

Spring 5-2013

Perceptions of BP: Successes of Post 2010 Oil Spill Recover Effort

Jordan R. Mathews
University of Southern Mississippi

Follow this and additional works at: https://aquila.usm.edu/honors_theses



Part of the [Business Commons](#)

Recommended Citation

Mathews, Jordan R., "Perceptions of BP: Successes of Post 2010 Oil Spill Recover Effort" (2013). *Honors Theses*. 142.

https://aquila.usm.edu/honors_theses/142

This Honors College Thesis is brought to you for free and open access by the Honors College at The Aquila Digital Community. It has been accepted for inclusion in Honors Theses by an authorized administrator of The Aquila Digital Community. For more information, please contact Joshua.Cromwell@usm.edu, Jennie.Vance@usm.edu.

The University of Southern Mississippi

Perceptions of BP: Successes of Post 2010 Oil Spill Recover Effort

By

Jordan Mathews

A Thesis
Submitted to the Honors College of
The University of Southern Mississippi
in Partial Fulfillment
of the Requirement for the Degree of
Bachelor of Science in Business Administration
in the Department of Management

May 2013

Approved by

Leisa Flynn, Chair

Department of Marketing

David Duhan, Chair

Department of Management

David R. Davies, Dean

Honors College

Abstract

This purpose of this project was to determine peoples' opinions of BP's post 2010 oil spill recovery effort. The researcher examined 65 faculty at the University of Southern Mississippi in order to determine their beliefs, attitudes, and intentions concerning different elements of the BP oil spill recovery effort. The researcher found that there is an overall negative opinion concerning the economic, ecological, and overall recovery effort aspects of the spill. This research suggests that BP still has some work to do in order to restore the gulf coast like they promised.

Table of Contents

Title Page	
Approval Page	iii
Abstract	iv
Table of Contents	v
Introduction	6
Purpose and Significance	8
Literature Review	8
Methodology	15
Conclusion	23
References	27
Appendices	29

Introduction

One of the worst oil spills in world history began April 20, 2010 when the Deepwater Horizon oil rig exploded at approximately 11pm. BP Exploration and Production leased the oil rig Deepwater Horizon from Transocean, an international oil rig development company. The Deepwater Horizon oil platform was approximately 300 feet by 300 feet, and was destroyed, burned, and sunk in the time immediately following the explosion. Eleven oil rig workers on the Deepwater Horizon were killed, and seventeen were injured. Oil gushed uncontrollably from pipes at the bottom of the ocean until July 15, 2010, and was not completely stopped until September 19, 2010. In these four months, millions of gallons of oil were released, covering more than 88,000 square miles (Upton, 2011).

The U.S. Geological Survey said that three teams of scientists estimate that between 504,000 and 798,000 gallons of oil per day were being released through the blown well (USA Today 2010). At this rate of a half a million gallons per day, it did not take long for the oil to cover 88,000 square miles of oceans, beaches, islands, and estuaries. Incalculable amounts of damage were wreaked upon the various ecosystems that make up the rich Gulf of Mexico biosphere. There are studies being conducted in attempts to develop a more concrete overview of the biological extent of this damage, but there will never be a definitive number for this aspect of the spill's effects. Along with the immense biological impact was an incredible economic toll. The spill had major effects on the tourism, seafood, and fishing industries. The economic toll is almost as difficult to calculate as the ecologic toll. While the exact fiscal toll is difficult to calculate, millions of people undoubtedly felt the effects of the spill in some form or

another. Due to the fact that it is seemingly impossible to put a number on the environmental, economic, and life damages, it is rather difficult to put accurate estimations on the full extent of the spill. BP has estimated that the oil spill will cost them 40 billion dollars, including the 20 billion dollar compensation fund (Wearden, 2010).

In towns where the effects of natural disasters were constantly being felt, people were under the impression that disasters of this magnitude were impossible. Most people had not even considered the possibility of an oil spill causing so much harm to so many communities. There is no doubt that immediately following the spill there were many negative perceptions of BP on the Gulf Coast. People were protesting against BP so much that local gas stations were changing their signs so that people would purchase their fuel. These negative attitudes were mostly emotional and short-term, or were they?

The purpose of this project is to examine people's perceptions of BP. Nearly three years have passed, and most of the emotions displayed immediately following the spill have subsided. In this study, the researcher studied attitudes, beliefs, and intentions in order to fully understand consumer behavior towards BP. Through a quantitative analysis of the data, the researcher was able to develop an understanding of current attitudes and purchase intentions towards BP. The research also highlights successful, and unsuccessful, areas of the BP post oil spill marketing campaign. In analyzing the positive and negative attitudes about BP, the researcher was able to determine what areas that BP needs to concentrate on in future advertising in order to continue working towards a recovery.

Purpose and Significance of this Study

This study gives future companies insight as to how they should run disaster recovery efforts. BP has spent billions of dollars restoring a brand name in attempts to salvage goodwill. Despite the fact that regulations and technology are continually leading to safer operations, accidents like the BP oil spill of 2010 are impossible to completely eliminate. Current trends show an increase in pipeline spills in the United States (Etkin, 2001). This increase in pipeline spills suggests that the BP 2010 spill might not be the only spill of this magnitude in the next decade. While this study is particularly applicable to oil spill recovery efforts, it can also be applied to other fields. Regardless of what market a company is in, it could encounter some sort of accident, and will need to have a guide to recovery. This study will allow researchers to see the success of a recent company's success/failure, and allow them to know a direction for the future.

Literature Review

The purpose of this research project is to determine people's perception of BP now that nearly three years have passed since the oil spill. The researcher begins with a discussion of the history of oil spills in the United States. The history of oil spills in America will help to set the stage for the magnitude of the 2010 oil spill. After the history of oil spills in the United States is discussed, the research moves towards a review of Fishbein and Ajzen's contextual framework of belief, attitude, intention and behavior. Once a clear understanding of the variables that the researcher plans on analyzing are discussed, a short synopsis of BP's marketing history is reviewed. After BP's 'green' past is considered, the researcher will move into some perception studies. Research suggests

that perception factors into brand equity, and brand equity can have a high correlation to consumer behavior. The researcher will then review similar research to explain that projects such as this one have been conducted. All of this research helps to prove that people's attitudes and perceptions can lead to behavior, which highlights the importance of BP's post oil spill recovery effort.

History of Oil Spills in the United States

Oil spills have been occurring in the United States for as long as humans have been transporting it. When moving oil, spills are an imminent danger. Even though spills are always going to happen, governments and companies can work to limit the number and size of the spills. Due to increased regulation, the number and size of spills have decreased significantly over the course of the past forty years. In the past two decades, despite an increase in oil transportation, there has been a noticeable decrease in the number and amount of oil spilled (Etkin, 2001). This decrease is owed largely to the fact that there has been a significant reduction in the number of vessel oil spills. Prior to the BP 2010 spill, the Exxon Valdez was the worst oil spill in recorded history. According to the Alaska Oil Spill Commission, over 10.8 million gallons of oil covered over 1000 miles of coastline (1990). After the Exxon Valdez spill in 1989, stringent guidelines were imposed on oil transportation. US pipelines now account for more spills than tankers (Etkin, 2001). Massive pipeline spills like the 2010 BP Deepwater Horizon spill, do not help this statistic. The Deepwater Horizon was approximately 250 miles southeast of Houston in water over 4000 feet deep (Adams 2009). This isolation and depth makes it extremely difficult to regulate spillage, and makes it even more complicated to keep a spill under control once one has occurred.

Attitude, Belief, and Intention

Martin Fishbein and Icek Ajzen dedicated a significant amount of time towards shedding some light on the areas of attitudes, beliefs, intentions and behavior. Prior to these researchers' contribution to this field, there was uncertainty as to how much correlation existed between these variables. Fishbein and Ajzen were able to prove a correlation between attitude, behavior, and intention. These researchers found that "it is possible to operationally distinguish between beliefs, attitudes, intentions, and behaviors, and to obtain reliable and valid measures of each of these constructs" (Fishbein, et al, p. 510). The researchers also found that these variables, despite the distinct differences, are "all systematically related to one another" (Fishbein, et al, p. 510). Fishbein and Ajzen used this research to develop a contextual framework. The basis of the framework is beliefs.

A belief is defined as "a person's subjective probability judgments concerning some discriminable aspect of the world; they deal with the person's understanding of himself and his environment" (Fishbein, et al, p. 131). Beliefs are determined by a systematic relationship between direct observation, and an underlying inference by the individual. According to Fishbein and Ajzen, beliefs about an object provide the basis for the formation of attitude. An attitude is a person's favorableness or un-favorableness towards an object. Belief entails a person assigning an object, person, or place to an attribute. Belief factors directly into attitude in that "a person's attitude toward an object is a function of his evaluations of these attributes" (Fishbein, et al, p. 216).

Considering the forgoing, the “evaluations of these attributes” is referring to the affective, or feeling, element of belief. Fishbein and Ajzen proposed that “attitude towards a given object is based on the summed set of beliefs about the object’s attributes weighted by the evaluation of these attributes” (Engel, et. al. p. 322). This formula for attitude is a complicated way of saying that attitude is formed through a combination of beliefs and feelings. A person’s feelings about an object are just as important as their beliefs for the object.

Intention is defined as “a person’s location on a subjective probability dimension involving a relation between himself and some action” (Fishbein, et al, p. 288). Therefore, behavioral intention refers to the probability that a person performs a behavior. In the 1930s, literature was presented that pointed to a direct correlation between attitude and intention. Fishbein and Ajzen disagree with these researchers. A thorough analysis of intention allowed Fishbein and Ajzen to reveal that intention is influenced by two factors: attitudes toward a behavior and subjective norms concerning that behavior (p.289). Therefore, while attitude is a major influencing factor towards intention, there are other factors that are important in the development of intention.

There are many ways to change belief, attitude, intention and behavior. The most prominent is to expose the person to new information. BP does this through aggressive oil spill recovery marketing campaigns. Just in the four months that the oil was leaking, BP spent over \$94 million on advertising (Allen, 2010). When a person is exposed to new information it can change their beliefs. “Changing beliefs can produce changes in other beliefs as well as changes in attitudes, that change in attitude towards a behavior or in subjective norms can lead to changes in intentions, and that change in intentions can

lead to behavioral change” (Fishbein, et al, p. 512). This sequence of events is why marketing is so important. Particularly in situations in which companies are going through disasters such as the 2010 BP Oil Spill. In order to attempt to change obvious negative perceptions, BP had to expose consumers to new information through advertising and other marketing techniques in order to change their beliefs and attitudes, and ultimately their consumption intentions.

Considering the foregoing, beliefs, attitudes, and intentions are all related and partly dependent upon one another. In order to develop a sufficient understanding of peoples’ perceptions of BP’s 2010 oil spill recovery effort, the researcher must analyze all of these dimensions in order to fully understand the contextual framework. A thorough analysis of these dimensions will lead to a clear understanding of the successes of the post oil spill marketing campaigns.

Marketing

As mentioned above, new information is one of the most common, effective ways to change peoples’ attitudes or beliefs about a subject. Marketing is a crucial element in distributing this new information. BP had to be particularly careful when distributing this new information, due to the fact that they were already under some scrutiny for their “green” advertisements. Jason Daley (2010) suggests that the BP oil spill was the end of an advertising era as a whole (p. 74). Prior to the 2010 oil spill, BP had been working branding itself as the ‘greenest’ company in the oil industry. British Petroleum changed its name to BP in attempts to drive home the point that it is more than a petroleum company. BP also adopted the sun and the green and yellow colors in its logo to help

display its green policies. BP rolled out a stylish new slogan, “Beyond Petroleum”, to go along with this new color scheme. This attention towards green advertising allowed BP to create an image of a green company, even though Daley (2010) explains that 99 percent of its profits were still coming from oil (p. 74). All of this marketing was definitely scrutinized after the deep water horizon oil spill exploded. Not only did BP’s post oil spill marketing effort have to change peoples’ opinions about the safety of the Gulf Coast industries, it had to do so with a predetermined questionable marketing reputation.

Perception Studies

Consumer’s perceptions of company behavior are vital to the overall success of a company. A positive perception creates positive brand equity, which leads to consumer investment and eventually profit. Perception is a crucial element that all companies have to take into consideration. Brand equity has been more narrowly defined as “the customer’s subjective and intangible assessment of the brand, above and beyond its objective perceived value.” (Lemon, et. al, 2001). Lemon and her fellow researchers went on to describe brand equity as having three main branches. The three ‘levers’ of brand equity are brand awareness, attitudes toward the brand, and corporate ethics. These three levers were all present in BP’s post oil spill marketing campaign. Awareness concerns companies marketing communications with their consumers. This communication is extremely vital in how successful a company can be in repairing goodwill after an event such as an oil spill. The attitudes towards the brand are most often effective when direct or specific marketing is used (Lemon, et. al, 2001). Perception of corporate ethics is one of the main parts of BP’s brand equity that was

damaged by the oil spill. When an oil platform explodes and contaminates thousands of miles of coastline, it undoubtedly creates a pretty negative perception.

This negative perception was manifested most clearly when BP's consumers began to boycott the company immediately after the spill (Blake, 2010). Boycotts along the coast were so bad that BP gas stations along the gulf coast were changing their signs so that people would purchase their fuel. The signs were slowly restored, and people began to normally purchase fuel. Was this return to normalcy due to people forgetting over time, or a sign of the success of BP's recovery effort?

Similar Research

Many studies that have been conducted about a company's reaction to a disaster or accident have been focused on the company. Far fewer studies have been conducted that focus on the consumer's perception of the company's response to the disaster. Jung Hee-Kwon (2011) studied consumer's reactions to product recalls, and this very closely resembles what the researcher plans to survey in this study. While few studies have taken place focusing on the recent oil spill, companies undergoing product recalls are in a very similar situation as companies responding to an oil spill. A recall puts negative attention and affects brand equity in a similar fashion as an oil spill. For this reason, studies that have taken place regarding product recall are very applicable to this study. Hee-Kwon (2011) picked out different perception variables and surveyed consumers based on how they felt about different company recalls. One perception element that Hee-Kwon focused on was consumer's perceptions of corporate social responsibility. Turban and Greening define corporate social performance as a company's positive impact to economic stakeholders, such as employees and stockholders, as well as the community at

large (Turban, et. al 1997). Consumer perception of BP's social responsibility was very negative in the months following the spill, which explains why BP focused much of its advertising towards cleaning the environment. Hee-Kwon found that consumers' purchase intention was affected by the expectation for recall when variables such as corporate social responsibility were taken into account. This means that if BP is perceived to have negative social responsibility, that it can affect purchase intention.

A thorough analysis of existing literature on this topic revealed a hole in the area concerning consumers' perceptions of companies with respect to disasters such as oil spills. There has been very little research done on this subject, and even less pertaining directly to consumers' perception of the 2010 BP oil spill recovery effort. This project will be unique and very enlightening as to the success of BP's oil spill recovery effort. Popular press is the extent of current research on this particular subject, so the results should be intriguing.

Methodology

The purpose of this research is to determine the effectiveness of BP's 2010 oil spill recovery effort. Due to the newness of this event, there is a gap in the research concerning this topic. The methodology of this research is statistical in nature and examines different peoples' perceptions of the recovery effort.

Research Design

To test the proposed question, the researcher surveyed people in order to examine their opinions of the subject matter. Every person that took part in this research was given the same survey. The surveys were focused on developing an understanding of

peoples' beliefs, feelings, and intentions with regards to the recovery effort. The surveys were administered online, and the links were delivered to the participants through email.

Instrumentation

This research is mainly quantitative in nature. The results were found by analyzing the surveys given in the research. The first step in formulating the surveys was interviewing focus groups in order to gather information as to what people were concerned about regarding the oil spill. The researcher held three focus groups, one from each of the academic departments that will participate in the final survey. The focus groups were composed of three faculty members and the researcher. In the interview, participants were questioned about their knowledge of the spill, opinions of varying topics, and future concern. After gathering and evaluating this information, the researcher was able to develop a survey that could cover most of the concerned topics. The surveys were created using Qualtrics Survey Software. The surveys have thirteen questions. Some of the questions only require yes/no answers (e.g. Are you aware of the British Petroleum (BP) oil spill that occurred on April 21, 2010?), while others will be 5-point Likert scale questions (e.g. To what extent do you feel that you are informed on the BP 2010 oil spill?). The questions were written in a way in which belief, feeling, and intention could be tested. An example of a belief question used is, "How would you rate the effectiveness of BP's recovery effort in the environment?", and an example of a question that surveyed feeling is, "How favorable is your opinion of BP's oil spill recovery effort with respects to the economy?". One belief and one feeling question were asked for each of the aspects tested about the spill and recovery effort. The belief and feeling questions were used to compute the attitude measure. Once the attitudes and

intentions were determined, the researcher could draw conclusions about the successes of the recovery effort. These perception questions were followed by demographic questions in order to allow the researcher to fully understand the sample set. See appendix A for an example of the survey.

Participants

The group that the researcher chose to study is the faculty at The University of Southern Mississippi. The researcher believes that due to the geographical proximity to the zone affected by the spill, the faculty at The University of Southern Mississippi should be informed on the topic in question. The researcher chose to study faculty, instead of students, due to the fact that educators are generally more informed on news topics, and would be more informed about the recovery effort. The surveys were evenly dispersed between the different academic departments. Everyone in the three departments were given the opportunity to participate in the research. The researcher focused on three academic areas in particular. The three areas of focus were the Business, Science, and Liberal Arts colleges. The reason why the researcher chose these three colleges is that these three colleges traditionally have very different views on popular issues. These colleges encompass very different ideologies and encompassed a very diverse view of the BP spill. The goal was to survey twenty faculty members from each of these three colleges. Sixty-five fully completed surveys were analyzed, surpassing the researcher's initial goal. Incomplete or partially completed surveys were discarded before the tests were run. The surveys were administered in the spring of 2013.

Procedures

The surveys were made using Qualtrics Survey Software. Once the surveys were prepared, the researcher then compiled a list of participants. The surveys were administered March 1st through March 15th. After these two weeks of data collection, the researcher compiled the results of the survey. Once the results were compiled, the researcher then analyzed the data and drew conclusions as to how people feel about BP's recovery effort.

Data Analysis

The results of the surveys were used to analyze subjects' overall opinions of BP's recovery effort. The data from Qualtrics was exported to SPSS in order to complete this data analysis. The data was used to find subjects' attitudes, beliefs, and intentions in order to determine the success/failure of BP's marketing campaigns. This analysis will also be furthered through projections of future consumption.

In order to analyze consumer's attitudes and beliefs and find a correlation to intention and behavior, Fishbein's formulation for the multi-attribute model was used (Engel, et. al. p. 333) This equation is:

$$A = \sum_{i=1}^n b_i v_i$$

Where,

A = attitude toward the object,

b_i = the strength of the belief that the object has attribute I,

v_i = the evaluation of attribute I,

n = the number of salient attributes.

The researcher used the responses to the belief and feeling questions in the survey in order to compute attitude as the formula dictates. After attitude was computed, the researcher then ran tests in order to determine the correlation between attitude and intention. As the Fishbein model suggests, there turned out to be a high correlation between attitude and purchase intention. As shown in Table 1 below, there was high correlation between the three attitudes tested (environmental, economic, and recovery effort) and the two purchasing intention questions asked (intention to buy fuel and intention to buy seafood). The correlation between attitudes and purchasing intentions for BP fuel was remarkably high, ranging between .71 and .55. The correlation between the attitudes and purchasing intention of Gulf seafood was less than the correlation between the attitudes and the intention to purchase fuel, but still statistically significant ranging between .35 and .21. This smaller correlation might be due to the fact that the researcher did not include any direct seafood questions in the beliefs and feelings part of the survey.

Table 1

	Fuel Intention	Seafood Intention	Environmental Attitude	Economic Attitude	Recovery Effort Attitude
Fuel Purchase Intention	1	.			
Seafood Purchase Intention	.33* .007	1			
Environmental Attitude	.71* .000	.32* .009	1		
Economic Attitude	.55* .000	.35* .004	.67* .000	1	
Recovery Effort Attitude	.66* .000	.21 .096	.74* .000	.59* .000	1

* = statistically significant numbers; $\alpha \leq .05$

Once this correlation was established, more general attitude and intention tests were run assuming that there was an innate relationship that existed between them. The first test that the researcher ran was an attitudinal test comparing the attitudes of the different academic disciplines. The faculty in business had an overall better attitude towards the different elements of the oil spill tested. The business faculties' mean attitudes ranged from 10.1 and 14.0. These means are derived from using the attitudinal equation discussed earlier in the research. The mean of 12.4 for the business faculty under the environmental attitude section means that the business faculties' beliefs and feelings were higher than the other departments tested. The business faculty had the highest mean in all three categories. This means that these faculties' attitudes towards the different elements of the spill were generally higher. The liberal arts faculty had the lowest mean in all three attitudes tested ranging from 6.0 and 8.8. This means that the liberal arts faculty have an overall worse attitude about the different elements of the oil spill. The science faculty had the middle attitude in all of the tested attitudes ranging between 7.7 and 9.9. The charts showing these results can be seen in Table 2.

Table 2

	Discipline	N	Mean	Significance
Environmental Attitude	Business	16	12.4	
	Liberal Arts	15	6.1	
	Science	27	8.0	

	Other	7	5.4	
	Total	65	8.4	.004*
Economic Attitude	Business	16	10.1	
	Liberal Arts	15	6.4	
	Science	27	7.7	
	Other	7	6.0	
	Total	64	7.8	.192
Recovery Effort Attitude	Business	16	14.0	
	Liberal Arts	15	8.7	
	Science	27	9.9	
	Other	7	8.4	
	Total	65	10.5	.041*

* = statistically significant numbers; $\alpha \leq .05$

After the conclusions were drawn from the attitudinal test, the researcher then conducted a test on purchase intention, seen in Table 3. The intentions concerning the purchase of fuel were very predictable. The business faculty, with the best overall attitude about the different aspects of the spill, had the highest intention to buy BP fuel in the future. The liberal arts faculty, with the worst attitude about the elements of the spill overall, had the least intention to purchase BP fuel in the future.

Table 3

	Discipline	N	Mean
Fuel Intention	Business	16	3.4
	Liberal Arts	15	2.5
	Science	27	2.8
	Other	7	3.0
	Total	65	2.9

Seafood Intention	Business	16	4.2
	Liberal Arts	15	4.3
	Science	27	4.2
	Other	7	4.4
	Total	65	4.2

The intentions concerning the Gulf seafood were far more interesting. The science faculty, with the mediocre attitude about the spill overall, had very negative purchase intentions concerning the seafood. In fact, 15 of the 27 science faculty that were tested said that they did “definitely not” plan on buying Gulf seafood in the future. Fifty-five percent claiming definitely not is a remarkably high number. These interesting finding can be seen in Table 4.

Table 4

	In the future, do you intend to buy Gulf Coast seafood?				
	Definitely yes	Probably yes	Maybe	Probably not	Definitely not
Business	0	0	3	7	6
Liberal Arts	0	1	1	6	7
Science	1	2	3	6	15
Other	0	0	1	2	4
Total	1	3	8	21	32

An analysis was also conducted by filtering the attitudinal responses by educational level, seen in Table 5. These results are not significant due to the fact that the lower educational levels are not represented enough for those means to be reliable. With the limited responses asside, the data does suggest that there is a diffence in

attitudinal response with respect to education level. There were enough Master's and PhD responses for the means to be reliable, and there was a consistent gap in the mean attitudes. This suggests that the bachelor data could be correct. If this were to hold true, this data would suggest that the attitudes were highest with the higher levels of education, and that the attitudes were continually lower the less and less education one achieved.

Table 5

	Discipline	N	Mean	Significance
Environmental Attitude	PhD	41	11.3	.111
	Professional	4	8.4	
	MA	15	6.5	
	BA	5	3.8	
	Total	65	7.8	
Economic Attitude	PhD	41	9.3	.118
	Professional	4	8.3	
	MA	15	7.9	
	BA	5	2.8	
	Total	65	8.4	
Recovery Effort Attitude	PhD	41	11.5	.041*
	Professional	4	9.3	
	MA	15	10.3	
	BA	5	3.6	
	Total	65	10.5	

* = statistically significant numbers; $\alpha \leq .05$

Conclusion

The BP 2010 Oil Spill was the worst oil spill in recorded history. Eleven lives were lost, and incalculable amounts of damage were wreaked both economically and

ecologically. BP has spent and devoted billions of dollars to helping the Gulf Coast recover from this strategy. Little research has been conducted in order to test the success of this massive expenditure. This study allows for the researcher to help fill this void in literature.

The results of this study lead the researcher to believe that BP still has a lot of work to do. The mean attitude and purchase intention was negative. A faculty member with a perfect attitude would have been given a score of 25. The highest mean for any department in any of the tested areas was the business faculty when asked about the overall recovery effort, and the mean was 14. This was the only above average mean out of all the departments and areas tested. The results to the study are most clearly evaluated through dividing the different academic disciplines.

The business department had the best overall attitude about the different elements of the spill. While the business faculty did have the highest overall attitudes, the attitude was still negative for two of the three elements tested. The attitude was determined by multiplying the belief and feeling question. The scores could have ranged from 1-25. The mean for the business faculty was 12.4 for the ecological attitude, and 10.1 for the economic attitude. The score that represented a neutral attitude was 12.5. This suggests that the business faculty had an overall negative attitude towards the economic and ecological elements of the spill. The business faculty had a mean score of 14.0 for the overall recovery effort attitude. This is the only attitudinal score from any of the three departments that scored a mean above the 12.5 (neutral) score. This means that despite the business faculties' negative opinion about the spills effect on the environment and

economy, the faculty do have a slightly positive opinion about BP's overall success with regards to the recovery effort.

The liberal arts departments had the worst overall attitude about the different elements in the study. The liberal arts faculty scored an attitudinal mean score of 6.1 for the environment, 6.4 for the economic, and 8.7 for the overall recovery effort. These means are significantly less than the business faculty. The liberal arts faculties' attitude towards the overall recovery effort was the highest of the three, but still very negative.

The science faculty had the middle score in all three of the attitudinal areas. The science faculty scored an attitudinal mean score of 8.0 for the environment, 7.7 for economic, and 9.9 for the overall recovery effort. The science faculty also had the highest of the three attitudes towards the recovery effort. All three of the academic disciplines had the highest attitude towards the recovery effort as a whole. This could suggest that the research participants feel as though BP's recovery effort cannot fix the terrible economic and ecological damage created by the spill, but that the overall effort that BP is putting forward is commendable.

Fishbein and Ajzen state that "changing beliefs can produce changes in other beliefs as well as changes in attitudes, that change in attitude towards a behavior or in subjective norms can lead to changes in intentions, and that change in intentions can lead to behavioral change" (Fishbein, et al, p. 512). This change can happen through exposing people to new information in the form of marketing. BP spent over \$94 million on advertising during the four months that the oil was still leaking (Allen, 2010). This money spent towards exposing people to new information in order to change their beliefs, attitudes, and intentions seems to have been unsuccessful to date. John Daley discusses

the oil spill being the end of an era for BP (2010). The spill coming directly after BP's aggressive green marketing campaign might be causing people to question BP's legitimacy.

Implications for Future Research

There were some limitations to this research. The first limitation in this research is that the survey was just distributed to the faculty at the University of Southern Mississippi. The researcher assumed that due to the geographical nearness to the affected area that these faculty would be well educated on the subject, but this was only an assumption. Another limitation to this research is that the research included a small number of subjects. If the research could include more subjects, more statistical significance could be drawn from the data.

Another future implication is expanding the research to the general public. One question in the survey asked about highest level of education. When cross tabulations were conducted filtering the attitudinal responses by the level of education, interesting data was revealed. The problem is that not enough subjects in the study had an educational level below a master's degree. If the research was expanded into the general public, then the void in the lower quartiles of the educational level could be filled, drawing truth as to what this research's limited data suggests. This research is important because if the data trends remain consistent with a bigger sample, then BP could be in major trouble. The data in this study suggests that the attitudes were lowest for the lower educational levels. Considering the fact that the general consumer for BP is among these lower educational levels, then these negative attitudes could have bad implications for BP and the Gulf Coast.

References

- Adams, Mikaila. "Bp find oil in multiple Lower Tertiary reservoirs." *Oil and Gas Financial Journal*. (2009): Web.
- Alaska Oil Spill Commission, . "Details about the Accident." *State of Alaska*. (February 1990): 5-14. Web. 7 Jan. 2013. <<http://www.evostc.state.ak.us/facts/details.cfm>>.
- Allen, Jonathan. "BP Spent \$94 Million on Ads During Spill." *Politico* 01 09 2010, n. pag. Web. 8 Jan. 2013. <<http://www.politico.com/news/stories/0910/41670.html>>.
- Blake, Rich. "Boycotting BP: Who Gets Hurt." *ABC News*. 02 2010: n. page. Web. 2 June. 2010. <<http://abcnews.go.com/Business/bp-boycotts-spreading-frustration-oil-spillboils/story?id=10800309>>.
- Carson, Richard T., Robert C. Mitchell, Michael Hanemann, Raymond J. Kopp, Stanley Presser, and Paul A. Ruud. "Environment and Resource Economics." *Environment and Resource Economics*. 25. (2003): 257-286. Print.
- Daley, J. (2010). GREEN FALLOUT. *Entrepreneur*, 38(8), 72-75.
- Engel, James F., Roger D. Blackwell, and Paul W. Miniard. *Consumer Behavior*. Seventh. The Dryden Press, 1993. 332-339. Print.
- Etkin, D. (2001). Analysis of Oil Spill Trends in the United States and Worldwide. *2001 Oil Spill Conference*
- Fishbein, M., & Ajzen, I. (1975). *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*. Reading, MA: Addison-Wesley.

From staff and wire reports. "Obama, in Gulf, Pledges to Push on Stopping Leak." *USA TODAY* 28 5 2010, n. pag. Web. 26 Nov. 2012.

Hee-Kwon, Jung. "The Impact of Perception Factors on Consumer Reaction Under Product Recalls." *Academy of Business Journal* 1. (2011): 73-92. *Business Source Complete*. Web. 10 Jan. 2013

Lemon, Katherine N., Roland T. Rust, and Valarie A. Zeithaml. "What Drives Customer Equity: A company's current customers provide the most reliable source of future revenues and profits." *Marketing Management*. 10.1 (Spring 2001): 20-25. Web. 13 Aug. 2012.

Turban and Greening (1997), "Corporate Social Performance and Organization Attractiveness to Prospective Employees," *Academy of Management Journal*, 40(3), 658-672.

Upton, Harold F. "Congressional Research Service." *Congressional Research Service*. 7 5700.R41640 (2011): n. page. Print.

Wearden, Graeme. "BP oil spill costs to hit \$40bn." *Guardian* [United Kingdom] 02 11 2010, Web.

Appendices

1. Are you aware of the British Petroleum (BP) oil spill that occurred on April 21, 2010?
 - a. Yes
 - b. No
2. To what extent do you believe that you are informed about the BP 2010 oil spill?
 - a. Very informed
 - b. Moderately Informed
 - c. Slightly Informed
 - d. Barely Informed
 - e. Not Informed
3. To what extent do you believe that BP made a serious 2010 post oil spill recovery effort?
 - a. Very Serious Effort
 - b. Somewhat Serious Effort
 - c. I feel neutral about the effort that BP made
 - d. Not much of a serious effort at all
 - e. No serious effort at all
4. Indicate how strongly you feel about the following statement:
“I really like what BP has done with its post oil spill recover effort”
 - a. Strongly Agree
 - b. Agree
 - c. Neither Agree nor Disagree
 - d. Disagree
 - e. Strongly Agree
5. To what extent do you believe that BP’s oil spill recovery effort fixed the economic damage?
 - a. Very Likely
 - b. Likely
 - c. Undecided
 - d. Unlikely
 - e. Very Unlikely
6. How favorable is your opinion of BP’s oil spill recovery effort with respects to the economy?
 - a. Very Favorable
 - b. Favorable
 - c. Neither Favorable or Unfavorable
 - d. Unfavorable
 - e. Very Unfavorable
7. To what extend do you believe BP was effective with the aspects of the recovery focusing on the environment?
 - a. Very Effective
 - b. Effective

- c. Neither Effective nor Ineffective
 - d. Ineffective
 - e. Very Ineffective
8. How would you rate the effectiveness of BP's recovery effort in the environment?
- a. Very Good
 - b. Good
 - c. I feel neutral about the effectiveness
 - d. Poor
 - e. Very Poor
9. In the future, do you intend to buy BP fuel?
- a. Definitely yes
 - b. Probably yes
 - c. Maybe
 - d. Probably not
 - e. Definitely not
10. In the future, do you intend to buy Gulf Coast seafood?
- a. Definitely yes
 - b. Probably yes
 - c. Maybe
 - d. Probably not
 - e. Definitely not
11. What is your gender?
- a. Male
 - b. Female
12. What is your highest level of education?
- a. Masters Degree
 - b. Doctoral Degree
 - c. Professional Degree (JD, MD)
 - d. Other _____
13. What is your primary academic discipline?
- a. Business
 - b. Liberal Arts
 - c. Hard Sciences
 - d. Other _____