

## Appraisalment of CIS of a Certain Hospital Based on SD Method

Wei Wang<sup>1,a</sup>, Pengyu Lou<sup>1,b,\*</sup>, Wenjing Huang<sup>1,c</sup>, Jun Chen<sup>1,d</sup>

<sup>1</sup>Weifang Medical University, Collaborative Innovation Center for Major Social Risk Prediction and Governance of "Healthy Shandong", Weifang (261053), Shandong Province, China

<sup>a</sup>wang\_w2006@126.com, <sup>b</sup>loupy@wfmcc.edu.cn, <sup>c</sup>pit\_wit@163.com, <sup>d</sup>chenjun@126.com

\*Corresponding author: Pengyu Lou

Tel(necessary): 0536-8462590

**Key words:** CIS (Corporate Identity System), SD (Semantic Differential method), Hospital

**Abstract.** *Objective* to investigate how doctors and patients appraise CIS of a certain hospital, and analyze the basic condition of CIS, find the problems, thus to provide advises. *Methods* SD (Semantic Differential method) is used to survey the doctors and patients about how they appraise the CIS. *Results* the general appraisalment of CIS is good, but it couldn't reflect "client-centred concept", appraisalment gaps exit between doctors and patients. *Conclusions* hospital managers should get more familiar with CIS theory, and intensify the conduct of BIS.

### 1. Introduction

The application of Corporate Identity System (CIS) was developed in Europe and the United State during 1950s. It's a kind of brand strategy for companies to shape good image to compete with one another in the market. One of the important aspects of the CIS is the development of corporate identity which helps corporate display individuality to be recognized by the public [1-2]. CIS includes three basic parts which are Mind Identity System (MIS), Behavior Identity System (BIS), Visual Identity (VIS). The centrality of CIS is to design a specific MIS which should be applied to the whole company either internal or external through behavior, at the same time the main points of MIS would be demonstrated by VIS. CIS can be viewed as equivalent instrument and, moreover, strategic terms [3-5].

Since 1990s some hospitals in China began to adopt this instrument, trying to shape and perfect the image and reputation of hospitals. It's popular for health organizations to employ CIS as an administration strategy. This study aimed to investigate the basic CIS condition in a certain hospital through Semantic Differential method and appraise the attitude of the patients and the doctors from both external and internal.

### 2. Method

Semantic Differential (SD) is a type of a rating scale designed to measure the connotative meaning of objects, events, and concepts. The connotations are used to derive the attitude towards the given object, event or concept. SD was put forward by Osgood. The respondent is asked to choose where his or her position lies, on a scale between two polar adjectives [6-8].

Based on SD method, we consulted many published materials and designed CIS Assessment Scale according to theory of CI. The scale included three dimensions MIS, BI and VIS. There were 14 items (adjectives) altogether which were used to evaluate CIS with 5 grades the scores were respectively 2, 1, 0, -1, -2 from the highest to the lowest (Table 1) [9-13].

We used SPSS to calculate the mean scores.

Table1 Basic assessment factors of CIS appraisalment

Dimension	Items	factors
MIS	Integrity of MI	righteous-not righteous
	On behalf of patients	good-bad

	On behalf of hospital	totally-partly
	the consistence between MI and hospital nature	adequate–inadequate
BIS	Medical level	high-low
	working enthusiasm	positive-negative
	Perfection of rules	perfection-imperfection
	Service attitude	good-bad
	Emphasis of relationship	much-little
	Ability to deal with relationship	competent-incompetent
VIS	Identifiability	strong-weak
	Creativity	high-low
	Fashionability	fashionable-unfashionable
	Applicability	partly-generally

### 3.Samples

Of 90 doctors and 100 inpatients who participated this investigation, the returned questionnaires from doctors were 85 among which the valid ones were 80, the returned questionnaires from inpatients were 100 among which the valid ones were 97. Male doctors were 33 (41.3%), female doctors were 47 (58.8%). Male inpatients were 50 (51.5%), female inpatients were 47 (48.5%).

## 4. Results

### 4.1 General assessment

The mean scores got from the participants are shown in Table 2. Both doctors and inpatients gave positive value to the items except items “attitude towards relationship between doctors and patients” and “the ability to deal with the relationship” which were negative value. Positive values all exceeded 0.5, no one surpassed 1.0. The overall mean scores were not high. The items which got little higher scores were of “the consistence between MI and hospital nature”, “integrity of MI”, “to what extent MI on behalf of hospital”, “service attitude towards patients”, “medical level”, “working enthusiasm”, “identifiability of VI”, “universality of VI application”.

Table 2 Mean scores of CIS by the sample

Dimension	Items	Doctors	Inpatients	Total mean score
MIS	Integrity of MI	0.78	0.74	0.76
	On behalf of patients	0.79	0.39	0.57
	On behalf of hospital	0.73	0.74	0.74
	the consistence between MI and hospital nature	0.81	0.76	0.78
BIS	Medical level	0.85	0.62	0.72
	working enthusiasm	0.79	0.76	0.77
	Perfection of rules	0.68	0.62	0.65
	Service attitude towards patients	0.89	0.72	0.80
	Emphasis of relationship	-1.36	0.64	-0.25
	Ability to deal with relationship	-1.00	0.47	-0.18
VIS	Identifiability	0.16	0.77	0.50
	Creativity	0.13	0.31	0.23
	Fashionability	0.11	0.31	0.22
	Applicability	0.60	0.74	0.68

### 4.2 SD analysis

We drew SD curve graph (Figure 1) to compare the difference between the doctors and inpatients.

The general assessment was good for almost all the scores were positive near 1.0. The difference of some items between doctors and inpatients were significantly big. For example, doctors thought MI represented patients' interests very well while patients gave it a lower score. On the contrary, Scores graded by the two groups of participants about "attitude towards relationship between doctors and patients" and "the ability to deal with the relationship" were nearly 2 points different. Both the two parts gave higher scores to "medical levels" and "service attitude", but scores given by doctors were higher than by inpatients. Inpatients graded a higher point on "identifiability of VI" than doctors. See Figure 1.

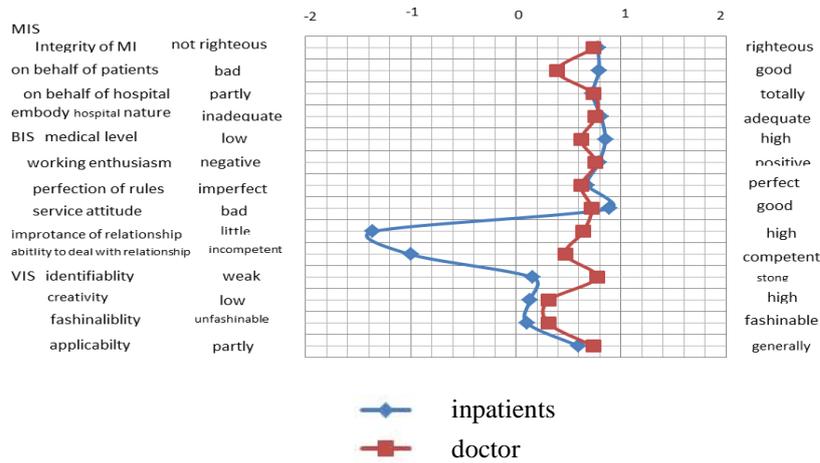


Figure 1 SD curve graph of CIS assessment

## 5. Discussion

Generally speaking this hospital had designed a complete CIS including the basic three subsystems including MIS, BIS, VIS. According to the theory, the system of CI comprises three basic subsystems including MIS, BIS, VIS. Each of the three is composed of various items. MIS is the soul of the whole CIS, the other two are derived from MIS<sup>[9]</sup>. BIS and VIS of this hospital were designed based on MIS which had taken the patients' interest into account, meeting the main value in China.

However, this process of leading CIS into this hospital didn't embody the concept of patient-centered. The theory of CIS has always aimed to customers from the VIS to MIS to solicit and move customers, at the same time BIS should reflect the value of MIS to communicate with customers. This hospital didn't put the customer in the first place during applying CIS to practice. Moreover, most patients couldn't understand what the sign of the VIS really meant.

According to SD analysis, there was a big gap of the assessment between doctors and patients, especially on the several items like "on behalf of patients", "the consistence between MI and hospital nature", "emphasis of relationship", "ability to deal with relationship", "identifiability of VIS". It might be because the two parts had their own interests and evaluated CIS from their own perspective.

## Acknowledgement

This research was financially supported by the 2016 medical education research project (Grant NO. 2016A-RW008, 2016B-RW044).

## References

- [1] Silveira, C., Lages, C. and Simões, C. (2013), "Reconceptualizing brand identity in a dynamics environment", *Journal of Business Research*, Vol. 66 No. 1, pp. 28-36.
- [2] Urde, M. and Greyser, S.A. (2016), "The corporate brand identity and reputation matrix – the

case of Nobel prize”, *Journal of Brand Management*, Vol. 23 No. 1, pp. 89-117.

- [3] Fombrun, C.J. (1996), *Reputation: Realizing Value from the Corporate Image*, Harvard Business School Press, Cambridge, MA.
- [4] Gray, E.R. and Balmer, J.M.T. (1998), “Managing corporate image and corporate reputation”, *Long Range Planning*, Vol.31No.5, pp.695-702.
- [5] John M.T. Balmer, (2017), "The corporate identity, total corporate communications, stakeholders' attributed identities, identifications and behaviours continuum", *European Journal of Marketing*, Vol. 51 Issue: 9/10, pp.1472-1502
- [6] Osgood, C. E., May, W. H., and Miron, M. S. (1975). *Cross-Cultural Universals of Affective Meaning*. Urbana, IL: University of Illinois Press.
- [7] Osgood, C.E., Suci, G., & Tannenbaum, P. (1957). *The measurement of meaning*. Urbana, IL: University of Illinois Press.
- [8] Snider, J.G., and Osgood, C.E. (1969). *Semantic Differential Technique: A Sourcebook*. Chicago: Aldine.
- [9] Wanchun Ye, Houfen Wan, Jiaqing Cai. *Corporate Image Planning*[M]. Dalian: Dongbei University of Finance & Economics Press, 2001:69.
- [10] Wei Wang, Jun Chen, Yunwei Li. Leading into CIS, promoting the good doctor-patient relationship [J]. 2008, 29(4):16-18.
- [11] Salvador Mondrago' n, Pedro Company, Margarita Vergara. Semantic Differential applied to the evaluation of machine tool design[J]. *International Journal of Industrial Ergonomics*, 2005, 35 :1021–1029
- [12] Shang H. Hsu, Ming C. Chuang, Chien C. Chang. A semantic differential study of designers' and users' product form perception[J]. *International Journal of Industrial Ergonomics*, 2000 ,2:375-391.
- [13] J. Kang, M. Zhang. Semantic differential analysis of the soundscape in urban open public spaces[J]. *Building and Environment*, 2010, 45 :150–157.