© Kamla-Raj 2015 PRINT: ISSN 0972-0073 ONLINE: ISSN 2456-6802 Anthropologist, 19(1): 211-227 (2015) DOI: 10.31901/24566802.2015/19.01.24

# Anthropological Methods are Meaningful in Business Research: A Case Study of Foodservice at a Chinese University

Tian Guang<sup>1</sup>, Dan Trotter<sup>2</sup> and Liu Yu<sup>3</sup>

Business School, Shantou University, 243 Daxue Rd., Shantou, Guangdong, China 515063
Telephone: ¹<86-754-82904542>, ²<86-754-82904541>; Fax: ¹²<86-754-86502600>;
E-mail: ¹<gtian@stu.edu.cn>, ²<dtrotter@stu.edu.cn>, ³<yliu@stu.edu.cn>

**KEYWORDS** Ethnography. Qualitative Methods. Participant Observation. Chinese University. Covert Participant Observation. In-depth Interview

ABSTRACT Qualitative research methods, which have long been considered normative by the anthropological and sociological community, have recently made a presence in business research. The present research is to buttress that growing body of evidence. The subject is the foodservice operation of a Chinese university. The qualitative research method is used, to analyze the data collected through participants' observation and in-depth interviews. The present study briefly surveys traditional ethnographic methods used in the social sciences. Then it examines the penetration, or lack of penetration, of ethnographic methods into various fields of business administration research. The study describes the research into the foodservice operation of one Chinese University. The research discovered that foodservice quality had a greatly-perceived influence on the students' health, that foodservice quality affected the students' academics in one aspect, and that foodservice factors affected their satisfaction with their university dining experience. Finally, the study makes the case that ethnographic methods do indeed work effectively in the field of business study.

# INTRODUCTION

Ethnography uses various research methods to achieve its purpose. The present research used two methods; namely, in-depth interviews and participant observation. Ethnography characteristically uses direct observation of the subjects under study. Although, readers often identify ethnography with participant observation, actually, non-participant observation still satisfies the criterion that the definition of ethnography demands. Non-participant observation still satisfies Marshall's definition of "observing directly the behavior of a social group." (Marshall 1998). Gold's famous paradigm illustrates ethnography as a continuum. On one extreme is the "complete observer", who doesn't participate at all in the activity being studied. On the other extreme is the "full participant" who completely identifies with and integrates into the social structures of the subjects under study (Gold 1958).

Address for correspondence:
Dr. Dan Trotter
Business School
Shantou University,
243 Daxue Rd,
Shantou, Guangdong
China 515063
Telephone: 86-754-82904541
Fax: 86-754-86503442
E-mail: dtrotter@stu.edu.cn

This research used the approach of "full participants." The field workers were students enrolled in the university where the research took place, and who daily ate in the cafeterias belonging to the foodservice organization under study. Ethnographic methods of observation, both non-participatory and participatory, can be either covert or overt. The current research used a covert participatory method. This method is of some particular interest, for the following reasons: researchers rarely use the method, despite some palpable advantages; and people often associate the method with severe ethical objections, which have tended to constrain its use.

Covert methods at the least involve disguise. As the researcher immerses himself in the field setting, the subjects under study do not know the identity of the researcher. However, often more elements than mere disguise are involved in covert research. For instance, this method often requires intentional misrepresentation, interpersonal deception, and maintenance of a false identity (Miller 1995). These elements raise obvious ethical questions, which fortunately for this research were irrelevant. The student field workers did not have to intentionally misrepresent himself or herself, deceive anyone, or to maintain a false identity, in order to observe covertly the foodservice operations they were using in their normal, daily life.

The complex ethical issues concomitant with covert observational techniques have suppressed the use of secret research investigations. Social scientists have "virtually ignored" their use. Research methods texts in social science either do not mention these techniques or describe them in less than a page's length. Most qualitative methods books do not provide detailed instruction, but rather a mere few illustrative examples. Covert observation is said to be "the truly least used of all the qualitative research methods," and new generations of researchers remain unfamiliar with a potentially worthy research tool (Miller 1995). The research described in the study is illustrative of not only the value of the general use of ethnographic tools in the operational management of business, but also in particular, the value of a seldom-used ethnographic tool (covert observational methods). This research confirms the similar conclusions of other researchers who have applauded the use of covert ethnography, for instance, Spicker (2011), who argued that "undeclared, undisclosed research in informal settings has to be accepted as a normal part of academic inquiry." In addition, Walters and Godbold (2013) argued for covert ethnography, claiming that with careful design of a study, ethical tensions can be managed and the ends may justify the means. Besides, Calvey (2013-14) argued that despite increasing regimentation of ethical governance in social research, covert ethnographic research has a "legitimate and innovative voice." (Calvey 2013-14).

What are the advantages of covert observational methods? The most obvious advantage is that subjects, who in the normal course of events could not be studied, are available for investigation. In the case of this research, foodservice management officials in a company contracted to provide foodservice to a university might well resist providing information to students, who have been in all ages and all places notorious for complaining about university food. A negative student report could only hurt the foodservice company in the eyes of the university: a positive report might have no effect. The covert nature of the students' observations avoided any such potential hindrances. Another advantage of covert observations is that by concealing their intentions and activities, field workers can avoid creating a Hawthorne effect. Still, another advantage is that covert methods avoid problems encountered in in-depth interviewing and overt

observation, when subjects have reasons not to open up to the field worker (Li J 2008). In the case of the present research, it is reasonable to assume that potentially a foodservice worker might not want to reveal to a student operational problems, for fear of damaging consequences to his employment.

No critic, who may have raised ethical objections against covert observational methods, can criticize on ethical grounds the research described in this study. Possible objections include the charge that the research is violating the basic rights of the subjects under investigation. Their privacy is invaded, there is no informed consent, there is potential for harm to the subjects. (Tian et al. 2013) In this research, no privacy was invaded because the research into food service consumption and management was conducted in full view of the student public, and the researchers participated in foodservices that were open to all. Researchers did not attempt to investigate the backroom operations of the management of the foodservice system.

#### Ethnography in the Field of Business

It is not only in the field of business that researchers have offered resistance to the use of ethnography in research. For example, long after ethnographic methods had become current in the social sciences, researchers reported that the educational research community was generally lacking in knowledge of ethnographic research, and within that community, there had been minimal efforts to deal with ethnographic methodological issues. Indeed, to use a case study by one prominent educational researcher to be "well-nigh unethical" (Campbell and Stanley 1966).

Those who desire to introduce ethnographic techniques into business research have felt the same resistance. Objections to ethnographic methods in a business context are quite understandable. Much more communication is going on in a business environment than in a typical anthropological setting. Participant observers may perhaps find it difficult to keep up with fast-changing circumstances due to their restricted access to relevant emails, memoranda, telephone calls, and activities of actors exterior to the domain to which the researcher has gained access. Membership on a committee or team may not provide access to informal, backstage transac-

tions, which are necessary to make formal decisions (Horlick-Jones and Rosenhead 2007). Ethnographic researchers in business face other troubles. Ethnography in its pure form requires immersion in the research field for long periods, but business is constrained by many and sundry deadlines. For instance, if market researchers use ethnography, the researcher constantly faces deadlines for marketing campaigns, and deadlines for launching new products and brands. Longitudinal ethnographic projects can extend over periods lasting for years or even decades, whereas ad hoc market research projects can last for as short a period as two weeks. Companies are reluctant to spend money for projects which require more time resources than the companies possess (Agafonoff 2006). As the researchers will contend later, researchers can adapt ethnographic methods in such a way that they may deliver results within the time and budget constraints of a corporation. However, other characteristics besides the expense of ethnographic research tend to be off-putting to corporations. Such results are often too inconclusive and ambiguous for many organizations - the process of generating insights requires more interpretation than organizations are typically used to (Elliott and Jankel-Elliott 2003). In addition, ethnographers come with less preplanned frameworks, prepared questions, and hypotheses than the typical manager is accustomed to. Many managers would prefer to have some idea of the outcome of the research before they expose themselves to the costs and risks of undertaking the research. Finally, in-depth ethnographic research could very well turn up dysfunctional or even unethical circumstances in a business that a management may or may not want to deal with (Harvey and Myers 1995).

These difficulties, perhaps, explain why researchers have resisted adopting ethnographic research methods in business research. A quick glance at business administration subfields tells a consistent story. Like, in the field of marketing, a review of the syllabi of 40 marketing research courses taught in such schools as Georgetown, Johns Hopkins, the Wharton School, Berkeley, and Stanford revealed that the coverage ratio of quantitative to qualitative content was 7:1. The comparable figure for the marketing research industry was 4:1. The most mentioned qualitative techniques were focus groups and depth interviews, with little mention of participant observa-

tion or other ethnographic techniques (Freeman and Spanjaard 2012). The field of business ethics offers another example. An oft-cited 1990 study reported that out of 94 published empirical studies in the area of ethical beliefs and behavior only 4% of those studies employed interviews, while a further 3% used a combination of interviews and surveys (Randall and Gibson 1990, cited in Brand and Slater 2003). The field of international business provides the same situation, where the focus is on quantitative methodologies, and the adoption of qualitative methodologies is still scarce (Parkhe 1993; Peterson 2004; Yang et al. 2006, all cited in Sinkovics et al. 2008).

Despite the difficulties delineated above, business researchers have labored to overcome the difficulties of applying ethnographic and other qualitative methods in the field of business research. They have implemented a range of techniques (often referred to as "quasi-ethnography") to produce results as effective as full-blown ethnographic methods. These techniques include participant diaries, video imagery, rapid assessments, depth interviews, observations, and casual interactions, employed to deliver research results in a shorter period (Freeman and Spanjaard 2012; Elliot and Jankel-Elliot 2003). Despite the indifference and resistance to qualitative methods in business research, these new qualitative and ethnographic methods are finding their way into more and more business research. Evidentially, studies of the internal functioning of the International Monetary Fund, calculations used by fast food retailers, and studies of other workplaces have used such techniques (Horlick-Jones and Rosenhead 2007). A hybridization of operations research techniques and ethnography is to have "added value" to an operations research model. In fact, an entire new field has emerged, entitled "business anthropology." A pioneer text in the field lists many uses for anthropological methods in business, including marketing, consumer behavior, product design, competitive intelligence, knowledge management, international business, and entrepreneurship (Tian et al. 2010). It follows that the research in the present study follows in a respectable line of scholarship, which is merging anthropological techniques with business research.

# Research on University Foodservice in China

It is, perhaps, quite surprising how much impact a well-run university foodservice operation

can have, both on the students and on the university. In this section of the paper the researchers will list the many impacts that are possible, after which the researchers will examine the impact of university foodservice operations on the students, and finally, the researchers will look at the impact such operations can potentially have on the university, both examinations being done in the context of non-western, Chinese universities. This section will be concluded with reference to the research methods chiefly employed in doing research into Chinese university foodservice operations.

The impacts of foodservice operations on students' education are vital. Providing healthy, tasty, and high quality food is so important that it is an important guarantee of both teaching and learning (Xiao 2008). Chinese researchers have concluded that a student's nutritional level affects his physical and mental health and his learning ability (Ye et al. 2006). Positive campus dining experiences can contribute to student retention (Hossler and Bean 1990). A high-quality dining hall related to the effectiveness of Chinese educational programs, as well as the Chinese college or university's stability and development (Li et al. 2008). Research has found that foodservice at Chinese universities related directly with students' health, mood, completion of the students' studies, and even the stability of the campus, and as such, foodservice quality was one of the most important issues in school logistics management (Pan 2009). Student satisfaction with food in the dining hall had a direct impact on dining frequency and expenditure, thus affecting foodservice profits, as well as the long-term development of the university (Lu 2009).

One of the key variables studied in this research is student satisfaction with foodservices, and therefore, it is of interest to see what Chinese research has to say about student satisfaction with university dining halls. It is clear that as time has gone on in modern China, the demands of university students have increased greatly, and as a result, Chinese university foodservice operations have become more and more strained to satisfy students. With the rapid improvement of Chinese living standards, Chinese students no longer merely desire just to eat; they want to eat comfortably in a pleasing environment (Li G 2008). Factors that favorably impress students and increase their satisfaction now include such things as dining environment and

atmosphere, meal price, service attitude, food taste, hygiene, and coordination with campus culture (Ma 2009). Stating the issue differently, one Chinese researcher sets forth the proposition that there are four main factors affecting student satisfaction; namely, dining environment, perception of the dining hall's food products, service quality perception, and eating conditions, all of which factors affect student satisfaction differently (Gao 2009).

There are particular institutional factors inherent in university foodservice operations that render it difficult for universities to satisfy students. One such factor is the typical lowly financial status of a university student. This requires foodservice operations to offer inexpensive food, and inexpensive food is difficult to make attractive (Li G 2008). Another factor is the fact that a university student is often a captive consumer—it is often difficult for students to find alternatives to the university dining hall. This means that a student is often forced to eat three meals a day at the university dining hall. This regular monotony is inherently liable to compel a student's dissatisfaction (Chen 2006).

The present study, now, turns from a focus on the students affected by foodservice operations to the foodservice operations themselves. What does a review of Chinese literature uncover concerning the organizations who provide meals to university students? The first thing discovered by the literature review is that the operational model of such organizations has changed in recent years. Third-party contract management companies have replaced university-operated services on many Chinese campuses. These private entities are typically more efficient than university-operated ones, but they are also more risky from the university's point of view, because in outsourcing foodservice operations, the university loses the degree of control over foodservice operations that it had before (Zhou 2009). The operating environment has also changed. More and more Chinese students are attending college, therefore, more and more students and parents are paying attention to the university's foodservice delivery. These environmental changes are putting increased pressure on university foodservice operations to improve the quality of their service (Gao et al. 2010).

However, there are institutional factors that militate against improvement of university dining hall services. One is the fact that the dining hall services are a monopoly. The students do not have the choice of eating at another dining hall service, because there is only one. As a result, students continue to go to university dining halls which they believe are providing them bad food, backward service, at a high price. In addition, since they have no option to go elsewhere, the university dining service feels no competitive pressure to improve (Zhou 2009; Chen 2006). However, probably the most significant institutional factor hindering the improvement of university foodservice operations is the simple fact that dining hall quality is not included in the assessment criteria to judge the performance of university management officials. In China, government officials from the Ministry of Education (MOE) produce an annual university evaluation, which is an index closely tied to the college's reputation and future advancement. Ministry of Education officials do not include quality of foodservice as a factor of assessment; hence, there is no incentive for busy university officials to push for improvement (Ministry of Education 2004).

There have been many scholarly suggestions for the improvement of dining hall services (in general, not just in China). Evidentially, some scholars suggested that schools improve professional standards of dining hall workers, improve recipes, and strengthen regulations concerning food purchasing and preparation (Wechsler et al. 2001). Other suggestions include selecting better contractors, strengthening publicity and education about dining services, raising awareness of food safety, letting students participate in foodservice management, establishment of long-term price structures, and increasing variety on the menu (Wu 2011). Others have isolated other factors. For example, some academics have suggested that choosing managers with the proper philosophy as well as those who possess overall management capacity is important, as well as an improvement of the foodservice management system. As well, scholars have suggested that multi-level monitoring would be of benefit (Lan and Tian 2011).

It is of interest to review the Chinese research literature on foodservice operations to see what research methods are in the main used. The literature review discovers that existing Chinese research in this area mainly employs questionnaires, but the research rarely uses anthropological methods such as participant observation

and informal interviews. The lack of qualitative research methods used heretofore has resulted in a lack of depth in the analysis of the intrinsic nature of Chinese university foodservice operations. The findings of previous research have, therefore, been less reliable than they could have been had more qualitative research methods been employed. In addition, the research is usually not in depth, and is not extensive, focusing mainly on students' eating behaviors alone, and slighting other factors such as dining environment, student health, effect on learning, reputation of the institution, etc. Therefore, it is necessary to employ new research methods. The research described in this study relies heavily on qualitative anthropological methods to provide more profound insights into the nature of Chinese university foodservice operations than have heretofore been obtained. More specifically, the goal of this study is to attempt to answer five basic questions concerning Shantou University's foodservice operations. The five questions are listed here: 1) How did the university's foodservice affect student health? 2) How did the university's foodservice affect student learning? 3) How did the university's foodservice affect student satisfaction with their university and with their dining experience? 4) How might the management improve foodservice operation at the university? 5) Should foodservice quality be included in the government's performance evaluation of the university? To answer these questions, the researchers used three research methods: participant observation, in-depth interviews, and a questionnaire survey.

# RESEARCH DESIGN AND METHODOLOGY

In the fall semester of 2011, one of the authors of this study taught a maiden Business Anthropology course at the university whose food service was under study by this research. The purpose of the course was to train undergraduate students in the use of anthropological research methods, especially ethnographic methods. Seventy students took the course as an elective. The 70 students divided into 12 study groups of five or six in each. The 70 students, thoroughly trained by the professor, working individually, in their study groups, and together as a class, designed the research methodology. The design process was as follows. Each indi-

vidual student conducted a literature review. In addition, each individual student randomly observed students eating in the dining hall. The entire class then took these observations, and the results of the literature review, and then extracted from that specific research questions. This procedure insured that the research questions were derived from the data, and that the data was not shoe-horned into research questions which were preconceived in the minds of the researchers. The students then, in their individual study groups, designed their observation plans, their in-depth interviews, and their questionnaires. These preliminary plans were then taken before the whole class, and the entire class refined the plans. Then, each of the individual students took the observation plans, in-depth interview questions, and questionnaires into the field and collected data. They, then, brought the data back to the entire class for analysis. Throughout this whole process, at every stage, the professor was fully involved, making suggestions and corrections as needed.

From the process described above, the class developed the several research questions listed above in the Introduction, which questions became the central focus of the research.

# **Participant Observation**

From September to late December 2012, members of the Business Anthropology class observed diners at different Dining Halls for a period of about 14 weeks. They were covert participant observers, because the dining service personnel did not know of the research project, nor did the student diners. However, at the point that the field workers interviewed diners, they informed the diners of the project, and those diners may have told other diners. This effect was probably negligible, given the very large number of students who potentially ate at the dining halls (about 10,000). Therefore, the research method employed may be described as partially covert participant observation.

The observations were made randomly at the three different dining halls at different times; including breakfast, lunch, evening dinner, and late night snack time, on both weekdays and on weekends. The student field workers focused on two groups of people: student diners, and the foodservice workers. The field workers observed which foodservice window the students chose,

with whom the student sat to eat, where the student diner sat and for how long, and any interactions with service staff. They also observed the attitudes of the service staff, their work patterns, did they wear a mouth mask, and when did they open their service windows. The field workers created about 300 observation records. The observation locations were the Second, Third, and Fourth Dining Halls. Subjects observed included undergraduate students, graduate students, teachers, and foodservice personnel.

#### **In-depth Interview**

The student-researchers who administered the in-depth interview asked eight questions of students from different geographical districts, grade levels, and genders. The field workers selected 112 interviewees from students who filled in questionnaires by asking them if they were willing to be interviewed. The questions aimed to discover student satisfaction, student learning outcomes, and student health. The first five questions asked, respectively, what effect the foodservice had on the student's health, his learning, his mental outlook, his pleasure, and his satisfaction with the school. The interviewers also asked respondents with the sixth question whether they thought that foodservice performance should be a part of the university's evaluation. The seventh question asked what measures the students would take, if they had the power, to improve the food and beverage service. The eighth and final question asked the respondent about any other relevant matters they had noticed about the foodservice.

The questionnaire asked specific questions regarding the influences of the school's catering service on the students' campus life. The first part asked for basic information concerning the respondent such as gender, grade, hometown, family incomes, etc., and in addition asked about the influence of the catering service on the student's campus life, as well as the positive and negative aspects of the school's dining service from the students' perspective. The second part of the questionnaire adopted a five-dimensional Likert scale, which ranged from strongly agree to strongly disagree. This part of the questionnaire contained six questions asking about the relationship between foodservice quality and student health, learning effectiveness, inspiration, and happiness. In addition, the second part of the questionnaire asked six questions concerning the students' evaluation of the quality of the university's foodservice. The second part of the questionnaire also contained seven questions that probed student awareness of the importance of the foodservice. The third part of the questionnaire consisted of two open-ended questions. For example, one question inquired "What are the three aspects which were done poorly by the dining hall?"

The field workers administered the questionnaire to small groups of student diners. Each group had six members consisting of three men and three women. The field workers administered the survey at meal times in every dining hall. To improve the authenticity and validity of the questionnaire, the field workers required the target respondents to do the questionnaire on the spot. The researchers felt that the attitudes of students could be measured more accurately when the students were in a dining atmosphere. The field workers selected random tables during lunch and evening dinnertime, both on weekdays and on the weekend. The student fieldworkers delivered 350 questionnaires in this fashion to those students eating at the selected tables. Most students were very cooperative when asked to fill out the questionnaire.

# **FINDINGS**

# Questionnaire

In this research project, the researchers conducted a questionnaire survey to assure the quality of the observational data and analysis. The sample consisted of 341 students. Among them 184 were females (54%) and 156 were males (46%). Broken out by grade level, the sample included 49 freshmen, 61 sophomores, 157 juniors, and 24 seniors. The number of first-year, second-year, and third-year postgraduate students was 34, 12,

and 3 respectively. About 62% of students came from Guangdong province, 71% of the students' family economic condition was at the middle level, and 63% of the students were very willing to recommend their university to those students who were preparing to register for the college entrance examination. Ninety-eight percent of the students had eaten in restaurants at the East Gate. Ninety-eight percent of the students who had eaten at the East Gate preferred to eat there rather than in the school dining halls. This latter statistic especially demonstrates that the school dining hall has not satisfied students' foodservice needs at this university.

# Students Morale and Satisfaction

The questionnaires showed that students' satisfaction with the quality of foodservice impacted students in many aspects. A large majority either agreed (46%) or strongly agreed (20%) that satisfaction with food service quality affected their ability to learn. Moreover, a large majority either agreed (49%) or strongly agreed (26%) that satisfaction with food service quality affected students' mental outlook upon their university life. In addition, a very large majority either agreed (47%) or strongly agreed (41%) that satisfaction with the university's foodservice operations produced a positive impact on their overall happiness. Lastly, a very large majority of the students either agreed (54%) or strongly agreed (36%) that satisfaction with foodservice operations positively affected their attitudes toward the university itself. (See Table 1) Using a 5 point Likert scale (the lower the score, the greater the satisfaction), the questionnaires also evaluated different components of student satisfaction with the university dining service, namely, satisfaction with the following: price, size of portions, dining environment, healthiness, food diversity, and service. The students ranked their satisfac-

Table 1: Questionnaire: Impacts from satisfaction with the university foodservices

Impacts	Average <sup>1</sup>	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
Q. 1 Physical health	1.463	60%	36%	3%	1%	0
Q. 2 Learning effects	2.235	20%	46%	25%	8%	1%
Q. 3 Mental outlooks	2.067	26%	49%	18%	7%	0
Q. 4 Happiness	1.768	41%	47%	7%	5%	0
Q. 5 Satisfaction with the school	1.777	36%	54%	6%	4%	0

<sup>1</sup>Strongly agree, 1 point; Agree, 2 points; Uncertain, 3 points; Disagree, 4 points; Strongly disagree, 5 points. The lower the score, the higher the satisfaction is.

tion/dissatisfaction as follows: price (2.836), environment (3.109), size of portions (3.349), healthiness (3.446), service attitude (3.692), and food diversity (4.326). (See Table 2) In addition, the survey data showed that none of the above components of student satisfactions were able to obtain a majority of the students to either agree or strongly agree that the component satisfied them. However, a majority of students reported that they either disagreed (39%) or strongly disagreed (13%) that size of portions satisfied them. In addition, a majority of students indicated that they either disagreed (38%) or strongly disagreed (14%) that the healthiness of the food satisfied them. Besides, a very large majority either disagreed (42%) or strongly disagreed (48%) that the diversity of the food offered satisfied them. Finally, a majority of the students reported that they either disagreed (40%) or strongly disagreed (22%) that they were satisfied with the service attitude of the food service staff (See Table 2). From this it can be deduced that the students were more dissatisfied than satisfied with various aspects of the foodservice operations. Therefore, the data indicate that there is much room for improvement on the part of the dining services, because an educational institution is found to serve students, it follows that a university should improve its service quality and should increase the students' satisfaction with their school. Improving foodservice quality seems to be a good method to advance the university towards that goal.

**Student Health:** It can be seen that foodservice quality directly impacted a majority of the students' perception of their physical health (strongly agree, 60%; agree, 36%).

**Student Learning:** A large majority either agreed (46%) or strongly agreed (20%) that satisfaction with food service quality affected their ability to learn.

Miscellaneous: Table 3 shows that a very large majority of parents either agreed (49%) or strongly agreed (34%) that they paid attention to the quality of foodservice provided to their children. In addition, a very large majority of students either agreed (42%) or strongly agreed (35%) that they often discussed the foodservice quality among themselves. In addition, a large minority of students indicated that they either disagreed (35%) or strongly disagreed (10%) that they were overall satisfied with the food service. The overall satisfaction degree was only 3.258 (5 point scale, the lower the score, the higher the

Table 2: Questionnaire: Student satisfaction with the university dining services

	Average <sup>1</sup> agreement	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
Q. 11 Price satisfaction	2.836	6%	39%	24%	27%	4%
Q. 12 Satisfaction with portions	3.349	3%	25%	20%	39%	13%
Q. 13 Environment satisfaction	3.109	2%	35%	23%	31%	9%
O. 14 Health satisfaction	3.446	1%	18%	29%	38%	14%
O. 15 Food diversity satisfaction	4.326	1%	3%	6%	42%	48%
Q. 16 Service attitude satisfaction	3.692	0	14%	24%	40%	22%

<sup>&</sup>lt;sup>1</sup> Strongly agree, 1 point; Agree, 2 points; Uncertain, 3 points; Disagree, 4 points; Strongly Disagree, 5 points. The lower the score, the higher the satisfaction is.

Table 3: Questionnaire: Other questions

	Average <sup>1</sup> agreement	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
Q. 8 Parents attention paid to foodservice	1.918	34%	49%	10%	6%	1%
Q. 9 Foodservice often discussed by students?	1.982	35%	42%	12%	10%	1 %
Q. 10 Hometown eating habits considered by foodservice?	3.082	4%	32%	24%	31%	9%
Q. 20 Overall satisfaction	3.258	2%	26%	27%	35%	10%

<sup>&</sup>lt;sup>1</sup> Strongly agree, 1 point; Agree, 2 points; Uncertain, 3 points; Disagree; 4 pointS; Strongly disagree; 5 points. For Q. 20, the lower the score, the lower the satisfaction is.

satisfaction), which indicated there was much room for the dining hall to improve its campus foodservice.

Table 4 indicates that each of the 341 respondents were supposed to list three aspects of the university food service operations which had been done poorly by the foodservice. Many students did not list three aspects, so as a result 40% of the potential answers were blank. The top three "disappointment" comments were poor service attitude (17% of possible answers), undiversified food selection (12% of possible answers), and unhygienic conditions (13% of possible answers). Responses recorded in Table 4 also reported three sentences related to foodservices that students most wanted to tell their school leaders. The top three "suggestions" made were hygiene improvement (9% of possible answers), taste improvement (7% of possible answers), and supervision of foodservice staff enhancement (7% of possible answers). The responses indicated that the dining hall should improve hygiene, increase the number and variety of dishes, and foodservice management should ask students for advice and should enhance supervision of its staff.

# **Participant Observation**

The student fieldworkers sorted the data collected into three major categories, each category reflecting a significant impact on the students: student morale and satisfaction, student health, and student learning. Findings and conclusions will be given here, organized in general by the above three categories. The researchers will present miscellaneous discoveries afterwards. Tables constructed from the collected data follow.

Student Morale and Satisfaction: The field workers observed that the students not only

used the dining halls for mundane eating, but in addition, they used the dining halls for a social gathering place, and as a place to carry out student activities, or a common place to eat together on a holiday. The observers noted a direct and positive impact on student morale.

By contrast, the researchers discovered conditions that had a negative impact on student morale. Evidentially, the dining halls tailored their menus mainly towards the majority Guangdong population, thus, neglecting the tastes of the minority of the student body who were from different regions and whose cuisine was different. In addition, the field workers observed students in front of the set meal window who were unhappy with their choices. They also observed that the dining halls did not open up early enough before the first early morning class. Additionally, they observed that some foodservice workers had no patience when providing services for students, providing services with "a straight face and heavy tone." And lastly, the student researchers perceived a suboptimal eating environment in the dining halls, which were not bright, comfortable, clean, and quiet enough. They saw the tables as sometimes messy. They observed that some students were getting packed meals from the dining halls and carrying them to the dormitory, perhaps to avoid the dining hall environment.

Student Health: Observations concerning the impact of the university foodservice operation on student health included the following. Food service staff had diluted the soybean soup with water, so that the soup had no nutritional value. There was not a variety of vegetables. Food service cooks had prepared food with too much oil and salt. There were no professional rules concerning staff training and health safety. Employees were not wearing their masks correct-

Table 4: Questionnaire:	Selected	answers	to	open	ended	questions
-------------------------	----------	---------	----	------	-------	-----------

Disappointments contents	%*	Most preferable suggestions contents	%*
1 Poor service attitude	17%	1 Hygiene improvement	9%
2 Single type	12%	2 Taste improvement	7%
3 Unhygienic conditions	13%	3 Supervision enhancement	7%
4 Small food portions	5%	4 Improve facilities	2%
5 Crowdedness	2%	5 Officials have meals	5%
6 Negative flavor	3%	6 Staff training	6%
7 Others	8%	7 Others	18%
8 No answer	40%	8 No answer	46%

<sup>\*</sup> The percentage is based on 1023 (341\*3) possible answers.

ly. Staff assigned to clean up tasks would clean tables at which students were not finished eating. There were flies all around, at least, one of the dining halls. Students lined up much more often at the snack and pastry window, suggesting their nutritional needs were not being met.

Student Learning: The field workers found that one major characteristic of the dining service impacted student learning. Inconvenient operating hours have an especially negative impact on student academic efforts. There was a rush period for breakfast ten or twenty minutes before class. Students rushed their eating, or ate as they walked to class. Lines were long, and the students had to wait a long time to eat.

Miscellaneous: Findings The student researchers felt that food quality was the issue; the students were most concerned about. They also observed that the students learned from one another which dining rooms featured what, sharing their experiences in the various dining halls with each other. For instance, they observed that the Fourth Dining Hall had the most delicious cooked noodles; while the Second Dining Hall offered more entries than that of the Third Dining Hall, which had provided a limited choice in terms of food selection. The combos, a fixed combination of several sorts of dishes, were the most popular choice of the students, because the price was very low, due to subsidies from the Li Kaishing Foundation. However, there were also long queues in front of windows providing selections that are more expensive. Evidentially, students greatly patronized the window supplying "Lvcai" (Green Dishes), which contained pickled food, pasta and soup at higher prices. The researchers interpreted this to mean that students, craving variety, were willing to pay more to get it. Other miscellaneous findings of interest were that students had no opportunity to choose the quantity of rice staff served them, which inevitably led to waste; also, foodservice management had not laid out tables optimally, and students placing bags on chairs used up scarce seats that could have been used by diners.

# **In-Depth Interview**

Student Morale and Satisfaction: In terms of the foodservice influencing the students' morale and satisfaction, 49.12% of the respondents thought the catering service would affect the students' mental outlook and mentality, but only 17.54% of respondents believed that the impact was negligible (See Table 5). When asked about where the foodservice needs to improve, the respondents stated that the styles of food, food combinations, service attitude and dining environment needed to improve. See Table 6 for detailed information of the foodservice's influence on students' mental outlook. Also, see Table 4 for detailed information concerning the impact of the dining service on student happiness.

Student Health: The depth interviews revealed that foodservice quality had a great perceived influence on students' health, affecting the students' perceived physical health, nutritional intake, and fear of disease. A large majority of the students (67.54%) felt that the unhealthy diet provided by the foodservice operator had a

Table 5: Interviews: Foodservice's influence on general mood

Questions	Top explanations	Frequency	Frequency rate
Influences on Students	Mental outlook and mentality	56	49.12%
' Mental Outlook	Mood	32	28.07%
	Little	20	17.54%
Impacts of Foodservice	The quality of the service influences appetite and satisfaction	80	70.18%
	Good service makes students have a good mood and high satisfaction	35	30.70%
	Ensure student's physical strength and energy	26	22.81%
What Aspects Need to	Food style and taste	64	56.14%
be Improved?	Service attitude	55	48.25%
•	Dining environment	27	23.68%
	Sanitary conditions offood and tableware	26	22.81%
How to Improve?	Increase food variety	49	42.98%
•	Train employees and strengthen staff management	48	42.11%
	Promote sanitary conditions	18	15.79%

Table 6: Interviews: Foodservices' influences on student's happiness

Questions	Top explanations	Frequency	Frequency rate
Influences on Student's	Mood	48	42.11%
Happiness	Learning efficiency and satisfaction	33	28.94%
**	Morale for study	19	16.67%
	Service attitude affects appetite and mood	68	59.64%
	Dissatisfaction on the food price and quality	64	56.14%
	The dining environmental impacts dining mood	36	31.57%
What Aspects Need to	Service staff's attitudes	68	59.65%
be Improved?	Food styles	55	48.24%
•	Sanitary conditions offood and tableware	45	39.47%
How to Improve?	Train employees and strengthen staff management	66	57.89%
1	Promote sanitary conditions	64	56.14%
	Increase food variety	55	48.26%

negative impact on student health. An even larger majority of the students (78.95% felt that sanitary conditions needed to be improved, and a large majority of the students (73.68%) of the students felt that the variety and collocation of the foods needed to be improved (See Table 7). The largest problems detected were sanitary conditions and lack of variety of foods. (See Table 5 for detailed information of foodservices' influences on student's health).

Student Learning: The researchers postulated that the quality of the university dining service would affect the students' mood for learning, their physical strength and their learning efficiency. The depth interviews uncovered the following findings (see Table 8). Only a minority of the students (although a large minority, 46.49%) felt that the university's foodservice affected their mood for learning. Smaller minorities of the students reported that foodservice operations influenced their learning by affecting their physical strength (33.33%), and by affecting their

learning efficiency (10.53%) Table 6 reports students' reported attitudes towards these factors. The students' perception is indeed that their foodservice affects their academics. See Table 6 for detailed information concerning the university foodservice's impacts on student learning.

# **Participant Observation**

The student fieldworkers sorted the data collected into three major categories, each category reflecting a significant impact on the students: student morale and satisfaction, student health, and student learning. Findings and conclusions will be given here, organized in general by the above three categories. Miscellaneous discoveries will be presented afterwards.

Student Morale and Satisfaction: The field workers observed that the students not only used the dining halls for mundane eating, but in addition, they used the dining halls for a social gathering place, and as a place to carry out stu-

Table 7: Interviews: Foodservices' influences on student's health

Questions	Top explanations	Frequency	Frequency rate
How Does the Foodservic	e Physical health	57	50.00%
Impact Student Health?	Nutritional intake and balance	22	19.30%
1	Disease	21	18.42%
What Aspects of the	Unhealthy diet	77	67.54%
Foodservice Impact	Lack of nutrients in the food	44	38.60%
Student Health?	Poor food quality	32	28.07%
What Aspects Need to	Sanitary conditions	90	78.95%
be Improved?	Variety and collocation of foods	84	73.68%
1	Service attitudes of staff	25	21.93%
How to Improve?	Increase food variety	63	55.26%
1	Train employees to improve their professionalism	38	33.33%
	Improve health conditions	45	39.47%

Table 8: Interviews: Foodservice influence on student learning

Questions	Top explanations	Frequency	Frequency rate
Impacts on Student	Learning mood	53	46.49%
Ĺearning	Physical strength	38	33.33%
0	Learning efficiency	12	10.53%
Specific Causal Factors and Their Impacts	Nutritional balance is helpful to improve learning efficiency	52	45.61%
7	Good service attitudes can improve learning enthusiasm	38	33.33%
	Good dining experience has a positive impact on learning mood	30	26.32%
What Aspects Need to	Food style and taste	76	66.67%
be Improved?	Sanitary conditions offood and tableware	57	50%
	Service attitude	33	28.95%
How to Improve?	Increase the food styles and pay more attention to food nutritional balance	58	50.88%
	Pay more attention to sanitary conditions	58	23.68%
	Train employees to improve their professionalism	42	36.84%

dent activities, or as a common place to eat together on a holiday. The observers noted a direct and positive impact on student morale. By contrast, the researchers discovered conditions that had a negative impact on student morale. For instance, the dining halls tailored their menus mainly towards the majority Guangdong population, thus neglecting the tastes of the minority of the student body who were from different regions and whose cuisine was different. In addition, the field workers observed students in front of the set meal window who were unhappy with their choices. They also observed that the dining halls did not open up early enough before the first early morning class. Additionally, they observed that some foodservice workers had no patience when providing services for students, providing services with "a straight face and heavy tone." Lastly, the student researchers perceived a suboptimal eating environment in the dining halls, which were not bright, comfortable, clean, and quiet enough. They saw the tables as sometimes messy. Staff assigned to clean up tasks would clean tables at which students were not finished eating. They observed that some students were getting packed meals from the dining halls and carrying them to the dormitory, perhaps to avoid the dining hall environment.

Student Health: Observations concerning the impact of the university foodservice operation on student health included the following. Food service staff had diluted the soybean soup with water, so that the soup had no nutritional

value. There was not a variety of vegetables. Food service cooks had prepared food with too much oil and salt. There were no professional rules concerning staff training and health safety. Employees were not wearing their masks correctly. There were flies all around. Students lined up much more often at the snack and pastry window, suggesting their nutritional needs were not being met.

Student Learning: The field workers found that one major characteristic of the dining service impacted student learning. Inconvenient operating hours have an especially negative impact on student academic efforts. There was a rush period for breakfast ten or twenty minutes before class. Students rushed their eating, or ate as they walked to class. Lines were long, and students had to wait a long time to eat.

Miscellaneous Findings: The student researchers felt that food quality was the issue students were concerned about the most. They also observed that students learned from each other which dining rooms featured what, sharing their experiences in the various dining halls with each other. For instance, they observed that the Fourth Dining Hall had the most delicious cooked noodles; while the Second Dining Hall offered more entries than that of the Third Dining Hall, which had provided a limited choice in terms of food selection. The combos, a fixed combination of several sorts of dishes, were the most popular choice of the students, because the price was very low, due to subsidies from the Li Kaishing Foundation. However, there were

also long queues in front of windows providing selections that are more expensive. For example, students greatly patronized the window supplying Lücai (Green Dishes), which contained pickled food, pasta and soup at higher prices. The researchers interpreted this to mean that students, craving variety, were willing to pay more to get it. Other miscellaneous findings of interest were that students had no opportunity to choose the quantity of rice which the staff served them, which inevitably led to waste; also, foodservice management had not laid out tables optimally, and students placing bags on chairs used up scarce seats that could have been used by diners.

# **DISCUSSION**

There were five research questions posited at the beginning of this research. These questions were: 1) How did the university's foodservice affect student health? 2) How did the university's foodservice affect student learning? 3) How did the university's foodservice affect student satisfaction with their university and with their dining experience? 4) How the foodservice operation at the university be improved? 5) Should foodservice quality be included in the government's performance evaluation of the university? The data collected show that the answers to these questions may relate to the following categories.

# Comparison of Qualitative Methods with Quantitative Methods

This section will delineate the information gleaned from the qualitative methods which was over and above the information obtained from the quantitative questionnaire, with a view to illustrating the depth and detail which can be obtained by qualitative methods, in comparison to quantitative methods.

Interviews: With regard to morale and satisfaction, the depth interviews detected that students morale was affected by lack of employee training, and deficient staff management, both of which were not discovered by the quantitative questionnaire. With regard to learning, the interviews found that the foodservice affected the students' mood for learning; whereas the questionnaire discovered only that the foodservice operations affected the students' ability to

learn. No information concerning health not found in the questionnaire was found in the depth interviews.

Participant Observation: All of the following items, concerning student morale and satisfaction, student health, and student learning, all of which were not discovered by the quantitative questionnaire, were discovered by the qualitative method of participant observation. With regard to student morale and satisfaction, it was found that the students used the dining halls as a social gathering place, that the cuisine was biased in favor of Guangdong residents, that the dining halls did not open early enough for students attending morning classes, the service attitude (as opposed to mere service quality) was not satisfactory, the environment was deficient in several particulars (brightness, cleanliness, comfort, quiet), the tables were messy, students were carrying packed meals off to the dormitories (perhaps indicating dissatisfaction with dining in the dining halls, or perhaps indicating that the service hours were too short), and finally, staff cleaned the tables before the students had finished eating, thus, perhaps, impacting their satisfaction.

Concerning student health, items of information discovered by the qualitative method of participant observation which were not discovered by the quantitative questionnaire, are listed as follows: the soup was diluted, there was no variety of vegetables, service workers were not wearing their masks correctly, the cooks used too much oil and salt, there were no professional rules for staff training and safety, service workers' masks were not worn correctly, flies were buzzing around, and finally, too many students were eating snacks and pastries.

With regard to student learning, one item of information which was discovered by the qualitative method of participant observation which was not discovered by the quantitative questionnaire, is this: there was a rush period 20 minutes before breakfast, and the students were seen eating on their way to class, indicating that students were not eating properly before their early morning class, which might affect their learning.

From the above it is obvious that actionable information was obtained from the quantitative anthropological methods which were not obtainable from a quantitative questionnaire. This supports strongly one of the theses of this paper, namely, that qualitative anthropological research

methods have a place in the world of business research.

#### **Student Health**

The research discovered that, from the aspect of the students' perception, foodservice quality had a great-perceived influence on the students' health, affecting the perception of the students' physical health, nutritional intake, and fear of disease. There were problems with the variety and quality of foods offered. For instance, food service staff had diluted the soybean soup with water, which thus had no nutritional value. The university's foodservice did not provide a variety of vegetables. Students lined up much more often at the snack and pastry window, suggesting that the dining halls were not meeting their nutritional needs. The staff cooked food with two much oil and salt. In addition, there were health issues arising from deficiencies in the foodservice staff. There were no professional rules concerning staff training and health safety. Employees were not wearing their masks correctly. Staff assigned to clean up tasks would clean tables at which students were not finished eating. Besides, the field workers discovered unsanitary condition in the dining halls, where there were flies all around.

#### **Student Learning**

The research found that perceived student learning was impacted by one major characteristic of the dining service. Student diners felt that inconvenient operating hours had an especially negative impact on student academic efforts. There was a rush hour at breakfast, students rushed their eating, or ate as they walked to class. Lines were long, and the students had to wait a long time to eat. We postulated that the quality of the university dining service would affect the students' mood for learning, their physical strength and their learning efficiency. Table 6 reports students reported attitudes towards these factors. The students' perception is indeed that their foodservice affects their academics.

# **Student Satisfaction**

This research indicated that at this university, a large plurality of the students believed that foodservice factors would indeed affect their satisfaction with their university dining experience. A large plurality believed that dining hall quality would affect their degree of satisfaction. Most of the factors uncovered by the research were negative aspects of the foodservice. These negative factors including: bias towards local cuisine at the expense of out-of-province students; not enough food variety (especially with the set meals); the cafeterias opened too late; the attitude of foodservice workers was less than optimal; the dining environment was not bright, not comfortable, not clean, not quiet, and not sanitary enough. However, the research discovered that there was one positive factor affected student satisfaction, which was the fact that the food service management offered the dining halls to the students for gatherings and activities.

# Suggestions for Enhancement to the University's Foodservice Operations

The research suggested a need for improvement in three areas of the university foodservice operation. The first needed improvement was concerned with sanitary conditions, which participants' observation, in-depth interviews, and questionnaires all detected as something that needed to be attended to. The second needed improvement was an increase in the variety of foods, a need that detected by all the three research methods used. The third needed enhancement of the foodservice operation was an increase in staff performance and professionalism through training. This need was detected by all the research methods used.

# Include Foodservice Quality in the Evaluation of the University

Questionnaire data revealed strong support among the student diners for the proposition that foodservice quality should be included in the set of evaluation criteria used by the Chinese government to evaluate universities. Forty-seven percent of the students surveyed agreed with that proposition, and 42% strongly agreed.

This research employed a combination of qualitative ethnographic methods (in-depth interviews and covert participant observation) and traditional quantitative survey data. This triangulation provided a depth of understanding that would not have been possible with the use of any of the research methods in isolation. In ad-

dition, a more profound understanding of the intrinsic nature of Chinese university foodservice operations has been obtained than, has been reported by previous research, which has relied mainly on quantitative methods. It is a straightforward conclusion that, as a result of the research findings by this study, it is clear that anthropological ethnographic methods actually do work in business research.

#### Discussion of the Partially Covert Participant Observation Used in This Research

Particular attention should be drawn to one ethnographic method used in this research. If ethnographic methods generally are used sparingly in business research, then it is no surprise that we can rarely find the covert participant observation is rarely found in business research. In fact, in the social sciences researchers rarely use it at all, because some scholars stigmatized it for several reasons. Fear of ethical violations and lawsuits has made the use of this research method a "perilous endeavor." (Lugosi 2006) Increasing limitations by funding agencies and universities have made research using covert participation more and more circumscribed, and recent writings of the topic are relatively rare (Li J 2008).

Covert participant observation has earned such a bad reputation that some critics see the method as "inherently transgressive". Some have even gone farther, and have denounced covert methods as "ethically and professionally unsound", and have vilified all those who use the method as being engaged in "duplicitous" research. One critic claimed that covert methods were inexcusable forms of civil betrayal that violated the individual's right not to be studied (Shils 1982, cited in Lugosi 2006). Not only do some blast covert methods as violation of subjects' rights, some also criticize the method for the stress it places upon researchers who have to deceive those with whom they develop a personal relationship (Lugosi 2006).

Despite such vehement ethical objections to covert participant observation, the research value of the method has impelled some social scientists to leap to its defense, at least, in some circumstances. Some subjects simply will not submit to overt methods. In addition, those in powerful and authoritative positions have often behaved secretly and made it difficult to observe their behavior. This is especially true when the

subjects are covering up institutionalized corruption (Miller 1995).

Although, critics have severely criticized covert research methods, there are those who will defend the method. However, the defense is usually on a case-by-case basis, or on a "sliding-scale" basis. A researcher who proposes to use a covert method will examine the research and balance in his mind whether the hoped-for benefits outweigh the possible risks to the subjects. The risks and rewards should be "highly specified", according to Miller (1995) who defends covert techniques, and who admits that to "highly specify" is difficult to do. While defenders of covert techniques admit that in some cases, ethicality is a problem, many detractors of covert techniques make blanket condemnations, and thus, in our view, create a difficult burden of proof for themselves. It is an extreme position to say that all covert techniques should be illegitimate. The more reasonable position, in our view, is that researchers should examine their proposed investigations on a case-by-case basis, and balance the following interests: What is the sensitivity of the research topic? What is the vulnerability of the researched individuals? How close of a relationship must be developed between the researcher and the subject? (Li J 2008) How might subjects under investigation value the information gathered? How might other groups who are in the same category as the subjects under investigation value the information gathered? How invasive in the eyes of the subjects is the covert technique that is used?

Using the criteria above, the authors proceed to evaluate this research, to demonstrate that ethnographic methods can not only be used in general with great profit in business research, but also that is possible, in certain situations, to employ covert participant observation methods in particular, with no fear of ethical complications. First, what is the sensitivity of the research topic? Foodservice is not nearly as sensitive as criminal behavior, or activities associated with vice such as gambling or out-of-the-mainstream sexual practices. Yet, covert observation methods have been used, and defended, in many such situations; therefore, a fortiori, the method is clearly legitimate when examining eating in a public cafeteria.

Second, what is the vulnerability of the college students under investigation? They are not vulnerable, as, for example, gamblers in a casino would be if their gambling became known to their families. Third, how close of a relationship must be developed between the researcher and the subject? This situation creates a problem when a researcher becomes so close to a subject that the subject inadvertently reveals matters of an intimate nature, before the researcher has a chance to stop the subject from speaking. Other problems arise, such as researchers developing stricken consciences, and researchers losing objectivity. None of these problems arises in this research, because the student field-workers merely ate with the subjects. It was not necessary to develop a close personal relationship at all to make the necessary observations.

Fourth, how might subjects under investigation value the information gathered? If the investigation should lead to the improvement of the dining services, the investigated students who will use those dining services will obviously be benefitted. This leads directly to the fifth criterion, how might other groups who are in the same category as the subjects under investigation value the information gathered? Information leading to the improvement of a university food service might not only benefit all students at the university under investigation, but all university students everywhere, should the knowledge obtained by the research be successfully disseminated to other universities.

Sixth, how invasive in the eyes of the subjects is the covert technique used? Here is the answer to this question: not very invasive at all. The subjects' privacy was not invaded, because they were eating in public. The accommodating and cheerful responses that were often provided by the subjects when asked to participate in interviews and questionnaire surveys confirms that there was no detectable resistance on the part of students being investigated.

# **CONCLUSION**

The present research has accomplished several purposes. Firstly, it encourages the use of ethnographic techniques in business research, as these techniques are truly effective and reliable. Secondly, it encourages the appropriate use of covert participant observation, which is also very reliable and effective in terms of obtaining data. Thirdly, this research has revealed factors about the relationship of Chinese university foodservice operations to both Chinese university

students and to universities, which is a very important issue that reaches beyond foodservice operations, and which pertains to the whole higher education industry in China.

Although, the findings from this case study can serve as the evidence that anthropological methods work in business research, it is less possible to extrapolate that conclusion to other business research projects, given the fact that this study took only one university foodservice as the study subject. In addition, the study did not investigate whether the foodservice management, the university leadership, as well as the higher education administration had different opinions.

#### RECOMMENDATIONS

The present research study indicated that food quality, foodservice quality, and dining environment affected the students' health and spirit. However, this research did not indicate *how* food quality, food service quality, and dining environment affected the students' health and spirit. Fruitful future research should be directed at an examination of the causal mechanisms which link foodservice quality with the students' health and spirit. In-depth interviews could be employed to probe those linkages.

In general, researchers need to conduct further investigations to test the anthropological method's effectiveness in business research by recruiting more universities to participate in similar studies; in addition, scholars need to study foodservice management, university leadership, and higher education administration as well, to confirm the findings from this research.

# REFERENCES

Agafonoff N 2006. Adapting ethnographic research methods to ad hoc commercial market research. *Qualitative Market Research: An International Journal*, 9: 115-125.

Brand V, Slater A 2003. Using a qualitative approach to gain insights into the business ethics experiences of Australian managers in China. *Journal of Business Ethics*, 45(3): 167-182.

Calvey D 2012-13. Covert ethnography in criminology: A submerged yet creative tradition. Current Issues Crim Just, 541.

Campbell DT, Stanley JC 1966. Experimental and quasi-experimental designs for research in teaching. In: Nathaniel Lees Gage (Ed.): Handbook of Research in Teaching. Chicago: Rand McNally, pp. 171-246.

- Chen X 2006. On college dining hall management and service. Science and Education Forum (on Affairs), 8: 45.
- Elliott R, Jankel-Elliott N 2003. Using ethnography in strategic consumer research. *Qualitative Market Research: An International Journal*, 6(4): 215-223.
- Freeman L, Spanjaard D 2012. Bridging the gap: The case for expanding ethnographic techniques in the marketing research curriculum. *Journal of Marketing Education*, 34: 238.
- Gao Q 2009. Statistical analysis of public service satisfaction factor-taking students' dining hall of universities as an example. Soft Science, 23: 82-84.
- Gao Q, Cao Z, Sheng P 2010. Model analysis of college dining hall service satisfaction based on SEM. Journal of Southwest University for Nationalities (Humanities and Social Sciences), 6: 255-299.
- Gold RL 1958. Roles in sociological field observation. *Journal of Social Forces*, 16: 1-30.
- Harvey LJ, Myers MD 1995. Scholarship and practice: The contribution of ethnographic research methods to bridging the gap. *Information Technology and People*, 8(3):13-27.
- Horlick-Jones T, Rosenhead J 2007. The uses of observation: Combining problem structuring methods and ethnography. The Journal of the Operational Research Society, 58(5): 588-601.
- Hossler D, Bean JP 1990. The Strategic Management of College Enrollments. San Francisco: Jossey-Bass.
- Lan X, Tian G 2011. The ethnography research method and its application in business practice. Fujian Forum (Social Sciences Edition), 14: 65-66.
- Li B, Li T, Li S 2008. Establishing reflection of lasting effect mechanism to deal with college dining hall price rising. *North Economic and Trade*, 10: 157-158
- Li G 2008. Difficulties facing university catering service work and responses. Science and Technology Information, 14: 72-73.
- Li J 2008. Ethical challenges in participant observation: A reflection on ethnographic fieldwork. *The Qualitative Report*, 13(1): 100-115.
- Lu X 2009. Research on the Change of Customer Satisfaction Based on Service Recovery-An Example for Restaurants. Master Thesis. Tianjin, China: Tianjin University.
- Lugosi P 2006. Between overt and covert research: Concealment and disclosure in an ethnographic study of commercial hospitality. *Qualitative Inquiry*, 12(3): 541-561.
- Ma L 2009. Factors influencing dining in dining hall on contemporary students and responses. *Science and Technology Information*. 3: 554-555.
- Marshall G (Ed.) 1998. *Dictionary of Sociology*. 2<sup>nd</sup> Edition. Oxford, England: Oxford University Press.
- Miller M 1995. Covert participant observation: Reconsidering the least used method. *Journal of Contemporary Criminal Justice*, 11(2): 97-105.

- Ministry of Education (P.R.C.) 2004. Notification Issued by the General Office of the Ministry of Education about the Undergraduate Teaching Assessment Plan of Universities and Colleges with General Education (Trial Implementation). *Internal Documentations*, Issue 21.
- Pan F 2009. On the establishment of student satisfaction with the dining hall elements. *Zhejiang Marine International Journal of Career Technical College*, 3: 71-73.
- Parkhe A 1993. Messy research, methodological predispositions, and theory. *Academy of Management Review*, 18(2): 227-268.
- Peterson RB 2004. Empirical research in international management: A critique and future agenda. In: R Marschan-Piekkari, C Welch (Eds.): Handbook of Qualitative Research Methods for International Business. Cheltenham: Edward Elgar, pp. 25-55.
- Randall DM, Gibson AM 1990. Methodology in business ethics research: A review and critical assessment. *Journal of Business Ethics*, 9(6): 457-471.
- Shils EA 1982. Social inquiry and the autonomy of the individual. In: M Bulmer (Ed.): Social Research Ethics: An Examination of the Merits of Covert Participant Observation. London: Macmillan, pp. 125-141
- Sinkovics RR, Penz E, Ghauri PN 2008. Enhancing the trustworthiness of qualitative research in international business. *Management International Review*, 48(6): 689-713.
- Spicker P 2011. Ethical covert research. Sociology, 45(1118): 133.
- Tian G, Van Marrewijk AH, Lillis MH 2013. General Business Anthropology. 2nd Edition. Miami FL: North American Business Press.
- Walters SR 2013. Someone is watching you: The ethics of covert observation to explore adult behavior at children's sporting events. *Bioethical Inquiry*, DOI 10.1007/s11673-014-9543-9542.
- Wechsler H, Brener ND, Kueste S, Miller C 2001. Foodservice and foods and beverages available at school: Results from the school health policies and programs study. *Journal of School Health*, 19: 313-324.
- Wu M 2011. On how to strengthen college dining hall management. *Law and Society*, 18: 218-219.
- Ye W, Gao Y, Yin Z, Lin J 2006. Investigation into nutrition of college students and attitudes towards food safety knowledge in Guangzhou. *Chinese Jour*nal of School Health, 10: 847-848.
- Xiao JG 2008. Analysis of campus foodservice management for constructing a harmonious university. Contemporary, 4: 25-26.
- Yang Z, Wang X, Su C 2006. A review of research methodologies in international business. *International Business Review*, 15(6): 601-617.
- Zhou L 2009. Survey and countermeasure analysis of some college students dining hall satisfaction. *University Logistics Research*, 24: 88-89.