

**EMPLOYER BRANDING IN THE CHINESE PUBLIC
HOSPITAL**

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Abstract

The present study aims to investigate the instrumental- symbolic framework as a package for analyzing employer branding under Chinese context, a non-Western culture. Specifically, we examine the relative importance of perceived instrumental and symbolic attributes as an employer in public hospitals between two groups of individuals (211 final-year students and 200 current employed doctors). First, results show that instrumental and symbolic attributes are significantly related to hospital's attractiveness as an employer, while symbolic trait inferences can explain incremental variance in employer attraction beyond instrumental attributes. Second, although attributes explain similar portions of the variance in two groups, the significant variables within the dimensions perform divergently. In addition, potential applicants have more favorable perceptions of both instrumental and symbolic attributes than current employed doctors. Finally, implications for employer branding practices and limitations for future researches are discussed.

JEL Classification: J44, M51

Keywords: Recruitment, Employee retention, employer branding, instrumental-symbolic framework, public hospitals, China.

Resumo

O presente estudo tem por objetivo investigar o quadro instrumental e simbólico, em conjunto, de maneira a analisar a marca de empregador no contexto chinês, uma cultura não ocidental. Mais especificamente, examinamos a importância relativa dos atributos instrumentais e simbólicos distinguidos como empregadores em hospitais públicos entre dois grupos de indivíduos (211 estudantes de último ano e 200 médicos atualmente empregados). Os primeiros resultados mostram que os atributos instrumentais e simbólicos são significativamente relacionados com a atratividade empregadora do hospital. As interferências dos traços simbólicos podem, quanto a elas, explicar a variância incremental na atratividade do empregador além dos atributos instrumentais. Em segundo lugar, embora os atributos expliquem porções similares da variância nos dois grupos, as variáveis significativas dentro desses mesmos atuam divergentemente. Além do mais, candidatos potenciais têm percepções mais favoráveis dos atributos instrumentais e simbólicos comparativamente aos médicos atualmente empregados. Finalmente, são discutidas implicações para práticas de branding de empregador e limitações para futuras investigações.

JEL Classificação: J44, M51

Palavras-chave: Recrutamento, retenção de empregado, branding empregador, quadro instrumental-simbólico, hospitais públicos, China.

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1. Introduction

Recruiting and retaining the most talented employees is always a crucial issue for organization success and survival (Van Hoyer, 2012). It becomes of key importance for corporations to attract the brightest job seekers and keep the most competence workers who fit suitably into an organization's mould. This is also especially true for the healthcare industry, as the growing demand for healthcare services contrasts the diminishing supplement of healthcare professions (Van Hoyer, 2008). It is a common phenomenon, observed by Chinese scholars, that most of the hospitals are confronting the difficulties including the competition for competent top-talent and the shortage of well-trained primary care doctors (Ge, Wang, Li, Wang & Liu, 2009). Although in China, public hospitals control the dominate power in health care sector at present stage and traditionally only face the main competition from other public healthcare organizations, as implementing the new health care reform and being supported by the policies, large amounts of capital entered into health care market that gave rise to the rapidly development of private healthcare providers and corporations in its quantity, quality and scale (Hesketh and Zhu, 1997; Yang, Wang and Lu, 2005). These new powerful comers subsequently intensify the human resource competition which occurs on the doctor level. In order to achieve self-development and maintain the quality of medical service, managers of public hospitals recognized that it is urgently to find a way out in this age of war for talent (Yi, Tang and Jiang, 2010).

In recent decades, employer branding has received great amount of attention as one of the prime approach for responding to recruitment and retention challenges in both the practitioner and academic literature (Martindale, 2010). It is a main process of managing a unique employer image or identity, which involves internally and externally promoting a view of what makes an organization distinct and desirable as an employer (Backhaus and Tikoo, 2004; Lievens, 2007). From a job-market perspective, employer branding has been suggested to be particularly useful in highly competitive job markets (Hughes and Rog, 2008). A strong employer brand is deemed to have effect on making the firm differentiate from competitors

and attracting more talented applicants (Collins and Stevens, 2002; Lievens and Highhouse, 2003). Besides, studies showed that an effective employer brand management in early recruitment stage can strongly increase applicants' intention to accept the job, as well as applicants were found to accept lower rewards to work in the organization with a preferable brand (Cable and Turban, 2003). Moreover, transferring an appropriate employer image can shape employees' expectations about the recruitment, thus reducing intentions to quit and turnover (Backhaus and Tikoo, 2004).

Despite the importance of employer branding and employer image as an employer, firstly, it should be recognized that most of the studies are conducted in Western countries (Berthon, Ewing and Hah, 2005; Harold and Ployhart, 2008; Lievens and Highhouse, 2003). The validation of the theories in this area is remained virtually unexplored in China. Although Chinese scholars have conducted several researches over the years about one of the popular model, namely instrumental -symbolic framework (Zhou, Kong and Zhang, 2011; Zhu, Wang and Zhao, 2016), the findings are not carefully discussed. We are still lacking of empirical evidence that how employer branding could efficiently affect recruitment and retention under Chinese context.

Second, former studies are mainly conducted in limited industries such as banking, military, engineering and so forth (Baum and Kabst, 2013; Lievens, 2007; Lievens and Highhouse, 2003). It is urgently required to examine the generalizability of previous findings in other sectors, specifically in healthcare industry. Previously, there have been very few efforts on branding the employer image among medical students or doctor population oriented to hospitals (Heilmann, 2010). One possible reason for the exclusion of doctors in this research field may due to the respective healthcare systems in different countries. For example, in U.S., physicians were typically self-employed business persons who work in a fee-for-service system (Kim, Price, Mueller & Watson, 1996). In China, physicians, conversely, were mostly salaried employees who employed by hospitals (Hesketh and Zhu, 1997) and thus provide an opportunity to generalize the past findings regarding to the employer branding theories. Even because of the absence of evidence, we can suppose that

the majority of Chinese hospital administrators are not aware of the employer branding as an effective administrative measure in managing their personnel.

In addition, based on the given audit steps of employer branding management, the target populations need to include both potential employees and current employees, corresponding to external recruitment and internal intention process respectively (Backhaus and Tikoo, 2004). By exploring the variance between different groups of people, employer image audit could provide guidance for human resource practitioners on how organizations should interact in different phases of talent management. Accordingly, increasing numbers of scholars emphasized the importance of incorporating relevant stakeholders and calling for more research to study the employer image across different groups (Lievens, 2007). However, the studies that we can observe in this research area still mostly concentrated on single stakeholder, namely measuring the employer image perceived by either the potential applicants for recruiting or employees for retention (Theurer, Tumasjan, Welpe and Lievens, 2016).

Few researches and case studies, which were conducted in healthcare organizations such as hospitals and nursing homes, underlined the necessary of a high quality employer branding in human resource practice (Trybou, Gemmel, Van Vaerenbergh & Annemans, 2014; Heilmann, 2010), yet none of them have examined these questions through a more comprehensive stakeholders' perspective. From a hospital manager's point of view, it should be clear how the hospital image perceived by different target populations determines the organization attractiveness as an employer for that particular hospital (Trybou et al., 2014). On the other hand, from an academic point of view, due to the distinct job and organization characteristics of public healthcare sector and health workers in China, we believe that it is essential to know which attributes are of more importance to medical students and doctors on this issue.

Above all, recognizing the research gaps in the field, the current study will focus on these interesting issues by applying the instrumental-symbolic framework to measure

respondents' perceptions of employer image related to employer attractiveness in Chinese public hospital context, specifically presenting, comparing and discussing the different outcomes between potential applicants and current employees. Incidentally, to frame and justify the hypotheses, several theoretical mechanisms are used, including social identity theory, the theory of psychological contract, and so forth. Meanwhile, we discuss little about the restriction of using the theories when explaining the effects of employer image branding on outcomes.

2. Study Background

2.1. Employer brand and Employer branding process

Branding, stemming from marketing principles which were originally used to differentiate products or corporate brands, has been applied to the area of human resource management over the years (Peters, 1999). The application of these branding principles were termed “employer branding”. Presented by Swystun (2007), a brand is a mixture of tangible and intangible attributes, symbolized in a trademark, which if managed properly can create great amounts of value and influence. Similarly, employer branding considers how a firm is presented to potential and current employees as an employer. In the earlier research, Ambler and Barrow (1996, p.8) defined the employer brand in terms of benefits, calling it “the package of functional, economic, and psychological benefits provided by employment, and identified with the employing company.” Later, a widely cited definition developed by Backhaus and Tikoo (2004) emphasized the unique and specific association of firm’s employment offerings. They defined the employer brand “as a concept of the firm that differentiates it from its competitors”, in the meantime, employer branding described “the process of building an identifiable and unique employer identity” (Backhaus and Tikoo, 2004, p.502).

To promote a unique and attractive image as an employer, Backhaus and Tikoo (2004) reviewed human resource practitioner literatures and concluded employer branding generally as a three-step process. First, a firm develops a concept of particular value proposition which it offers to its applicants and employees. The value proposition needs to present a true representation and provides the central message that is conveyed by the employer brand (Eisenberg, Kilduff, Burleigh and Wilson, 2001). Also, Lievens (2007) added that it is of the key importance to carefully managing the images that make firms attractive as an employer.

After determining the content of value proposition, the firm markets the proposition to its target populations. External marketing of the employer brand, which is generally consistent with other branding efforts of the firm, intends primarily to attract external audience (i.e. potential applicants) during recruitment (Backhaus and Tikoo, 2004). However, unlike product and corporate branding, employer branding also includes the target group of internal audience (i.e. employees). The third process of employer branding is so called internal branding, which carries the brand “promise” made to recruits into the firm and incorporated it as part of the organizational culture (Frook, 2001).

2.2. Employer image

Regarding employer brand image audit step, all brand-related thoughts and ideas could be categorized under the umbrella term of employer knowledge, which consists of ‘employer familiarity’, ‘employer reputation’ and ‘employer image’(Cable and Turban, 2001). Employer image is related with employer familiarity and employer reputation, but it must be distinguished from the other two aspects. On one side, Lievens and Slaughter (2016, p. 4.3) defined employer image as “an amalgamation of transient mental representations of specific aspects of a company as an employer as held by individual constituents.” According to this definition, employer image is made up of particular attributes that an individual associates with an organization as a place to work, meanwhile the specific associations might individually fluctuate. Moreover, Collins and Kanar (2013) indicated the particular associated attributes are not automatic perceived which means that they require more cognitive processing.

On the other side, in terms of employer reputation, Highhouse, Brooks and Gregarus (2009, p.482) concluded in their review that “corporate reputation is a global, temporally stable, evaluative judgment about a firm that is shared by multiple constituencies.” In contrast to employer image, employer reputation targets a more general area of an organization and correspondently enduring in collective, which implies the possibility that the organization

image as an employer held by a job seeker may have huge difference or even opposite view between the reputation held by the public (Highhouse et al., 2009; Lievens and Slaughter, 2016). Accordingly, to evaluate whether an organization is attractive as a place to work, employers who even though obtain a good reputation also need to carefully manage their employer image in individual level. As to employer familiarity, it is an essential precursor of employer image and reputation, because it reflects the level of awareness that a job seeker has of an organization (Cable and Turban, 2001). Lievens, Van Hoyer and Schreurs (2005) tested this assumption in their research and discovered that dimensions of employer image and reputation had more pronounced effect when familiarity was high. In this study, the assessed public hospitals are assumed more or less familiar to respondents and so employer familiarity will not be analyzed.

2.3. Organizational attractiveness as an employer

Organizational attractiveness also is an often-investigated factor in employer branding literature. Collins and Kanar (2013, p. 287) described organizational attractiveness as “subjective evaluations of the attractiveness of a brand” which expressed through “surface brand associations”. Whereas perceived attributes of employer brand image evaluate from an elementalistic perspective, organizational perceived attractiveness measures the outcome of branding through a more holistic view (Collins and Stevens, 2002), and it focuses on general feelings and attitudes toward the organization (Gardner, Erhardt and Martin-Rios, 2011). Since numerous researches have illustrated that organizational attractiveness can be influenced by the employee perceived attributes (Lievens and Highhouse, 2003; Slaughter, Zickar, Highhouse, and Mohr, 2004) and in order to present a holistic aggregated perspective to employer branding, organizational attractiveness is usually used as a typical dependent variable.

2.4. Instrumental and symbolic framework

As noted above, employer image is made up of associations regarding an organization as an employer. Although divergent ways exist to conceptualize and measure employer image dimensions, one popular and prominent method, termed as instrumental-symbolic framework, was transferred from the marketing-based categorization (Keller, 1993). It was initially introduced to human resource management research by Lievens and Highhouse (2003). According to this framework, employer image attributes could be clustered in two dimensions, including instrumental attributes and symbolic attributes.

Applied to employment context, instrumental attributes of the employer image describe the job or organization from a more objective, concrete and factual point of view, which usually trigger interest among applicants and employees because of their utilitarian need, such as pay, benefits and advancement opportunities (Lievens and Highhouse, 2003). According to the social exchange theory, for a person choosing between alternative actions, he tends to behave so as to maximize the reward he can get and minimize the cost he needs to pay (Homans, 1958; Emerson, 1976). Obviously, since instrumental attributes directly correspond to the factual rewards which can be received from engaging in an employment, applicants and employees will value the instrumental image as an employer during recruiting and retaining process.

When determining and identifying dimensions of instrumental attributes, most scholars conducted an inductive qualitative strategy because the items associated with employer image might be different across jobs, organizations, industries and cultures from different countries. For example, Lievens and Highhouse (2003) identified 6 instrumental attributes scale for banking sector, including “pay”, “advancement”, “job security”, “task demands” and “working with customers”. In contrast, Lievens (2007) followed this typical strategy and developed a nine-factor model for Belgium army. The opportunity to perform physical activities, one of the dimensions, might play an important role under military context, however not in other sectors. Another example is presented by Van Hoye, Bas, Cromheecke

and Lievens (2013). This study was conducted in Turkey nationwide and covered different industries, finally they only got four instrumental image dimensions, which included “pay/security”, “task demands”, “advancement” and “working conditions”.

Besides, an organization will also be attractive to applicants and employees because of its symbolic attributes associated with the organization as an employer. Conversely, defined by Lievens and Highhouse (2003), symbolic attributes describe the job or organization in terms of subjective, abstract and intangible attributes. The attributes will convey symbolic organizational information in the form of imagery and trait inferences that stemmed from how people perceive the organization as an employer (Lievens and Highhouse, 2003). It could also be understood in the context of social identity theory (Mael and Ashforth, 1995). Accordingly, people tend to classify themselves into social categories and the organization in which people work is a considerable determinant of their self-concept and social identity (Lievens and Highhouse, 2003; Turner, 1985). The specific symbolic attributes that applicants or employees ascribe to the organization are linked to people’s need which could enable them to maintain their self-identity, to enhance their self-image, or to express their beliefs and personality, and consequently organizational identification enable the individual to be attracted to a company or feel loyal to a corporate culture (Aaker, 1997; Mael and Ashforth, 1995).

Although symbolic attributes could be measured through various person-descriptive traits, a measurement that drew upon Aaker’s (1997) brand personality scale is widely recommended in previous researches (Lievens, 2007; Lievens and Highhouse, 2003; Van Hoye et al., 2013). Accordingly, Lievens (2007) developed an adapted version of Aaker’s work to represent symbolic trait inferences according to six different factors, including sincerity (i.e. honest, sincere), excitement (i.e. daring, thrilling), cheerfulness (i.e. cheerful, friendly), competence (i.e. intelligent, technical), prestige (i.e. high status, highly regarded) and ruggedness (i.e. tough, rugged).

2.5. Studies in different cultures

To date, prior empirical research has tested the validity of the instrumental-symbolic framework for examining organizational image as an employer. The important findings in common of these researches are as follows. First, both instrumental attributes and symbolic attributes could positively influence organization attractiveness as an employer (Lievens and Highhouse, 2003; Lievens et al., 2005; Slaughter et al., 2004). Besides the attractiveness as the variable of most concern, these attributes have effects on employee's organizational identification and recommendation intentions as well (Lievens, Van Hoye and Anseel, 2007; Van Hoye, 2008). Other sporadic evidence showed that symbolic traits dimensions could also be associated with satisfaction, employer brand loyalty, and employer brand trust and affect (Davies, 2008; Rampl and Kenning, 2014).

Second, in predicting organizational attractiveness as an employer, symbolic trait inferences account for incremental variance beyond and above instrumental attributes (Lievens, 2007; Lievens and Highhouse, 2003). For instance, according to Lievens and Highhouse (2003), trait inferences added an additional 17.5% of the explained variance in organizational attraction among bank employee sample. Moreover, organizations could be better differentiated from their competitors on the basis of symbolic attributes than on the basis of instrumental attributes, under the condition that job and organizational characteristics might tend to be similar with the same industry (Lievens and Highhouse, 2003).

However, these employer image research or instrumental-symbolic framework research were mostly conducted in Western countries, such as Belgium, Australia, and the United States (Berthon et al., 2005; Harold and Ployhart, 2008; Lievens and Highhouse, 2003). As supported by cross-cultural theories (e.g. the Hofstede dimensional model), people in non-Western countries might not react to employer branding in the same way as do those in prior research, due to the culture differences between countries (de Mooij and Hofstede, 2010; Ma and Allen, 2009; Turban, Lau, Ngo, Chow and Si, 2001). Responding to the call for more research on the applicability of the instrumental-symbolic framework to different cultures,

recently, several studies were conducted to fill this research gap.

For example, Anderson, Haar and Gibb (2010) reported that personality trait inferences were related to perceptions of organizational attraction in a multi-cultural student sample, supporting and replicating overall findings in previous research (Slaughter et al., 2004). However, in this study, Anderson et al. (2010) did not differentiate the participants from multiple cultural characteristics and failed to investigate them separately. Baum and Kabst (2013) examined the engineering students from Asia (China and India) and Europe (Germany and Hungary). They found that the relationship between intentions to apply and specific instrumental attributes varied among samples in different countries. Another study conducted in India implied that the effective employer branding could enhance the brand equity of the organization as an employer and determined several specific dimensions of employer brand image which could significantly predict the application intentions (Agrawal and Swaroop, 2009). These researches seems to have gone one step further under other cultures context, though neither of them analyzed organizational attraction and employer brand from a more integrated view, namely using both instrumental and symbolic dimensions for analyzing employer image.

To the best of our knowledge, one empirical research, developed by Van Hoyer et al. (2013) with a sample of Turkish students, might be the most relevant study which examined how the instrumental-symbolic framework affected organizational attractiveness as an employer in a non-Western country. In line with previous study in the Western countries (Harold and Ployhart, 2008; Lievens, 2007), Van Hoyer et al.'s (2013) work supported the idea that both instrumental and symbolic attributes would significantly influence organizational attractiveness. Also, symbolic traits perceived by Turkish students could explain more variance in organizational attraction, as well as could account for the incremental variance in predicting attractiveness beyond instrumental attributes (Van Hoyer et al. 2013). In addition, symbolic attributes could help organizations better differentiated from each other (Van Hoyer et al. 2013). Consequently, all these results indicated the possibility of the instrumental-symbolic framework fitting into non-Western cultures.

Considering a distinctive culture with huge difference from Western countries, employer branding begins to gain more attention among HRM scholars and practitioners in the People's Republic of China, even though the number of research which we can now observed is still scarcely. Researchers, like Liang and Li (2005), first started to explore the employer branding under Chinese context, relating person-organization fit with organizational attractiveness. This study implied that Chinese students might also value the symbolic aspect of an organization during recruitment process. Moreover, since the propositions, such as "Best employer" and "Employer of the year", became popular in China, scholars have tried to develop scales depending on the instrumental-symbolic framework for measuring dimensions and effectiveness of an employer brand (Huangfu, Liu, Si, Zhao, Shi and Huang, 2012). However the validity and reliability of these scales need to be further confirmed.

Despite all this, interesting results still can be extracted from the limited amount of researches. On one hand, consistent with previous findings, in most conceptual papers, scholars acknowledged that both instrumental and symbolic attributes are positively related to organizational attractiveness as a good place to work (Zhou et al., 2011; Zhu, Wang, Yu, Hu, Wen and Liu, 2014). On the other hand, comparing to the research conducted in the Western countries, the studies in China showed somewhat divergent results in whether symbolic dimensions or instrumental dimensions were of more concern when determining organizational attractiveness. A study, with a sample of final-year finance students, showed that symbolic traits might play a more important role in shaping employer image and application intentions (Zhou et al., 2011). Chen and Qian (2015) also conducted a research in Taiwan which consisted of potential applicants who were seeking to change jobs and finally came into similar conclusions. Whereas, Zhu et al. (2014) reported that students who majored in social science and engineering, cared more about instrumental attributes, such as compensation, benefits and opportunity for development. Meanwhile some symbolic information (e.g. prestige) related to functional benefits were attractive to the participants, but the factors which had been emphasized in prior research (e.g. innovativeness, robustness, see Lievens & Highhouse, 2003) did not receive significant outcomes (Zhu et al., 2014).

Moreover, Zhu et al. (2016) found that during pre-selection phase of job-seeking, there is even no significant difference between instrumental and symbolic factors among potential applicants. Above all, no final agreement has yet been reached on this matter.

2.6. Employer branding in healthcare industry

Previous studies have offered a number of crucial insights into the management of employer branding. When reviewing, we can see various organizational images exist, that people are likely to generate different perceptions about what constitutes the organization, based on their work group, their organization or their profession (Dukerich, Golden, Shortell, 2002). However, it is surprisingly that only little focused on the healthcare sector, especially doctors. In this section, we are going to discuss the accomplishment achieved by now from the limited researches.

Since there is no direct research analyzing doctors or medical students using the concept of employer branding image, we concluded the findings of previous study from other relevant research fields. When measuring hospital-physician relations, on the one hand professional attributes (hospital prestige, professional development opportunities for physicians) and relational attributes of hospitals (organizational and leader support) were major predictors of hospital attractiveness, economic attributes (pay and financial benefits, job security) were only of limited importance on the other (Trybou et al., 2014). Physicians seem to have a more complex set of motives which primarily based on self-interest rather than economic transactions (Trybou et al., 2014). But scholars did not suggest hospital managers to apply a strategy which ignore the economic ties, since it may cause dissatisfaction results from its absence (Herzberg, 1966; Trybou et al., 2014). We also found another causal model explaining variation in career intent among physicians. In this model, seven variables are considered to have strong effect on career intent, including organizational commitment, job satisfaction, search behavior, opportunity, met expectations, positive affectivity and promotional chances (Kim et al. 1996).

The organization attributes defined in those researches could help building up the general content of hospital image as an employer. But if we reconstruct the findings into the framework introduced by Lievens (2003), most of the researches only concentrated on the instrumental attributes and did not draw sufficient attention on examining the issue of symbolic traits perceived by doctors or medical students of the hospitals.

Healthcare systems, specifically hospitals, include a variety of healthcare workers, such as physicians, surgeons, pharmacists, nursing employees, etc. Those professions have some job features in common. For example, Van Hove (2008) conducted a research among nursing employees in Belgium. She proved that instrumental (e.g. task diversity and helping people) and symbolic (e.g. competence and prestige) employer image dimensions could be used as positive predictors for nursing employees' recommendation intentions, under the background of which word-of-mouth recommendations by current employees could enhance healthcare organization attractiveness as an employer for potential applicants. In another study focusing on nurses, Fréchette, Bourbis and Stacura (2013) suggested that the perceptions of quality of care, type of work, compensation and employer branding are important factors related with organization attraction, and practically their findings resulted in an increase in the hiring of university-trained nurses in a Canadian university teaching hospital.

However, we should acknowledge the specific characteristics appeared between doctors and other healthcare workers. Comparing to nurses, doctors were considered to be more confident, arrogant, detached and dedicated, while nurses were more caring and more dithering (Carpenter, 1995; Rudland and Mires, 2005). Regarding to the background characteristics, doctors were considered to have more positive status in society, more professional competence and greater academic ability (Rudland and Mires, 2005). As suggested in social identity theory, there is a cognitive link between the definition of the organization and the definition of self (Dukerich et al., 2002). From this point of view, the perceptions of employer image, both instrumental and symbolic attributes perceived by doctors will show somewhat divergently from other healthcare professions.

Also, because of the different medical systems implemented in different countries, we need to be careful about the hiring type of doctors whether they are self-employed or salaried employees. The relationship between doctors and hospital will influence how they perceive the organizational attributes (Kim et al., 1996; Trybou et al., 2014) and thus may affect the way to manage hospitals' employer brand. The doctors in China, who are generally employed by hospitals, always have a tight relationship with the particular organization (Dukerich et al., 2002; Hesketh and Zhu, 1997). How this group of population will react to the employer branding image is still unknown. Analyzing employer branding under the distinct cultural and political environment, it is expected not only to generalize the previous findings in unexplored area but also bring some new ideas to the research field.

2.7. Employer brand image across different groups

As shown in the former section, although most conceptual papers generally identified that employer branding consists of both external branding process for recruiting applicants and internal branding process for retaining employees (Backhaus and Tikoo, 2004), an investigation, which provided by Theurer et al., (2016) claimed that quantitative empirical studies considering employer image still predominantly focus on recruitment context. Several evidences, provided by the limited but influential studies, point out the importance of bringing current employees as a comparable target group into this research area. According to Davies's (2008) finding, employer image management which was oriented to employees can influence an employer's differentiation, affinity, satisfaction and loyalty. Lievens (2007) then argued that combining internal employer image and external employer image could also help organizations to improve and develop a more comprehensive knowledge about employer branding. The findings in Lievens's (2007) work confirmed that different groups of respondents perceived instrumental and symbolic attributes variously and attributes divergently explained the variance of organizational attractiveness as an employer across groups. Therefore, from this point of view, the current study will focus on analyzing how

instrumental and symbolic image influence employer attractiveness differently between two groups of people: potential applicants and current employees.

Realizing the gaps of research, the following hypotheses were posited. The hypothesis 1 and 2 considered the favorable perceived attributes among two samples. On one hand, potential applicants are able to generate perceptions about employer's instrumental or symbolic attributes before or during the recruitment process. First, it should be recognized that the participants of potential applicants in the present study are final-year medical students. One specific characteristic of medical students, comparing to students in other majors, is that they have at least one year internship experience in the tertiary hospitals. Therefore we can suppose that even if some of these students have not yet entered into recruitment circle, they already have generated basic and initial conceptions about which kind of organization is attractive as an employer. Second, the theories of person-organization fit (PO fit) or person-job fit (PJ fit) during job-searching process may also contribute to the establishment of the hypotheses. Schneider Goldstein and Smith (1995, p.749) emphasized the "implicit estimate of the congruence" between individual and organization characteristics is the base of preferring potential workplace. In prior to or during selecting stages, applicant perceptions of matching their tangible and intangible characteristics with the organization will positively related to the perceptions of organizational attractiveness as an employer, according to a study provided by Carless (2005). Besides, one could not ignored that numerous important job related attributes are concerned by applicants when seeking for job information, but consequently applicants may gain some unrealistic expectations to their preferred employers (Barber, Daly, Giannantonio and Phillips, 1994; Lievens, 2007).

On the other hand, according to organizational identification theory, employees could also perceived the instrumental or symbolic attributes as being a member of the organization, and this identity will be positively related with organizational attractiveness (Dukerich et al., 2002). It is quite hard to predict between medical students and employed doctors, but based on the existing researches, employees are supposed to have less positive perceptions about those attributes than potential applicants. The theory of the psychological contract may

contribute to establishing the hypotheses. During the recruitment phase of employer branding, potential applicants generate preferred instrumental and symbolic perceptions about the organization as the formation of psychological contract, which will be carried into their future workplace (Backhaus and Tikoo, 2004). Meanwhile, as suggested by Lievens (2007), when applicants have entered into the organization, they may experience a modification or adjustment of the views for their employers, which means that the employees will assess the organization from a more rational and realistic point of view and the perceptions about the instrumental and symbolic attributes might not be consistent with the one they hold as an applicant before. In general, organizations were perceived to fail to fulfill some of the committed offerings which were promised to applicants during recruiting (Backhaus and Tikoo, 2004). Because of the renege of the psychological contract, it will lead to the reduction of the favorability of the employer beliefs perceived by current employees. Therefore, I expected that respondents who are now entering or during recruitment process may hold more perceptions about both instrumental and symbolic attributes of organization as an employer, and the hypotheses are as follows:

Hypothesis 1: Potential applicants will have more favorable perceptions about an employer's instrumental attributes than will employed doctors in public hospital.

Hypothesis 2: Potential applicants will have more favorable perceptions about an employer's symbolic attributes than will employed doctors in public hospital.

Next hypothesis analyze the different attributes related with organizational attractiveness as an employer among two groups. First, from practical point of view, materialistic values are commonly seen as dominant values in developing countries (Inglehart, 1997). Considering the level of economic development in China, it could be argued that tangible benefits might play an important role in attracting Chinese applicants (Chiu, Luk and Tang, 2001). This previous finding implies that instrumental attributes could be treasured in both potential applicants and employees samples. However along with the job-search process theories, applicants will primarily conduct job searching broadly in the beginning stage, acquiring as many opportunities as possible (Barber et al., 1994). As they will not narrow

down their preferences for their future employers, organizations will not provide enough particular instrumental messages through the initial recruitment contacts (Lievens, 2007). The job search behavior implies that applicants are more likely to generate some general impressions about the organization, which is considered to be a more abstract and trait-like features (Trobe and Liberman, 2003), rather than the concrete and factual information (Lievens, 2007). Comparing to potential applicants, the sample consisted of current employees who have already served in the organization can easily recognize the specific factual information about the instrumental attributes of the organization they worked for. From this point of view, instrumental factors perceived by doctors are expected to explain more variance in the hospital attractiveness as an employer than the medical students. Therefore, I present the following hypothesis:

Hypothesis 3: Perceptions of instrumental attributes will explain more variance in the public hospital's perceived attractiveness as an employer among employed doctors as compared to potential applicants.

Also, it is expected that symbolic attributes will explain more variance in the public hospital's perceived attractiveness as an employer among employees rather than potential applicants. This hypothesis could be based on the aforementioned organizational identification theory. As individuals get to identify and start to consider themselves as a membership in the organization, the organizational goals, values and norms will unintended internalize employees' self-definition, and the reshaped self-definition will in turn influence organizational identification (Mael and Ashforth, 1995). This mechanism illustrates the possibility that employees could perceive employer's symbolic traits while developing identity of the organization. And the level of employees defining themselves in terms of the particular organizational membership is related to their attitudes and behaviors, such as job satisfaction, turnover intentions to a substantial extent (van Dick, 2004). Besides, it is revealed that the relative attributes identified by Dukerich et al. (2002) which measured the perceived organizational identity among physicians have the large extent of similarity to the symbolic traits inferences identified by Lievens (2007). Moreover, although applicants can

generate some general symbolic thoughts about potential employers, previous researches suggested that potential applicants in China may not treat symbolic traits inferences as seriously as how researchers found in the studies conducted in western countries (Zhu et al., 2014). As noted, Zhu et al. (2014) indicated that applicants may only be attracted to the symbolic attributes which also contain instrumental meanings. Above all, I anticipated that:

Hypothesis 4: Perceptions of symbolic attributes will explain more variance in the public hospital's perceived attractiveness as an employer among employed doctors as compared to potential applicants.

Furthermore, Lievens and Highhouse (2003) argued that even though instrumental attributes were generally perceived as an attractive attributes, organizations could not always use them as a basis to stand out from their competitors, because jobs or organizations instrumental characteristics may not have distinct difference within the same industries and specifically for potential applicants, they only have limited knowledge about the instrumental attributes of their future employer in the early stage of recruiting process. Conversely, as applicants could also perceive symbolic attributes which related to organizational attractiveness and tended to be attracted to the employers that organizational traits match their own traits, symbolic attributes were considered to play a more important role in explaining employer attractiveness (Lievens and Highhouse, 2003). Lievens (2007) also provided support to this perspective that symbolic attributes could explain additional variance in employer attractiveness beyond instrumental attributes across different groups. Later, Van Hove et al. (2013) demonstrated the key importance of symbolic traits for organizational attraction in a non-Western country in line with previous studies. These recent studies provided insight into the role of symbolic attributes in forming attractiveness of an organization as an employer. However, it is remain unknown how symbolic attributes will predict the level of organizational attraction in hospital sector under Chinese context. Therefore, based on the evidence presented by previous researches above:

Hypothesis 5a: Symbolic attributes would have incremental value over and above

instrumental attributes in explaining public hospital's perceived attractiveness as an employer among potential applicants.

Hypothesis 5b: Symbolic attributes would have incremental value over and above instrumental attributes in explaining public hospital's perceived attractiveness as an employer among employed doctors.

In addition, the specific variables of instrumental and symbolic attributes might perform differently when predicting organizational attractiveness as an employer across different groups of respondents. For example, in Lievens's (2007) study, "excitement" as one of the symbolic attributes, was the only consistent variable which showed significant effect among studied samples in Belgian Army. Meanwhile, potential applicants in military sector might more favor the attributes such as "task diversity", "prestige", however, these predictors would not lead to significant effect in employees' sample (Lievens, 2007). From this point of view, the current study will further analysis and discuss the particular differences of perceived attributes between potential applicants and current doctors in public hospital when explaining an attractive employer.

3. Method

3.1. Sample and Procedure

As mentioned before, two samples were used in this study. The participants in the first sample consisted of potential applicants. Considering that in recruitment activities, final-year students are one of the main targets, I contacted five clinical medicine colleges, located in the South China. Online questionnaires were sent via email to 500 final-year students, while other 120 students started paper questionnaires with the help of their teachers in these colleges. To increase the reliability of the data, I excluded those participants who failed to answer

completely, and who filled in the same answer throughout the questionnaire, resulting in a final sample of 211 students for a 34 % response rate, including 55 per cent female, with an average age of 22.82 (SD=1.72). Participants were also asked to write down a single most admired public hospital which they might apply for in the future. Subsequently they rated the chosen hospital on instrumental and symbolic image dimensions as well as on its attractiveness as an employer. The results across all the participants covered 69 different public hospitals.

The second sample consisted of current employed doctors who worked in a tertiary hospital in Guangdong province (in the southern part of China). With the help of the HR department in this hospital, questionnaires were distributed to doctors during work breaks and group meetings, and all participants rated the hospital which they worked for, on the same dimensions as the first sample. After excluding the invalid responses, I received completed questionnaires from 200 doctors, yielding a response rate of 66%. The final sample was made up of 50 per cent female with a mean age of 39.36 (SD=8.72) and a mean seniority of 10.64 (SD=7.67). Participants were consisted of five types of specialist. The distribution across the varies specialties of medical career was as follows: 25.5% were surgery, 46.4% were internal medicine, 8.2% were public health, 9.2% were administrative medicine, and 9.2% were laboratory medicine. Moreover, 35.5% of the participants performed the function of supervising. Whereas, in general, these two samples showed a similar education background, that over 98% participants had obtained a bachelor or higher degree in both samples.

3.2.Measure

Instrumental image dimensions

Since it was important to ensure that relevant instrumental image dimensions were included in this study (Lievens, 2007), consistent with previous researches (e.g. Lievens, 2007; Van Hoye et al., 2013), I followed an inductive qualitative strategy to identify job and organizational attributes, which possibly related to the attractiveness of Chinese public

hospital as an employer. In a pre-study, I conducted a structured interview with 14 interviewees. Respondents consisted of current employees in the public hospital, including 5 HR managers and 9 doctors who performed clinical function, meanwhile, participated in recruitment activities. I contacted the interviewees through emails and the interviews were implemented through online voice or video meetings. Respondents were asked to answer one question: “- why employees were interested in obtaining a job in this public hospital?” Various reasons were stated, at the meantime, interviewees rated the degree of importance for each reason, using a scale ranging from 1 = barely important to 10 = strongly important. All interviews were transcribed into scripts. The reasons which had high degree of relevance and overlap were combined into one item. Also, I excluded the reasons that were given less than 1% as well as that were rated the degree of importance lower than 5. Thirty-two reasons remained and were primarily sorted in twelve categories, shown in table 1.

Table 1 - Results of pre-study classifying reasons for joining a public hospital

	Dimension
The public hospital provides good rewards.	I
The public hospital provides opportunity of advancement.	I
The public hospital is located in a preferred location.	I
Working in the public hospital can learn a lot (other than school).	I
Working in the public hospital can maintain your interpersonal network.	I
The public hospital has a good workplace climate	S
The public hospital has a good reputation	S
Working in the public hospital is challenging.	S
The public hospital offers a good working environment.	--
Having an internship in the public hospital.	--
The public hospital is profitable.	--
Working in the public hospital is the best offer.	--

Note. “I” means Instrumental attribute. “S” means Symbolic attribute. Dashes indicate that this category was removed because it could not be classified.

Next, I conducted an inter-rater reliability analysis. Four PhD students helped me coding whether these categories were instrumental or symbolic image dimension. Each participant coded independently. Based on the result, I removed the reasons which had large divergence among raters. Finally, intraclass correlation (ICC) value =.73, indicating the degree of agreement was good (Cicchetti, 1994). The results in table 1 showed that five categories were classified as instrumental attributes; three categories were classified as symbolic attributes, whereas four categories could not be classified. The remaining 14 instrumental items in five categories were based on the reasons stated in the interviews. When respondents answering the questionnaires, these items were rated by a five-point Likert scale, ranging from 1 = strongly disagree to 5 = strongly agree. The Appendix-II presents the 14 items associated with the instrumental image dimension in the questionnaires.

To assess the validation of five-factor structure, I conducted a confirmatory factor analysis in the total samples. All items were only related to their specific relevant latent variable, meanwhile, the latent variables were co-varied with each other. Regarding to model fit, several fit indices were used. The comparative Fit Index (CFI) and Tucker-Lewis index (TLI) were known as incremental fit indexes which measured the proportionate improvement in fit by comparing with a baseline null model (Hu and Bentler, 1999). The recommended cutoff criteria for evaluating these indexes were to have values equal or higher than .09 (Bentler, 1989; Hu and Bentler, 1999). The root mean square error of approximation (RMSEA) was an absolute fit index which assessed how well a priori model reproduced the sample data (Hu and Bentler, 1999). It was a measure of the discrepancy per degree of freedom of the model (Browne and Cudeck, 1993). RMSEA indicated a reasonable error of approximation when the value is less or equal to .08 (Browne and Cudeck, 1993; MacCallum, Browne and Sugawara, 1996; Steiger, 1989). By checking the model, one item was removed (e.g., “The hospital offers opportunity to have advanced study or exchange abroad.”), because the removal of this item improved the fit of model. Finally, the results of CFA with five-factor structure showed a good fit to the data, CFI = .96, TLI = .94, RMSEA = .077. The Appendix-I presents the remaining 13 items associated with the five scales of instrumental image dimension. Moreover, the internal consistencies of the scale shown in table 2 were

satisfactory.

Symbolic image dimension

Symbolic image dimensions were measured by an 18-item scale, adapted from the scales proposed by Lievens (2007). As noted, Lievens developed the scales based on Aaker's (1997) brand personality scales, aimed to assess trait inference about the organization as an employer. These scales consisted of six factors as followed: sincerity, cheerfulness, excitement, competence, prestige and ruggedness. Nevertheless, I reworded few items which might not be suitable for describing the employer brand personality of a hospital. For example, the item "thrilling" was changed into "spirited" when measuring the factor of excitement. Respondents were asked to indicate the extent of agreement to which these items described the hospital as an employer, and rated on a 5-point Likert rating scale, ranging from 1 = strongly disagree to 5 = strongly agree. The Appendix-I presented the 18 items associated with the symbolic image dimension and the Appendix-II presented the 18 questions in the questionnaires in detail.

Also, to examine model fit, I conducted a confirmatory factor analysis using SPSS. In this model, each item was only loaded on the latent variable that it was intended to measure. Meanwhile, six latent variables were co-varied with each other. The results of fit indexes indicated the 6-factor model produced a good fit to the data, CFI = .98, TLI = .98, RMSEA = .057. In addition, the internal consistencies of the scale shown in table 2 were satisfactory.

Organizational attractiveness as an employer

A public hospital's attractiveness as an employer was measured by three items adapted from the scale proposed by Highhouse, Lievens, and Sinar (2003). The items were slightly different in the questionnaires for two samples. For example, the item "This hospital is attractive to me as a place for employment" in employee sample was reworded in potential applicant sample, because applicant sample consisted of students who had not yet decided their future employer (e.g., "This hospital is attractive to me as a place for future employment"). The items were rated with a 5-point rating scale, ranging from 1 = strongly

disagree to 5 = strongly agree. All three items were presented in the Appendix-I and the questionnaires were shown in the Appendix-II. In Table 2, the internal consistency of this scale was .93, which was satisfactory.

4. Results

4.1.Descriptive Statistics

Table 2 – Internal consistencies, Means, Standard deviations and Correlations of variables in total sample (N=411)

	M	SD	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
Instrumental images														
1. Geography	4.36	.74	(.74)											
2. Advancement	3.89	.84	.34**	(.90)										
3. Education	3.89	.87	.35**	.80**	(.86)									
4. Rewards	3.42	1.03	.18**	.64**	.57**	(.87)								
5. Interpersonal relationship	3.30	.98	.15**	.43**	.38**	.54**	(.72)							
Symbolic images														
6. Sincerity	3.70	.96	.35**	.65**	.62**	.60**	.42**	(.95)						
7. Cheerfulness	3.75	.89	.30**	.67**	.63**	.58**	.45**	.83**	(.91)					
8. Excitement	3.59	.93	.22**	.64**	.62**	.60**	.49**	.80**	.85**	(.92)				
9. Competence	3.78	.83	.33**	.69**	.66**	.62**	.46**	.79**	.81**	.84**	(.87)			
10. Prestige	3.64	.93	.30**	.64**	.61**	.61**	.49**	.73**	.74**	.78**	.85**	(.94)		
11. Ruggedness	3.60	.97	.27**	.60**	.57**	.60**	.42**	.76**	.74**	.79**	.78**	.78**	(.97)	
Dependent variable														
12. Attractiveness	3.90	.84	.36**	.67**	.62**	.57**	.41**	.71**	.73**	.71**	.77**	.73**	.68**	(.93)

** Correlation is significant at the 0.01 level (2-tailed).

Note. Internal consistencies are on the diagonal. Rating scale is ranging from 1 = strongly disagree to 5 = strongly agree.

Table 2 shows the means, standard deviations, correlations and internal consistencies of each variable in the total sample. Basically, in line with the instrumental-symbolic framework, all independent variables are significantly correlated with the public hospital's attractiveness

as an employer, ranging from .36 ($p < .01$) to .77 ($p < .01$), which indicates that the data was statistically correlated with dependent variable and suitable for examination through the subsequent analyses, such as multiple linear regression analysis. Meanwhile, the average correlation between instrumental attributes and symbolic attributes is .58, ranging from .15 ($p < .01$) to .85 ($p < .01$).

4.2. Test of Hypotheses

The first two hypotheses aim to figure out the differences between potential applicants and doctors, regarding to the ratings of attributes related with attractiveness as an employer. Table 3 presents the means and standard deviations of each relevant variable broken down by samples. Hypotheses 1 stated that potential applicants will have more favorable perceptions of instrumental dimension than employed doctors in public hospital. To test the hypotheses, I conducted a t -test for study attributes between two samples. The results showed that there were significant ($p < .01$) differences between potential applicants and public hospital doctors for all attributes categorizing under instrumental dimension. Most of the means of potential applicants were significantly higher than those of current employees, including attributes such as the opportunity of advancement, the opportunity of training/education, rewards and interpersonal relationship. However, one exception, the variable of geography preference, resulted in exact opposite outcome ($t = -2.65$, see Table 3). Therefore, according to the results, we can partially accept the hypothesis 1. Further, I conducted an effect size measure (Cohen's d , see the last column of Table 3) which expresses the mean difference between two groups. The largest difference appeared in the attribute of interpersonal relationship which Cohen's d ($= .89$) value suggested a large effect size of difference.

Hypothesis 2 dealt with the differences of the ratings of symbolic attributes between potential applicants and employed doctors. Similarly, I continued using t -test to measure this hypothesis. The results (see Table 3) showed that there were significant ($p < .001$) differences of all symbolic attributes across two groups of respondents and the means of potential

applicants were significantly higher than current employees. Moreover, as presented in Table 3, Cohen's *d* values, which indicated the magnitude of the difference, suggested a medium to large effect size for all symbolic variables. These results supported hypothesis 2 that potential applicants had more favorable perceptions than employed doctors about a public hospital's symbolic attributes as an employer.

Table 3 – Means and Standards deviation of variables broken down by samples

	Potential applicant sample (N = 211)		Current employee sample (N = 200)		<i>t</i>	<i>d</i>
	M	SD	M	SD		
Instrumental images						
1. Geography preference	4.27	.79	4.46	.68	-2.65**	-.26
2. Advancement	4.11	.78	3.66	.84	5.65***	.56
3. Training/Education	4.08	.82	3.70	.88	4.44***	.44
4. Rewards	3.72	.94	3.09	1.02	6.53***	.65
5. Interpersonal relationship	3.69	.83	2.90	.97	8.84***	.89
Symbolic images						
6. Sincerity	3.93	.89	3.45	.98	5.25***	.53
7. Cheerfulness	3.97	.89	3.51	.90	5.41***	.54
8. Excitement	3.86	.81	3.31	.96	6.19***	.61
9. Competence	4.01	.78	3.53	.81	6.02***	.60
10. Prestige	3.93	.83	3.33	.93	6.86***	.68
11. Ruggedness	3.86	.87	3.33	1.00	5.72***	.58
Dependent variable						
12. Attractiveness	4.12	.74	3.66	.88	5.62***	.57

* $p < .05$; ** $p < .01$; *** $p < .001$

Hypothesis 3 posited that perceptions of instrumental attributes will explain more variance in the public hospital's perceived attractiveness as an employer among employees as compared to potential applicants. To test the hypothesis, first I conducted a regression analysis for each sample which all five instrumental attributes were entered simultaneously. The results are shown in Table 4. In potential applicants' sample, instrumental attributes explained 49% of the variance of attractiveness ($F_{(5, 205)} = 38.72, p < .001$). Meanwhile, these attributes explained 52% of the variance in doctors' sample ($F_{(5, 194)} = 41.16, p < .001$). Next in order to test whether there is significant difference in explained variances across groups, I followed

the formulas and computed confidence interval (CI) for differences between independent R^2 s, outlined in Cohen, Cohen, West, and Aiken (2002, p. 88). The result showed that the approximate 95% CI for the hypothesis significance test = $.029 \pm .134$, from $-.105$ to $.163$. Since the 95% CI included zero, the difference in R^2 s between the potential applicant sample and current employee sample was not significant at the $\alpha = .05$ level. Therefore, although instrumental attributes were important predictors in both samples, the results lend no support to hypothesis 3.

Table 4 – Regression of the attractiveness as an employer on instrumental images broken down by samples

	Potential Applicant sample (N = 211)	Current employee sample (N = 200)
	B	B
Geography preference	.29***	.15*
Advancement	.28**	.32**
Training/Education	.10	.19*
Rewards	.11*	.23***
Interpersonal relationship	-.02	.04
F	38.72***	41.16***
R^2	.49	.52
Adjusted R^2	.47	.50

Note: B represents unstandardized coefficients.

* $p < .05$; ** $p < .01$; *** $p < .001$

Hypothesis 4 stated that comparing to potential applicants, perceptions of symbolic attributes will explain more variance in the public hospital's perceived attractiveness as an employer among employed doctors. Table 5 presented the results of the regression analysis for two samples which the six symbolic attributes were entered simultaneously. The results showed that symbolic attributes could explain 57% of the variance of employer attractiveness among potential applicants ($F_{(6, 204)} = 44.88, p < .001$), while 67% of the variance among

current employees ($F_{(6, 193)} = 65.35, p < .001$). Also, the formulas presented by Cohen et al. (2002, p. 88) were still used to test the difference in explained variances. The approximate 95% CI for the nil hypothesis significance test = $.101 \pm .113$, from $-.010$ to $.212$. Since the 95% CI included zero, the difference in R^2 s between the potential applicant sample and current employee sample was not significant at the $\alpha = .05$ level. On the other hand, I again computed a 90% CI for the nil hypotheses significance test. The results showed that the confidence interval did not contain zero for the difference in R^2 s between two samples ($\Delta R^2 = .101 \pm .093$, from $.008$ to $.194$, $\alpha = .10$ level). The lower limit value in two CI outcomes was both very close to zero. Consequently, although the results of regression analysis indicated that symbolic attributes could explain substantial amount of variance in public hospital's attractiveness as a good place to work in both two samples, based on the statistical evidence we could only believe that the difference between two R^2 s were marginal significant at the $\alpha = 0.10$ level, lending marginal verification to hypothesis 4.

Table 5 – Regression of the attractiveness as an employer on symbolic images broken down by samples

	Potential Applicant sample (N = 211)	Current employee sample (N = 200)
	B	B
Sincerity	.03	.16*
Cheerfulness	.11	.32**
Excitement	.09	-.15
Competence	.27*	.31**
Prestige	.24**	.14
Ruggedness	.01	.10
F	44.88***	65.35***
R^2	.57	.67
Adjusted R^2	.56	.66

Note: B represents unstandardized coefficients.

* $p < .05$; ** $p < .01$; *** $p < .001$

Furthermore, looking into the instrumental dimension presented in Table 4, the specific variables “Geography preference” ($B = .29, p < .001$), “Advancement” ($B = .28, p < .01$) and “Rewards” ($B = .11, p < .05$) were significant predictors of organizational attractiveness as an employer in potential applicant sample. In current employee sample, in addition to these three variables (Geography preference variable, $B = .15, p < .05$; Advancement variable, $B = .32, p < .01$ and Rewards variable, $B = .23, p < .001$), “Training/Education” ($B = .19, p < .05$) also performed significantly among employed doctors. In Table 5, the results indicated that “Competence” (in potential applicant sample, $B = .27, p < .05$; in current employee sample, $B = .31, p < .01$) was the only consistent significant symbolic variable that predicted the attractive employer in both samples. Besides, “Prestige” ($B = .24, p < .01$) emerged as another significant predictor in potential applicant sample, and in current employee sample, “Sincerity” ($B = .16, p < .05$) and “Cheerfulness” ($B = .32, p < .01$) significantly predicted the public hospital’s attractiveness as an employer as well.

Last but not the least, to test hypotheses 5a and 5b, in line with the previous research (Lievens, 2007; Lievens and Highhouse, 2003), I also conducted a hierarchical multiple regression analysis among potential applicant sample and current employee sample separately. It was performed to analysis the ability of symbolic attributes to predict the level of public hospital’s attractiveness as an employer when instrumental attributes were controlled. Before then, it was ensured that no violation of the assumptions of normality, linearity, and homoscedasticity appeared. In the first step, five instrumental predictors were entered as the first block. As shown in Table 4, instrumental attributes made a significant contribution in explaining the organizational attractiveness as an employer. After entry of six symbolic predictors at the next step, the total variance explained by the instrumental and symbolic attributes as a whole increased in both samples. Particularly, the introduction of symbolic predictors explained additional 13% of variance in employer attractiveness in potential applicant sample, after controlling the instrumental predictors ($F_{(11, 199)} = 29.00, p < .001$). Meanwhile in current employee sample, symbolic predictors explained 18% of incremental variance ($F_{(11, 188)} = 39.14, p < .001$). These results are consistent with hypothesis 5a and 5b

that symbolic attributes have incremental value over and above instrumental attributes in explaining public hospital's perceived attractiveness as an employer in both samples.

5. Discussion

To date, the topic of employer branding has received lots of attention in the human resource literature over decades (Backhaus and Tikoo, 2004; Theurer et al., 2016), however the empirical researches which concerned employer branding assumptions and effectiveness in non-Western countries and healthcare sector are still deficient. Standing on the shoulder of previous researches, this study was designed to extend the generalizability of instrumental-symbolic framework for studying employer brand in different country and industry. Meanwhile, recognizing the importance of including different groups of individuals that are relevant to organization in recruiting and retaining process, this study was also designed to examine the difference of expressions among relative stakeholders by testing how instrumental and symbolic attributes about an organization predicted organizational attractiveness as an employer between potential applicants and current employed doctors.

5.1.Theoretical contribution in employer branding

First of all, this study confirms the availability of the instrumental-symbolic framework for managing employer brand in public hospitals under Chinese context. In total sample, both instrumental and symbolic attributes were significantly related to organizational attractiveness as an employer, which is consistent with the previous researches in Belgium, the United States and Turkey (Harold and Ployhart, 2008; Lievens and Highhouse, 2003; Van Hoye et al., 2013).

Also this study reveals that in both potential applicant sample and current employed doctor sample, symbolic attributes can explain incremental variance beyond instrumental

attributes in predicting the public hospital's attractiveness as an employer. Previously in the studies conducted in China, most scholars confirmed the usefulness of instrumental factors as determinants of employer image, but held various attitudes towards symbolic meanings that applicants and employees associate with organization (Zhu et al., 2014; Zhu et al., 2016; Zhou et al., 2011). These results contribute to the employer branding theory because they indicate the importance of integrating instrumental and symbolic factors associated with organizations when managing employer image in public hospital. Many job or organizational features which were related to the employer attractiveness could not maximally differentiate from other jobs or organizations within the same sector (Lievens and Highhouse, 2003). Conversely, symbolic attributes could serve as another crucial determinant in predicting organizational attractiveness as an employer, and might subsequently help an organization to be distinct from their competitors. Even though we still cannot lead to final conclusion on this matter, this study extends prior study by highlighting the impact of including symbolic attributes for employer branding management in Chinese public hospital sector.

Second, results show that in both samples, instrumental attributes could explain quite similarly high variance in the public hospital perceived attractiveness. It confirms the consistent important position of instrumental beliefs, but this finding does not mean that there is no difference between two groups of population. More precisely, perceived geography preference, opportunity of advancement and rewards were identified as strong predictors of employer attractiveness among potential applicants. Beyond these three attributes, current employed doctors additionally highly valued the opportunity of training or education. Furthermore, the results showed that interpersonal relationship, which often treated as a social resource in Chinese, did not predict hospital attractiveness as an important determinant in both groups. This is surprising since China remains a hierarchical, relationship-based society, that *guanxi* has been one of the guiding principle in Chinese society, particularly in relation to business conduct (Bian and Ang, 1997; Fan, 2007; Michailova and Worm, 2003). The meaning of *guanxi* is differ from friendships or simple relationships and can be seen as a set of reciprocal interpersonal linkages with implication of a continued exchange of favors (Michailova and Worm, 2003). Previously, the typical personnel relationship were proved to

have positive impact on job channeling and job mobility in China (Bian and Ang, 1997), however our findings implied that this relationship may not have similarly considerable effect on the perceptions of organizational attractiveness in hospitals.

Third, another finding was that symbolic attributes could explain marginally more variance in the public hospital's perceived attractiveness as an employer among current employed doctors compared to potential applicants. The large portion of variance (67%) explained by symbolic attributes among doctors can be understood on the basis of the organizational identification theory. As noted above, individuals will choose activities congruent with salient aspects of their identities and the perceived identification may engender internalization of group values, norms and homogeneity in attitudes and behavior (Ashforth and Mael, 1989). On the other hand, it cannot be denied that potential applicants value symbolic image as well, since symbolic attributes could explain great amount of variance (57%) in this group. Basically, according to job search behavior models, applicants are likely to generate some impressions which are more abstract and essential about the organization at the early stage of recruitment (Trope and Liberman, 2003). However, not all symbolic attributes played an important role during these processes. Specifically, a hospital's competence and prestige were regarded as critical influences on assessing attractiveness in potential applicant sample. While attractiveness perceived by doctors were considered to be mostly influenced by sincerity, cheerfulness and competence. Unlike doctors will pay more attention to the attributes which are related to self-meaning, potential applicants will be attracted to the meanings which may bring functional benefits. It may lie in the fact that in developing country such as China, job seekers, to a great extent, will be influenced by the materialistic values in employment decision making process (Inglehart, 1997).

Last but not least, potential applicants have consistently more favorable perceptions about an organization instrumental and symbolic attributes than current employees, except the variable of geography preference. The results indicate an important difference which exists between the public hospitals' employer image perceived by potential applicants and the identity perceived by doctors, because it can partially explain the attrition that appears among

new employees after entering into the organization. The observable difference in this study implies the fact that doctors might more or less emerged discrepancy on the initial psychological contract after entering into the hospital. Backhaus and Tikoo (2004) proposed that if an organization reneged on its employer beliefs or obligations, employees were more probably to interrupt the employment and leave the organization. They further underlined the accuracy perceptions, well-balanced messages and complete picture of organizational culture that portrayed in the employer brand could reduce employee perceived violations of the psychological contract and subsequently reduce turnover and intentions to quit. However, since this study is not a longitudinal research and consists of cross-sectional self-reports, it would be reckless to draw a final conclusion instantly and future researches are needed for confirmation.

5.2. Practical contribution

Employer branding is not only a concept valued by human resource scholars but also managers. With respect to practical implications, firstly, this study demonstrate that the instrumental- symbolic framework can be applied to evaluate organization attractiveness as an employer and help managers strategically auditing employer image in public hospitals under Chinese context. To establish a more coordinated employer branding strategy, human resource practitioners are recommended to include both instrumental and symbolic attributes that people associate with the organization, and especially should pay more attention to symbolic meanings which are used to be unvalued seriously among managers. Usually the organizational image of a hospital, which intends to be advertised in target population, will more concentrate on job and organization characteristics (Herzberg, 1966; Trybou et al., 2014). However, due to the similarity of job and organization characteristics, if the hospital wants to be distinctive from their competitors in the same sector, a better strategy is to focus on its symbolic attributes as an employer (Lievens and Highhouse, 2003). For example, based on the current results, providing a competence and prestige image to medical students during recruiting process could increase the hospital's attractiveness as an employer.

Also, human resource practitioners should develop specific image audit for different target groups. On one hand, the applicant group is always the focus of the attention in the field. The current findings suggested that students tended to consider more about geography preference. It could be understood by the fact that potential applicants who have not decided where to start the new development stage of their life will consider geographical factor more seriously. Regarding hospital symbolic image, students were more attracted by the attributes which may contain more or less instrumental meanings (i.e. competence, prestige).

On the other hand, it is noteworthy that the insider views of the organization held by employees are another important component of what make an organization attractive as an employer. For instance, in this study, current employed doctors in the hospital were more attracted by the symbolic image which is related with self-meaning (i.e. sincerity, cheerfulness) and the instrumental attributes which can be managed through human resources measures (i.e. training/education, rewards), as compared to potential applicants. Base on the job characteristic of doctors (Rudland and Mires, 2005), they are deeply concerned about the possibility of improving their competency and professional skills, which is different from those final year students who are about to finish their education and still lacking of the knowledge of human resource measures. Nevertheless, the results of data were found that both of the samples care about the opportunity for self-development (i.e. advancement). It implicates that Chinese medical students and doctors will pay considerable attention to the chance of enhancing their employability. Ultimately, by integrating perceptions from different populations, organization can formulate and promote a more comprehensive value proposition to employees and applicants.

Moreover, the results further indicated that current employed doctors may not have as high favorability of employer believes as the potential applicants, which provide practitioners with advice concerning the accuracy of employer image transmitted to applicants. As suggested, managers should develop an image which is closely corresponding to the reality of the organization. Employees will have lower intention to quit, if they received more accurate

information, well-balanced messages and complete picture of organizational culture during their recruiting process (Backhaus and Tikoo, 2004).

5.3.Limitations and Directions for future research

A number of limitations should be acknowledged. First, since the survey was conducted in China which is known as a country with a huge population, even though we finally got more than 200 respondents in each sample, the sample size used in this study may still insufficient for representing such a populous nation. To further analyzing the generalisability of the instrumental- symbolic framework for managing employer image under Chinese context, we suggest that researchers are better to establish a larger sample size and contain more investigated hospitals in future studies. Also, the hospital and medical universities we surveyed in the current study were situated in a more developed and urbanized region of China (Guangdong Province). It will be an inspiring direction of future research on measuring employer image in undeveloped or rural areas, since evidences in previous researches revealed that the challenges of talent management will only be more pronounced in those regions (Sheikh, Josyula, Zhang, Bigdeli & Ahmed, 2017).

Second, in this study, the target populations were basically divided into two groups. If we want to receive more specific instrumental and symbolic perceptions perceived by relevant stakeholders, it will be interesting to apply a future research with more samples based on different phases moving through the recruitment, selection and retention process. Besides, while analyzing the data we collected, we noticed that there are several career paths for doctors (i.e. surgery, internal medicine, public health, administrative medicine, and laboratory medicine), which implied the possible variance in perceived attributes within doctor population. Future studies focusing on doctors in different functions may give researchers new insights into how organization characteristics or symbolic meanings can affect employer attractiveness externally and internally.

Third, the results in the current study are collected by self-reported measure at one single moment which may lead to common- method bias, and a longitudinal research is advised for analyzing the difference appeared in multiple time waves. Furthermore, we need to be cautious about the utility of the theoretical mechanisms, such as aforementioned social identity theory, P-O fit and P-J fit theory, which are used to frame or justify hypotheses. As indicated by Lievens and Slaughter (2016), some of the actual mediators are typically not tested directly. To better carry out researches in this field, it will be a long term demand for direct tests of those theoretical mechanisms. In addition, one limitation is consistent with previous researches as well (Lievens, 2007; Van Hove et al., 2013), that our approach was only designed to examine employer image as a precursor of organization attractiveness as an employer. Lievens (2007) pointed out the possibility that individuals who are attracted to an organization will also rate the variables as high even if they do not receive enough information and message of the employer. Thus, future study is required to fill the research gap on this reverse causality problem.

6. Conclusion

In an environment of war for talent, organizations are facing the challenges of attracting and retaining the best possible talent, so does public hospitals in China. Employer branding, which considered as one of the effective approaches for responding to these challenges, becomes increasingly competitive, however empirical studies measuring its assumptions and effectiveness under Chinese context are scarce. Our study demonstrated that instrumental - symbolic framework, which initially borrowed from marketing literature by Lievens (2003), can yield important insights to enhance organizational image as an employer in Chinese public hospitals. Results showed that perceptions of instrumental and symbolic attributes could explain substantial variance of the public hospitals' employment attractiveness among two samples, namely final-year students in medical university and current employed doctors

in public hospital. More specifically, when controlling the instrumental attributes, symbolic attributes could serve as a strategic predictor for explaining additional variance. Also understanding the different expressions toward instrumental characteristics and symbolic traits between various target populations enable the manager to channel the recruitment and retention activities into a more coordinated human resource strategy. At last, we also objectively pointed out the limitation of the current study and sincerely called for future research for filling the remaining gaps to this field.

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Appendix I - Overview of items measuring study variables

Geography preference

- The location of the hospital is convenient.
- The hospital is located in a more preferred city of mine.

Advancement

- The hospital offers development opportunity in professional skills or professional title.
- The hospital offers possibility for higher position.
- The hospital offers possibility to build a future career path.

Training/Education

- Working in this hospital has further study and practice opportunities.
- The hospital offers exchange opportunities with other hospitals.

Rewards

- The hospital offers higher wages and incentives.
- The hospital provides benefit of your child's education.
- The hospital helps me to solve the accommodation problem.

Interpersonal relationship

- Your friends or family members live in the same area
- Your friends, schoolfellows or supervisor also work in this hospital
- The hospital is close to/in my hometown.

Sincerity

- Honest
- Sincere
- Down-to-earth

Cheerfulness

- Cheerful
- Friendly
- Original

Excitement

- Daring
- Exciting
- Spirited

Competence

- Intelligence
- Technical
- Successful

Prestige

- High status
- Highly regarded
- Well-respected

Ruggedness

- Tough
- Rugged
- Masculine

The public hospital's attractiveness as an employer

- For me, this hospital is a good place to work.
- This hospital is attractive to me as a place for employment.
- A job in this hospital is very appealing to me.

Appendix II - Questionnaires

(A) The questionnaire for current employed doctors

This questionnaire focuses on the topic of employer brand attractiveness in public hospital. Confidentiality is assured. It will take approximately 10 minutes of your time. Please answer all questions, because only that way you will contribute to the success of this research. Thank you very much!

I. Personal information

1. Gender: Male \ Female
2. Age: _____
3. Working age: _____year(s)
4. Seniority: _____year(s)
5. Educational level: _____
6. Function: _____
7. Are you a supervisor: Yes \ NO

II. Organizational characteristics

The following questions seek to assess the hospital you now work in from a more objective, concrete and factual perspective, namely organization instrumental characteristics. Please rate the extent to which could describe your agreement or disagreement. Using the scale 1 to 5:

1 – Strongly disagree; 2 – Disagree; 3 – Neither agree nor disagree;

4 – Agree; 5 – Strongly agree

8. The location of the hospital is convenient.	1	2	3	4	5
9. The hospital is located in a more preferred city of mine.	1	2	3	4	5

10. The hospital is close to/ in my hometown.	1	2	3	4	5
11. The hospital offers personal development opportunity in professional skills or professional title.	1	2	3	4	5
12. The hospital offers possibility for higher position.	1	2	3	4	5
13. The hospital offers possibility to build a future career path.	1	2	3	4	5
14. Working in this hospital has further study and practice opportunities.	1	2	3	4	5
15. The hospital offers exchange opportunities with other hospitals.	1	2	3	4	5
16. The hospital offers opportunity to have advanced study or exchange abroad.	1	2	3	4	5
17. The hospital offers higher wages and incentives.	1	2	3	4	5
18. The hospital provides benefit for child's education.	1	2	3	4	5
19. The hospital helps solving the accommodation problem.	1	2	3	4	5
20. Your friends or family member live in the same area	1	2	3	4	5
21. Your friends, schoolfellows or supervisor also work in this hospital	1	2	3	4	5

III. Organizational trait inferences

The following questions seek to examine your working hospital by subjective, abstract, and intangible attributes, namely from the perspective of organizational trait inferences. Please rate the extent to which could describe your agreement or disagreement. Using the scale 1 to 5:

1 – Strongly disagree; 2 – Disagree; 3 – Neither agree nor disagree;

4 – Agree; 5 – Strongly agree

22. The hospital is honest as being an employer.	1	2	3	4	5
23. The hospital is sincere as being an employer.	1	2	3	4	5
24. The hospital is down-to-earth as being an employer.	1	2	3	4	5
25. Working in this hospital is cheerful.	1	2	3	4	5
26. Working in this hospital is friendly.	1	2	3	4	5

27. Working in this hospital is original.	1	2	3	4	5
28. Working in this hospital is daring.	1	2	3	4	5
29. Working in this hospital is exciting.	1	2	3	4	5
30. Working in this hospital is spirited.	1	2	3	4	5
31. I feel that the hospital is intelligence.	1	2	3	4	5
32. I feel that the hospital is technical.	1	2	3	4	5
33. I feel that the hospital is successful.	1	2	3	4	5
34. The hospital is considered to be high status.	1	2	3	4	5
35. The hospital is considered to be highly regarded.	1	2	3	4	5
36. The hospital is considered to be well-respected.	1	2	3	4	5
37. The hospital is tough as being an employer.	1	2	3	4	5
38. The hospital is rugged as being an employer.	1	2	3	4	5
39. The hospital is masculine as being an employer.	1	2	3	4	5

IV. Organizational attractiveness

The following questions seek to assess the organizational attractiveness as an employer of your working hospital. For each item, please rate the extent to which could describe your agreement or disagreement. Using the scale 1 to 5:

1 – Strongly disagree; 2 – Disagree; 3 – Neither agree nor disagree;

4 – Agree; 5 – Strongly agree

40. For me, this hospital is a good place to work.	1	2	3	4	5
41. This hospital is attractive to me as a place for employment.	1	2	3	4	5
42. A job in this hospital is very appealing to me.	1	2	3	4	5

*** Thank you very much for you cooperation ! ***

(B) The questionnaire for potential applicants

This questionnaire focuses on the topic of employer brand attractiveness in public hospital. Confidentiality is assured. It will take approximately 10 minutes of your time. Please answer all questions, because only that way you will contribute to the success of this research. Thank you very much!

I. Personal information

1. Gender: Male \ Female
2. Age: _____
3. Educational level: _____
4. Please name a public hospital you may apply for in the future:

5. Your favorable future function: _____

II. Organizational characteristics

The following questions seek to assess your favorable hospital, which you have mentioned in the question 4, from a more objective, concrete and factual perspective, namely organization instrumental characteristics. Please rate the extent to which could describe your agreement or disagreement. Using the scale 1 to 5:

**1 – Strongly disagree; 2 – Disagree; 3 – Neither agree nor disagree;
4 – Agree; 5 – Strongly agree**

6. The location of the hospital is convenient.	1	2	3	4	5
7. The hospital is located in a more preferred city of mine.	1	2	3	4	5
8. The hospital is close to/in my hometown.	1	2	3	4	5
9. The hospital offers personal development opportunity in professional skills or professional title.	1	2	3	4	5

10. The hospital offers possibility for higher position.	1	2	3	4	5
11. The hospital offers possibility to build a future career path.	1	2	3	4	5
12. Working in this hospital has further study and practice opportunities.	1	2	3	4	5
13. The hospital offers exchange opportunities with other hospitals.	1	2	3	4	5
14. The hospital offers opportunity to have advanced study or exchange abroad.	1	2	3	4	5
15. The hospital offers higher wages and incentives.	1	2	3	4	5
16. The hospital provides benefit for child's education.	1	2	3	4	5
17. The hospital helps solving the accommodation problem.	1	2	3	4	5
18. Your friends or family member live in the same area	1	2	3	4	5
19. Your friends, schoolfellows or supervisor also work in this hospital	1	2	3	4	5

III. Organizational trait inferences

The following questions seek to examine your favorable hospital by subjective, abstract, and intangible attributes, namely from the perspective of organizational trait inferences. Please rate the extent to which could describe your agreement or disagreement. Using the scale 1 to 5:

**1 – Strongly disagree; 2 – Disagree; 3 – Neither agree nor disagree;
4 – Agree; 5 – Strongly agree**

20. The hospital is honest as being an employer.	1	2	3	4	5
21. The hospital is sincere as being an employer.	1	2	3	4	5
22. The hospital is down-to-earth as being an employer.	1	2	3	4	5
23. Working in this hospital will be cheerful.	1	2	3	4	5
24. Working in this hospital will be friendly.	1	2	3	4	5
25. Working in this hospital will be original.	1	2	3	4	5
26. Working in this hospital will be daring.	1	2	3	4	5
27. Working in this hospital will be exciting.	1	2	3	4	5
28. Working in this hospital will be spirited.	1	2	3	4	5

29. I feel that the hospital is intelligence.	1	2	3	4	5
30. I feel that the hospital is technical.	1	2	3	4	5
31. I feel that the hospital is successful.	1	2	3	4	5
32. The hospital is considered to be high status.	1	2	3	4	5
33. The hospital is considered to be highly regarded.	1	2	3	4	5
34. The hospital is considered to be well-respected.	1	2	3	4	5
35. The hospital is tough as being an employer.	1	2	3	4	5
36. The hospital is rugged as being an employer.	1	2	3	4	5
37. The hospital is masculine as being an employer.	1	2	3	4	5

IV. Organizational attractiveness

The following questions seek to assess the organizational attractiveness as an employer of the hospital you named in question 4. For each item, please rate the extent to which could describe your agreement or disagreement. Using the scale 1 to 5:

**1 – Strongly disagree; 2 – Disagree; 3 – Neither agree nor disagree;
4 – Agree; 5 – Strongly agree**

38. For me, this hospital will be a good place to work.	1	2	3	4	5
39. This hospital is attractive to me as a place for future employment.	1	2	3	4	5
40. A job in this hospital is very appealing to me.	1	2	3	4	5

*** Thank you very much for you cooperation ! ***