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# A Look at Customer Attitudes, Influences of Subjective Norms, and Behavioral Intention Regarding Second Hand Smoke and Smoking in Public

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A look at customer attitudes, influences of subjective norms, and behavioral intention  
regarding second hand smoke and smoking in public

by

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Project

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Eastern Michigan University

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## ABSTRACT

This study is an assessment of customer's attitudes, influences of subjective norms, and behavioral intention regarding exposure to secondhand smoke and smoke free policy at a small family owned and operated restaurant. Research questions address relationships between customer attitudes and smoke free policy as well as likelihood of customers supporting a smoke free policy in an establishment where there is currently no law that prohibits smoking. Methodology included a voluntary self administered survey questionnaire given to a convenience sample of patrons who were dining out. The results show; (a) a significant relationship between attitude about second hand smoke and choosing to sit in a non-smoking section while eating out and (b) evidence that the majority of the participants are in favor of a smoke free policy. Much work still needs to be done on voluntary smoke free policy. These findings support current research about customer attitudes regarding smoke free policy as well as show great promise that customers would most likely support a voluntary smoke free policy at this restaurant.

## TABLE OF CONTENTS

Abstract .....	ii
Table of Contents .....	iii
List of Tables .....	iv
Chapter 1: Introduction .....	1
Statement of the Problem .....	3
Purpose of the Study .....	3
Delimitations of Study .....	4
Theoretical Base .....	5
Chapter 2: Literature Review .....	8
Chapter 3: Methodology .....	13
Chapter 4: Results .....	17
Chapter 5: Discussion .....	26
References .....	29
Appendix A Sample Survey Form .....	31
Appendix B Human Subjects Approval Form .....	34

## LIST OF TABLES

<u>Table</u>		<u>Page</u>
1	Demographic Characteristics of Participants	18
2	Frequency of Dining at Harold's	19
3	Attitude Towards Smoking	20
4	Smoking Behavior	21
5	Attitude Towards Second Hand Smoke	22
6	Subjective Norms	23
7	Behavioral Intent	24
8	Chi-Square Analysis	25

## CHAPTER 1

### INTRODUCTION

Smoking kills more people than alcohol, AIDS, car crashes, illegal drugs, murders, and suicides combined; and thousands more die from other tobacco-related causes such as fires caused by smoking and smokeless tobacco use (Tobacco free kids, 2009). There is no safe level of exposure to tobacco smoke and efforts often used to reduce the harm of secondhand smoke such as separating smokers from nonsmokers, cleaning the air, or ventilating buildings, do not protect the public from the dangers of secondhand smoke (Rayens, Hahan, Langley, Hedgecock, Butler, and Greathouse-Maggio, 2007). The only way to protect nonsmokers from the harm caused by tobacco smoke is to completely eliminate exposure.

As of January 4, 2009 thirty states have laws in effect that require workplaces and/or restaurants, and/or bars to be one hundred percent smoke free. Of those thirty, fourteen states have laws in effect that require workplaces, restaurants, and bars to be one hundred percent smoke free. Currently Michigan is not one of them. There has been an ongoing advocacy effort in Michigan to pass a smoke free law, however the public support for such an initiative has been mixed. This is a problem for people who like to dine out in smoke free environments. If customers who dine out in restaurant establishments support smoke free environments the number of people who are exposed to secondhand smoke exposure will be reduced dramatically. This reduction will have an impact on personal health and related medical costs (House Fiscal Agency, 2008). Workers will not get sick as much because they will be exposed to less second hand smoke. Thousands of lives will be saved each year, health care costs will be reduced, and the air quality will be better.

Nearly twenty two percent of Michigan adults smoke cigarettes (Centers for Disease Control and Prevention (CDC), 2006). Smokers inhale over 4000 toxins and chemicals with each cigarette. Nonsmokers inhale their second hand smoke which contains over 4000 substances, more than 69 of which are known to cause cancer. Cigarette smoking and exposure to tobacco smoke are associated with premature death from chronic diseases, economic losses to society, and a substantial burden on the United States health-care system. According to the American Cancer Society, secondhand smoke is the third leading preventable cause of death in the United States, killing 38,000 to 65,000 nonsmokers every year. Food service workers are approximately 50 percent more likely to develop lung cancer than the general public because many are exposed to secondhand smoke at work (House Fiscal Agency, 2008). Smoke-free laws can significantly reduce exposure to secondhand smoke simply by not allowing people to smoke in public places. They can reduce exposure to secondhand smoke. They can discourage smoking initiation among youth. They can create an environment that encourages smokers to cut back or quit and can support smokers who are already in the process of quitting (Rayens et al., 2007).

By assessing customer's attitudes and beliefs regarding secondhand smoke and smoking in public, health educators now have a better understanding of why people are still performing this behavior and, business owners have a better understanding of whether or not a voluntary smoke free policy should be established. Using the Theory of Reasoned Action as a framework, the results from this study provide useful information that can be used to help change attitude or beliefs about smoking behavior in public places such as restaurants. The information will be helpful to other establishments who are looking to possibly make a voluntary smoking policy change as well.

### *Problem*

Tobacco products are the only legal consumer products that are harmful when used exactly as the manufacturer intended (Education Training Research Associates, 2008). It is important that restaurant owners are aware of the attitudes, subjective norms, and behavioral intentions of their customers regarding secondhand smoke and smoking in public so that effective voluntary smoke free policies can be put into place at their establishments.

### *Purpose*

The purpose of this study was to assess customer attitudes, perceptions of subjective norms, and behavioral intention regarding exposure to second hand smoke and smoking in public at Harold's Place, a small family owned and operated restaurant in Irish Hills, Michigan. The framework from the Theory of Reasoned Action helped provide useful information for both health educators and small business owners. This information assisted the small business owner with his decision making about putting a voluntary smoke free policy into effect at his establishment.

### *Research Questions*

1. Is there a relationship between patron attitudes toward smoking and their intention to patronize a smoke free restaurant?
2. Is there a relationship between how patron's view second hand smoke and their attitude toward smoke free laws?
3. Do patron attitudes toward second hand smoke influence where they sit while dining out in restaurants?



4. What is the likelihood of current smokers supporting a smoke free policy at this establishment?
5. Do customers support a smoke free policy in an establishment where there is currently no law that prohibits smoking?

### *Assumptions*

It was assumed that the participants were current customers of Harold's Place. It was assumed that because the restaurant is located in the middle of two small towns that some small town politics including rumors about what this project was all about would get started. It was assumed that some customers will be first time visitors, but the majority of the participants will be those who frequent the establishment more than two times a week. It was also presumed that participants would fully participate with all the surveys and give honest answers during all of the assessments.

### *Limitations*

1. Many of the participants from the older generation might have been against any type of change in policy.
2. Selection bias – sample selection was skewed due to the customers who do not frequent the establishment on a regular basis. First time customers are included in the results.
3. Selection bias because this was a convenience sample therefore the entire population was not included.

4. The respondents selected may have been inclined to support the current smoking policy.
5. Selection bias – some individuals have already stopped eating out due to the current smoking policy and were not included in the results.

### *Theoretical Base*

The Theory of Reasoned Action (TRA) by Fishbein & Ajzen was used as the theoretical base for this project. The TRA includes measures of attitude and social normative perceptions that determine behavioral intention. Behavioral intention in turn affects behavior. The TRA helps to explain the relationship between attitudes and intentions, and subjective norms and intentions to perform a behavior. It does not measure behavior change, but looks at attitudes and beliefs of “why” people perform a behavior. Based on the “why” health educators can provide useful tools to help change attitude or beliefs (Glanz, Rimer, and Marcus-Lewis, 2002).

For the purpose of this project customer attitudes regarding smoking in public, exposure to second hand smoke, and smoke free policy were looked at. The TRA claims that people who hold strong beliefs that positively valued outcomes will result from performing the behavior will have a positive attitude toward the behavior. And, vice versa people who believe a negative valued outcome will result from the behavior will have a negative attitude toward the behavior. For example, if a customer strongly disagreed about a smoke free environment, then they would have a negative attitude about a change in policy. The TRA also looks at subjective norms. Subjective norms are determined by normative beliefs. Normative beliefs are beliefs about whether each referent approves or disapproves of the

behavior, and is weighted by their motivation to comply with those referents (Glanz, Rimer, and Marcus-Lewis, 2002). People who believe certain referents think they should perform a behavior (smoke in public) and are motivated to meet the expectations of referents will have a positive subjective norm. And, vice versa those who believe the referents think they should not perform the behavior (smoke in public) will have a negative subjective norm.

The TRA framework states that based on attitude and subjective norm one's behavioral intention is determined. Behavioral intention is the perceived likelihood of performing the behavior (smoking in public). Constructs were combined to look at the relationships between attitude and behavioral intention and the relationship between subjective norm and behavioral intention. Based on the participants behavioral intention we were able to look at the likelihood of them continuing to patronize the restaurant if a smoke free policy were put into place. Because the participants did show support for a smoke free environment and the likelihood of them continuing to patronize the restaurant was high we can now provide information to the business owner about the benefits of a smoke free environment. The results also helped provide health educators with information to help other small businesses who are trying to establish a voluntary smoke free policy for their establishment.

### *Definition of Terms*

1. *Second-hand smoke*- environmental tobacco smoke that is inhaled involuntarily or passively by someone who is not smoking.

2. *Environmental tobacco smoke*- is generated from the side stream (the burning end) of a cigarette, pipe or cigar or from the exhaled mainstream (the smoke puffed out by smokers) of cigarettes, pipes, and cigars.
3. *Carcinogen*- a substance or agent that causes cancer.
4. *Public opinion*- is the aggregate of individual attitudes or beliefs held by the adult population

## CHAPTER II

### REVIEW OF LITERATURE

#### *Introduction*

The purpose of this study was to assess customer attitudes and perceptions of subjective norms regarding exposure to secondhand smoke and smoking in public at Harold's Place, a small family owned and operated restaurant in Irish Hills, Michigan. The results provided health educators with a better understanding of why people are still continuing to smoke in public while dining out, and the business owner can now decide if he should establish a voluntary smoke free policy in his establishment. To date most of the research that has been done has assessed customer attitudes and restaurant revenues in response to smoke free *laws* that have been put into place, but not much regarding attitudes about a voluntary smoke free policy being put into place. This chapter reviews existing literature on the effects of smoking, secondhand smoke, restaurant sales and revenues, and smoke free laws.

#### *Effects of smoking tobacco*

Nearly 22 percent of Michigan adults smoke cigarettes (CDC, 2006). Each year more than 430,000 people die in the United States from cigarette smoking (CDC, 2006). In Michigan more than 14,500 adults will die each year from their own smoking. In Michigan 298,000 young people under age eighteen will ultimately die prematurely from smoking (Tobacco Free Kids, 2009). Smokers inhale over 4000 toxins and chemicals with each cigarette. Nonsmokers inhale their secondhand smoke with contains over 4000 substances, more than 69 of which are known to cause cancer.

Tobacco products are the only legal consumer products that are harmful when used exactly as the manufacturer intended (Educational Training Research Associates, 2008). Cigarette smoking is the leading cause of preventable death in the United States (United States Department of Health and Human Services, 2004). According to the latest Surgeon General's Report on Smoking and Health cigarette smoking is a cause of many types of cancer including bladder, cervical, esophageal, kidney, laryngeal, leukemia, lung, oral, pancreatic, and bladder. Additionally, cigarette smoking is a cause of heart disease, stroke, emphysema, chronic bronchitis, pneumonia, sudden infant death syndrome, cataracts, hip fractures, and peptic ulcer disease. Cigarette smoking and exposure to tobacco smoke are associated with premature death from chronic diseases, economic losses to society, and a substantial burden on the United States health-care system (Smoking-attributable mortality, 2000-2004). Smoking is the primary causal factor for at least thirty percent of all cancer deaths, for nearly eighty percent of deaths from chronic obstructive pulmonary disease, and for early cardiovascular disease and deaths (Smoking-attributable mortality, 2000-2004). During 2000-2004 cigarette smoking and exposure to tobacco smoke resulted in \$96.8 billion in productivity losses annually in the United States (Smoking-attributable mortality, 2000-2004).

### *Effects of Secondhand smoke*

Annually, exposure to secondhand smoke causes an estimated three thousand deaths from lung cancer among American adults. Secondhand smoke causes between 35,000 and 62,000 deaths from heart disease every year (Health Statistics, 2008). Additionally 12,000 otherwise healthy nonsmokers will die of some form of cancer because of their exposure to

secondhand smoke. Cigarette smoking is the single most preventable cause of premature death in the United States (CDC, 2006). According to the American Cancer Society, secondhand smoke is the third leading preventable cause of death in the United States, killing 38,000 to 65,000 nonsmokers every year. A study conducted at University of California, Berkeley found that food service workers are approximately fifty percent more likely to develop lung cancer than the general public because many are exposed to secondhand smoke at work (<http://www.legislature.mi.gov>).

### *Smoke free laws*

Smoke-free laws can significantly reduce exposure to secondhand smoke simply by not allowing people to smoke in public places. Smoke-free laws are beneficial in a number of ways. They protect nonsmokers. They can reduce exposure to secondhand smoke. They can discourage smoking initiation among youth. They can create an environment that encourages smokers to cut back or quit and can support smokers who are already in the process of quitting (Rayens et al., 2007). Michigan has attempted to pass a smoke free Bill two times since 2007. This Bill is known as House Bill 4163. House Bill 4163 would amend Part 126 (Smoking in Public Places) and Part 129 (Food Service Establishments) of the Public Health Code (MCL 333.12601 et al.), generally, to prohibit smoking in public places, in places of employment, and in food service establishments, such as restaurants, cafeterias, food courts in shopping malls, and bars (House Fiscal Agency, 2008). As of December 2008 this Bill did not get approved and was sent back to the House for concurrence.

### *Changes of attitudes and patronage behaviors*

Tang, Cowling, Lloyd, Rogers, Koumjan, Stevens, and Bai, 2003 determined that approval of the smoke free law in California rose from 59.8% to 73.2% over time and the likelihood of visiting a bar or of not changing bar patronage after the law was implemented increased from 86% to 91%. In a study of patron attitudes and behavior changes after implementation of the smoke free law researchers found that California bar patrons increasingly support and comply with the smoke free bar law.

A similar study by (Rayens et al., 2007) measured adults' opinions and behaviors before and after implementation of the comprehensive smoke free public places law in Lexington-Fayette County, Kentucky. Public support for the smoke free law: perception of health risks from exposure to secondhand smoke, smoking behaviors; and frequency of visiting restaurants, bars, and entertainment venues were assessed pre- and post-law. Of the combined sample of 2,146 participants, 60% were supportive of the smoke free law. There was an increase from 56% to 63% between the pre- and post-law periods. More than 70% of the sample considered exposure to secondhand smoke a moderate or severe health hazard. The increase from pre- and post-law went from 69% to 73%. The percentage of respondents in the total sample who indicated they went to restaurants in Lexington at least once a week was 75%. There was no significance in pre- and post-laws here. The percentage of patrons visiting bars rose from 15% to 18% in pre- and post-law periods. This study supports other public opinion studies that estimate increasing support for smoke free workplaces. Similarly, this finding showed that public support increased after the law took effect.



### *Controversy regarding smoke free laws*

Those who oppose smoke free laws claim that it is going against people's freedom of choice. Business owners often claim that the laws will harm business and decrease profits. Business owners also argue that patrons will stop frequenting establishments altogether or dine out less often if smoking is prohibited (Rayens et al., 2007).

## CHAPTER III

### METHODOLOGY

#### *Purpose*

The purpose of this study was to assess customer's attitudes and perceptions of subjective norms regarding exposure to secondhand smoke and smoking in public at Harold's place, a small family owned and operated restaurant in Irish Hills, Michigan. The completion of this project helped provide answers for a better understanding of customer's attitudes toward public smoking and their intention to patronize a smoke free restaurant regardless of whether or not they are current smokers. Results show whether or not there is customer support for smoke free environments in restaurants. Results show whether referents have an influence on smoking behavior while dining out. Results helped the business owner determine whether or not to and enforce a voluntary smoke free policy in his establishment.

#### *Design*

A convenience sample of both smoking and non-smoking adult customers eighteen or older who dined at Harold's Place were given an anonymous self-administered questionnaire. A prospective study design was used to discern the relationships between customer's attitudes, subjective norms, and intentions regarding secondhand smoke and smoke free policy. Qualitative analysis was used to provide useful information about the information collected from the sample. The survey was given throughout one month on three separate

weekends to reach a high number of customers for the sample. Repeating customers did not take the survey more than one time.

#### *Participant Inclusion Criteria and Recruitment*

Participants eighteen or older were recruited randomly from Harold's Place in Irish Hills, Michigan. Participants were asked to participate in a survey while dining out at Harold's Place. A description about the survey being anonymous and voluntary was provided at the top of the survey instrument. A convenience sample of both smokers and non-smokers were included. Verbal consent from the customer at the time of the survey was given. There was no limit to the number of customers who could participate in the survey. However, no one could take the survey more than one time. Customers who participated in the survey were rewarded with a free cup of coffee or soft drink.

#### *Measurement Instrument*

A survey instrument was used to assess customer's attitudes, subjective norms, and behavioral intention regarding secondhand smoke and smoke free policy. The instrument served as a one-time questionnaire to both smoking and non-smoking participants. The survey was administered over a month long time period for a series of four consecutive weekends.

The 24 item survey was divided into three sections: demographics, attitudes, subjective norms, and behavioral intention.

Items 1-5 in section I measured demographics. Smoking status (current smoker, former smoker, or non-smoker), age, and gender was assessed.

Items 1-9 in section II measured customer attitudes. Examples were: “Do you see secondhand smoke as good, bad, or neutral?” and “Do you agree or disagree that most people approve or disapprove of smoking in a restaurant?”

Items 10-13 in section II measured subjective norms to see whether or not referents had an influence on customer’s smoking behavior while dining out.

Items 1-6 in section III measured one’s behavioral intention. Examples are: “What is the likelihood of you eating out and sitting in the smoking section of this restaurant?” and “What is the likelihood of you continuing to eat out at this restaurant if a smoke free policy were enforced?”

All items on the survey were either multiple-choice or used Likert scale. All items allowed the research questions to be answered. Participants had an area to write comments about the survey. However, they were not considered as part of the research. The following survey items addressed specific research questions.

1. Items 1-13 in section II looked at patron attitudes toward smoking and their intention to patronize a smoke free restaurant.
2. Items 1-2 in section II looked at customer attitude regarding smoking and second hand smoke.
3. Items 10-13 in section II looked at the influence of subjective norms.
4. Items 1-6 in section III looked at customer behavioral intention to patronize restaurants with smoke free environments.

### *Threats to Validity*

Participants in the sample may have been inclined to support the current smoking policy due to their loyalty to the restaurant and personal belief that it is a choice to smoke or not. The sample selection may have been skewed due to the customers who do not frequent the restaurant on a regular basis. The survey did not reach those customers who have already stopped coming to eat here due to the fact that the restaurant is not smoke free. Another threat was relying on self-report measures. Participants were surveyed and many factors such as memory recall and dishonesty could have affected their answers. Participants were encouraged to answer to the best of their ability.

### *Ethical Issues*

There were not any ethical issues due to the fact that completion of the survey was voluntary.

### *Data Collection Procedures*

Surveys were administered to participants throughout the day in both the smoking and the non smoking section. Participants were approached by the administrator once they placed their order. If customers already had their meal or it looked like they were getting ready to leave they were not approached with the survey.

### *Data Analysis*

Frequencies were run to gather results on demographic variables. Cross tabulations with Chi-square analyses were performed to identify specific relationships between variables.

## CHAPTER 4

### RESULTS

The purpose of this project was to gather data on customer attitudes, influences of subjective norms, and behavioral intention regarding exposure to second hand smoke and smoke free policy at Harold's Place, a small family owned and operated restaurant in Irish Hills, Michigan.

Data were collected from 105 customers who were dining out at Harold's Place. Demographic data reported that the participants consisted of 58 (55.2%) males and 47 (44.8%) females. Of the participants 30 (28.6%) were between 18 and 29 years, 24 (22.9%) were between 30-39 years, 20 (19.0%) were between 40-49 years, 12 (12.4%) were between 50-59 years, 8 (7.6%) were between 60-69 years, and 5 (4.8%) were 70 years or older. Among the participants 18 (17.1%) were current smokers, 33 (31.4%) of the participants were former smokers, and 54 (51.4%) of participants reported never being a smoker (see Table 1).

Participants were assessed on whether or not the day they were taking the survey was their first time ever dining at Harold's Place. Of the participants 89 (84.8%) reported that they had eaten at Harold's before, and only 16 (15.2%) of the participants reported that this was their first time. Of the 89 participants 49 (46.7%) of them dine here once a week, and seven (6.7%) twice a week. Six participants did not report (see Table 2).

Table 1: Demographic Characteristics of Participants

	%	n
Gender		
Male	55.2	58
Female	44.8	47
Age		
18-29 years	22.9	24
30-39 years	4.8	5
40-49 years	12.4	12
50-59 years	22.9	24
60-69 years	19.0	20
70-79 years	7.6	8
80 years or older	4.8	5
Smoking status		
Current Smokers	17.1	18
Former Smokers	31.4	33
Never been a Smoker	51.4	54

Table 2: Frequency of Dining at Harold's

	%	n
Dine at least once a week	46.7	49
Dine twice a week	6.7	7
Dine three times a week	8.6	9
Dine four times a week	2.9	3
Five or more times a week	4.8	5
One to two times a year	7.6	8
First time dining here	15.2	16

Attitude Towards Smoking

When participants were asked how they viewed smoking; 83 (79.0%) reported it as bad and 21 (20.0%) reported neutral. One had missing data. No one reported it as good. When participants were asked how they viewed second hand smoke; 85 (81.0%) reported it was bad and 19 (18.1%) reported neutral. One had missing data. None of them viewed it as good. When asked how they viewed smoke free laws; 66 (62.9%) reported them as good, 18 (17.1%) reported them as bad, and 20 (19.0%) reported them as neutral. One had missing data. When asked if they were aware of the smoke free law that was trying to be passed in Michigan 95 (90.5%) of the participants reported *yes* they were aware of it and 10 (9.5%) reported *no* they were not aware of it (see Table 3).



Table 3: Attitude Towards Smoking

Indicator	%	n
View smoking as		
Bad	79.0	83
Neutral	20.0	21
Good	0	0
View second hand smoke as		
Bad	81.0	85
Neutral	18.1	19
Good	0	0
View smoke free laws as		
Good	62.9	66
Bad	17.1	18
Neutral	19.0	20
Aware of smoke free law in MI		
Yes	90.5	95
No	9.5	10

Smoking Behavior

In terms of primary reasons for smoking eight (7.6%) of the participants reported they smoke because of addiction. Of the participants seven or (6.7%) reported they smoke because of the taste. Among the participants six (5.7%) reported they smoke because they

like it, and five (4.8%) reported they smoke because it is a habit. (See Table 4) Former smokers and nonsmokers were not assessed on reasons why they do not smoke.

Table 4: Smoking Behavior

Indicator	%	n
Smoke because		
Addiction	7.6	8
Taste	6.7	7
Like it	5.7	6
Habit	4.8	5
Their friends do it	3.8	4
They can	3.8	4
Makes them feel good	2.9	3
Their wife smokes	1.9	2
Their husband smokes	1.0	1
It does not hurt them	1.0	1

Attitude Towards Second Hand Smoke

When participants were assessed on their attitude regarding second hand smoke 63 (60.0%) of the participants extremely agreed that it was harmful to their health where only three (2.9%) reported that it was not harmful to their health. A total of 65 (61.9%) of the participants extremely agreed that second hand smoke was harmful to others while only one (1.0%) participant reported that it was not harmful to others. A total of 64 (61.0%) of the

participants extremely agreed that second hand smoke causes cancer while only two (1.9%) reported that it did not (see Table 5). The majority of this population agrees that second hand smoke is harmful to them and to others around them.

Table 5: Attitude Towards Second Hand Smoke

Indicator	%	n
Agree it is harmful to their health	60.0	63
Not harmful to health	2.9	3
Agree it is harmful to others	61.9	65
Not harmful to others	1.0	1
Believe SHS causes cancer	61.0	64
SHS does not cause cancer	1.9	2

### Subjective Norms

Personal beliefs about smoking approval while dining out, as well as influences of subjective norms were also assessed. When asked if they believe most people approve or disapprove of smoking while eating out 21 (20%) of the participants reported that they disapprove of smoking while eating out. Only eight (7.6%) extremely approve of smoking while eating out. A total of 34 (32.4%) of the participants reported that they believe their friends also extremely disapprove of smoking while eating out whereas only seven (6.7%) extremely approve of smoking while eating out. Among the participants 37 (35.2%) of the participants believe that their significant other extremely disapproves of smoking while

eating out. There was also strong support that the participants believe that where they sit in a restaurant when dining out is influenced by the people they are with (see Table 6).

Table 6: Subjective Norms

Indicator	%	n
Disapprove of smoking while eating out	20.0	21
Approve of smoking while eating out	7.6	8
Believe friends disapprove	32.4	34
Believe friends approve	6.7	7
Believe significant other disapproves	35.2	37
Believe significant other approves	8.6	9
Where they sit is influenced by people they are with	28.6	30

*Behavioral Intent*

Data regarding behavioral intent of the participants revealed that 83 (79.0%) the participants were extremely unlikely to smoke while out to eat. Of the participants 81 (77.1%) of them were extremely unlikely to choose to sit in a smoking section while out to eat, and 24 (22.9%) were likely to sit in a smoking section while out to eat. A total of 75 (71.4%) of the participants are extremely likely to sit in a non-smoking section while out to eat, and 73 (69.5%) of the participants are extremely unlikely to dine at Harold’s Place if smoking was allowed anywhere inside. Only 32 (30.5%) of participants are likely to dine here if smoking were allowed anywhere inside. 77 (73.3%) of the participants are extremely likely to dine at Harold’s Place if it prohibited smoking everywhere inside (see Table 7).

Table 7: Behavioral Intent

Indicator	%	n
Unlikely to smoke while eating out	79.0	83
Likely to smoke while eating out	9.5	10
Extremely unlikely to sit in a smoking section	77.1	81
Likely to sit in smoking section	22.9	24
Likely to sit in non-smoking section	71.4	75
Unlikely to dine if smoking allowed anywhere	69.5	73
Likely to dine if smoking allowed anywhere	30.5	32
Likely to dine if prohibited smoking everywhere	73.3	77
Unlikely to dine if prohibited smoking everywhere	26.7	28
Support a smoke free policy at Harold's	60.0	63
Unlikely to support a smoke free policy	9.5	1

Cross tabulations with Chi-square analyses were performed to identify significant relationships between variables in an attempt to answer the proposed research questions. A Chi-square analysis of the relationship between attitude toward smoking and intention to dine at this establishment if smoking were prohibited throughout, showed no significant difference between participants who believed smoking was bad versus those participants who believed smoking was neutral (no participants stated that smoking was good) (Chi-square 3.396,  $P=.065$ ) on their intention to dine there.

A Chi-square analysis of the relationship between attitude about second hand smoke and likelihood of choosing to sit in a smoking section while dining out showed a significant

relationship (Chi-square=2.693, P=.000). Of the participants 74 people who see second hand smoke as bad were very unlikely to sit in a smoking section, whereas 11 people who saw secondhand smoke as bad were likely to sit in a smoking section. There was also a significant relationship between attitude about second hand smoke and choosing to sit in a non-smoking section while eating out (Chi-square=1.867, P=.000) (see Table 8).

Table 8: Chi-square analysis

Relationship	Chi-square	P-value
Attitude toward smoking and intention to dine if smoking were prohibited throughout	3.396	.065
Attitude about SHS and likelihood of choosing to sit in smoking section	2.693	.000
Attitude about SHS and choosing to sit in a non-smoking section	1.867	.000

## CHAPTER 5

### DISCUSSION

Cigarette smoking is a highly addictive and life threatening habit. Despite the warnings it continues to effect people on a daily basis. Although the majority of this population reported never being smokers their lives as well as lives of others are impacted by smoking or second hand smoke because of the decisions that other people are making on a daily basis. Much work is still needed to develop effective voluntary smoke free policies.

This study revealed that the participants have bad attitudes regarding smoking and second hand smoke. The study also revealed that participants feel that a smoke free policy is a good thing. The majority of the participants view smoking and second hand smoke as bad. This includes current smokers.

These findings support other research about customers who dine out in restaurant establishments. Research states that both smokers and non-smokers attitudes about smoke free policy are changing (Tang et al., 2003). Research shows that the longer that states that have smoke free laws in place the more accepting everyone is to the smoke free environment (Tang et al., 2003). Restaurant business in places like New York City has increased since the State adopted its smoke free law. Customers are more accepting of smoke free environments after smoke free laws are put into effect (Rayens et al., 2007). More people are realizing the dangerous and deadly effects of both smoking and second hand smoke. Results showed that 73.3% of the participants would continue to dine at Harold's Place if it prohibited smoking everywhere inside, and that 60% of the participants were in support of a smoke free policy at this establishment. The question here is how do we get these numbers to 90 or 100 percent? Because Michigan still has no current law that prohibits smoking in restaurants it is up to

individual business owners to make the decision to put a voluntary smoke free policy into place. For small business owners it is risky to put a voluntary policy into place because it would affect everyone, both smokers and non-smokers. The owner has to make the final decision after taking his customers feelings into account.

Some limitations applied to this study. Selection bias should be noted. First, this was not a large sample size. The sample should have include more people as well as more former smokers and current smokers as they can be an invaluable resource in creating voluntary smoke free policies. It was assumed that this group of people would automatically answer to be in favor of smoke free policy since the majority of them are currently nonsmokers already. The respondents may have been inclined to support the current smoking policy that is in place. Samples of participants who may have already stopped eating at restaurants that still allow smoking are not included. Lastly, the survey was given to participants as they sat down to eat a meal at this restaurant. Participants may have hurried through the survey in order to have it finished before their meal was served.

Some inconsistencies were also noted in this study. The data revealed that 73 (69.5%) of the participants were extremely unlikely to dine at Harold's Place if smoking was allowed anywhere inside. Smoking is already allowed at this establishment and the participants are already currently eating there.

Several lessons were learned from the results of this study that can be put into future research. The data provided many supportive answers regarding attitudes, influences of subjective norms, and smoke free policy. It provided the restaurant owner with information about some of his cliental with regards to whether or not they would support a voluntary smoke free policy. Because attitude about smoking and second hand smoke is primarily



negative, and because the majority of this population would continue to dine here if smoking were prohibited everywhere inside there is a good indication that if more people were surveyed the results would be the same. Therefore, the owner can now highly consider putting a voluntary smoke free policy into his place.

In sum, this study helped provide health educators with useful information about customer attitudes and beliefs in small family owned restaurants, in states where there is currently no smoke free law. Much work still needs to be done before it is clear on how to create these environments on a volunteer basis. This along with other studies will continue to help build the foundation for how to do this.

These findings support current research about customer attitudes regarding smoke free policy in restaurant establishments as well as show great promise that customers would most likely support a voluntary smoke free policy at this restaurant.

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## APPENDIX A

### Sample Survey

**This survey has been created as part of a graduate research project for Eastern Michigan University. Completion of this survey is totally anonymous and on a voluntary basis only. The information from this survey will only be used to answer research questions. Please complete the entire survey to the best of your ability.**

#### *Part I: Demographics*

*Please select the answer that suits you most to the best of your ability.*

1. Are you \_\_\_\_\_ Male or \_\_\_\_\_ Female
2. As of today you are  
18-29 years old      30-39 years old      40-49 years old      50-59 years old  
60-69 years old      70-79 years old      80 years old or older
3. Which one describes you the best?  
Current smoker      Former Smoker      Never been a smoker
4. Is this your first time ever dining out at Harold's Place?    Yes    No
5. If you answered no to the above question, on average how many times a week do you dine out at Harold's Place?  
1 time a week      2 times a week      3 times a week      4 times a week  
5 or more times a week

#### *Part II: Attitude (1-9) and Subjective Norm (10-13)*

*For each statement below, please circle the best answer for you.*

1. Do you see smoking as:  
Good      Bad      Neutral
2. Do you see secondhand smoke as:  
Good      Bad      Neutral
3. Do you see smoke free laws as:  
Good      Bad      Neutral
4. Are you aware that Michigan has tried to get a smoke free law passed that would prohibit smoking in all restaurants?    Yes      No
5. Do you agree or disagree with laws that prohibit smoking in public places?  
Extremely Disagree      1      2      3      4      5      6      7      Extremely Agree

6. If you smoke, you choose to smoke while dining out because: *(Circle all that apply)*  
 Habit                      Taste                      Addiction                      My wife smokes

My husband smokes                      My friends smoke  
 It makes you feel good                      You like it                      It doesn't hurt you  
 It doesn't hurt anyone around me                      You can                      Does not apply

7. Do you agree or disagree that secondhand smoke can be harmful to your health?  
 Extremely Disagree                      1                      2                      3                      4                      5                      6                      7                      Extremely Agree

8. If you smoke, do you agree or disagree that secondhand smoke can be harmful to the health of others around you?  
 Extremely Disagree                      1                      2                      3                      4                      5                      6                      7                      Extremely Agree

9. Do you agree or disagree that secondhand smoke can cause many forms of cancer?  
 Extremely Disagree                      1                      2                      3                      4                      5                      6                      7                      Extremely Agree

10. Do you believe that most people approve or disapprove of smoking while eating out in a restaurant?  
 Extremely Disapprove                      1                      2                      3                      4                      5                      6                      7                      Extremely Approve

11. Do you believe that your friends approve or disapprove of smoking while eating out in a restaurant?  
 Extremely Disapprove                      1                      2                      3                      4                      5                      6                      7                      Extremely Approve

12. Do you believe that your significant other approves or disapproves of smoking while eating out in a restaurant?  
 Extremely Disapprove                      1                      2                      3                      4                      5                      6                      7                      Extremely Approve  
 Does not apply \_\_\_\_\_

13. If you smoke, do you believe where you choose to sit while dining out in a restaurant is influenced by the people you are with?  
 Extremely Disagree                      1                      2                      3                      4                      5                      6                      7                      Extremely Agree

*Section III: Behavioral Intent*



**APPENDIX B**

**EASTERN MICHIGAN UNIVERSITY**

April 22, 2009

Tanya DuBay c/o Joan Cowdery and Christine Karshin Eastern Michigan University School of Health Promotion and Human Performance Ypsilanti, Michigan 48197

Dear Tanya DuBay,

The CHHS Human Subjects Review Committee has reviewed the revisions to your proposal entitled: "A look at customer attitudes, influences of subjective norms, and behavioral intention regarding second hand smoke and smoking in public at Harold's Place, a small family owned and operated restaurant in Irish Hills, MI" (CHHS 99-037).

The committee reviewed your proposal and its revisions and concluded that the risk to participants is minimal. Your study is approved by the committee.

Good luck in your research endeavors.

Sincerely,

A handwritten signature in black ink, appearing to read "Gretchen Dahl Reeves". The signature is stylized, with a large "G" and "R" and several loops.

Gretchen Dahl Reeves, Ph.D. Interim Chair, CHHS Human Subjects Review Committee