

Business Professionals' Attitudes toward Sustainable Business Practices

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Abstract

Maintaining the sustainability of our planet is an important issue as it affects the wellbeing of future generations. Businesses can potentially play an instrumental role in addressing global warming and maintaining the ecological equilibrium of nature. Attitudes held by business executives and professionals regarding sustainable business practices can help determine the outcome of this battle. A survey instrument was administered to 166 business professionals in the Midwest United States to assess these attitudes. In general, we found that the surveyed business professionals have positive attitudes toward sustainable business practices. These attitudes were correlated with utilitarianism ethics and new business opportunities hypothesis, but not with the cost factor or a belief in a free market economy. Several background variables were found to explain the variation of the subjects' overall attitudes toward sustainability: age, religious affiliation, political affiliation, and education.

Keywords: sustainability, corporate social responsibility

1. Introduction

1.1 Background and Motivation

Sustainable economic and business development that creates a prosperous economy and healthy environment is essential for the wellbeing of future generations. Businesses can play an instrumental role in addressing global warming and maintaining the ecological equilibrium of nature. More and more businesses and their executives, including accountants, have started to promote sustainable business practices. For example, companies such as Proctor & Gamble, 3M, Eli Lilly, Starbucks, Johnson & Johnson, and Microsoft prominently describe their sustainable business practices on their websites. Leading business authors and researchers are also advocating corporate social responsibilities for a livable and sustainable planet (Horoszowski, 2015; Epstein-Reeves, 2012; Porter & Kramer, 2011; Leap & Loughry, 2004). In addition, major college business texts, including managerial accounting books, have chapters or sections describing the importance of sustainable business practices in strategic planning and performance evaluation (e.g., Horngren, Datar, & Rajan, 2015; Brewer, Garrison, & Noreen, 2016).

The success of sustainable business development, however, hinges on the attitudes of business executives and professionals' attitudes toward sustainable business practices (Michalos, Creech, McDonald, & Kahlke, 2009). If the concept and values of sustainability are widely accepted and embraced by business professionals, then the pace of the sustainability movement will accelerate and become rooted in the daily operations of the business world. On the contrary, if the views and perception of these business professionals are less favorable toward sustainable business practices, there will be reservation and resistance in the adoption of these practices. A review of the current business literature yields surprisingly scant research on the attitudes of business professionals toward sustainability. Gaining knowledge about these attitudes can help in the advancement of sustainable business practices in the United States as well as in other parts of the world.

1.2 Research Design

To assess the attitudes of business professionals towards sustainability, a survey instrument was designed and administered to 166 business professionals in the Midwest United States. We found that the surveyed business professionals, in general, hold the belief that businesses should be concerned with sustainable business practices. We further investigated several factors that might influence the formulation of this belief: the cost factor, the

doctrine of free market, the new business opportunities hypothesis, and the utilitarianism ethics. Out of these four factors, we found that the utilitarianism ethics seems to have the strongest impact on their attitudes towards sustainability, followed by the new business opportunities hypothesis. We did not find strong support for the other two factors: the cost factor and the doctrine of a free market economy.

We also investigated whether any of background variables affect the subjects' overall attitudes toward sustainable business practices. We found that age and religious affiliation can significantly explained some of the variances in subjects' attitudes towards sustainability. With a lesser degree of significance, we found that survey participants with a college degree tended to have more positive attitudes than those with a high school degree or a master's degree. Lastly, Democrats tended to have more positive attitudes towards sustainable business practices than Republicans.

1.3 Literature Review

There have been several studies regarding attitudes towards sustainability. However, subjects surveyed in these studies primarily include students, households, consumers, citizens, and government officers. There is only one study using a sample of business professionals which will be discussed at the end of this section.

Michalos et al. (2009) conducted two studies on the knowledge, attitudes, and behaviors of students and households, respectively, towards sustainable development. Their results showed that for students and adults in the households, engaging in behaviors favorable to sustainable development were relatively more influenced by their having attitudes favorable to sustainability than factors such as age or level of education. For the students sampled, they also found that females were somewhat more disposed towards sustainable lifestyles.

Godfrey (1998) examined the attitudes of public sector "tourism managers" towards the principles of "sustainable tourism". It has been argued that the attitudes of local tourism officers will affect their approach to implementation, and *inter alia* to the success of this concept in practice. The results suggest many of the officers are reluctant to embrace the sustainable tourism concept yet.

Guardian News and Media (2010) conducted a survey on consumers' attitudes toward sustainability. Respondents in their sample indicated strong concerns about environmental and ethical issues. Over 80% of respondents indicated that carbon dioxide emissions, pollution, and over-use of resources were key concerns. This is consistent with the results reported by the European Commission (2009). However, the results also showed that environmental sustainability is only one factor in the decision to buy a product. Other factors equally or more important were price, quality, and availability of the products or service.

Bellm (2010) reported a survey attempting to identify emerging trends related to consumer perception and purchasing behavior of "green" products. The data indicates that the majority of consumers plan to spend the same or more money on green products in the coming years. The majority of consumers (over sixty percent) across all countries want to buy from environmentally responsible companies, but the cost of green products continues to be a hurdle in developed countries. Selection and labeling are the biggest challenges in developing economies.

Watling & Zhou (2011) conducted a study on attitudes towards sustainability of the general populace in Sweden. The aim of their study is to find out whether people have positive or negative attitudes towards sustainability and how knowledge levels affect people's attitudes. They found that education and knowledge about sustainability plays an important role in developing positive attitudes towards sustainability. They also discovered that belief in a higher power, gender, and age do not play a role towards having a positive attitude towards sustainability.

A study conducted by Harris Interactive (2007) was specifically geared towards business executives and professionals. The study notes that customers and the government are the two main influencers on a company's sustainability and environmental decisions. Other key factors that drive sustainability decisions are health, safety of employees, customers and suppliers. Other than these two relevant observations, the study provided very little insight regarding (1) the degree of business professionals' overall attitudes in favor or against sustainable business practices, (2) the underlying beliefs, values, or reasons why they possess these attitudes, and (3) the association of their attitudes with certain background variables such as their familiarity and knowledge of sustainability, years of professional experiences, industry type, political and religious affiliation, level of education, age, gender, and firm type (national vs. regional). These are the research issues being investigated in this paper using a more recent dataset which reflects current attitudes towards sustainability.

1.4 Research Hypotheses

Many factors can affect the attitudes of business professionals toward sustainable business practices. A review of business media and literature indicates that the most cited reason against sustainable business practices is that it

will raise the cost of doing business. Therefore, it is argued that it will make American businesses less competitive compared to their counterparts in emerging world economies, particularly when it comes to greenhouse effect and climate changes (Loris & Joleviski, 2014; Yudken & Bassi, 2009; Ball et al., 2009). It is clear that if American business professionals feel that sustainable business practices will increase their operational costs and threaten the existence of their businesses, then they will not have positive attitudes toward these practices. This observation is summarized in the following hypothesis.

Hypothesis 1: The attitudes of business professionals toward sustainable business practices are negatively correlated with their perceptions of the cost disadvantage of implementing sustainable business practices.

Some conservative scholars and business professionals believe that corporations have no social responsibility and that their sole responsibility is to maximize profits for their stockholders. They believe in free enterprise and, therefore, the problem of sustainability will be solved naturally through market equilibrium and there is no need for the government to enact sustainability regulations or legislation (Lieberman, 2011; Stroup, 2008). If business professionals truly believe in the role of free market in solving sustainability issues, it follows they would also believe that customers desiring eco-friendly products or services would be willing to pay the extra price for these goods and that the market (not the government) will eventually solve the issue through price equilibrium mechanisms. This observation is summarized in the following hypothesis:

Hypothesis 2: The attitudes of business professionals toward sustainable business practices are negatively correlated with their beliefs in the free market system.

Many businesses volunteer to engage in sustainable business practices because they discovered that being green or sustainable is also profitable for their businesses (Growstone, 2013; Mesure, 2010). In other words, sustainable business practices represent a new market or business opportunities for innovating enterprises. The demand for clean air, water, and environment is a consumer desirable that needs to be satisfied by free enterprises. As noted earlier, numerous companies such as Proctor & Gamble, 3M, Eli Lilly, Starbucks, Johnson & Johnson, and Microsoft have become leaders in the promotion of sustainable business practices. Business statistics seem to confirm this trend. Across the economy, green industries are showing much faster growth than their conventional counterparts. The Bureau of Labor Statistics reported that from 2010-11, green job growth has outpaced growth in all other industries. In addition, green goods and services grew at a rate four times faster than all other industries combined (Growstone, 2013).

If business professionals feel that sustainability represents new business opportunities and additional profits, they will be more inclined to engage in sustainability business practices. This observation is summarized in the following hypothesis:

Hypothesis 3: The attitudes of business professional toward sustainable business practices are positively correlated with their perceptions on sustainable businesses as new opportunities for growth.

Many business professionals are affected by the philosophy of utilitarianism in their daily business decisions (Reizaputra, 2013; Ebenstein, 1991). In accordance with the principle of utilitarianism, consequences or payoffs in the future will be a major factor people consider when making decisions. If the belief is held that ignoring environmental sustainability will result in an irreversible harm to the Earth at the macro-level and will cost a company in the long-run at the micro-level, business professionals would be more inclined to form favorable attitudes towards sustainable business practices (Hoffman, 2012; Arnold & Bustos, 2005). This observation is summarized in the following hypothesis:

Hypothesis 4: The attitudes of business professionals toward sustainable business practices are positively correlated with their perceptions on the negative impact of ignoring these practices.

Human attitudes are gradually formed through personal experiences such as social interactions, cultivations, and acculturations. Some of the variations in attitudes across humans maybe explained by biological differences such as gender and age. Other differences are due to differences in education, political or religious beliefs, work environment and other experiences. The attitudes of business professionals toward sustainable business practice should likewise be influenced by these demographic variables. Several studies reviewed in the previous section have documented the influences of background variables on the attitudes of non-business professionals toward sustainability. For example, Michalos et al. (2009) found that female students were somewhat more disposed towards sustainable lifestyles than males. Watling & Zhou (2011) found that education and knowledge about sustainability plays an important role in developing positive attitudes towards sustainability but that belief in a higher power, gender, and age do not play a role towards having a positive attitude towards sustainability. We suspect that some of the same background variables may be correlated to the attitudes of business professionals

in our sample toward sustainable business practices. Thus, the following hypothesis is posited:

Hypothesis 5: The attitudes of business professionals toward sustainable business practices are correlated with background variables such as age, gender, level of education, political or religious affiliation, years of professional business experience, work responsibilities, industry type, and their level of knowledge regarding sustainability.

2. Method

2.1 Sustainability Dimensions

To test the hypotheses, sustainable business practices need to be specified. These practices are environmentally friendly, socially equitable, and economically feasible and are usually grouped into three dimensions: Environmental Sustainability, Social Sustainability, and Economic Sustainability (Basiago, 1999).

Front Stream (2013) provides the following definitions for the three dimensions: Environmental Sustainability is directed towards the maintenance of a healthy natural environment through the reduction of toxic chemicals, waste, greenhouse gas emissions, energy consumption, and depletion of natural resources; Social Sustainability aims at building a sharing and equitable community through hiring of disadvantaged employees, enhancement of human health, purchase and hiring from local, and payment of livable wages; and Economic Sustainability is concerned with the maintenance of economic efficiency and prosperity through buying only what you really need, enhancing product performance and quality, assessing life-cycle cost and value, leveraging purchasing power, and reducing waste generation.

Among these three dimensions, Environmental Sustainability is likely the most familiar to the general populace. It has been widely publicized in media in terms of frequency of exposure and the attention it was received. For businesses, the practice of environmental sustainability may also potentially be the most costly to implement. For these reasons and in an attempt to keep our study manageable in scope, we focus on Environmental Sustainability.

2.2 Instrument and Measurement of Variables

Because of the exploratory nature of this study, a field survey method was selected to collect the data. This type of method is appropriate for exploratory research when the researchers do not have extensive knowledge about the construct of the variables and the relationships among the variables (Billings & Halstead, 2005). It also has the advantage of allowing the researchers to collect a broad base of responses to conduct statistical analysis.

To measure the attitudes of business professionals toward sustainable business practices, subjects in the sample were asked to indicate their degree of agreement with the following ten statements listed below. Their level of agreement is measured by a 5-point Likert type of scale where 1 = "strongly disagree"; 2 = "disagree"; 3 = "neutral"; 4 = "agree"; and 5 = "strongly agree."

The first statement was designed to capture the overall attitudes of the subjects towards sustainable business practice:

S1: A business should be concerned with sustainable business practices.

To explore if cost and loss of competitiveness are reasons for negative attitudes toward sustainable business practices, subjects were asked to indicate their sentiment regarding the following two statements:

S2: Sustainable business practices impose unreasonable costs on businesses.

S3: Sustainable business practices reduce the competitiveness of American enterprises.

To inquire if subjects might form their attitudes towards sustainable business practices because of their beliefs in free-market economy, the following statement were put forth to the subjects:

S4: If customers want eco-friendly products, they should pay extra price for them.

S5: Governments should not distort market prices by environmental legislation.

A possible reason for the business professionals to have positive attitudes towards sustainable business practices is because they see sustainable business practices represent new opportunities or a wise investment for their businesses. The following three statements were designed to capture their sentiment in this regard:

S6: Sustainable business practices can be a smart business strategy in a world of increasing ecological awareness.

S7: Some of the sustainable business practices can earn a positive return on the expenditures.

S8: More and more consumers are willing to pay for products or services provided by an eco-friendly company.

Another reason for positive attitudes towards sustainable business practices maybe that business professionals have been following the philosophy of utilitarianism ethics in their business decisions. If that is the case, the negative consequences of ignoring sustainable business practices may become a factor in forming their attitudes toward sustainability. The following two statements are designed to measure this factor:

S9: Ignoring sustainable business practices will cost companies in the long-run.

S10: Ignoring environmental sustainability will result in an irreversible harm to the Earth.

To explore if any of demographic variables will affect the subjects' attitudes towards sustainable business practices, the following information was collected from survey respondents:

- 1) Are you affiliated with any organization that promotes sustainable business practices?
- 2) How many years of business professional experience do you have?
- 3) What industry are you in?
- 4) What position do you hold currently?
- 5) What is your political affiliation?
- 6) What is your religious affiliation?
- 7) What is your highest educational degree?
- 8) What is your age?
- 9) What is your gender?

2.3 Sample Selection

The survey instrument was administered to and completed by 166 business executives and professionals in 2015. There were two approaches in the selection of the subjects. First, a table was set up at a national business conference held at a major city in the Midwest United States. Participants were asked if they were willing to complete the survey during their breaks and social hours. Eighty-two responses were obtained under this approach. Second, business owners and executives in the northeast region of a state in the Midwest United States were contacted and asked if they were willing to participate in the study. If so, they were interviewed and completed the instrument. Eighty-six responses were obtained under the second approach for a total of 166 responses using both approaches. Descriptive statistics for these respondents are presented in the Results and Discussion section.

2.4 Statistical Tests

To test if there is significant correlation between the attitudes of business professionals and the factors that might explaining their attitudes such as the cost factor, free market economics belief, new business opportunities, and utilitarianism ethics, the Pearson correlation coefficients and multiple regression were used.

To test if any of the background variables have any significant influence on the attitudes of the business professionals, the univariate analysis of variance was used.

3. Results and Discussion

3.1 Descriptive Statistics

Table 1 provides the frequency and the median of subjects' responses. Overall, the business professionals in the sample had very positive attitudes towards sustainability practices. A total of 95.2% of respondents indicated that they either agree or strongly agree that a business should be concerned with sustainability business practices and 20.5 % agree or strongly agree that sustainable business practices impose unreasonable costs on businesses. Similarly, only 24.1% of the respondents agree or strongly agree that sustainable business practices reduce the competitiveness of American enterprises. Responses to these two statements combined do not seem to indicate that sustainability business practices are an economic burden to most business enterprises. In comparison, a moderate 42.1% of the subjects agree or strongly agrees with the statement that if customers want eco-friendly products, they should pay extra price for them. In addition, 62.9% of the subjects agree or strongly agree with the statement that governments should not distort market prices by environmental legislation. Responses to S4 and S5 statements combined indicate that our respondents are inclined to believe in a free market economic system.

Table 1. Percentage and median of subjects' degree of agreement with statements

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean
<i>S1</i> : A business should be concerned with sustainable business practices.	1.2%	3.6%	0.0%	47.0%	48.2%	4.41
<i>S2</i> : Sustainable business practices impose unreasonable costs on businesses.	4.8%	39.8%	34.9%	13.3%	7.2%	2.78
<i>S3</i> : Sustainable business practices reduce the competitiveness of American enterprises.	12.0%	42.2%	21.7%	18.1%	6.0%	2.64
<i>S4</i> : If customers want eco-friendly products, they should pay the extra price for them.	0.0%	18.1%	39.8%	31.3%	10.8%	3.35
<i>S5</i> : Governments should not distort market prices by environmental legislation.	4.9%	13.6%	18.5%	48.1%	14.8%	3.54
<i>S6</i> : Sustainable business practices can be a smart business strategy in a world of increasing ecological awareness.	0.0%	3.6%	12.0%	53.0%	31.3%	4.12
<i>S7</i> : Some sustainable business practices can earn a positive return on the expenditures.	1.2%	2.4%	12.0%	55.4%	28.8%	4.08
<i>S8</i> : More and more consumers are willing to pay for products or services provided by an eco-friendly company.	0.0%	9.6%	15.7%	57.8%	16.9%	3.82
<i>S9</i> : Ignoring sustainable business practices will cost companies in the long-run.	0.0%	8.4%	15.7%	42.2%	32.5%	4.00
<i>S10</i> : Ignoring environmental sustainability will result in irreversible harm to the Earth.	2.4%	9.6%	19.3%	41.0%	27.7%	3.82

In total, 84.3% of the subjects agree or strongly agree that sustainable business practices can be smart business strategy in a world of increasing ecological awareness and 84.2% agree or strongly agree that some of the sustainable business practices can earn a positive return on the expenditures. In addition, 74.7% of the respondents agree or strongly agree that more and more consumers are willing to pay for products or services provided by an eco-friendly company. Responses to these three statements combined reveal that most business professionals think sustainable business practices actually represent new business opportunities.

Finally, the subjects that agree or strongly agree with the statement that ignoring sustainable business practices will cost the companies in the long-run represent 74.7% of the sample and 68.7% agree or strongly agree that ignoring environmental sustainability will result in an irreversible harm to the planet. Responses from these two statements are consistent with the inference that business professionals do consider long-term consequences in their business decisions.

The demographic statistics for the survey respondents are presented in Table 2. Only 27.7% of the subjects are affiliated with organizations promoting sustainable business practices. The average years of business professional experience is somewhat evenly distributed with an average of 22.8 years and a mode of 21 to 30 years (34.9%). Among survey respondents, 38.0% work for manufacturing entities. Those working for nonmanufacturing entities include service firms, distribution companies, financial institutions, and restaurants. A majority (55.4%) of the subjects are owners or executives while the rest are middle management or employees. The largest political affiliation was Republican (48.8%), followed by Democrat (25.9%), and Other (25.3%). In terms of religious orientation, the majority of the subjects are Christian (75.3%) followed by non-Christian (14.4%). The remainder reported no religious affiliation (10.3%). As to education level, 18.7% of the sample earned a high school degree, 37.8% have college degrees, and 43.4% have graduate degrees. The average age of respondents is 47.4 years and the mode (38.6%) was the 41 to 50 age group. Finally, a majority of the survey respondents were male (63.3%).

Table 2. Demographic information

Background Variables	Frequency	Percentage	Mean
<i>B1: Affiliation with organizations promoting sustainability</i>			
Yes	46	27.7%	4.50
No	120	72.3%	4.35
<i>B2: Years of business professional experience</i>			
10 years and below	31	18.7%	4.60
11 to 20 years	39	23.5%	4.32
21 to 30 years	58	34.9%	4.45
31 years and above	38	22.9%	4.38
<i>B3: Type of Industry</i>			
Manufacturing	63	38.0%	4.50
Nonmanufacturing	103	62.0%	4.35
<i>B4: Job position or title</i>			
Owner or executive	974	55.4%	4.46
Non-executive business professionals		44.6%	4.33
<i>B5: Political affiliation</i>			
Democrats	43	25.9%	4.75
Republican	81	48.8%	4.18
Other	42	25.3%	4.42
<i>B6: Religious affiliation</i>			
Christian	125	75.3%	4.38
Non-Christian	24	14.4%	4.83
No affiliation	17	10.3%	3.33
<i>B7: Highest education degree</i>			
High school	31	18.7%	4.21
Undergraduate	63	37.9%	4.60
Graduate	72	43.4%	4.28
<i>B8: Age</i>			
30 years and below	19	11.4%	4.89
31-40 years	14	8.4%	3.67
41-50 years	64	38.6%	4.33
51-60 years	58	34.9%	4.32
61 years and above	11	6.7%	4.60
<i>B9: Gender</i>			
Male	105	63.3%	4.36
Female	61	36.7%	4.50

3.2 Hypothesis Testing

The data was analyzed in three ways using correlation statistics, stepwise regression, and analysis of variance (ANOVA).

3.2.1 Correlation Statistic

As noted in the methodology section, one approach to test Hypotheses 1-4 is to calculate the Pearson Correlation Coefficients of the subjects' responses between the attitude variable (S1) and the other four groups of factors that might explain the subjects' attitudes toward sustainability business practices: the cost factor (S2 and S3), the belief in free market economy factor (S4 and S5), the new business opportunities factor (S6, S7, and S8), and the utilitarianism ethics factor (S9 and S10).

Table 3. Pearson correlation coefficients

Hypotheses	Correlation Coefficient	Significance (2-Tailed)
<i>Hypothesis 1:</i>		
Correlation of S1 and S2	-0.120	0.280
Correlation of S1 and S3	-0.125	0.258
<i>Hypothesis 2:</i>		
Correlation of S1 and S4	-0.117	0.294
Correlation of S1 and S5	-0.208	0.063*
<i>Hypothesis 3:</i>		
Correlation of S1 and S6	0.472	0.000***
Correlation of S1 and S7	0.391	0.000***
Correlation of S1 and S8	0.090	0.421
<i>Hypothesis 4:</i>		
Correlation of S1 and S9	0.512	0.000***
Correlation of S1 and S10	0.317	0.000***

Note. *** Significant at 0.01 level; ** Significant at 0.05 level; * Significant at 0.10 level.

Table 3 shows the Pearson Correlation Coefficients between the attitudes variable and the other factor variables (S2 to S10) separated by the four related hypotheses. As can be seen from the table, the attitude variable (S1) is significantly correlated with the four statements related to Hypothesis 3 (S6 and S7) and Hypothesis 4 (S9 and S10). The significance is at the 0.01 level with a two-tailed test. From these correlation coefficients, Hypothesis 3 and 4 are supported by the data while Hypotheses 1 and 2 are not (except for a weak correlation between S1 and S5 in Hypothesis 2).

3.2.2 Stepwise Regression Statistics

To confirm the results from the preceding correlation analysis, a stepwise regression was also performed to determine which factors explain most of the variance in the sample data. To alleviate the multicollinearity problem associated with regression, the response scores from the multiple statements (within each of the factors) were collapsed into a single average score. The validity of this data manipulation depends on if the multiple statements tend to measure the same construct or not. Cronbach Alphas were calculated for these statements: 0.732 for S2 and S3; 0.709 for S4 and S5; 0.823 for S6 to S8; and 0.792 for S9 and S10.

Table 4. Stepwise regression statistics

Model	Standardized Coefficient	T-statistic	Significance
1	Constant	9.764	0.000***
	(S9+S10)/2	5.315	0.000***
2	Constant	6.331	0.000***
	(S9+S10)/2	3.278	0.002***
	(S6+S7+S8)/3	2.280	0.025**

Note. *** Significant at 0.01 level; ** Significant at 0.05 level; * Significant at 0.10 level.

Since all Cronbach Alphas are acceptable (defined as 0.7 or above), a stepwise regression was run using the average scores for each factor as independent variables and attitude toward sustainable practices (S1) as the dependent variable. Table 4 reports the result of the stepwise regression analysis. The first independent variable entered is the factor representing utilitarianism ethics (measured by the average score of S9 and S10). The second independent variable entered is the factor representing new opportunities (measured by the average score of S6, S7, and S8). Both factors are significant at the 0.05 level. The other factors are excluded by the model. The stepwise regression statistics validate the correlation statistics in that Hypotheses 3 and 4 are accepted while Hypotheses 1 and 2 are not supported.

3.2.3 Analysis of Variance (ANOVA)

ANOVA was used to assess if any of the demographic variables have an impact on the subjects' attitudes toward sustainable business practices. Table 5 shows the ANOVA statistics. Two background variables are significant at the 0.05 level: religious affiliation and age. The last column of Table 2 reports the average attitudes scores for

various groups within each of the demographic variables. Consistent with prior literature, people with religious aspiration have more positive attitudes than people who do not have any religious affiliation. Interestingly, however, business professionals with non-Christian affiliation registered a more positive attitude toward sustainability than Christians. When looking at age, a U-shape pattern emerges. The youngest and the oldest groups of our sample registered more positive attitudes towards sustainability than the groups in the middle. Based on these result, Hypothesis 5 is supported for these demographic variables.

Of the remaining demographic variables, two are marginally significant at 0.10 level: political affiliation and education. Again, from the last column of Table 2, it appears that another U-shape pattern emerges as individuals with college degrees register more positive attitudes toward sustainability business practices than those that have higher or lower educational degrees. Finally, business professionals who are Democrats reported more positive attitudes towards sustainability than their Republican counterparts.

Although other background variables do not exhibit significant impact on the subjects' attitudes, several are consistent with general expectations from prior literature. For example, female business professionals were found to have more positive attitudes towards sustainability than male subjects. Business professionals who are affiliated with organizations promoting sustainability tend to agree more with Statement 1 than those who are not, perhaps because they have more knowledge about the benefits of practicing sustainability. Owners or executives are more inclined to agree with Statement 1, probably because they are in a position to see the potential consequences and impact from sustainable business practices. Finally, business professionals who have fewer years of work experience tend to better embrace sustainability because recent business education increasingly emphasize the issues and importance of sustainable business practices in the curricula (Albinsson, Perera, & Sautter, 2011).

An additional background variable we investigated is the size of the companies where our subjects worked. Using gross sales as an independent variable, we did not find firm size to be significant in explaining subjects' attitudes towards sustainability. Firm size was also insignificant when included as an additional variable in the stepwise regression analysis. Therefore, the previously reported results were not influenced by a firmsize effect.

Table 5. Analysis of variance for background variables

	F-statistic	Significance
<i>B1</i> : Affiliation with sustainability organizations	0.071	0.791
<i>B2</i> : Years of business or professional experience	0.567	0.639
<i>B3</i> : Type of industry	0.967	0.329
<i>B4</i> : Job position of title	0.655	0.421
<i>B5</i> : Political affiliation	2.931	0.062*
<i>B6</i> : Religious affiliation	4.838	0.011**
<i>B7</i> : Highest education degree	2.444	0.093*
<i>B8</i> : Age	3.488	0.015**
<i>B9</i> : Gender	0.824	0.367

Note. *** Significant at 0.01 level; ** Significant at 0.05 level; * Significant at 0.10 level.

4. Discussion

We found that the surveyed business professionals, in general, hold the belief that businesses should be concerned with sustainable practices. Four factors that might affect the formulation of this belief were investigated: cost factor, doctrine of free market, new business opportunities hypothesis, and utilitarianism ethics. We found that utilitarianism ethics has the strongest impact on attitudes towards sustainability. For example, survey respondents who felt that ignoring sustainable practices would cost their companies in the long run and harm the planet have more positive attitudes towards sustainable business practices. The new opportunities hypothesis also was a factor. For example, survey respondents who believe that engaging in sustainable business practices can be a smart business strategy also more positive attitudes towards sustainability. We did not find strong support for the other two factors (cost factor and doctrine of free market). That is, the cost of implementation or a faith in the free market mechanism to solve sustainability issues was not correlated with subjects' attitudes toward sustainable business practices.

We also investigated whether any of the background variables affect the subjects' overall attitudes toward sustainable business practices. Age and religious affiliation significantly explained some of the variances in subjects' attitudes towards sustainability. For example, survey respondents at both ends of the age spectrum (the

youngest and oldest groups) tended to have more positive attitudes toward sustainable business practices and non-Christian tended to have more positive attitudes than Christians or those that don't identify with a religious affiliation. With a lesser degree of significance, we found that survey respondents with a college degree tended to have more positive attitudes towards sustainability than those with a high school or master's degree. In addition, Democrats tended to have more positive attitudes towards sustainability than Republicans.

Based on the results of our study, several managerial implications can be derived. First, undertaking sustainable business practices is not just the right thing to do, but a necessity according to the beliefs held by most business professionals. Ignoring sustainable business practices could result in irreparable harm to a company in the future. Therefore, from a risk management perspective, a company can no longer ignore sustainable business practices when addressing its risk profile. In fact, one of the most important risk management tasks for a company is to assess the risk of failure to engage in these practices. Second, sustainable business practices are instrumental to the success of businesses in the future because they represent great potential for new business opportunities. Therefore, from a strategic planning perspective, a business cannot continue to ignore sustainable business practices. If they do so, they will not be able to compete in the future when an increasing number of their customers are concerned with sustainability issues.

There are limitations to our study. First, there is the self-selection bias inherent in using a survey methodology because of the voluntary nature of participation. That is, those who are willing to participate in a survey about sustainability may already hold more positive attitudes towards that issue. Second, the particular geographic location utilized in our sample may not reflect the general population of business professionals in the United States. A fruitful avenue for future research would be to conduct the survey in other geographic regions in the U.S. and other countries to determine if the results we obtained are descriptive of the attitudes of business professionals towards sustainability in other parts of the world.

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