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DURATION	:	2 HOURS
INSTRUCTION	:	ANSWER **ALL** QUESTIONS

THIS QUESTION PAPER CONSISTS OF **TWELVE (12)** PAGES

Q1 (a) Identify the differences between
   (i) journal,
   (ii) proceeding and
   (iii) research article.

(10 marks)

(b) Explain the importance of the following sections in a journal or proceeding.
   (i) abstract,
   (ii) literature review,
   (iii) methodology,
   (iv) results and
   (v) conclusions.

(10 marks)

(c) Distinguish between indexed journal and jounal with impact factor (JIF).

(5 marks)

Q2 The article in **Appendix 1** with title "THE APPLICATION OF BIG DATA IN HIGHER VOCATIONAL EDUCATION BASED ON HOLLAND VOCATIONAL INTEREST THEORY" discussed about the application of big data in education. Based on this article, answer the following questions.

(a) Criticize the role of big data in education as stated in the article.

(10 marks)

(b) Distinguish about interests, professional interest and occupation interest.

(6 marks)

(c) Summarize the big data process using Apache's Hadoop open source in this article by using not more than 50 words.

(9 marks)

Q3 (a) Explain **TWO (2)** main functions of the Department of Statistics Malaysia (DOSM).

(6 marks)

(b) Based on the information from the DOSM's slides, state **SIX (6)** the stake holders and **SIX (6)** international partners of DOSM.

(12 marks)

(c) The manufacturing sector is one of the most important industries in Malaysia. DOSM plays an important role to provide statistical data on the latest trends in the manufacturing sector specifically on
(i) sales value,
(ii) number of employees,
(iii) salaries and wages,
(iv) as well as the main products that are made in order to assist consumers in policy formulation and decision-making.
Determine the importance of these data (i   iv).

(7 marks)

Q4 (a) The article in **Appendix 2** with title "AN EMPIRICAL RESEARCH ON BRAND IDENTITY IMPRESSION OF CUSTOMER TO SATISFACTION DEGREE - BASED ON A SURVEY OF KFC'S CONSUMPTION OF NANCHANG CITY" discussed about the brand identity impression and customers satisfaction. Based on this article, answer the following questions.

(i) Define the importance of this survey.

(2 marks)

(ii) Outline the survey procedures conducted by the authors.

(5 marks)

(iii) Explain how the authors analyzed their questionnaire for reliability and validity.

(4 marks)

(iv) Discuss the function of structural equation model (SEM) applied in this paper.

(4 marks)

(v) Does this study really give benefits to other enterprises who want to establish their brands valuable information? Explain by using your own words.

(10 marks)

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- END OF QUESTIONS –

FINAL EXAMINATION

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APPENDIX

1. Appendix 1: THE APPLICATION OF BIG DATA IN HIGHER VOCATIONAL EDUCATION BASED ON HOLLAND VOCATIONAL INTEREST THEORY.
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2. Appendix 2: AN EMPIRICAL RESEARCH ON BRAND IDENTITY IMPRESSION OF CUSTOMER TO SATISFACTION DEGREE - BASED ON A SURVEY OF KFC'S CONSUMPTION OF NANCHANG CITY
   Page: 9 – 12.

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The application of big data in higher vocational education based on Holland vocational interest theory

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Abstract—Students want to find major or profession that they are really interested in. However, most of them do not know how to make the decision. The VPI and SDS scales, which have been widely applied basing on Hollander's vocational interest theory, can help students to find the interest. However, the self-report scale has its own limitations. By means of constructing integration platform and standard database, we gain student behavior data in daily educational activities. Digging out the valuable part in these data and find the intrinsic link between the students' behavior, we can build students' growth behavior model, and predict the future development trend, which provides scientific guidance for school education. In this case, we can promote the construction of a more reasonable management system and more personalized curriculum system.

Keywords-Big Data; Vocational Interest; Career Type; Data Application; Professional Career

I. INTRODUCTION

In the face of an employment, everyone generally shows a certain tendency. Choosing career is a process of development rather than a choice. The employment guidance for university student is an activity basing on student's personal characteristics and social needs with the purpose of helping student to plan skills on career development, form occupation ability, make appropriate choice of occupation and promote student's personal and social development. It is of great significance for promoting the sustainable development of higher education and social stability and development.

In the early 1950s, many western psychological and sociological studies began to explore the problems of professional behavior and career development, which give the original career counseling theory a new meaning. On this basis, Huber proposed the career development theory. Moreover, Hollander began to study the occupation personality in 1950, putting forward the personality and environment typology theory. In 1959, Hollander proposed the theory of occupation choice for the first time: People always choose the best matching occupations to their personality. He classified complex occupations into several ordinary types, in which people can find the suitable types for themselves. Since 1970s, there are more than 500 reports in support of Hollander's theory. The main research directions are as follows: (1) through the internal structure of Hollander occupation interest test of occupation interest (Ahadi, 1991; Campbell & Holland, 1972; Hansen & Johansson, 1972; Prediger, 1982; Rounds, Davision & Dawid 1979), based on the theoretical model, and the establishment of a new scale (Hanson & Prediger, 1977; Prediger & Mau, 1993). (2) Through testing the different characteristics of people in the United States (such as gender, age and education), finding the common parts on Hollander's interest model. Moreover, evaluate its internal structure (Conneran & Hartman, 1993; Hanson, 1987; Loken & Taylor, 1986; Prediger & Hanson, 1976; Tracey & Rounds, 1996 Trusty & Ray, 2000). (3) to study the relationship between Hollander and other occupation interest theory and the personality theory (Blake & Sacket, 1999; Boyd & Cramer, 1995; De-Fruyt, 1997, Fuller & Holland, 1999; Holland& Gottfredson, 1993; Schuerger, 1995; Strack, 1994; Swanson, 1995; Tokar & Vaux, 1995). (4) Studying the cross-cultural applicability of Hollander's Theory (Hood, 1995; Arbona; 1989; Meyer; 1981; Farh & Law; 1998; Holland & Asama, 1994)[1,2,3].

The positive impacts of information technology on education have been widely recognized. It is a strategic choice to promoting the modernization of education with informatization. In the age of big data, it is a meaningful thing to re-explore career education. The employment guidance has changed from the administrative service type in the past to the teaching work with educational function now. From static planning to dynamic planning, from employment to the sustainable development of the occupation, from "big" to "useful, applicable and practical", from teaching to re-explore and experience multiple teaching method, is the inevitable trend of occupation planning education for college students [3].

II. THE APPLICATION OF BIG DATA IN HIGHER EDUCATION

A. Big Data

With the spread of the concept of big data and its gradual deepening of applications, the connotation of big data is constantly changing and expanding. Big data is an ability more than just a technology. We can find meaningful relevance and change law more than predict

the development trend of things from the mass of data. Big data is a way of thinking, that is, to make data become the basic starting point of human thinking and behavior decision[4].There are many useful associations between knowledge (information) [5,6].

B. Education big data

The application of the big data concept is the decision-making mechanism of data driven, which must base on massive educational data and the corresponding data processing platform.And finally, depth data mining may realize the powerful support to the educational measure.

Educational big data is a subset of big data. It is a collection of data created in daily educational activity or as required, which can create enormous potential value for educational development.There are four major educational data sources: (1)The process of teaching activities directly generate data, such as classroom teaching, examination and network interaction. (2) Data collected in the educational management activities, such as student's family information, medical information and equipment information.(3) Data collected in college scientific research, such as paper publication , operation of research equipment, procurement of scientific materials.(4)Data generated in campus life, such as campus consumption, internet access, data acquisition. Compared to traditional educational data, the collection of big data is more real-time, coherent, comprehensive and natural.The analysis and processing is more complex and diverse. And the application is more extensive and in-depth. However, big educational data needs to be filtered and arranged to prepare for later deeply excavation and analysis [1,4].

C. The application of big data in Higher Education

The application of big data in higher educational management has become more and more extensive, including asset management, information management, teaching management, student affairs management and so on [7,8,9]. By the means of building integrated platform and normalized database, we can find the law of student' s growth and development process. In this way, more scientific guidance for school education can be given, which can promote the construction of reasonable management system and personalized curriculum system [10].

III. HOLLAND VOCATIONAL INTEREST THEORY

A. Holland vocational interest theory

Interests refers to the individual psychological tendency to the living environment and the people, things, as well as learning, occupation and other activities in it. It concerns individual cognition and the interaction between individual and environment.

Interest is called professional interest when it focuses on career and related activities. Occupation interest plays an important role in the occupation activity. When occupation types match the personal characteristics of occupation interests, the correct occupation selection can help people to plan their career, inspire the desire of exploration and creation, and enhance the adaptability and stability of human occupation. Therefore, it is the premise and foundation of the career guidance to help the career seeker to recognize his professional interest. The particularity of vocational interest in career guidance determines that the study of vocational interest begins with the development of career guidance [11]

A particular type of occupation usually attracts people with the same personality traits (personality). When the traits reflect in the profession, it is professional interests. Hollander (Holland) believes that the occupation interest is the reflection of personality. Personality is a complex of interest, values, needs, beliefs, attitudes and learning skills. To the occupation choice, interest is the most important factor in the matching process of individual and occupation. In Hollander's career decision book, he described six occupations corresponding six types of personality: Social, Enterprising, Conventional, Realistic, Investigative and Artistic, which are referred to as RIASEC. He also proposed a hexagonal model to explain the relationship between the six types of occupations as shown in figure 1. In the hexagonal model, the closer distance between two types, the bigger similarity on occupational environment and interest.

Everyone have one or several types of vocational interests. In this model, the social type is characterized by good social relationship, brilliant conversationalist, and positivity about social issues. Typical jobs contain teacher, educational administrator, consultant, public relations personnel. The characteristics of enterprise type are pursuit of authority, material wealth, and competition. Typical occupations are project manager, sales staff, government official, judge, lawyer. Conventional type is characterized by respect for authority and rule, caution, orderliness and conservative. Typical jobs are secretary, clerk, accountant, administrative assistant and librarian. Reality type is characterized by the ability to do practical work. People of this type prefer to finish specific task conventionally by themselves, who may not be good at words, lacking social skills. Typical occupations are technical post such as computer hardware, photographer, mechanical assembler, skilled post such as carpenter, cook, machinist. Research type characterized by abstract

thought, developed mind, profound knowledge. People in this type ordinarily enjoy independent and creative work, who think about a problem accurately and will constantly explore an uncharted territory. Typical occupations are scientific researcher, teacher, engineer, computer programmer, doctor, systems analyst. Art type is characterized by the willingness of creating novel things, individuality and artistic talent. Typical professions are actor, designer, sculptor, musician, singer, composer, conductor, novelist, poet[12].
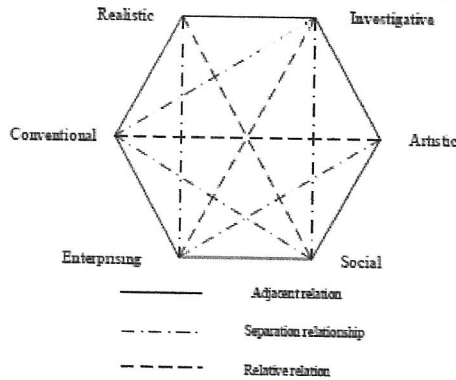

Figure 1.   Holland vocational interest theory

B.   Hollander vocational interest scale

Hollander wants to find two abilities matching each career interest. Based on the occupation interest theory, Hollander had developed the vocational preference inventory(VPI) and the self-directed search (SDS) as tools to check the occupation interests. Liluo Fang, working at Institute of Psychology, make Chinese "Holland" vocational interest scale, referred to as "H-C" vocational interest scale. The combination of interest test and ability test play an important role in the practical operation of career guidance and career counseling. By means of the Hollander career orientation test, the students can find their professional interest and ability, which can help them to make job or professional choice. In practice, it is important to guide students to understand themselves and the professional conditions. Only in this way, students can plan their career scientifically and arrange their own study independently [13,14]. At the same time, it can provide the basis for career counseling and career guidance for teachers by the means of accumulating valuable data and experience for the employment education in Colleges and universities.

IV.   APPLICATION IN VOCATIONAL EDUCATION

The importance of educational data analysis lies in the potential and meaningful information that can reflect objective facts. Educational data analysis, including statistical operations, data mining, forecasting analysis and decision support, has attracted great attention both at home and abroad. In 2012, the US Department of education implemented a $200 million program to apply big data analysis to public education in the United States, which aims to promote teaching and learning through using big data analysis. American Educational Technology Office in October 2012 released a research report and analysis to promote learning "teaching and learning" through the education of American domestic education data mining, data mining and learning analysis research and application are summarized. In May 2014, the University of Electronic Science and Technology of China set up a big data research institute, in which the integration platform, student's portrait system and many other research results have been got [1].

This paper constructs a platform based on Apache's Hadoop open source distributed big data computing architecture. It is used to process the big data of Holland vocational interest theory, as shown in Figure 2. The core module is divided into two parts: Hadoop Distributed File System (HDFS) and Hadoop Parallel Programming Framework (MapReduce). HDFS provides high reliability, high fault tolerance, high throughput and extensible storage solutions for massive data of student behavior and decision results. The MapReduce programming model provides developers with easier parallel programming and more convenient operability. Figure2 shows the overall architecture of the system. It is based on Hadoop open source components, which includes basic data, models of student growth behavior based on Holland vocational interest theory and system interface.

Data layer: It supplies basic data supporting for the entire system. The layer mainly stores mass data of student behavior data including teaching, education management, scientific research, campus life and so on. Also, the results of model-learning and feedback information are stored in the distributed database (Hbase).Logic layer: It is the core part of the whole system, which is the value of the data mining. Many classic data mining algorithms are encapsulated in Mahout. MapReduce supplies distributed computing framework to help extract, filter, analyze, process characteristic data of student behavior big data. The model most consistent with students' career planning is stored in the layer. Model is built on Holland vocational interest theory. The data are processed by the model to get the optimal decision result.Presentation layer: This layer provides a visual interface for users. Through the web version, users can entry data, import all kinds of information of students. In addition to input information, user can also edit, view, modify, submit and operate data.The graphical data analysis interface

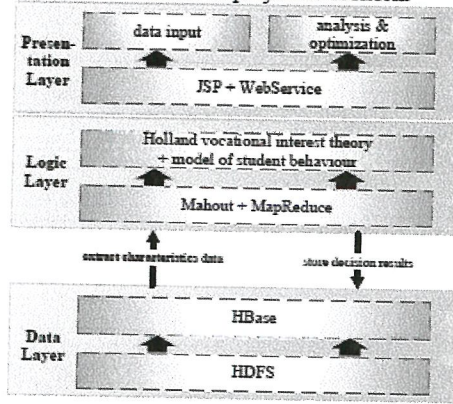can help users make Holland analysis, curriculum optimization and student employment decision.

Figure 2. Technology frame

V. CONCLUSIONS

Whether people can succeed in their careers depends largely on the degree of integration between the individual and the professional environment. The purpose of vocational counseling or vocational guidance is promoting this integration. Most students say they do not know (or are not aware of) their most interested and suitable areas of work. The test results can provide a reference for students, but the self-report scale has limitations that are difficult to overcome. However, the big data can solve this problem effectively. From entrance to graduation of the entire university life cycle, college students leave a large number of data in each information system, including selection, examination, checking-in, payment, internet, consumer behavior, book-borrowing, online learning etc. Scholars like Xianmin Yang put forward an "iceberg model" of educational data, which divides educational data into data that appears on "ice", such as learning information, achievement information, attendance information, payment information. And data under "ice" mainly based on implicit process data, including learning, examination, internet, consumer behavior and the internal relations among various behaviors.

Basing on the Holland vocational interest theory, through extracting and analyzing the practice of students (including the type of activity and the results that are achieved), data acquisition (including library information and internet), learning courses (including courses, elective courses and case), questionnaire (including all kinds of scale questionnaire), occupation planning consultation, family conditions (including family members, family economic conditions), habits (including rest time, daily consumption.) special skills (including certification specialty.), we match the results with Hollander vocational interest scale finally. By selecting the influential factors in the study and life, we match the whereabouts of the students when they leave school and then build a model. It provides a basis for decision-making, arrangement of extra-curricular value-added activities and educational optimization for students. For further development, we can explore the "big data" for more application and improve the construction of university students' information big data platform.

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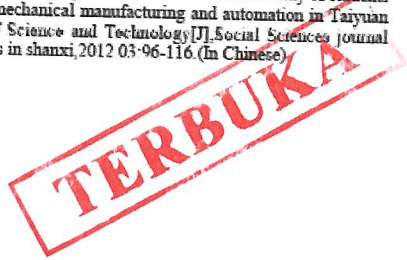
8

AN EMPIRICAL RESEARCH ON BRAND IDENTITY IMPRESSION OF CUSTOMER TO SATISFACTION DEGREE
——Based on a survey of KFC's consumption of Nanchang City

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Abstract—The research on brand identity impression and satisfaction degree of customers is an important issue and academic frontier in the brand research area. In this paper, using first-hand data of KFC and structural equation model (SEM), we have empirical study on the impact of customers' brand identity impression to satisfaction degree. The results show that: advertisements and customers' consume experience to products have a significant positive impact on customer satisfaction degree; however, customers' impressions of the KFC appearance and perception to its products and service have no significant impact on customer satisfaction degree.

Keywords-Brand identity impression; satisfaction degree; structural equation model ; KFC

I. INTRODUCTION

In the past tens of years, brand marking and management is always being the hot topic between managers and the hotspot of academic area. Brands are very important intangible assets for enterprises. So many enterprises do their best to set up famous brands. However, unfortunately, after long time efforts, they fail to found their own excellent brands.

An excellent brand must have clear, vivid and abundant brand identity. Unless it can not bring out its potential and may have a dangerous situation among many undifferentiated products and in price competitions. Brand identity, as one of the four bases of founding famous brand (the other three bases are brand architecture, brand establishment activities and organizations and procedure of brand),reflects what the enterprises hope the brand represent best which are the most substantial, the most distinctive and the most attractive things for the target public (Zhao Guanghua, 2002). Nowadays products tend to become increasingly homogeneous. Brand distinguish is still the major factor for brand sales, grow and profits (Pang Ke, Shu Yangchun, Zhang Mingli, 2000). Now more and more customers' decisions come from experience and multiple impressions toward the brand, other than the awareness of product function. When enterprises set up brands, they should give their existing and potential customers deep feelings and impressions of brands, and create strong brands experience (i.e. brands identity impression).

Simultaneously, in order to gain competitive edge in the market, enterprises should identify their customers and get customers' satisfactions. Generally speaking, the brand image is the basis of market positioning, whose purpose is to give target customers good identification impression. So customers' brand identification impression and satisfaction degree has a certain relationship. However, based on relevant literature retrieval, we find there are only a few theories and exploratory studies on the impact of customers' brand identity impression to satisfaction degree.

The empirical subject of this paper is the internationally renowned brand -- Kentucky Fried Chicken (hereafter, KFC). Our rationale for selecting KFC is that as a mature and successful international brand, KFC is the good exemplary in brand establishment. So the results of this exploratory study may give other enterprises who want to establish famous brands valuable information. This paper using first-hand data about impression of KFC among customers surveys the impact of customers' brand identity impression to satisfaction degree, in order to provide a new perspective and further enrich the existing theory materials about the research between brand identity and customer's satisfaction. At the same time, it will also give references for fast-food industry's brand establishment and identity of our country.

II. HYPOTHESES AND MODEL

We use Schmitt and Simonson's (1997) measure model for brand identity which is proposed in point of view of marketing aesthetics. They consider that enterprises and their brands provide their customers not only core products and services, but also active participation, sensory and aesthetic interests (Schmitt and Simonson, 1997) . Schmitt and Simonson deem that aesthetic management can also bring customer loyalty and premium, reduce information interference, avoid attacks from other competitors, cut down costs by standardization and encourage staff. All of these are good for the identity of enterprises and brands. When customers are immersed in their own unforgettable memories, common services will be

elevated to vivid experience (Pine and Glimore,1998). Whether these are valued to recall depends largely on the quality of the sense and aesthetic provided by enterprises. If the marketing is full of wise sensory experience, it will produce high level satisfaction and patronage (Zheng Dan, Fan Xiucheng, 2005). In view of the characteristics of sense and aesthetic, Schmitt and Simonson suggest four factors for brand identity: properties, products presentations and publications. All these four factors include important sensory and aesthetic elements which will affect customers' experience.

Schmitt and Simonson (1997) suggest that the elements of properties include buildings, offices, retail outlets and enterprises' transportation. Zheng Dan and Fan Xiucheng (2005) develop the elements of properties into restaurant's façade, color matching and decoration; regional arrangement for indoor ordering and dining; toilet facilities, etc. Thus it can be seen that the elements of properties which are the first impression for customers' brands identity are used mostly to measure the sites of brands. In fact, from experience and marketing theories, we can see that customers' impressions of brands identity are affected greatly by their environments. It is the first impressions of environment form so-called perceived value. The compare between perceived value and desired value forms customers' satisfaction. Therefore, hypothesis:

H1: customers' impressions to brand sites (the properties of brand identity) have a significant positive impact on customer satisfaction degree.

Schmitt and Simonson (1997) consider that product elements include specific aspects or properties of goods and services. Appearance is focus on materials around products (e.g. packaging and labeling), or something around services, such as shopping bags, display items, napkins as well as the appearance of staff. Learning from Zheng Dan and Fan Xiucheng's relevant researches, we divided KFC's product elements into types of food, appearance, smell, taste, price and promotion; and develop the appearance elements into the indoor display (plates, utensils and napkins), the dress, etiquette, attitude and efficiency of staff etc. Marketing theories regard a product which is the vector for meeting target customers' needs and desires as a product mix (core product, formal product and extended product). In other word, besides physical goods, products also include services, experiences and other a lot of extended products. In many cases, the premium arising from services and experiences can give customers psychological satisfaction. Customers always use three basic factors to judge products: characteristics and quality of products, composition and quality of services and appropriate prices (Kotler, 2003). From the perspective of consumers' behaviors, customers' perceptions of products and services may change into the inner experiences which constitute the psychological foundation of satisfaction and dissatisfaction. Especially for KFC, the foreign fast-food who has relatively strong culture, in Chinese particular environment, customers consume it may be because of identity and cultural consumption. In this context, the customers' experiences of KFC products and services may have more prominent impact on satisfaction. So according to the analyses above, we make the following hypotheses:

H2: Customers' consume experience to products have a significant positive impact on customer satisfaction degree.

H3: customers' perceptions to products and service have a significant positive impact on customer satisfaction degree.

Schmitt and Simonson (1997) think that the elements of publication are composed of promotion, advertisement, enterprise card and mascot. So applying Zheng Dan and Fan Xiucheng's relevant researches, we concretize the publication to be advertisements, webs, outdoor markers, indoor propaganda and themes. Advertisements and propagandas (including markers and themes) are not only very important parts of the corporate marketing activities, but also the core concept of forming brand differentiation and brand identity. The effects of advertisements and propagandas which aim at target customers are obvious. If the themes and ideas publicized by enterprises can meet most of the target customers' cognition, this publication will strengthen the positive impressions of brand identity in the target customers. And all these are conducive to the spread of positive impression of brand identity. Conversely, if the ideas and images of advertisements and propagandas conflict with the understanding from most of the target customers, which may be because of the mistakes of image design or the disorders of transmission routes, no matter how much this publication cost, undoubtedly it will be inefficient. Thus, advertisements and propagandas for brand will eventually affect customers' satisfaction. Hypothesis as follow:

H4: brand advertisements and propagandas for customers have a significant positive impact on customer satisfaction degree.

Based on the above analysis and researches from our predecessors, this paper constructs a conceptual model about the impact of customers' brand identity impression to satisfaction degree. (Figure 1)
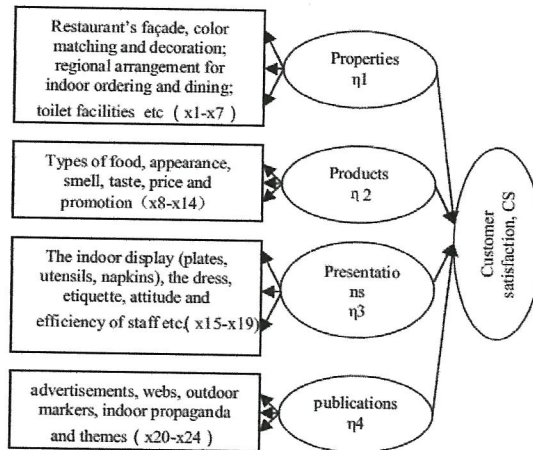

Figure 1. The conceptual model about the relationship between brand identity and customers' satisfaction

CONFIDENTIAL

III. GENERATION OF QUESTIONNAIRES AND RESEARCH DESIGN

This paper will measure the impression of brand identity from four aspects which are raised by Schmitt and Simonson. We use multiple attribute method to measure variables in the model. And the measurement about the elements of the impression of brand identity which is advanced in "A Comparative Study on Brand Identity Impression of China and U.S. consumers" by Zheng Dan and Fan Xiucheng will be used for reference. We also take some adjustments according to the actual situation. Finally the questionnaire consists of three parts: basic situations of respondents, the impressions of the four elements of brand identity and customers satisfaction degrees. There are 13 major topics in the Questionnaire, including seven test items for properties and products respectively, five test items for presentations and publications respectively, one test item for the overall impression of brand identity and three test items for overall satisfaction degree. The likert's five grades scale is used for all measure statements of above variables: 1 represents extremely disagree, 5 represents extremely agree.

The data used in this paper are from the investigations between July and August, 2009. In order to understand the correlation between the impressions of KFC's brand identity and customer satisfaction degree, we survey 650 consumers (who are consuming KFC or consumed KFC before) with questionnaires. In order to reduce errors and homogeneous samples, taking the representativeness of the samples, the feasibility of the investigation, population flow and geographical area factors into account, we choose ten KFC outlets in Nanchang City (Guangchangbei Road's outlet, Lihua Mall's outlet, Caifu Mall's outlet, Zhongshan Road's outlet, Baihuazhou's outlet, Wanshougong's outlet, Qingshan Road's outlet, Nanjingxi Road's outlet, Dazhong Mall's outlet and Railway Station's outlet). We randomly select 400 consumers who are consuming in KFC as well as 250 consumers (white-collar workers and students from four universities of Nanchang City) who consumed KFC before. The distribution of the samples is: 40 respondents from ten KFC outlets, 50 respondents from white-collar workers, 50 respondents respectively from the students of four universities.

In this survey, a total of 650 questionnaires were issued and 574 are retrieved. The recovery rate is 88.31%. In these 574 questionnaires, we reject the half-baked, wrong and invalid ones, and then there are total 489 valid questionnaires. The effective rate is 75.23%. The characteristics of the valid samples are as follows: men and women respectively account for 49.6% and 50.4% of the valid samples; the age of respondents are from 18 to 35; the proportions of the respondents who come from large cities, middle or small cities, towns and rural areas are 17%, 26.4%, 24.6% and 31.9%. Overall, the sample's demographic characteristics meet the requirements of sampling. The samples are representative.

IV. EMPIRICAL TESTS AND RESULTS

A The reliability and validity tests of samples

1) The reliability tests of questionnaires

We use the Cronbach α to test the reliability of questionnaires. Through the operations of SPSS15.0, we get the reliabilities of customer satisfaction degree and the four indices of brand identity, as shown in Table 1. Devellis and others consider that 0.60 and the numericals above are the acceptable reliability value. Results in table 1 indicate that the questionnaires have good internal consistency.

Table 1. THE INTERNAL CONSISTENCY COEFFICIENT OF EACH INDEX IN QUESTIONNAIRES

factors	Properties	Products	Presentations	publications	Customer satisfaction
Cronbach α	0.679	0.692	0.719	0.683	0.782

2) The validity tests of questionnaires

The questionnaire was mainly made reference to Schmitt and Simonson's measurement which has four elements and the study about the measure elements of brand identity impression by Zheng Dan and Fan Xiucheng (2005). So the questionnaire has very good content validity. We use factor analysis to test construct validity. The KMO value in factor analysis is 0.778>0.5. Meanwhile, the Bartlett spheroid test is very significant. It also shows good construct validity (Table 2).

Table 2. KMO AND BARTLETT'S TEST

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.794
Bartlett's Test of Sphericity	Approx. Chi-Square	2058.35
	df	489
	Sig.	0.000

B. Model checking

In this paper, we use structural equation model (SEM) software, LISREL8.7 to test the hypotheses of the model. The structural equation model can be divided into two parts: the measurement equation and structural equation. The measurement equation is used to measure the relationship between indices and latent variables (factors) relations; and the structural equation is used to measure the relationship between the latent variables. The structural equation model can estimate measurement equation and structural equation simultaneously. It is precisely because of this characteristic that the structural equation model can get more accurate results compared with traditional regression analysis (Hou Jie etc., 2004). Chi-square value ($\chi2$), degrees of freedom (DF), RMSEA, NNFI, and CFI are often used to report the results of structural equation model. It is generally recognized that, if the RMSEA below 0.08 (the smaller the better), the NNFI and CFI above 0.9 (the bigger the better), the fitting model will be a good model (Hou Jietai, Wen Zhonglin, Cheng Zijuan, 2004). The index values of this study are in the following table:

Table 3. THE FITTING TESTS FOR STRUCTURAL MODEL

Model	χ^2	DF	χ^2 / DF	P	RMSEA	NNFI	CFI
values	2058.35	314	6.555	0.00	0.074	0.92	0.93

Table 3 shows that every fit index is in line with the requirements of a good model. This indicates that the fitting

effect between requirements and samples meet the basic requirements. The path coefficients of each hypothetical relation can be seen in table 4.

Table 4.   THE INFLUENCE RELATION AMONG VARIABLES AND THE COEFFICIENT ESTIMATES

path	SEC[a]	t value
Customers' perceived impression of the KFC brand sites → satisfaction	0.37	1.91
Customers' consume experience to KFC products → satisfaction	0.83	8.14**
Customers' perception to KFC products and services → satisfaction	0.21	1.09
The advertisements and propagandas for KFC → satisfaction	0.31	3.88**

a. standardized estimation coefficient. Note: ** indicates it is significant in the level of 0.01.

The results show that: advertisements and customers' consume experience to products have a significant positive impact on customer satisfaction degree. Therefore H2 and H4 get supports. Thus, products and advertisements as the important components of the impression of brand identity have obvious impact on customers. Especially for the KFC fast-food, the experience of the product has a significant impact on customer satisfaction. To improve the quality products (taste/packaging/fulfillment of individual requirements, etc.) and to carry out targeted advertising play important roles for deepening brand image, enhancing the impression of brand identity among consumers, as well as improving customer satisfaction.

Customers' impressions of the KFC appearance and perception to its products and service have no significant impact on customer satisfaction degree. So H1 and H3 are not supported. There is a negative correlation between customers' impression of KFC restaurants' appearances and customer satisfaction (the standardized estimation coefficient is -0.37). But it also noted that t = -1.91> -1.96, which is not statistically significant and deny the estimate that there is a negative correlation between customers' impression of KFC restaurants' appearances and customer satisfaction. They may have positive correlation. Why H1 and H3 are not supported? The reasons may be that customers consider the appearance of restaurants (restaurant's façade, color matching and decoration; regional arrangement for indoor ordering and dining; toilet facilities, etc.) as well as the perception of products and services (the indoor display; the dress, etiquette, attitude and efficiency of staff etc.) are things that enterprises should provide to customers. They belong to "hygiene factors" and "Duty-bound matters". At the same time as a foreign brand, KFC do all these things relatively well, so customers do not have obvious responses.

V.   CONCLUSIONS AND RESEARCH PROSPECTS

A. Conclusions

Based on the above analysis, we can draw the following conclusions: (1) The impression of brand Identity has a certain impact of customer satisfaction, but the impacts of the different elements of brand identity to customer satisfaction have huge differences. (2) Advertisements and customers' consume experience to products have a significant positive impact on customer satisfaction degree; however, customers' impressions of the brand's appearance and perception to its products and service have no significant impact on customer satisfaction degree.

B. The inadequacies and future directions of this study

In this study, although we do all we can to let our theoretical derivation and empirical analysis be in accord with a scientific principles, due to various of reasons, this study was has many of the restrictions. These limitations are mainly in the following aspects: (1) Limitations on the range of investigation. In this study, we only investigate KFC consumers OF Nanchang City, and do not collect the regional samples, which may lead to regional errors. Meanwhile, the number of samples is very limited, which may cause statistical errors. In addition, we only select one brand, and each brand has its own characteristics. For all these above, we should treat the extension of the conclusions in this study with prudent attitudes. (2) The limitations on research model. In this study, without considering the impact of other factors, we only consider and study the impact of customers' brand identity impression to satisfaction degree. In the future research, we can study consumer's brand identity impression to some different brands in different target markets and geographic markets; and we can also put forward the conceptual models of brand identity in other points of view and have empirical studies. All these inadequacies will be the main directions for our future researches.

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