

# Determining factors of a CSR strategy: The case of French socio-medical establishments

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## **Abstract:**

*Purpose:* The socio-medical sector, like many others, is developing CSR actions and strategies to answer new expectations of residents, families and stakeholders. This research aims at proposing a model to show determining factors of CSR strategies, investigating the relations between a number of variables appertaining to CSR and evaluate their strength and their impact on some aspects of the performance of socio-medical organizations.

*Methodology:* The model rests on 18 hypotheses and uses a set of structural equations to measure the relations between the different variables.

*Findings:* The hypotheses proposed are largely validated and the model shows the determination of a number of factors on a CSR strategy by organizations. However it appears that non-observed factors in this study also have an impact, which will be the subject of further research. Globally the study shows that CSR strategies in these socio-medical establishments are more of an ‘emergent’ type than a ‘deliberately planned’ one.

*Practical implications:* This study can help socio-medical establishments to devise a CSR strategy and CSR actions, as very often they do not know well where to start from, where to go and how to evaluate the results.

*Originality/value:* This study is part of a vast programme to evaluate the strategy of socio-medical establishments in terms of CSR and assist them in conceiving and implementing a CSR strategy.

## Introduction

The care of elderly persons is undergoing dramatic changes everywhere in the West due to a number of mutations such as the lengthening of life – going with a constant increase of dependency -, the introduction of innovative and costly technologies (tele-medicine, robotics, connected objects, etc), a shortage of financial resources, increasing requirements from financiers and the public in terms of quality and well-being, new investors from the private sector leading to the equitization of various groups of socio-medical establishments.

Establishments operate in a world which is definitely complex putting them in danger or at least creating uncertainty. In this context CSR can be considered by deciders as an asset permitting to find some stability in a very competitive environment. CSR tends to give confidence to investors and customers as it involves the social, environmental, ethical (human rights) of customers (elderly persons and relatives) in the strategy and operations of the establishment. It also requires a close collaboration between all the stakeholders (elderly persons, families, employees, overseeing authorities, suppliers, banks, insurance companies, societies of families, etc.) (European Union, 2011).

In this context, the central issue is that of the identification of determining factors for a CSR strategy in socio-medical establishments. To work out the model of these determining factors of a CSR strategy, we will present first the theoretical framework and the model of the research, then the survey by questionnaires to collect the field data<sup>1</sup>, the results and finally their analysis and discussion.

### 1. A model for determining factors of a CSR strategy

We propose a model permitting to understand better the determining factors of a CSR strategy in socio-medical establishments. It is presented below using elements of the literature to build the measurement scales.

#### *1.1. The social aspect of CSR*

The social aspect of CSR can be broken down into three parts: the responsibility towards the personnel, the responsibility towards elderly persons and families, the responsibility toward the community.

The responsibility toward the personnel is not always expressed spontaneously by the management and takes on several dimensions. The works of Berger-Douce (2008) put forward the improvement of working conditions, social dialogue, equity in the policy of human resource management and the development of competencies. Other authors such as Maignan and Ferrell (2004), Boal and Peery (1985) and David et al. (2007) also take into account health, safety and the well-being of employees (hours, professional and personal life, etc.). We have considered all these items, which looked relevant to us, while trying to avoid redundant questions.

The responsibility of the establishment toward users (elderly persons and families) is measured thanks to the scales worked out by Maignan and Ferrell (2004). The items refer to three dimensions: the information given to elderly persons on the services offered, the tools used to grasp their expectations better, the measures taken to improve the quality of services.

The “societal” part of CSR (i.e. the responsibility toward the community and society at large) is rather difficult to translate to the management, although the directors questioned

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<sup>1</sup> This paper uses the results of a survey carried out between 2012 and 2017 with the objective of promoting a CSR strategy adapted to homes for the elderly and care-at-home services.

during the qualitative phase of the research often spoke of the insertion of their establishments into the local social and economic environment. To approach the societal responsibility, we have used the scales established by Maignan (2001) and David et al. (2007). The purpose is to know the actions carried out in relation with the territory (hirings, partnerships, events, etc.) as well as the participation in the well-being of the community and the solving of social problems. The image of the establishment, translated into the trust granted to it, the quality of the services offered and the reputation noted are another important aspect of the societal engagement (Fombrun et al. 2000).

### *1.2. The economic aspect of CSR*

It is difficult to find scales which have been tested in socio-medical establishments to measure the economic aspect of CSR, we have then adapted a measurement scale of Maignan et al. (1999). The items measuring the economic dimension of CSR are strongly linked to the financial dimension: generation of profit, creation of value and implementation of a long-term financial strategy. The analysis of the results shows that these indicators are relevant to measure the economic aspect of CSR in the organizations concerned by our study. Consequently our scale focuses on the financial elements of the organization (profit, turnover, variable costs, level of debt, etc.).

For the financial performance of the establishment, we refer to the works of Samiee and Roth (1992). Their scale permits to know if the main indicators of financial management have improved over the previous period. In order to take into account some particular features of socio-medical establishments, we have added a more specific indicator about the cost of overtime for “normal” operations for the replacement of absentees.

### *1.3. The environmental aspect of CSR*

This environmental aspect is the one that comes to mind most easily among the managers interviewed.

Following the work by Maignan and Ferrell (2004), we have adopted a global vision of environmental responsibility to grasp the managers’ strategy. We have questioned them about the objectives of ecological performance, the financing of programmes, the actions implemented in the organization and tools for the analysis of impacts and the awareness of the personnel.

### *1.4. The levers (positive motivation) and the brakes (negative motivation) for the implementation of a CSR strategy*

For the levers or brakes perceived by the management, we have adapted the scales proposed by Berger-Douce (2008).

Implementing a CSR strategy offers several advantages (positive motivations) that we divide into three categories: answering the expectations of financiers and/or deciders, improving the relationships with the stakeholders, defending a philosophy.

We questioned the management about the incentives from the overseeing authorities, the pressure of stakeholders and the alignment on the strategy of other establishments.

The brakes can also be classified into three categories: the lack of resources (time, funds, personnel, competencies, technical support of authorities), doubts about such a strategy, legitimacy of the action (not a priority, not adapted to the culture of the establishment).

### *1.5. The knowledge of CSR*

A factor that strongly influences the implementation of a CSR strategy is the knowledge of supporting organisms or referentials, particularly in that they can reduce certain brakes linked to the lack of resources of organizations. According to the works of Berger-Douce (2008), we

have used a scale with four items to measure this knowledge. We have gone a little further by questioning the management about their knowledge of regulations about CSR.

#### *1.6. The perceived uncertainty of the environment*

The perceived uncertainty of the environment is a concept frequently studied in management studies as it is linked to a number of practices. For example organizations operating in an uncertain environment need more non-financial indicators (Gosselin and Dubé, 2002). In our questionnaire we have adapted the scale of Govindarajan (1984) which breaks down this concept into seven items: demand, competition, customers, technology, purchases, regulations, trade-union actions.

The use of technologies is not a determining factor in homes for the elderly or services at home as would be in industry, and demand is not a particular problem as would be in retail trade for example. Consequently we have ignored these items and retained a five-item scale.

#### *1.7. The evaluation of the impact of a CSR strategy*

We refer to Mousli (2010) for the practices of reporting. The author evidences indicators to evaluate the structure of the budgetary system. In our study, we try to know if the budgetary system of the establishments is adapted to measure the societal performance resulting from CSR actions. First we need to know if the organizations evaluate the impact of CSR actions. Then we qualify the nature of the indicators used (qualitative and/or quantitative and/or financial). Finally we estimate the frequency of analysis of these indicators. We have questioned the establishments on indicators of measurement of societal performance to avoid getting answers only centred on accounting aspects of CSR.

Due to the lack of existing scales for our study, we have tested original scales. We have used the ISO 26000 standard to identify and measure the CSR process. The standard recommends the formalization and publicizing of the orientations and characteristics of societal responsibility in the establishment (ISO, 2010). The impacts of the CSR strategy are measured thanks to a scale constructed from various authors. For example, A CSR strategy enables the organization to be pro-active and have a strategic behavior which is more effective and less costly (Caroll and Buchholtz, 2011). As a result a CSR strategy contributes to the survival of the organization. It also, more specifically, favours a reduction of costs, of personnel turnover, the acquisition of new knowledge and a good reputation (Luetkenhorst, 2004). It improves the corporate image, the morale and motivation of employees, reduces the risk of rejection from users or customers, and may also fend off excessive and constraining regulations imposed by the State (Caroll and Shabana; 2010).

#### *1.8. Knowledge management and change management*

The scales to measure knowledge management and change management are constructed on the basis of the works by Levitt and March (1988), Nonaka and Takeuchi (1995), Davenport and Prusak (2000), Argyris (1993), Senge (2006). We have focused on the ways in which different types of knowledge (explicit and tacit) circulate in the organization and are capitalized, on the link between building of knowledge and development of competencies (training) and more generally on management of competencies and individual (productivity, quality of service) and collective (absenteeism, accidents, turnover, quality of service) performance.

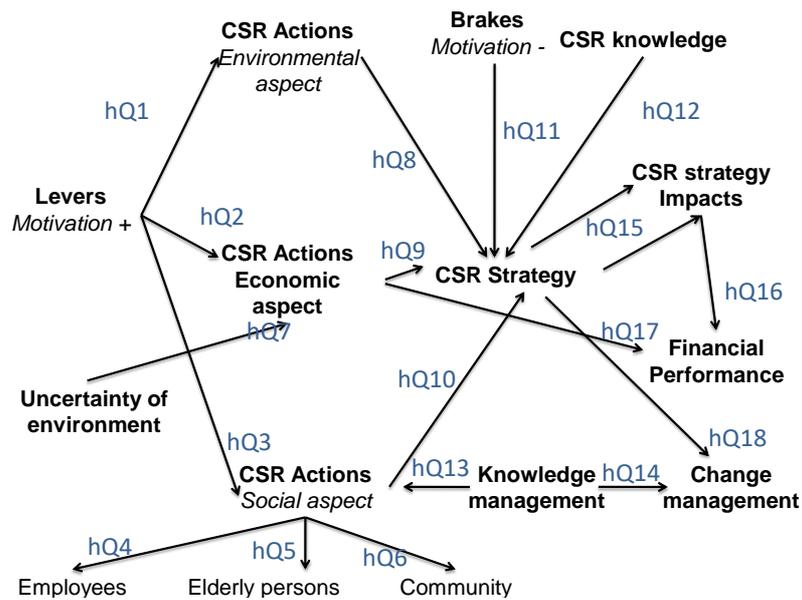
#### *1.9. The construction of the model*

We propose here a model permitting to understand better the determining factors of a CSR strategy in socio-medical establishments. This model takes into account the articulation between the management's motives, the knowledge management practices, the CSR actions

and the impacts on the establishments. Certain more general factors, such as the perceived uncertainty or the practices of change management also need to be considered to seize the phenomenon studied better. This model reflects a number of hypotheses formulated following twelve interviews conducted with directors of homes for the elderly and at-home care services:

- hQ 1: The positive motives of the management (or levers) have a positive impact on the CSR environmental actions.
- hQ 2: The positive motives of the management (or levers) have a positive impact on the CSR economic actions.
- hQ 3: The positive motives of the management (or levers) have a positive impact on the CSR social actions.
- hQ 4: CSR social actions develop the organization's responsibility towards employees.
- hQ 5: CSR social actions develop the organization's responsibility towards elderly persons.
- hQ 6: CSR social actions develop the organization's responsibility towards the community. Hypotheses 4, 5 and 6 are necessary to check the stakeholders who are most impacted by CSR actions (personnel and customers – primary stakeholders with a contractual relationship -, the community or society).
- hQ 7: The perceived uncertainty of the environment has a positive impact on the CSR economic actions.
- hQ 8: The CSR environmental actions contribute to the formalization of a CSR strategy.
- hQ 9: The CSR economic actions contribute to the formalization of a CSR strategy.
- hQ 10: The CSR social actions contribute to the formalization of a CSR strategy.
- hQ 11: The management's perceived brakes (negative motives) slow down the development of a CSR strategy.
- hQ 12: The management's knowledge of the CSR tools incites them to implement a CSR strategy.
- hQ 13: The tools of knowledge management have a positive impact on the CSR social actions.
- hQ 14: The tools of knowledge management have a positive impact on change management practices.
- hQ 15: The formalized CSR strategy has a positive impact on the functioning of the organization.
- hQ 16: The CSR strategy's impact on the organization contributes to improve the financial performance of the organization.
- hQ 17: The CSR economic actions contribute to improve the economic performance of the organization.
- hQ 18: The formalized CSR strategy influences positively the change management practices of the organization.
- The model is illustrated below. The arrows show causal relations (e.g. « uncertainty of the environment impacts/determines/acts on « economic actions of CSR »).

Figure 1. The links between a CSR strategy, the management's motives, the CSR and KM practices



## 2. Collection, analysis of data, operationality of variables and estimation of the model

The survey was carried out on the internet. We will first present the reasons for using this medium, then we will present the sample selected and the rate of return, and we will order the data and qualify the sample. We finish by explaining the operationality of the variables and the estimation of the model.

### 2.1. The web questionnaire

Leading a survey about CSR strategies by the establishments selected requires interrogating a large sample of directors with a rather heavy questionnaire. As directors are not easily available and establishments are geographically scattered, it is not easy to carry out face-to-face interviews and not effective to do it on the phone. Over the last years, the methods used have evolved by integrating new technologies. It was then decided to resort to a web questionnaire which permits to contact a big number of establishments. The use of this medium also reduces the cost per contact and saves time for the respondent compared to a paper questionnaire.

The questionnaire contains several dozens of questions and a number of filters to avoid redundancies. The Sphinx Online software was used to carry out the survey. It offers good ergonomics ensuring a better rate of return. It also permits to guarantee the stocking and security of the data. In order to identify CSR practices and also motivations and obstacles for the managers in this field, the questionnaire is divided into several themes: actions put in place in the 'three pillars' of CSR (economic, social, environmental); the knowledge of the management in terms of CSR and their perception of the impact of the strategies implemented; the CSR process (stakeholders, method, reporting); the ways and means of knowledge management in the establishments and departments. The items have been tested with measurement scales validated in the literature in order to get a reliable evaluation of behaviours. 5 point Likert scales have been used for the respondents to express the degree of agreement (1 = totally disagree, 5 = totally agree). The characteristics of the establishments have also been taken into account. Organizations will indeed be different depending on their

age, location and qualifications of the directors. Such criteria are likely to influence the will of implementing a CSR strategy. Therefore a number of questions concern the characteristics of the organization (status, opening date, number of places, location, etc.) and the characteristics of the director (age, sex, qualifications, seniority).

### 2.2. *A satisfactory rate of return*

The questionnaire was administered by mail by the directors of the establishments at the end of February 2014. These persons were first contacted to announce the launching of the survey and explain its objectives. After processing the e-mail addresses available, 4638 addresses were valid for the survey. After three recalls every fortnight, 537 persons accessed the website to try and answer the questionnaire (a rate of 11.57 %). However all the persons who accessed the site did not answer all the questions because of lack of time or lack of will to answer more complex or 'strategic' questions. Finally 486 persons gave exploitable answers, i.e. a rather satisfactory rate of return of 10.47% considering the length and complexity of the survey.

### 2.3. *The processing of the data and the qualification of the sample*

The analysis of the results had to overcome a number of difficulties. First the data need to be ordered to be exploitable. After checking that all the questions had been satisfactorily answered, and thus making sure that there would not be a significant bias in the results of the statistical tests, the answers were codified. This task consists in giving a specific code to each possible answer. The coding was done when the questionnaire was worked out for closed-end questions but could only be done after the answers had been collected for the open-ended questions.

It is also necessary to qualify the sample on the basis of socio-demographic characteristics. As the characteristics of the respondents were not known *a priori*, we based ourselves on the characteristics of the organization: nature of the activity, status, location, age, number of persons taken care of, etc. Then features of the directors were taken into account such as sex, age, level of qualifications... Then the test of equality of the means or proportions was used and results where the level of significance is more than 5% were retained.

### 2.4. *The structure of the model*

The model contains five exogenous variables: the levers in favour of CSR, the brakes to the implementation of a CSR strategy, the uncertainty of the environment, the knowledge about CSR, the knowledge management devices in the organization. These variables never appear as dependent variables in the equations of the structural model, but contribute to explain other variables of the model. In other words, no arrows point to them.

The model also contains ten endogenous variables: the responsibility towards employees, the responsibility towards elderly persons and families, the responsibility towards the community, the social aspect of CSR, the environmental aspect of CSR, the economic aspect of CSR, the CSR process, the impacts of the CSR strategy, the financial performance of the organization, the practices of change management in the organization. An endogenous variable is dependent in at least one equation of the structural model, and is explained by some exogenous variables. In other words, at least one arrow points to it.

It is interesting to note that the latent variable (not directly observed but constructed from other variables called manifest variables) "social aspect of CSR" is itself made up of three latent variables: responsibility towards employees, responsibility towards elderly persons and families, and responsibility towards the community. It is then a second order variable. To define it we have used all the manifest variables (directly observable and about which the directors have been interrogated) of the latent variables of order 1 which depend on them. To be more specific, the latent variable "social aspect of CSR" is defined by the following items:

- Concerning the responsibility towards employees (“Would you say that your establishment takes into account the interests of employees”, etc.)
- Concerning the responsibility towards elderly persons and families (“Would you say that your establishment uses the satisfaction level of elderly persons to improve the quality of service”, etc.)
- Concerning the responsibility towards the community (“Would you say that your establishment has a good reputation”, etc.)

### 2.5. *The reliability of the model*

According to Chin (1998) a model, to be reliable, needs to have a number of observations (i.e. answers given by respondents) higher than:

- Ten times the number of structural relations (represented by the arrows in the figure);
- Ten times the number of indicators (manifest variables associated with a latent variable) of the most complex formative latent variable.

This is the case in our model as we have 191 respondents, 17 structural relations and 12 indicators maximum for the most complex formative latent variable (here the “knowledge management” variable).

The measures of this model are presented as formative indicators (Fornell and Bookstein, 1982), which means that the measures have an impact on (or cause) a unique construct. The direction of causality goes from the indicators (or manifest variables) to the construct (or latent variables). The latter can be considered as a combination of indicators which contribute to “shape” it. That is the reason why we speak of formative variables.

According to Diamantopoulos and Sigauw (2006), the selection of the biggest number of indicators is interesting to validate the formative measurement models, which explains the sometimes big number of manifest variables associated to a latent variable (12 for the variable “practice of knowledge management”). It is also important to check two conditions to evaluate the capacity of the items (or manifest variables) of a scale to measure the latent (or variable) construct (Nunnally and Berstein, 1994; Drucker et al., 1999):

- Check if all the items refer to common notions, that is if each item is coherent with all the other items of the scale. In the PLS method the homogeneity of scales is evaluated with several indicators: Cronbach Alpha and  $\rho$  of Jöreskog.
- Check that the items of the scale are sufficiently distinguished from items meant to measure other close latent variables. This is what we call a discriminating validity. In the PLS method, we analyze the cross-loadings matrix.

The values of Cronbach alpha and  $\rho$  of Jöreskog are all higher than 0.7 and often 0.8. The homogeneity of scales is then sufficient.

Then, if the model has been correctly specified, the manifest variables must have a strong relation with the latent variable that they define. Consequently it is necessary to analyze the cross-loadings matrix, which corresponds to the results of an exploratory analysis of principal components, in order to check that the most important factorial weights of each manifest variable are really linked to the corresponding latent variable, which is the case in our study for all the variables considered. The supposed links between the manifest variables and the latent variables that they characterize, do exist.

We note that the indicators (or manifest variables) which define the latent variables “responsibility towards employees, responsibility towards elderly persons, responsibility towards the community” are also strongly linked to the variable “social aspect of the CSR”, which is explained by the fact that second order variable is the combination of the three latent variables.

Finally, the analysis of the correlations between the latent variables of our model shows indeed that the correlations exist and that they are significant.

The Bootstrap method consists in replication the estimation of the model on a big number of samples constituted randomly from the data collected. Starting from a sample giving information on a population, a new sample is extracted randomly (in the sub-population reduced to this sample) and the operation is repeated a big number of times (250 samples in our study). We then analyze the new observations obtained to refine the estimations realized on the initial observations.

After this Bootstrap procedure, it is necessary to check that the indicators chosen (or manifest variables) significantly contribute to the latent variable to which they are linked. By definition, the value of the critical ratio for each manifest variable must be more than 1.96 (for a risk of error of 5%) or 1.64 (for a risk error of 10%). We note that five manifest variables present non-significant contributions with reference to their construct (or latent variable) at the level of significance of 5%, et only three at the level of 10%. The five variables are the following:

- LEV2: “You have formulated CSR objectives in your project because the law imposes it” (critical ratio = 1.026)
- UNCER1: “Do you think that the actions of competing homes for elderly or at-home services are easily predictable (critical ratio = 1.492)
- UNCER2: “Do you think that the evolutions of the expectations and needs of elderly persons are easily predictable?” (critical ratio = 1.411)
- BRAKE1: “You have formalized CSR objectives in your project but you lack time to put in place your CSR strategy” (critical ratio = 1.704)
- BRAKE2: “You have formalized CSR objectives in your project but you lack financial means to put in place your CSR strategy” (critical ratiion = 1.758)

## 2.6. *Quality of adjustment of the model*

Then, it is necessary to evaluate more globally the quality of adjustment of the model to the data of the survey. The PLS method gives the Goodness of Fit (GoF) as indicator of adjustment. It is an approximation of the global variance given by the model. The closer to 1 it is, the more the model is confirmed by the data. In our study, the GoF is 0.411, and very near its Bootstrap estimation (0.417).

Consequently we can conclude that:

- 41% of the variance of the data is explained by the model proposed. The value of an observation (answer of a manager) can be broken down into two parts, a part explained by the model and a residual part. The dispersion of all the observations is then made up of the variance explained by the model and the unexplained residual variance.
- The model is stable since the values of the GoF before and after the Bootstrap (absolute Gof) are not very different. This means that if we carry out the analysis on other samples of respondents (250 randomly built), the quality of adjustment of the model varies very little.
- The manifest variables are strongly linked to the latent variables that they define (external GoF = 0.977). This confirms that the manifest variables used in the questionnaire permit to define well the latent variables at the heart of the analysis.
- The links defined between the latent variables, illustrated with arrows in the model we present, are relevant (internal GoF = 0.767), which confirms the hypotheses.

## 3. Analysis and discussion of the structural model

Once the measurement model has been studied, the structural model needs to be analyzed to be able to validate the hypotheses of the study. This validation depends on the importance

and the significance of the structural relations obtained. The coefficients of determination (R<sup>2</sup>) reflect the part of the variance of the endogenous variables explained by the model. With a value between 0 and 1, they measure the adequacy between the model and the data observed. The values of the structural coefficients correspond to the different influences of the explaining (or exogenous) variables on the variable to explain (or endogenous).

A sound model must present coefficients of determination higher than 0.1 (Falk and Miller, 1992). Chin (1998) considers that the structural coefficients must be at least equal to 0.2, and even 0.3, to be judged as significant. As shown in the following table, the structural relations of the model are globally significant. Only some explaining variables of the endogenous variable “CSR strategy” do not seem to respect these criteria (structural coefficients of the variables “knowledge of CSR” and “economic aspect of CSR” are below 0.2).

*Table 1. Structural equation*

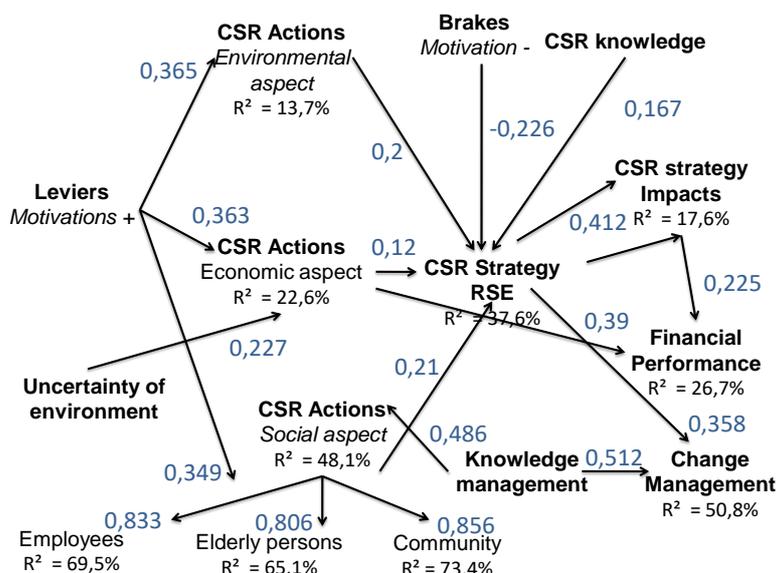
|                                    |                      |                                 |                            |
|------------------------------------|----------------------|---------------------------------|----------------------------|
| <b>Environmental aspect of CSR</b> | <b>R<sup>2</sup></b> | <b>R<sup>2</sup>(Bootstrap)</b> | <b>Critical ratio (CR)</b> |
|                                    | 0.117                | 0.137                           | 2.702                      |
| Structural coefficients            | Value (Bootstrap)    | Standard deviation (Bootstrap)  | Critical ratio (CR)        |
| Levers                             | 0.365                | 0.059                           | 5.757                      |
| <b>Economic aspect of CSR</b>      | <b>R<sup>2</sup></b> | <b>R<sup>2</sup>(Bootstrap)</b> | <b>Critical ratio (CR)</b> |
|                                    | 0.205                | 0.226                           | 3.981                      |
| Structural coefficients            | Value (Bootstrap)    | Standard deviation (Bootstrap)  | Critical ratio (CR)        |
| Levers                             | 0.363                | 0.057                           | 6.273                      |
| Uncertainty of env.                | 0.227                | 0.050                           | 4.170                      |
| <b>Social aspect of CSR</b>        | <b>R<sup>2</sup></b> | <b>R<sup>2</sup>(Bootstrap)</b> | <b>Critical ratio (CR)</b> |
|                                    | 0.457                | 0.481                           | 7.426                      |
| Structural coefficients            | Value (Bootstrap)    | Standard deviation (Bootstrap)  | Critical ratio (CR)        |
| Levers                             | 0.349                | 0.035                           | 9.600                      |
| Knowledge Manag.                   | 0.486                | 0.046                           | 10.449                     |
| <b>Resp. employees</b>             | <b>R<sup>2</sup></b> | <b>R<sup>2</sup>(Bootstrap)</b> | <b>Critical ratio (CR)</b> |
|                                    | 0.689                | 0.695                           | 10.435                     |
| Structural coefficients            | Valeur (Bootstrap)   | Standard deviation (Bootstrap)  | Critical ratio (CR)        |
| Social aspect of CSR               | 0.833                | 0.040                           | 20.827                     |
| <b>Resp. elderly persons</b>       | <b>R<sup>2</sup></b> | <b>R<sup>2</sup>(Bootstrap)</b> | <b>Critical ratio (CR)</b> |
|                                    | 0.650                | 0.651                           | 10.659                     |
| Structural coefficients            | Value (Bootstrap)    | Standard deviation (Bootstrap)  | Critical ratio (CR)        |
| Social aspect of CSR               | 0.806                | 0.038                           | 21.053                     |
| <b>Resp. community</b>             | <b>R<sup>2</sup></b> | <b>R<sup>2</sup>(Bootstrap)</b> | <b>Critical ratio (CR)</b> |
|                                    | 0.735                | 0.734                           | 12.719                     |
| Structural coefficients            | Valeur (Bootstrap)   | Standard deviation (Bootstrap)  | Critical ratio (CR)        |
| Social aspect of CSR               | 0.856                | 0.034                           | 25.211                     |
| <b>CSR strategy</b>                | <b>R<sup>2</sup></b> | <b>R<sup>2</sup>(Bootstrap)</b> | <b>Critical ratio (CR)</b> |
|                                    | 0.352                | 0.376                           | 6.077                      |
| Structural coefficients            | Value (Bootstrap)    | Standard deviation (Bootstrap)  | Critical ratio (CR)        |
| Env. aspect of CSR                 | 0.200                | 0.027                           | 7.187                      |

|                              |                      |                                 |                            |
|------------------------------|----------------------|---------------------------------|----------------------------|
| Economic aspect of CSR       | 0.120                | 0.032                           | 3.807                      |
| Social aspect of CSR         | 0.210                | 0.023                           | 8.874                      |
| Brakes                       | -0.226               | 0.029                           | -7.625                     |
| Knowledge of CSR             | 0.167                | 0.029                           | 5.704                      |
| <b>Impact of CSR</b>         | <b>R<sup>2</sup></b> | <b>R<sup>2</sup>(Bootstrap)</b> | <b>Critical ratio (CR)</b> |
|                              | 0.166                | 0.176                           | 2.659                      |
| Structural coefficients      | Value (Bootstrap)    | Standard deviation (Bootstrap)  | Critical ratio (CR)        |
| CSR strategy                 | 0.412                | 0.080                           | 5.123                      |
| <b>Financial performance</b> | <b>R<sup>2</sup></b> | <b>R<sup>2</sup>(Bootstrap)</b> | <b>Critical ratio (CR)</b> |
|                              | 0.252                | 0.267                           | 4.622                      |
| Structural coefficients      | Value (Bootstrap)    | Standard deviation (Bootstrap)  | Critical ratio (CR)        |
| Financial aspect of CSR      | 0.390                | 0.053                           | 7.163                      |
| Impact of CSR                | 0.225                | 0.048                           | 4.607                      |
| <b>Change management</b>     | <b>R<sup>2</sup></b> | <b>R<sup>2</sup>(Bootstrap)</b> | <b>Critical ratio (CR)</b> |
|                              | 0.492                | 0.508                           | 9.378                      |
| Structural coefficients      | Valeur (Bootstrap)   | Standard deviation (Bootstrap)  | Critical ratio (CR)        |
| Knowledge Man.               | 0.512                | 0.038                           | 13.518                     |
| CSR strategy                 | 0.358                | 0.033                           | 10.675                     |

As the values of the critical ratio are all higher than 1.96, we admit the significance of the whole of the structural relations of our model at the level of significance of 5%. These results show the reliability and validity of the variables used in the study.

The different structural relations of our model of analysis are represented in the following figure with the structural coefficients to give a systemic view of the interrelations.

Figure 2. Estimation of the structural model



The structural coefficients translate the importance of the explaining variables on the variable to explain. The higher the coefficient, the more its weight is important in the variable to explain. Thus, for the CSR economic variable, the impact of the ‘lever’ variable (positive motivation of the director) is more important (0.363) than that of the ‘uncertainty of the environment’ variable (0.227) on the estimation of the CSR economic latent variable. In other

words, even if these two variables influence the decision to implement actions of the economic aspect of CSR, the motivation of the director has more importance than the will to adapt to the uncertainty of the environment.

As mentioned earlier, the value of an observation (e.g. economic CSR) can be broken down into two parts: one part explained by the model (e.g. the values of the 'lever' and 'uncertainties' variables) and a residual part (explained by other variables that we do not know or do not study here). This is the most important limitation of the model.

The dispersion of the whole of the observations (i.e. the distribution of the values around the mean, which indicates the heterogeneity of the answers) is then made up of the variance explained by the regression and the – unexplained – residual variance. The R2 (for each endogenous variable) is defined as the part of the variance explained (by the exogenous variables) with reference to the total variance. Then, the higher the R2, the more we can estimate the 'economic CSR' variable (in our example) thanks to the 'lever (positive motivation) and 'uncertainties' variables. In this case the R2 is 22.6%, which is not very high. This can be notably explained by the fact that we work on individual answers, which are non-aggregated data, submitted to strong variations. It also means, once again, that there are other variables (not studied) which have an impact on the putting in place of actions relating to the economic aspect of the CSR.

This model calls for four essential comments:

First, the model is relevant to evaluate the putting in place of a CSR strategy in the organization (R2 = 37.6%, meaning that nearly 40% of the factors impacting the CSR strategy are represented in the model), thus permitting to validate largely the 18 hypotheses derived from the literature and the interviews. The model also shows the link between the implementation of a CSR strategy and the improvement of the economic performance of an establishment. This result is encouraging to foster the implementation of a CSR strategy, even more so as a recent study carried out in the same sector of activity (Bertezene and Vallat, 2016) shows that the perspective of improving the performance in a wide sense is the first lever in favour of the involvement in a CSR strategy.

This study reveals that three levers strongly influence the management in their involvement in a CSR strategy: the possibility to reduce the wastage of resources, to improve the quality of the offer and to answer the expectations of the persons received in terms of CSR. In parallel, three factors have a multiplying effect on all the others and thus favour even more the involvement of management in a CSR strategy: liberate the necessary time to define and implement a CSR strategy (Berger-Douce 2008; Carroll and Shabana, 2010), acquire the adequate technical competencies to monitor and develop such a strategy (Davis, 1960) et having laws on CSR be imposed (Bertezene et al., 2014, 2015). The model presented here completes these results and validates the existence of a positive link between the levers considered by the literature (the positive motivation of the management, that is the perception by the management of what CSR can bring) and the CSR strategies implemented in the establishments. This relation is not direct, other constructs interfere in the process (brakes, actions effectively implemented, knowledge management tools, knowledge of devices favouring CSR).

The implementation of CSR is explained in a systemic way: the management is globally motivated to put in place CSR actions, above all if they perceive their environment as uncertain. Once these actions have been done, the management thinks of formalizing a CSR strategy for their organization. At that moment, different brakes appear (lack of means, competencies, time, etc.). But logically the directors who know the means of monitoring the CSR better face the difficulties better and, in the end, the formalization of the CSR strategy has positive impacts on the organization. The financial performance is improved and the management of change becomes a real asset for the organization.

Even if the implementation of the CSR is explained in a systemic way, it is important to notice that the existence of knowledge management tools and devices in the organization leads to actions relating to the social aspect of CSR. Consequently KM favours the adaptation to the environment (Vallat et al., 2016), the changing environment favours the implementation of CSR strategies, and CSR strategies favour the improvement of the financial performance.

Although the value of  $R^2$  is rather moderate, the “financial performance” variable does have observable positive impacts on the motivation of employees, the relationships with partners (suppliers, authorities, etc.), the image of the establishment, the satisfaction of elderly persons and families. This rather moderate value of the  $R^2$  means that some non-observed factors also contribute to explain the financial performance, outside the impact of the CSR strategy and the economic or financial actions implemented in the organization. According to a previous study (Bertezene and Vallat, 2016), the factors explaining the impact of CSR on the financial performance could be in interaction and be the following: obtaining a financial help for the implementation of CSR actions, the improvement of the quality of the services, the implementation of CSR actions to meet the expectations of the residents, so that CSR offers ways and means to help the monitoring of the residents.

Finally, this model shows that CSR strategies are akin the model of “emergent” strategies. According to Mintzberg and Waters (1985), the strategy is constructed thanks to a continuous flux of actions. A real conscious and planned strategy (deliberate strategy) is in fact a very rare model. Most frequently it is composed of actions selected depending on events with which the organization is confronted (emergent strategy). These actions can originate from the management of the organization of course but also from other actors in the organization. According to Mintzberg (1990), organizations often have an interest in choosing an emergent strategy founded on the judgment capacity and experience of the members of the organization. This type of strategy is more implicit than explicit and is generally observed in organizations operating in an unstable world. This situation corresponds well to the elements observed: Homes for the Elderly and At-home service providers operate in a complex environment and organizations embark on a CSR strategy on the basis of a philosophical outlook and intention, which is made of a mix of formalized planned actions and non or little formalized un-planned actions as the implementation unfolds.

## **Conclusion**

The objective of this study was to verify the existence of CSR actions implemented as the result of a more emergent than planned CSR strategy. We chose the context of French medical and social establishments which are undergoing heavy mutations, to try and answer this question. The answers of the medical and social establishments to a questionnaire have permitted to test a model, in which many variables interact, taking into account the (positive and negative) motivations of the management, the knowledge management practices, the CSR actions implemented and the impacts noticed in the establishments.

Synthetically, this model reveals a number of significant results:

- There is a positive link between the motivation of the management and the CSR strategies implemented, but this relation is not direct;
- The implementation of CSR is explained in a systemic way: the management is motivated to implement CSR actions, even more when they perceive the environment as uncertain. Then they consider formalizing a CSR strategy but encounter a number of obstacles that are better overcome when they are better informed and trained;

- Having knowledge management tools and devices has a positive impact on the implementation of CSR actions, especially in its social aspect;
- The CSR strategy has positive impacts particularly on the financial performance, the motivation of employees, the relationships with partners, the image of the establishment, the satisfaction of elderly persons and families. There are, however, other factors, which are not observed, contributing to explain the phenomenon. Therefore further research needs to be carried out to comfort this still debated positive link between CSR and performance. It would also be of interest to study other sectors of activity to see if the same, or a similar, relation can be evidenced.

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