmed.

For the variables corresponding to the manager's predisposition to take risks, these exert a significant influence on the practice of investment decisions ( $\beta = 3.102 > 1$  sign = 0.002 < 0.05). Indeed, the risk-loving leader does not necessarily seek to make the optimal investment decision. It is the performance and growth of the entity that interests him; he can change his investment decision practice at any time as long as he achieves a good turnover or acceptable profitability according to his perception of the 'environment. We agree with the work of Perren (2000) according to which the more the manager takes the risk, the more he increases the profitability of the entity. Hence the H4 hypothesis is confirmed.

The variables relating to hypothesis H5 are significant because their value conforms to the threshold ( $\beta = 2.382 > 1$  and sign = 0.001 < 0.05). In other words, the degree of emotional stability has a significant effect on the practice of investment decision-making in times of crisis. The leader with low emotional stability prefers normative practices. In addition to his health (context of COVID-19) which he must manage emotionally, the leader cannot bear a negative action on his entity due to the change in decision-making method. Hypothesis H5 is confirmed. The variables relating to hypothesis H6 are significant ( $\beta = 4.263 > 1$  and sign = 0.000 < 0.05). The logistic regression result simply indicates that the leader with high internal control dominates the crisis context and therefore can modify or opt for a given investment decision practice at any time. This corroborates the work of authors Brockhaus (1980) and Basso (2006). However, the health context (COVID-19) with the mutation of the virus reveals that the manager being a potential subject with a high degree of internal control, cannot fully control the environment of his investment decision-making; therefore, his method decision-making process can remain constant. The H6 hypothesis remains mixed.

## CONCLUSION

As part of the appropriation of SME decision-making tools, this article assesses the influence of the psychological profile of the SME manager on the practice of investment decisions in times of crisis. In a very unstable context due to COVID-19, SMEs are looking for financial resources for the investment that allows them to protect their market share. The psychological profile constitutes a strategic resource allowing them to establish a sustainable competitive advantage in such context.

At the scientific level, by the mixed approach and the analysis by means of the chi-square test and multinomial logistic regression on the 78 Ivorian SME managers, the result of this research shows that the tolerance to uncertainty, the need for personal fulfillment, predisposition to risk-taking and emotional stability significantly influence the practice of investment decision in times of crisis. However, the effect of the place of internal control on these practices remains mixed. From these results, actions can be initiated to support, in times of crisis, managers in their investment decision-making practice or in their entrepreneurial action (Abouna Adam et al., 2020). Methodologically, the subjective measurement of the variable to be explained (PDIPC) remains attenuated since we have not had the possibility of coming into direct contact with most managers, so we are aware of the loss of the relevant information that can cause this dependent variable approach. However, this article opens up other perspectives on the resilience of SME managers in the context of crisis.

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