Word Cloud Analysis of Corporate Reputation and the Influence of Corporate Social Responsibility on Corporate Reputation

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Abstract: Along with the economic and social development, the company has also been developed to a great extent, but the environmental pollution has become a high-profile topic at present, the environmental pollution will affect enterprise's reputation and image, so more and more domestic and foreign scholars to the field of research, explore the ways and means to improve enterprise reputation. This paper uses Python to highlight the words with high frequency in the text to dig and analyze the research hotpots of corporate reputation. At the same time, considering the two factors of corporate social responsibility and corporate reputation, this paper studies the mechanism of corporate reputation and corporate social responsibility, and analyzes the intermediary role of green human resource management in corporate social responsibility and corporate reputation. The results show that corporate social responsibility can promote corporate reputation. Green human resource management plays a positive intermediary role in the mechanism of corporate social responsibility to corporate reputation.

1 INTRODUCTION

With the serious destruction of the ecological environment, the coordinated development of social development and environmental protection has become a topic of widespread concern at home and abroad. As an important part of the social and economic system, enterprises have a relatively large impact on environmental protection and environmental protection. At the same time, as the incidents of enterprises destroying the environment in order to develop continue to appear in the public view, all aspects of society and related stakeholders of enterprises pay more attention to various activities of enterprises. Enterprises also pay more attention to their own environmental protection in the face of more environmental concerns and demands from the society. If enterprises choose to passively face the fact that they need to develop green, they will not be able to gain competitive advantages under the trend of green development, so they must formulate green development plans according to their own development strategies. Human resources, as one of the important parts of all kinds of resources in enterprises, will affect the development of enterprises to a large extent, and it is the source of enterprises to keep competitive advantages. Therefore, if enterprises want to improve their competitiveness, they need to play the role of human resources incisively and vividly. However, it is certainly far from enough to only carry out the green development of human resources. The social responsibility of an enterprise also determines the extent to which an organization carries out green human resources. At the same time, different positions of enterprises in the industry will lead to different social responsibilities. To sum up, these factors will directly or indirectly affect the reputation and image of enterprises.

2 WORD CLOUD ANALYSIS OF CORPORATE REPUTATION

Word cloud map is a kind of visualization method to summarize the text by filtering and analyzing the text and highlighting the words with high frequency in the text. The size of the words in the word cloud is positively correlated with the frequency of their occurrences.
appearance in the text, so the importance of some words can be directly reflected, so the research hotpots of corporate reputation can be clearly seen.

2.1 Data Collection

Based on the literature research, this paper took WOS as the literature source database and Corporate reputation as the retrieval term. A total of 867 literature on corporate reputation were retrieved, and 650 literature on corporate reputation in recent years were selected, excluding those with low correlation with corporate reputation.

2.2 Data Processing

Through Python programming, key words were extracted from the selected 650 literature, and then the extracted keywords were changed into lowercase letters. After ranking the frequency of keyword occurrences, the keywords with the highest frequency were extracted for processing and analysis. The word cloud map was drawn as follows.

![Word Cloud Analysis of Corporate Reputation](image)

**Figure 1: Word cloud analysis of corporate reputation.**

2.3 Results Analysis

Corporate reputation through word cloud knowable and word frequency in the highest is the social environment, enterprise management, scientific, international, corporate responsibility, such as word frequency, can see corporate reputation not only is the enterprise internal matters, it includes both the enterprise internal include external, enterprise can provide the high quality of the product or service to enhance their own reputation, At the same time, they can also improve their corporate reputation by assuming their own social responsibilities and actively carrying out green development.

3 LITERATURE REVIEW

3.1 Green Human Resource Management

The source of green human resource management is the concept of "sustainable development". After this concept was put forward, scholars put forward the concept of "environmental management" successively (Boudreau and Ramstad 2005). Therefore, later scholars combined human resource management and environmental management, emphasizing the necessity of human resource management for effective participation in environmental management system. Scholars define sustainable human resource management as "the human resource management that will not affect its future needs, but also can meet the current development needs of enterprises", thus forming a new research field (Jackson et al., 2011).

3.2 Corporate Social Responsibility

Corporate social responsibility means that enterprises not only need to assume economic responsibilities to shareholders, but also need to take a series of measures to assume moral and legal responsibilities to the environment and stakeholders. (H. Abdoh, O. Varela, 2017). When employees perceive that enterprises are willing to undertake social responsibility and implement CSR into specific systems and policies, they are more willing to support and participate in CSR and actively and voluntarily adopt green work behaviors (Tian Q, Robertson J L, 2019). The stakeholders of enterprises for environmental protection include consumers and internal employees, so it is necessary
to study the mechanism of how corporate social responsibility affects employees' green behavior.

3.3 Corporate Reputation

Corporate reputation refers to the evaluation of the past behavior and the evaluation description of the future planning of the enterprise by the stakeholders of the enterprise, which represents the evaluation of the enterprise by the outside world and the stakeholders of the enterprise. In the embryonic period, the market of China is also in the stage of small market size and imperfect systems, so the reputation of enterprises is too busy to ask (Ogunfowora B, 2014). When in the competition stage, most enterprises have experienced the competition of product quality and product price. At this time, enterprises begin to enter the stage of enterprise reputation competition. The social responsibility of an enterprise also determines the extent to which the organization carries out green human resources. These factors will directly or indirectly affect the reputation and image of the enterprise, so the reputation of the enterprise has also become an important part of enterprise management.

4 THEORETICAL BASIS AND MODEL CONSTRUCTION

4.1 Corporate Social Responsibility and Corporate Reputation

If a company wants to improve its reputation, it must take more corporate actions to fulfill social responsibility. According to the stakeholder theory of an organization, the stakeholders of an organization can obtain the information related to an enterprise through various channels. One of the information that stakeholders attach great importance to is whether an enterprise takes the behavior characteristic of fulfilling its social responsibility and the degree to which it takes it. If the company has a good corporate image, the candidate will use the company's image as a signal to make a decision about whether to join the organization. A good corporate reputation will also be more attractive to consumers, thus creating more corporate performance for the enterprise. Therefore, this paper believes that the characteristics of corporate social responsibility will improve corporate reputation, and proposes the following hypothesis:

Hypothesis 1: The characteristics of corporate social responsibility can promote the improvement of corporate reputation.

4.2 The Mediating Role of Green Human Resource Management

The behavior of enterprises to fulfill the characteristics of social responsibility inevitably includes the green human resource management of enterprises. Therefore, to some extent, the implementation of green human resource management of enterprises will be affected by the behavior of enterprises to fulfill the characteristics of social responsibility. In an organization, if the organization not only encourages and guides the green behavior of employees, but also is influenced by the organization, the employees in the organization will also take the active or passive green behavior to work. When both the organization and the employees in the organization try their best to adopt green work behavior, the environmental protection performance and corporate reputation of the enterprise can be promoted and improved. Therefore, this paper believes that green human resource management will improve the reputation of enterprises, and proposes the following hypothesis:

Hypothesis 2: Green human resource management plays a positive mediating role in the mechanism of corporate social responsibility and corporate reputation.

5 THE RESEARCH METHODS

5.1 Research Samples and Data Sources

The respondents are from 160 different enterprises in the highly competitive industries and in the moderately competitive industries. In the later stage of this paper, 5 blank and invalid questionnaires due to various reasons were removed, and the data of 155 enterprises were retained after processing.

5.2 Variable Measurement

5.2.1 Corporate Social Responsibility

Corporate social responsibility content analysis method, reputation index method and third-party evaluation index method are commonly used to
study corporate social responsibility.

5.2.2 Green Human Resource Management

The 18-item scale developed by Tang et al. was used for measurement, and the questionnaire was evaluated by five-point Likert scale to determine how many enterprises implemented green human resource management and to what extent.

5.2.3 Corporate Reputation

The global RepTrakPulse score is used for measurement, and the reliability and validity of this measurement standard are tested by Ponzi et al. to determine the level of corporate reputation of each enterprise.

In summary, the research model of this paper is

\[ y = \alpha_0 + \beta_1 x_1 + u \]

6 THE RESULTS OF THE STUDY

6.1 Correlation Analysis of Variables

Stata software was used to process the data of various variables, including corporate social responsibility, green human resource management and corporate reputation. As can be seen from Table 1, there is a significant positive correlation between corporate social responsibility and green human resource management \((r=0.20, p < 0.05)\), indicating that corporate social responsibility will positively promote green human resource management in enterprises. Table 1 also shows that green human resource management is significantly positively correlated with corporate reputation \((r=0.39, p < 0.01)\), indicating that corporate reputation and corporate image will be positively promoted by corporate green human resource management.

Table 1: Correlation coefficient of each variable.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Csr</th>
<th>Ghrm</th>
<th>Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Csr</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ghrm</td>
<td>0.20*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Cr</td>
<td>0.58**</td>
<td>0.39**</td>
<td>1</td>
</tr>
<tr>
<td>The mean</td>
<td>132.1</td>
<td>127.8</td>
<td>121.0</td>
</tr>
<tr>
<td>The standard deviation</td>
<td>59.54</td>
<td>35.45</td>
<td>23.33</td>
</tr>
</tbody>
</table>

Note: N=155; **show p<0.01, *show p<0.05;

6.2 Descriptive Statistical Analysis

Table 2 is the descriptive statistical results of variables, as shown in the figure: Data of 155 enterprises were collected in this study, so the sample observation value was 155. Each variable basically conforms to the normal distribution, the median value and the mean value have little difference. The maximum, minimum and variance of each variable are as follows: corporate social responsibility \((\text{Csr})\), Green Human Resource Management \((\text{Ghrm})\), and corporate reputation \((\text{Cr})\). The difference between the maximum and minimum values of each variable is relatively large, indicating that each enterprise adopts the implementation of corporate social responsibility, the distribution of green human resources is uneven, and the corporate reputation of each enterprise is very different.

Table 2: Descriptive analysis of data.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Median</th>
<th>Std.de</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Csr</td>
<td>155</td>
<td>132.1</td>
<td>125</td>
<td>59.54</td>
<td>36</td>
<td>140.4</td>
</tr>
<tr>
<td>Ghrm</td>
<td>155</td>
<td>127.8</td>
<td>119</td>
<td>35.45</td>
<td>24</td>
<td>134.3</td>
</tr>
<tr>
<td>Cr</td>
<td>155</td>
<td>112.3</td>
<td>105.4</td>
<td>66.31</td>
<td>21</td>
<td>130.4</td>
</tr>
</tbody>
</table>

6.3 Analysis of Regression

Table 3 is the regression results, the table shows the model for \(y = 0.58 + 0.39x_1 + u\), can be seen from the table in the \(R^2\) is 0.7864, shows that the degree of fitting model better; F value is 66.68, \(P<0.01\) indicates that the overall model is significant at the 1% level. The T-values of corporate social responsibility and green human resource management are 8.98 and 6.89 respectively, indicating that the variable is significant; It can be seen from the table that hypothesis 1 and hypothesis 2 are both valid.

Table 3: Analysis of regression.

<table>
<thead>
<tr>
<th>Linear regression</th>
<th>Number of obs</th>
<th>= 155</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F (3,32)</td>
<td>= 66.68</td>
</tr>
<tr>
<td></td>
<td>Prob&gt;F</td>
<td>= 0</td>
</tr>
<tr>
<td></td>
<td>R-squared</td>
<td>= 0.7864</td>
</tr>
<tr>
<td></td>
<td>Root MSE</td>
<td>= 1.0609</td>
</tr>
<tr>
<td>Cr</td>
<td>Coef</td>
<td>Std.Err.</td>
</tr>
<tr>
<td></td>
<td>0.58</td>
<td>0.000123</td>
</tr>
<tr>
<td></td>
<td>0.39</td>
<td>0.000765</td>
</tr>
</tbody>
</table>

7 CONCLUSION

This paper takes 155 Chinese enterprises as the research object, constructs a model with corporate social responsibility as the antecedent variable,
green human resource management as the intermediary variable and corporate reputation as the outcome variable, and empirically tests whether the model is valid or not. The results show that corporate social responsibility can promote corporate reputation; Green human resource management plays a positive mediating role in the mechanism of corporate social responsibility and corporate reputation.

REFERENCES


