

# **THE IMPACT OF CULTURE, GENDER, AND AGE ON EMPLOYEE PERCEPTIONS OF INDIVIDUAL AND ORGANIZATIONAL COMMITMENT TO THE GREEN MOVEMENT**

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## **ABSTRACT**

In this research, we find support for a proposed set of linkages among employee perceptions of organizational green orientation, individual green orientation, and impacts of the green movement on organizational performance in two cultures: Jamaica and the United States. The results indicate differences among male and female subjects and between different age groups in terms of employee perceptions of individual and organizational green orientation, organizational culture, impacts of the green movement, and organizational performance.

## **INTRODUCTION**

### **The Green Movement**

Recent events, and especially rising gasoline prices, a depressed housing market, and instabilities in the world economy, have led to considerable discussion of the current status of the “green movement”, a phenomenon that has appeared over the past 20 years (Stafford, 2003). It encompasses areas such as “green buying” by consumers (Mainieri, et al., 1997), Environmentally Preferable Purchasing (EPP) by government agencies and ultimately by organizations in the private sector (Elwood & Case, 2000), Environmentally Benign Design and Manufacturing (EBDM) (Newsdesk, 2006), and Socially Responsible Investing (SRI) (Blodget, 2007). In contrast, a second stream in the literature has suggested that the “green movement” may be in decline. Specifically, one of the “Current Issues in the Greening of Industry” (July 2007) suggests that the current “new-found environmental ethic” may be somewhat ephemeral and that “... corporate greening could go bust” in ways analogous to other recent fad-like phenomena.

Environmental friendliness and sustainability are the major concerns of green products, green manufacturing and service, and green organizations (Liu & He, 2005). All of the green activities, such as reducing waste, using harmless materials, and providing organic food can be placed under the umbrella of greening. Providing a clean, ethical and safe environment to

human beings and all creatures is the goal of green movement, and is one which potentially requires the efforts of all the people, industries and governments on the earth (Grewe 2002; Holden 2004; Patulny & Norris, 2005; Tiemstra, 2003).

### **Organizational Culture and Sustainability**

In this research, we also speculate that *organizational culture* may impact employee perceptions of the green movement and its importance to the organization and to them personally. Moreover, culture may impact perceptions about outcomes as well. Note, however, that the impacts between the culture and the perceptions may move in two directions. Specifically, as organizations become *greener*, we should see a move toward a more empowered, employee-centered, and customer-centered culture. Additionally, however, a culture, which is supportive of the green movement, should lead to better outcomes and, perhaps in part through self-selection, to employees who, themselves, are more supportive of the green movement.

Centering on quality practices, recent in-depth discussion by Zairi (2002) can illustrate what is being considered. See also similar ideas by Hitchcock and Willard (2002), Jonker (2000), and McAdam and Leonard (2003).

### **Systematic Study of Cultural Differences**

Of interest to this research is the prospect that, in differing cultures, there may be differences in how the green movement is embraced at both the individual and organizational levels. These ideas have recently been examined in China (Huang, et al., 2006; Liang, Xue, Boulton & Byrd, 2004; Martinsons, 2004; Poon & Yu, 2010; Soh, Kien & Tay-Yap, 2000; Wang, Klein & Jiang, 2006) and there has been limited study in Europe (Van Everdingen, Van Hillegersberg & Waarts, 2000). Reports suggest a general pattern of identifying cultural differences impacting adoption of green beliefs and actions. In our study, we examine cultural differences between an emerging culture – Jamaica – and the United States, a leader among developed countries.

### **Gender Differences**

The relationship between gender and environmentalism has been well studied since the 1960s. Numerous research seeks to determine the effect of gender on environmental values/attitudes and on pro-environmental behaviors (Blake, Guppy, and Urmetzer 1996-97; Blocker and Eckberg 1997; Dietz, Kalof and Stern 2002; Eisler, Eisler, and Yoshida 2003; Kalof et al. 2002; O'Shaughnessy and Huddart-Kennedy, 2011; Ozanne, Humphrey, and Smith 1999; Stern, Dietz, and Kalof 1993; Stoddard & Tindall 2011; Tarrant and Cordell 2002; Tindall and Davies, 2011; Tindall, Davies, and Mauboulés 2003; Zelezny, Chua, and Aldrich 2000). The empirical finding is that women show more concern with environmental issues than men but they are less likely to engage in environmental activism. O'Shaughnessy and Huddart-Kennedy (2011) argue that women's involvement in environmental activism is through "relational activism." Instead of advocating environmentalism in a public way, they use their home-front to influence their friends and family.

### **Age Differences**

In the recent years, environmental protection inescapably has become key concerns in the US among both younger and older generations. The older generation is concerned about the world they are leaving behind for their the coming generations (Moody, 2008; Moody, 2009-2010; Steinig and Butts, 2010; Wright and Lund, 2000) while schools have been actively promoting positive environmental values and behaviors. The younger generation is possibly the “greenest” ever. The Renaud-Dube et al. (2010) has reported higher environmental motivation among older high school students.

In this research, we consider how employee perceptions of their own and the organization’s commitment to the “green” movement and employee perceptions that the organization has implemented perceptions of outcomes. We examine differences that may be occurring among male and female subjects of various age groups and of different cultures. In this study, we develop three research questions to explore the possibilities.

**Research Question 1:** Organizations in the United States and in Jamaica will have different levels of individual green orientation, organizational green orientation, organizational culture, organizational performance, and impacts of the green movement.

**Research Question 2:** Male and female subjects will have different levels of green orientation, reactions to organizational culture, organizational performance, and impacts of the green movement.

**Research Question 3:** Subjects of different age groups will have different levels of green orientation, reactions to organizational culture, organizational performance, and impacts of the green movement.

## METHODOLOGY

### Subjects of the Current Study

Subjects in the sample were approximately 323 managers from a wide variety of industries in the United States. The subjects were roughly 57.3 % male and 42.7% female with an average age of 41.26 (Table 1). These managers had an average of 20.64 years working experience with 11.11 years in management positions. 35.9% of the subjects are employed in a company, which has more than 500 employees, 8.7% of the subjects work in a company, which has 251 to 500 employees, 19.5% of the subjects work in a company, which has 51 to 250 employees and 35.9% of the subjects work in a company that has less than 50 employees. Among the 323 managers, 148 managers work in the “Regional Only Focus” companies and 175 managers work in the “National or International Focus” companies.

Subjects in the Jamaican sample were approximately 345 managers. Of the 345 Jamaican managers, they were roughly 43.9 % male and 56.1% female with an average age of 36.9 years. These managers had an average of 16.02 years working experience with 6.75 years in management positions. 51.3% of the subjects are employed in a company, which has more than 500 employees, 13.8% of the subjects work in a company, which has 251 to 500 employees, 22% of the subjects work in a company which has 51 to 250 employees and 12.9% of the subjects work in a company which has less than 50 employees. Among the 345 managers, 144 managers

work in the “Regional Only Focus” companies and 201 managers work in the “National or International Focus” companies.

## **Instrument**

In this research, we developed survey questions to measure the Organizational Green Movement. The instrument asks the respondents to indicate how important for the organization to design, produce, and promote environmentally friendly goods and services, reuse or refurbish components, provide a safe workplace, preserve employees’ well-being, and make ethical and socially responsible decisions. The results of our factor analysis indicate a two-factor solution with 71.61% of the variance explained in the case of the Organizational Green Orientation items. We have labeled Factor 1 as “Green Products/Services” and Factor 2 as “Green Workplace.” We also developed survey questions to measure the Green Orientation at the personal/individual level. The instrument includes questions on individual’s participation on daily green activities such as recycling papers and plastic, using energy-efficient and eco-friendly products, and buying organic food. In addition, there are questions on individual’s belief and value towards the green movement. We obtained a three-factor solution with 50.66% of the variance explained in the case of the Individual Green Orientation items. We have labeled Factor 1 as “Green Actions”, Factor 2 as “Green Consciousness” and Factor 3 as “Green Belief.” Based on previous research (Fok et al., 2000, 2001; Hartman, Fok & Zee, 2009), we measured the Organizational Culture by constructing a series of paired opposite items which asked whether the organization’s climate should be described as open vs. closed, soft vs. tough, competitive vs. collaborative, and the like. The factor analysis resulted a two-factor solution in the case of the Organizational Culture items and have labeled Factor 1 as “TQM Culture” and Factor 2 as “People-Friendly Culture.” 49.64% of the variance was explained by these two factors. As for measuring the impact of green movement, the instruments included are items such as “Provide better products,” “Provide better services,” “Have better relationship with customers,” “Have better relationship with suppliers,” “Have better reputation,” “Provide better working environment,” “Increase profits,” “Reduce costs,” and “Improve productivity.” Factor analysis produced a single-factor solution and we named it “Benefits of Green Movement.” 64.88% of the variance was explained by the factor. Lastly, the Organizational Performance items were primarily adapted from the Malcolm Baldrige National Quality Award outcome assessment measures. The Baldrige Awards are designed to identify organizations, which are performing in an exceptional manner and include criteria for identifying excellence. We used the Baldrige criteria in the form of a scale, which asks respondents to provide their perceptions about their organizations along Baldrige lines. The resulting scale has been used and reported in previous research (Fok, Zee, & Hartman, 2009; Hartman, Fok & Zee, 2009). The instrument included are items such as “Overall, my company is performing well,” “Overall, morale in my company is high,” “Overall, I am satisfied with the use of technology in my company,” and the like. Factor analysis in this study indicated that one factor was present. We named the factor as “Organizational Success.”

## **RESULTS**

Our first research question suggested that organizations in the United States and in Jamaica would have different levels of organizational and individual green orientation, organizational culture, organizational performance, and impact of green movement. The MANOVA results are significant with a p-value of .000, which implies that organizations in United States were

significantly different from organizations in Jamaica, and that subjects reported different levels of organizational and individual green orientation, organizational culture, organizational performance, and impacts of the green movement. Among the nine factors, we found that “Green Products/Services”, “Green Actions”, “Green Belief”, “TQM Culture”, and “Organizational Success” are statistically significant at the levels of .05. For “Green Products/Services”, the mean factor score of Jamaican organizations (.196) is greater than that of United States organizations (-0.219). The result implies that the Jamaican respondents have stronger belief that Jamaican organizations are inclined to develop green products or services than American respondents evaluating their organizations. For “Green Actions”, the mean factor score of Jamaican sample (0.333) is greater than that of American sample (-0.352). For “Green Belief”, the mean factor score of American sample (0.179) is greater than that of Jamaican sample (-0.198). The result suggests that respondents in Jamaica perceive themselves to have higher level of individual green practices than those in the United States. However, respondents in the United States perceived themselves to have higher level of individual green awareness than those in Jamaica. For “TQM Culture”, the mean factor score of Jamaican organizations (.207) is greater than that of the United States organizations (-.232). The result implies that Jamaican organizations achieve higher level of teamwork, quality-oriented and innovation promoting than those organizations in the United States. For “Organizational Success”, the mean factor score of the United States organizations (.372) is greater than that of Jamaican organizations (-.403). The results suggest that American organizations achieve higher level of organizational performance/success than those organizations in Jamaica.

Our second research question suggested that male and female subjects would have different levels of organizational and individual green orientation, organizational culture, organizational performance, and impact of green movement. The MANOVA results are significant with a p-value of .000, which implies that males are significantly different from females, and that subjects report different levels of organizational and individual green orientation, organizational culture, organizational performance, and impacts of the green movement. Among the nine factors, we found that “Green Actions”, “Green Belief”, and “Organizational Success” are statistically significant at the levels of .002, .026, and .006, respectively. For “Green Action”, the mean factor score of females (.115) is greater than that of males (-.135) which implies that female subjects take more personal green actions (such as recycle paper, plastic, or aluminum, buy organic food, turn off lights when not in use, and etc.) than male subjects. For “Green Belief”, the mean factor score of males (.083) is greater than that of females (-.102). The result implies that male subjects perceive themselves to have higher level of green awareness than that of female subjects. For “Organizational Success”, the mean factor score of males (.093) is greater than that of females (-.123). The result suggests that male subjects are perceived to have higher level of organizational performance than that of female subjects.

Our third research question suggested that subjects in different age groups would have different levels of organizational and individual green orientation, organizational culture, organizational performance, and impact of green movement. The MANOVA results are significant with a p-value of .001, which implies that subjects are significantly different between respondents who are 35 years old and younger and respondents who are older than 35 years, and that subjects report different levels of organizational and individual green orientation, organizational culture, organizational performance, and impacts of the green movement. Among the nine factors, we

found that “Green Actions” and “Green Belief” are statistically significant at the levels of .00, and .006, respectively. For “Green Actions”, the mean score of respondents who are older than 35 years (.140) is greater than that of respondents who are 35 years and younger (-.159). For “Green Belief”, the mean score of respondents who are older than 35 years (.105) is greater than that of respondents who are 35 years and younger (-.125). The results suggest that respondents who are older than 35 years are perceived to have higher levels of individual green actions and individual green awareness than those who are 35 years and younger.

## **DISCUSSION AND CONCLUSIONS**

In this research, we examine whether there are differences between the American and Jamaican organizations in employee perceptions of and reactions to the “green movement.” Our MANOVA results found significant differences between the American and Jamaican organizations in five aspects: “Green Products/Services”, “Green Actions”, “Green Belief”, “Green Consciousness”, “TQM Culture”, and “Organizational Success”. The American organizations have two significantly higher scores in “Green Belief” and “Organizational Success” than that of the Jamaican organizations. The Jamaican organizations, on the other hand, score higher in three items: “Green Products/Services”, “Individual Green Actions”, “Green Belief”, and “TQM Culture”.

We have found that male and female subjects have different levels of organizational and individual green orientation, organizational culture, perceptions about organizational performance, and impact of green movement. As indicated by our significant MANOVA results, men show higher levels of individual green belief and awareness when compared to women; however, women take more individual green actions than men. This finding is consistent with O’Shaughnessy and Huddart-Kennedy’s (2011) argument that women use “relational activism” strategy to advocate environmentalism through home-based activities. In terms of “Organizational Success”, male subjects show higher levels of perceptions about organizational performance/success than female subjects.

Moreover, we found that subjects in different age groups would have different levels of organizational and individual green orientation, organizational culture, organizational performance, and impact of green movement. Our significant MANOVA results suggest that respondents who are older than 35 years have stronger personal green belief and take more personal green actions than those who are 35 years and younger. This finding offers support to the Renaud-Dube et al. (2010) study. Legacy motivation perhaps can explain why the older groups reported higher levels of personal green belief and personal green actions (Hunter and Lund, 2000). Moody (2009-2010) stated that the “eco-elders” were motivated to leave behind a sustainable world for all generations.

“References are available upon request from Lillian Fok.”