

# Review and Application of Research on Social Representation Theory

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**Abstract.** Literature survey shows that social representation theory has been widely used in many fields such as research on foreign social science, collective representation and personal representation, and provides effective theoretical support and practical guidance for many industries. However, at present, the research and application of social representation theory in China is still in the exploratory stage. Based on reviewing a large number of relevant literatures at home and abroad, this paper systematically reviews the theoretical and applied aspects of social representation theory, and summarizes the application paradigm, which suitable for social representation theory provides theoretical and practical guidance for the latter research and application of social representation theory.

**Keywords:** *social representation theory, coding, core edge analysis, IAS matrix*

## 1. Introduction

Social representation theory is a manifestation of "common consciousness", which is the viewpoint, behavior and cognition shared by members of the collective or group. It was first proposed by S Moscovici of France in the 1960s. The social representation theory explains the group cognition and its process, pays attention to the centrality of the research group and the historical phenomenon of the group phenomenon, and advocates analyzing the society from the historical perspective. Historicity also illustrates the subtle influence of social representation on the influence of collective or group members. It is combined with social identity theory and discourse analysis theory as the troika of the development of European social psychology. [1]

## 2. A Review of the Research on Social Representation Theory

With the continuous improvement of social representation theory by scholars in various fields, social representation theory has been applied by domestic and foreign scholars to the study of the social representation of the same social phenomenon by different social groups. This paper mainly reviews the theoretical and practical aspects of social representation. [2]

From the perspective of theoretical development, Guan Jian (2009) in-depth discussion and development of social representation theory proposed by S Moscovici in his book "Social Representation: Exploration of Social Psychology"; Wei Weiling (2009) The development of social representation theory has been systematically organized from the perspective of representation and common consciousness. Both of them have developed social representation theory to a certain extent, providing a more detailed theoretical basis for the latter research.

From the perspective of theoretical application, social representation theory mostly studies the collective consciousness of collectives or groups on certain things, such as burnout, public confidence, public opinion and so on. For example, Suzanne D. Pawlowski, Evgeny A. Kaganer (2007) on the job burnout of IT staff, pointed out that Hours / Workload, Emotional Strain, Job Performance, Management / Supervision are the core elements that affect the job burnout of the IT industry, and build the impact accordingly. The social representation of job burnout in the IT industry, and finally, based on the research results, propose measures to prevent burnout from various aspects such as enterprises and employees. Yoonhyuk Jung, Suzanne D. Pawlowski (2009) studies people's communication and communication in information systems, and finally determines Easy/convenient, Accessible/available, Technology, Records/files by constructing IAS matrix,

anchoring and core edge analysis. , Privacy as a core influence factor. Yoonhyuk Jung (2010) studies the virtual economy and virtual consumption of the public in the virtual society. It is determined by anchoring, objectification and core edge analysis that Amusement, Virtuality and Consumer activity are the main factors affecting people's consumption in the virtual economy.

In summary, the theory of social representation is widely used at home and abroad, but there are few studies on the application of theory. This paper summarizes a set of normative social representation theory research paradigms through literature review and other methods, and studies and applies the society for the latter. The theory of representation provides theoretical support and guidance.

### **3. The Application of Social Representation Theory**

#### **3.1 Induced Social Representation**

Inducing social representation refers to extracting the public's perceptual attributes of social phenomena from the appearance, which is a very important step from qualitative analysis to quantitative analysis. A very important task before inducing social representation is to select the sample. In the process of sample selection, we should pay attention to the following two points: First, the sample selection should be comprehensive, and all kinds of people should be included in order to obtain a more comprehensive information; second, the sample size should increase as the number of primary codes increases until the number of primary codes no longer increases, that is, the new code will not appear after the investigation is continued.

The commonly used methods for inducing social representation are mainly the phrase association idea, questionnaire method, interview method and focus combination method. The application of the above methods will be described in detail below. [3]

##### **3.1.1 Phrase Idea**

The idea of phrase association is the most common and most effective way to study social representation. The method is based on research questions, and gives relevant materials for the research questions of the researcher, such as keywords, related literature, related web pages, etc., combined with open questionnaires and in-depth interviews, after the relevant materials are understood by the respondents. Speech and reaction lead to the researchers' knowledge of the research questions. Then these words are sorted and gradually deepened, and the underlying reasons for the cognition of the researchers are mined, and the supporting evidence for the conclusion of the research questions is obtained.

##### **3.1.2 Questionnaire Method**

Questionnaire method is one of the basic methods of empirical research. The availability, objectivity and operability of the data are favored by many experts and scholars. In the process of research on social representation, the open-ended questionnaire is mainly used to minimize the occurrence of closed-ended questions, so that the respondents can fully express their ideas and wishes according to the questions designed by the questionnaire, and deeply penetrate the respondents from different levels. In the answer, I asked again to get a more comprehensive understanding of the respondents' opinions on this issue.

##### **3.1.3 Interview Method**

As the closest research method to public perception, the interview method induces the true attitude of the interviewees through face-to-face interviews, which are mainly divided into structural interviews and non-structural interviews. The structured interview method is similar to the open survey questionnaire. There are rules to follow. There are fixed patterns. The interviewees can understand the respondents' attitudes and opinions on the questions. The non-structured interviews require the interviewers to be higher. The interviewers need to chat. The method will be introduced into the target research field by the interviewer, and the psychological changes and opinions will be summarized through the interviewee's reaction, and the relevant methods need to

be used for certification and confirmation. In addition, during the interview process, it should be noted that the interviewer cannot intentionally induce it to avoid the data loss.

### **3.2 Data Processing Analysis**

#### **3.2.1 Coding**

Coding is to transform each sentence in the induced social representation into a professional language. In the process, it is necessary to start from the text of the respondent and completely abandon the individual's willingness and the definition of the whole research field, and use the concise language. Express the attitudes and thoughts of the interviewees on the research questions.

The coding is mainly divided into three steps: initial coding, primary coding and secondary coding. The initial coding is to extract the text related to the research question from the transcribed text to give the new concept as the initial code, and sort out the initial code table, and back up the corresponding original text under each initial code table for later inspection and proofreading; Encoding is the process of reorganizing the initial code and extracting the concept generics. At the same time, pay attention to the correspondence between each primary code and the initial code and the original text. The secondary coding is the basis for analyzing the primary code in the system. On the top, the code with similar attributes in the first-level code table is classified into a class as a second-level code, also known as TOPIC. This coding is ultimately to organize the text after transcription into a number of TOPIC, that is, the research group's focus on research issues is mainly focused on these TOPIC. [4]

#### **3.2.2 Core Edge Analysis**

By coding a number of TOPICs, in order to clarify the focus of the research group on the research issues, it is necessary to determine which of these TOPIC are core elements and which are edge elements. This requires further processing of the data to determine the presence of each TOPIC in the survey. The frequency, the sum of similarities and similarities between the various TOPICs, and the core of each TOPIC.

##### **1. Design frequency lattice distribution table**

The frequency lattice distribution table is to determine the frequency of occurrence of each TOPIC. The table attributes are the number of the TOPIC, the first level code, the total frequency of each interviewee and each TOPIC. In the table, all the first-level codes mentioned by each interviewee are marked, but the same person proposes that the first-level code belonging to the same TOPIC proposes the TOPIC for the interviewee, and finally accumulates each one. The number of times that TOPIC appears is the total frequency.

##### **2. Building an IAS Matrix**

The purpose of the IAS matrix is to determine the similarity and similarity of each TOPIC as an important basis for distinguishing between core and edge elements. The IAS matrix is all TOPIC horizontally and vertically, and the number of people who mention two TOPIC at the same time is filled in at the intersection of the two TOPICs. The final division by this value by the total number is the similarity of the two TOPICs. The sum of the similarities is obtained by adding the IAS matrices vertically and vertically, and then adding the sum of the numbers corresponding to each TOPIC.

##### **3. Determining core edge elements**

The premise of determining the core edge elements is that the frequency, similarity sum and core degree of each TOPIC are required. The sum of frequency and similarity has been determined by the frequency lattice distribution table and the IAS matrix respectively. The core degree is obtained by UCINET software. The specific steps are as follows: First, the symmetric frequency lattice distribution table is input into the UCINET software, and finally the output file is obtained; secondly, the valuable information is extracted from the output file, that is, Coreness As the core of TOPIC.

### 3.2.3 Social Representation Icon

The social representation diagram originated from graphic theory and aims to show the relationship between all TOPIC through the node connection. The social representation diagram is drawn by a proximity algorithm that includes four parameters: similarity, frequency, sum of similarity, and degree of core.

In general empirical research, social representations can draw conclusions, including the core elements of the research problem and the relationships between the various elements. However, if it is necessary to explore deep-seated reasons, research such as the impact mechanism needs to further study the relevance of the perceived attributes and the intrinsic attributes of the research questions.

## 4. Summary

Social representation theory has been widely used in the field of social psychology and has been gradually applied to other related fields. On the basis of summarizing the research status of social representation theory at home and abroad, this paper introduces in detail the analysis principles and steps of induced social representation, data processing analysis (including coding, core edge analysis and social representation), and the latter studies social representation theory. And its application to guide.

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