Are students "real people?"
The use of student subjects in hospitality research

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Abstract

The objective of this study is to examine the service failure evaluations by sample group and failure type. Specifically, we examine three sample groups (hospitality major students, students of other majors, and non-students) in two service failure types (outcome and process). This study can provide useful insight for researchers in terms of using student subjects in research and in evaluating research findings. Since the proportion of the total population is unknown, quota samples (100 for each group) of 300 respondents were collected for the comparison analysis. During this research, experimental study was designed using quasi-experimental design. The findings can reveal patterns of service failure evaluation by different sample groups, which can guide researchers on which sample to use for their research.

Keywords: *hospitality students, non-students, general population, service failure, research*

Introduction

Using college student subjects in research has been a widely spread practice in many disciplines such as marketing, social psychology, and consumer research (Peterson, 2001). It can be said that "between 20 and 33 percent of articles reporting consumer research findings employed student subjects" (Cunningham, et. al, 1974, p. 399) and 75percent of published research in social psychology has involved college students (Gordon, Slade & Schmitt, 1986). In the context of consumer research articles published in *Journal of Consumer Research*, the usage of students increased from 23 percent in their first volume to 89 percent in 2001 (Peterson, 2001). This is similar to 86 percent that has been reported by Sherman, et al. in 1999 in *Personality and Social Psychology Bulletin* (Peterson, 2001). It could be evidence of academic researchers' pressure either to "publish or perish" (Burnett & Dunne, 1986), where the use of student subject has been ignored for the purpose of data collection and in some cases trade-off between external validity and convenience.

This practice has caused some disagreements in the research community whether it is or not appropriate to use students as a sample which has been a debating issue for decades since McNemar's (1976) remark "the science of sophomores." Despite the enduring and vitriolic nature of the debate over the use of college students as research subjects, relatively little empirical evidence exists to understand this issue in hospitality research (notable exception, Ok et al., 2008). Also, researchers often use student subjects who are in the major of the field due to utmost convenience: for example, hospitality students for the hotel service evaluation experiment. However, it is not clear whether hospitality students are more sensitive or lenient

than other research subject groups. Since hospitality students are more exposed to hospitality services from their learning and field experience, such as internships and jobs, their perception may be different from others. Therefore the results reflected in the research may be systematically biased.

The objective of this study is to examine the service failure evaluations by sample group and failure type. Specifically, we examine three sample groups (hospitality major students, students of other majors, and non-students) in two service failure types (outcome and process). Understanding a possible systematic bias in the sample groups with a moderating factor (failure type) can provide useful insights for researchers to use student subjects in research and evaluate research findings more cautiously.

Conceptual Framework

Debate on student samples in research

Some researchers have argued that student subjects' attitudes and perceptions are different from typical consumers (Wells, 1993), thus, they are not a representative sample of adult consumers (James & Sonner, 2001). For example, young adults change attitudes more often than older people, and their social and political views are more unstable (Sears, 1986). Their attitudes are less likely crystallized; they have a less-formulated sense of self, stronger cognitive skills and tendencies to comply with authority, and their peer-group relationships are more unbalanced (Sears, 1986). James and Sonner (2001) found that the results received from students are significantly different from adult consumers in emotional appeal, liking and purchase interest. In addition, students and non-students differ in relative wealth positions, and age difference, which could influence possible study outcome in many ways (Wells, 1993). This is not to conclude that studies based on students are constantly incorrect. It is to say that findings based on students are always suspect (Wells, 1993), and researchers should be more critical in reviewing their results.

While other researchers suggest that the differences between student and consumer samples are minimal, and the student samples provide better results than adult volunteers (Burnett & Dunne, 1986; Lynch, 1999). Thus, so far the findings are inconclusive and further research is warranted (Peterson, 2001). Recently, Ok et al. (2008) examined this issue by comparing service failure evaluations of hospitality students and non-students. They suggest that using students as experimental subjects is appropriate and does not falsely represent general consumers; however, there were some differences in their perceptions (Ok, et al., 2008).

Based on previous research, we expect differences in service evaluations among hospitality students, students of other majors and non-students. Specifically, the more experience with service exchanges in marketplace, the more critical service evaluations of service failures. We expect non-students who are more likely to be mature consumers to be more critical than student groups as they differ in skills, personality traits, and experience (Ok et al., 2008). However, since the hospitality students are more likely to be familiar with hospitality services than students of other majors, we expect that they are more critical than other students. Thus, we hypothesize the following:

H1: There are significant differences in service failure evaluations by sample groups.

Service failure evaluation by sample group

Parasuraman et al. (1988) identified two types of service encounter: outcome and process dimension. The *outcome failure* involves what a consumer actually received from the service

(Chan et al., 2007) and is the primary driver of consumer evaluations of service during the initial encounter (Berry & Parasuraman, 1991). It occurs when organization failed to deliver or to perform some part of core service, causing the consumer to lose economic resources (Smith et al., 1999). An example of an outcome failure would be an unacceptable quality of food. The *process failure* involves how the customer received the service (Chan et al., 2007) and is the primary driver during service recovery (Berry & Parasuraman, 1991). A process failure happens when service is delivered with a flaw or in a deficient manner, resulting in the loss of social resources (Smith et al., 1999). An example of a process failure can be a long wait time for a table in a restaurant or a server that is being impolite. It can be said, outcome failure normally involves a utilitarian exchanges, while process failure involves symbolic exchanges (Smith et al., 1999).

This service failure type can provide deeper insights by allowing us to examine sample group patterns under different service failures. Researchers suggest that evaluation of an in-group is more favorable than evaluation of an out-group (Mullen et al., 1992). The in-group bias which is described as the tendency to display favoritism toward members of their own group (Patterson & Mattila, 2008) can play a role when hospitality students are the subjects of hospitality service research. Thus, we argue that hospitality students may empathize with the service provider in the service failure situations due to in-group bias and evaluate more leniently. Since the process failure involves employees' services, this effect will be more prominent when there is a process failure rather than an outcome failure. In other words, they may feel a sense of common fate with members of the in-group who are service providers in the service failure encounters, or simply put, "been there." Thus, we hypothesize the following:

H2: Hospitality students' evaluation will be less negative than other sample groups when the service failure is process oriented.

Method
Research design
A 3 x 2 quasi experimental design will be used. Two factors are sample group (hospitality major students, students of other majors, and non-students) and service failure type (outcome and process failure). A casual dining experience will be used as setting in this study, and the outcome failure scenario involves an unavailable food, while the process failure scenario involves a long wait. Both scenarios will be identical except for the type of failure manipulation. After each participant reads the scenario, a series of structured questions were asked including demographic information.

Measures
The evaluation of the service failure (dependent variable) will be assessed by perceived magnitude of service failure and negative emotions. The magnitude of service failure will be measured via two items adopted from Hess et al. (2003) on a 7-point bipolar scale. The negative emotions will be measured via three items adopted from Smith and Bolton (2002) on a 7-point scale. For the manipulation check, six items adopted from Chan et al. (2007) will be used.

Sample and data collection
Student sample data (hospitality undergraduate students of other majors) will be collected at a large university in Southeastern region of the United States during Fall 2010 period. The non-student samples, general consumers, will be collected at the local airport. By taking a systematic sampling approach, every third person at the data collection site will be asked to participate in

the study. Since the proportion of the total population is unknown, quota samples (100 for each group) of 300 respondents will be collected for the comparison analysis.

Data analysis plan

We will be using two-way ANOVA. The main effect of sample group will be tested for H1, and multiple comparisons will be used for group differences. The interaction effect between sample group and service failure type will be tested for H2, and the interaction plot will be examined for the pattern.

Implications

This study examines whether a student sample is different from a non student sample, which type of student group is less biased but more like the non-students (general customers) and under which type of service failure. This study can address some issues relating to the use of student samples in hospitality research. The findings can reveal patterns of service failure evaluation by different sample groups, and they can guide researchers with possible systematic bias insights in conducting future research and evaluating previous research findings with hospitality student subjects.

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