Exploring young consumers’ trust and purchase intention of organic cotton apparel

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Abstract:

Purpose: The purpose of this study is to examine the effects of corporate social responsibility (CSR) reputation, product price and organic label on consumers’ perceptions of quality, trust and purchase intentions of organic apparel products by surveying American young consumers.

Design/methodology/approach: An intercept survey approach was used to administer a written questionnaire to a sample of college students. The experiment is a 2 (CSR reputation: poor vs good) × 2 (price: low vs high) × 2 (organic label: absent vs present) factorial design.

Findings: The results of our study suggest that retailers’ CSR reputation had a significant positive effect on perceived quality, consumer trust and purchase intentions, and price had a negative impact on consumers’ purchase intentions. Results also revealed a significant three-way interaction among the three independent variables on perceived quality and consumer trust.

Originality/value: This research is the first empirical effort to investigate the key factors that may influence young consumers’ perceptions of quality, trust and purchase intentions of organic products by considering joint use of CSR reputation, product price and an organic label, which represents a realistic buying condition. Consequently, the findings of this study represent an important step forward in better understanding consumers’ buying behavior toward green products.

Keywords: Organic cotton | Corporate social responsibility | Young consumers | Organic label | Consumer trust | Organic apparel

Article:

Introduction

In the USA, about 30 per cent of adults (63 million people) are interested in lifestyles of health and sustainability (Gam et al., 2010). Along with health and sustainability lifestyle consumption,
sales for organic products are growing (Gam et al., 2010). Organic cotton, the most widely available organic fiber used in the clothing industry, is cotton that is produced and certified to organic agricultural standards. Sales of organic cotton have grown significantly in recent years, as consumers increasingly seek out sustainable, chemical-free fiber products. Organic cotton fiber is now the largest non-food organic category in the US market, with organic cotton fiber sales in the USA totaling over $1.1bn in 2014, up 18 per cent from 2013 sales (Organic Trade Association, 2016b). The organic cotton market has increased due to the efforts to include organic cotton lines in some mainstream apparel manufacturers (i.e. H&M, Nike, Levi Strauss & Co, Marks & Spencer, Patagonia, Gap) and retailers (i.e. Wal-Mart) (Gam et al., 2010; Lin, 2009). The global sales of organic cotton products reached an estimated $15.7bn in 2014, up 10 per cent from 2013 (Organic Trade Association, 2016b).

Green consumer behavior largely differs from general consumer behavior because it is not based on balancing an individual’s costs and benefits, but has to take the influence on society at large into account (Culiberg and Elgaiaied-Gambier, 2016). Pro-environmental behaviors are indeed future oriented and unlikely to benefit directly the person performing the behavior (Culiberg and Elgaiaied-Gambier, 2016). Furthermore, for apparel consumers who would like to make responsible consumption choices, they are faced with multiple competing decision-making factors in addition to their moral and ethical responsibility. Other factors, such as product price, apparel company’s corporate social responsibility (CSR) reputation, complexity of product information and uncertainty about actual environmental and social benefits are consumers’ main barriers to purchasing environmentally and socially responsible products. Consumers are constantly measuring and evaluating options between their wants to be environmentally and socially responsible and their desires for positive shopping experiences (Ha-Brookshire and Norum, 2011). As organic products are credence goods, consumers cannot directly verify whether these products comply with official standards. Thus, organic labels can serve as an important source of consumer trust. Previous studies suggest that consumers are more likely to trust the organic products sold by a retailer when it is considered socially responsible (Perrini et al., 2010), so retailer’s CSR reputation impacts consumer decision-making. In addition, as organic products are generally more expensive than their conventional counterparts, consumers may also rely on price information as a quality cue for organic apparel products.

Several empirical surveys have identified young millennials as the most sustainable generation to date (Euromonitor International, 2016; The Nielsen, 2015). A simple act of selecting a product or service becomes a potential statement about their identity and personal values, which are more important than personal benefits (such as cost or convenience) (Gazzola et al., 2017). As such, understanding young consumers’ views offers valuable insights to global sustainable apparel marketers.

Organic cotton has been defined as a niche-market product (Lin, 2009). Studies focusing specifically on the organic cotton textile/apparel consumers are limited (Ellis et al., 2012; Lin, 2009). In the apparel consumption literature, multiple attempts were made to identify important factors that would influence sustainable consumption (Ha-Brookshire and Norum, 2011; Hustvedt and Dickson, 2009). However, few studies have investigated how CSR reputation, price, and organic label impact consumer’s trust in organic claim and purchase intentions of organic cotton apparel. Considering the essential role of perceived quality and
consumer trust in the organic clothing market and the emerging young consumer segment interested in sustainable consumption, this study aims to investigate the key factors that may influence young consumers’ perceptions of quality, trust and purchase intentions of organic apparel products by surveying college students.

Literature review

Organic cotton

An organic cotton garment is indistinguishable to the sight and touch from a garment made of conventionally grown cotton; hence, it is possible that consumers’ willingness to pay a premium for organically produced cotton would have to arise from concern about the upstream effects of the cotton production (Casadesus-Masanell et al., 2009). Despite being natural, renewable, and recyclable, cotton has been criticized due to its excessive water consumption and growers’ high use of pesticides and other insecticides (Chen and Burns, 2006; Ha-Brookshire and Norum, 2011). Producing cotton organically means only non-genetically modified plants can be used and the use of synthetic agricultural chemicals such as pesticides and fertilizers is practically excluded (Organic Trade Association, 2016b). Organic cotton in the USA is produced within a set of strict US Department of Agriculture (USDA) standards, enforced by USDA-certifying agents who annually inspect fields and growing operations for adherence to National Organic Program (NOP) standards (Ha-Brookshire and Norum, 2011). NOP standards require a three-year conversion, or change over, of land before organic crops can be harvested (USDA, 2011). NOP standards specify that farming practices must maintain or improve the natural resources of the operation, including soil and water quality. Thus, synthetic substances are prohibited and genetically modified organisms are not allowed (USDA, 2011). Certified organic cotton is grown on 220,765 hectares of land, representing approximately 0.7 per cent of global cotton area; and an additional 37,883 hectares are in conversion to organic (Organic Trade Association, 2016b). There are approximately 148,000 organic cotton farmers around the world (Organic Trade Association, 2016b).

Corporate social responsibility

Dickson and Eckman (2006) defined the concept of social responsibility in the textile and apparel field which includes the three major conceptual dimensions of CSR: a business orientation focusing on the environment, people, products and the impact on society; a business philosophy that balances ethics/morality with profitability; and a business drive for outcomes that would positively affect, or do little harm to, the world and people. When customers see intrinsic connections among the product, the cause, and the company’s core values, the bundle is likely to be more positively received (Becker-Olsen et al., 2006; Casadesus-Masanell et al., 2009).

There is evidence to suggest that concern over or knowledge about CSR business practices may influence consumers’ responses to social responsibility marketing claims (Hyllegard et al., 2012). Kang and Hustvedt (2014) maintained that the impact of consumer opinions about the social responsibility of a firm should not be considered in isolation from the general attitudes that consumers have about the company. Academic and market research suggests that college
students (and younger adults, in general) are knowledgeable about ethical apparel business practices and demonstrate preferences for brands that are environmentally conscious, engaged with the community, or associated with a social cause (Hyllegard et al., 2014; Hyllegard et al., 2012; Kozar and Connell, 2010). The findings from Ha-Brookshire and Norum’s (2011) study showed that consumers were willing to pay more for organic cotton apparel if the brand they perceive has good CSR reputation. The results from Kang and Hustvedt’s (2014) study showed that consumers’ perception of a corporation’s efforts to be socially responsible plays a critical role in building consumer trust and positive attitude toward the corporation and in turn developing their intentions to purchase. This study investigates whether CSR reputation affects consumers’ perceived quality, trust in organic claim and purchase intention of organic apparel products.

Product price

For apparel products, price has been found to be one of the most decisive factors impacting consumers’ perception of the product and their purchase intention. Naturally colored organic, or green, cotton products are generally priced for an upscale market, running from about 10-30 per cent more than comparable items made from conventional cotton (Lin, 2009). Some previous studies indicated that consumers are willing to pay higher price for organic cotton products (Lin, 2009, 2010; Wang, 2007). Casadesus-Masanell et al. (2009) analyzed internal company data from Patagonia Inc. and found that consumers were willing to pay US$6.58 more for an organic cotton flannel shirt. However, a few other studies reported different findings. For example, Gam et al. (2010) concluded that mothers, although willing to purchase organic cotton clothing for their children, were not willing to pay high price. Ellis et al. (2012) found that although on average, participants in their study were willing to pay a 25 per cent premium for an organic cotton t-shirt over the visibly similar t-shirt made from conventionally produced cotton, participants who pay for their own clothing or make purchase decisions alone were not willing to pay a premium. The participants in Ellis et al. (2012)’s study were college students and when faced with the reality of funding their own clothing purchases, it seems they were not willing to pay more for organic cotton. The present study investigates whether the price of an organic apparel product affects consumers’ perceived quality, trust in organic claim and purchase intention.

Organic label

Information about a product is crucial for determining, maintaining and communicating the product features, performance, and differentiation. The organic attributes are identified by information “cue” on the product which is usually presented through a label. The implementation of an organic labeling system would provide information that can help consumers to make informed purchasing and consumption decisions because the labeling reduces the asymmetry of information between consumers and producers and increases the utility of consuming products that carry such labels (de-Magistris and Gracia, 2014).

Many apparel products on the market are claiming to be organic products, but they are not carrying certified organic seal or label. It has been suggested that third-party certified environmental claims may improve consumers’ evaluations of a product’s environmental
performance (Hyllegard et al., 2014; Hyllegard et al., 2012). The certified organic label can increase consumers’ confidence in the quality characteristics of products (de-Magistris and Gracia, 2014). Besides the USDA NOP production and processing standards, globally, the Global Organic Textile Standard (GOTS), is the stringent voluntary international standard for the processing of organic fibers and products and GOTS is recognized as the world’s leading processing standard for textiles made from organic fibers (Organic Trade Association, 2016a). It defines high-level environmental criteria along the entire organic textiles supply chain and requires compliance with social criteria as well (Organic Trade Association, 2016a). With the completion of GOTS certification system by an approved certifier, a firm can use the GOTS labeling on the certified products. The GOTS helps explain producers’ causes and products’ benefits (Ha-Brookshire and Norum, 2011). In the highly competitive apparel market, a successful product differentiation and communication strategy through organic labels could promote the market incentive and highlight the product attributes that may be desirable for specific niche markets, furthermore enhance the profitability and reputation of firms by increasing consumer trust and loyalty. This study investigates whether the presence of a certified organic label affects consumers’ perceived quality, trust in organic claim and purchase intention of organic products.

**Perceived quality**

Defined as the consumer’s judgment about a product’s overall excellence or superiority (Zeithaml, 1988), perceived quality is not the objective quality of the product but consumers’ subjective evaluations which depend on their perceptions. Perceived quality provides consumers with a reason to buy. It creates a basis for brand differentiation and extension and offers a price premium advantage for firms (Keller, 1993).

Focusing on specific product attributes, Hustvedt and Dickson (2009) found that consumers, who used “organic” as a criterion when purchasing apparel products, believed that a quality product was an outcome of their organic cotton apparel purchase. Although research has not concluded that organic cotton is perceived softer by consumers, trade publications and industry press report that many consumers believe organic cotton is softer than conventional cotton and attribute this to the lack of harsh chemicals used in growing and processing organic cotton products (Ellis et al., 2012). This is consistent with the findings in Hustvedt and Dickson (2009).

**Consumer trust and purchase intention**

Morgan and Hunt (1994) defined trust as confidence in the reliability and integrity of an exchange partner. They explained that reliability and integrity are associated with consistency, competency, honesty, fairness, responsibility, helpfulness and benevolence. In Delgado-Ballester (2004)’s study, brand trust is conceptualized as “The confident expectations of the brand’s reliability and intentions in situations entailing risk to the consumer” (p. 574) and this definition of brand trust reflects two distinct components: brand reliability and brand intentions. Brand reliability is based on the extent to which the consumer believes that the brand accomplishes its value promise, and brand intentions is based on the extent to which the consumer believes that the brand would hold consumers’ interests ahead of its self-interest when unexpected problems with the consumption of the product arise (Delgado-Ballester, 2004).
Consumer perception of a product represents certain situations in which the consumer faces some degree of uncertainty or ambiguity in the satisfaction of his/her consumption expectations. Consumer trust is a feeling of security held by the consumer that the brand will meet his/her consumption expectations. Consumer trust represents the recognition that product value can be created and developed by managing to go beyond consumer’s satisfaction with the product’s attributes and functional performance. The process by which a consumer attributes a trust image to the product/brand is based on his/her experience with that brand. Therefore, as an experience attribute, trust will be influenced by the consumer’s evaluation of any direct and indirect contact (advertising, word of mouth, brand reputation) with the product/brand (Delgado-Ballester and Munuera-Alemán, 2001).

Consumer trust may be an important contributor to consumer’s purchase intention (Park and Kim, 2016). Trust has been founded as a critical predictor for positive outcomes of marketing and branding such as loyalty, consumer retention, and purchase intention (Kang and Hustvedt, 2014). The results of Kang and Hustvedt (2014)’s research demonstrated that trust directly affected word-of-mouth intention and purchase intention. Ma et al. (2012)’s study provided evidence that consumers’ beliefs concerning both the fair trade concept and product attributes played critical role in driving purchase intentions.

**Theoretical framework and research model**

Fishbein’s attitude theory (Fishbein, 1963; Fishbein and Ajzen, 1975) offers theoretical support for the study. According to Fishbein’s attitude theory, a person’s attitude is a function of his salient beliefs at a given point in time and salient beliefs are those activated from memory and “considered” by the person in a given situation (Fishbein and Ajzen, 1975). The basic theoretical proposition of Fishbein’s attitude theory is that it proposed a causal flow among three cognitive variables-beliefs, evaluations or attitudes, and intentions (Mitchell and Olson, 1981). According to this view, a marketing stimulus such as an advertisement affects consumers’ beliefs first. Then the influenced salient beliefs mediate the marketing variable’s effect on attitude, and attitude in turn mediates subsequent effects on behavioral intention (Mitchell and Olson, 1981). A person’s beliefs are shaped by direct observation and information received from outside sources (Ajzen and Fishbein, 1980; Fishbein and Ajzen, 1975). These beliefs also influence a person’s positive or negative evaluation of an object or his or her attitude toward that object, which in turn affects behavior intention. Approaching apparel purchase decision as a problem-solving process, consumers have perceptions and form beliefs about a product/brand by being aware of the product/brand or seeking information about relevant attributes, and then consumers evaluate these beliefs and perceptions and develop feelings and attitudes about the product/brand, which result in buying or rejecting the product/brand (Solomon, 2012). A sustainable apparel shopping attitude is a predisposition toward or away from environmental and ethical awareness that affects apparel consumption behavior. Research suggests that consumers whose attitudes relate to environmental and/or social responsibility possess a higher likelihood of consuming organic items (Hyllegard et al., 2014; Hyllegard et al., 2012; Lin, 2010).

Table I provides a summary of the selected studies that report the effects of CSR, product price and organic label on consumer behavior. Based on the literature review, we expect that
company’s CSR reputation, price of organic cotton apparel product and organic label would significantly influence consumer’s perception of product quality and consumer trust in organic claim, which in turn affect their purchase intention of organic apparel. In addition, we are also interested in the direct effects of CSR reputation, price, and organic label on consumer purchase intention. Figure 1 illustrates the research model and the hypotheses:

**Figure 1.** The conceptual model

**Table 1.** Summary of the selected studies reporting the effects of CSR, product price and organic label on consumer behavior

<table>
<thead>
<tr>
<th>Variable</th>
<th>Study</th>
<th>Findings/Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CSR</strong></td>
<td>Becker-Olsen <em>et al.</em> (2006)</td>
<td>Consumers expect firms to be involved in social initiatives and may reward them for their efforts through purchase behavior</td>
</tr>
<tr>
<td></td>
<td>Casadesus-Masanell <em>et al.</em> (2009)</td>
<td>When customers see intrinsic connections among the product, the cause, and the company’s core values, the bundle is likely to be more positively received</td>
</tr>
<tr>
<td></td>
<td>Dickson and Eckman (2006)</td>
<td>The concept of social responsibility in the textile and apparel field includes the three major conceptual dimensions of CSR: a business orientation focusing on the environment, people, products, and the impact on society; a business philosophy that balances ethics/morality with profitability; and a business drive for outcomes that would positively affect, or do little harm to, the world and people</td>
</tr>
<tr>
<td></td>
<td>Ha-Brookshire and Norum (2011)</td>
<td>Consumers were willing to pay more for organic cotton apparel if the brand they perceive has good CSR reputation</td>
</tr>
<tr>
<td></td>
<td>Kang and Hustvedt (2014)</td>
<td>Consumers’ perception of a corporation’s efforts to be socially responsible plays a critical role in building consumer trust and positive attitude toward the corporation and in turn developing their intentions to purchase</td>
</tr>
<tr>
<td><strong>Organic label</strong></td>
<td>de-Magistris and Gracia (2014)</td>
<td>The implementation of an organic labeling system would provide information that can help consumers to make informed purchasing and consumption decisions because the labeling reduces the asymmetry of information between consumers and producers and increases the utility of consuming products that carry such labels</td>
</tr>
<tr>
<td></td>
<td>Ha-Brookshire and Norum (2011)</td>
<td>Products with certifications have become popular as a way to target specific consumers who are concerned with the social and natural environments. These certifications help explain producers’ causes and products’ benefits</td>
</tr>
<tr>
<td></td>
<td>Hyllegard <em>et al.</em> (2014)</td>
<td>College students evaluated apparel hang tags featuring prosocial marketing claims more positively than they evaluated hang tags with no prosocial marketing claim</td>
</tr>
<tr>
<td></td>
<td>Hyllegard <em>et al.</em> (2012)</td>
<td>Hang tags featuring highly explicit messages and third-party SR logos produced more favorable evaluations than did hang tags featuring less explicit messages and no logos</td>
</tr>
<tr>
<td>Variable</td>
<td>Study</td>
<td>Findings/Implications</td>
</tr>
<tr>
<td>----------</td>
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</tr>
<tr>
<td>Product price</td>
<td>Casadesus-Masanell et al. (2009)</td>
<td>Patagonia’s end customers (i.e. final purchasers of its clothing) were willing to pay substantial price premiums for green goods</td>
</tr>
<tr>
<td></td>
<td>Ellis et al. (2012)</td>
<td>On average, participants were willing to pay a 25% premium for an organic cotton t-shirt over the visibly similar t-shirt made from conventionally produced cotton. Participants who pay for their own clothing or make purchase decisions alone were not willing to pay a premium</td>
</tr>
<tr>
<td></td>
<td>Gam et al. (2010)</td>
<td>Mothers, although willing to purchase organic cotton clothing for their children, were not willing to pay high price</td>
</tr>
<tr>
<td></td>
<td>Lin (2009)</td>
<td>More than half of the participants in their structured interview study stated that they would be willing to pay more for organic cotton based on health and environmental issues</td>
</tr>
<tr>
<td></td>
<td>Wang (2007)</td>
<td>Majority of the respondents in their study indicated they are willing to pay higher price for organic cotton product</td>
</tr>
</tbody>
</table>

**Hypotheses**

**H1.** CSR reputation of the company positively impacts (a) product perceived quality, (b) consumer purchase intention and (c) consumer trust.

**H2.** Product price positively affects (a) perceived quality and (c) consumer trust, but negatively affects (b) consumer purchase intention.

**H3.** Organic label positively affects (a) perceived quality, (b) consumer purchase intention and (c) consumer trust.

**H4.** Perceived quality positively influences consumer purchase intention.

**H5.** Consumer trust positively influences consumer purchase intention.

**Research design and methodology**

**Study design**

An experiment was constructed to test the hypotheses. The experiment we conducted used a between-subjects 2 × 2 × 2 design. Eight scenarios were developed to manipulate three independent variables: CSR reputation (poor vs good), price (low vs high) and organic label (absent vs present). Please refer to Table II for the eight scenarios. Subjects were randomly assigned to one of the eight experimental conditions.

<table>
<thead>
<tr>
<th>Scenarios</th>
<th>CSR reputation</th>
<th>Product price</th>
<th>Organic label</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario 1</td>
<td>Good (Patagonia)</td>
<td>High ($79)</td>
<td>Present (carry the GOTS label)</td>
</tr>
<tr>
<td>Scenario 2</td>
<td>Good (Patagonia)</td>
<td>High ($79)</td>
<td>Absent (NOT carry the GOTS label)</td>
</tr>
<tr>
<td>Scenario 3</td>
<td>Good (Patagonia)</td>
<td>Low ($19)</td>
<td>Present (carry the GOTS label)</td>
</tr>
<tr>
<td>Scenario 4</td>
<td>Good (Patagonia)</td>
<td>Low ($19)</td>
<td>Absent (NOT carry the GOTS label)</td>
</tr>
<tr>
<td>Scenario 5</td>
<td>Poor (Walmart)</td>
<td>High ($79)</td>
<td>Present (carry the GOTS label)</td>
</tr>
<tr>
<td>Scenario 6</td>
<td>Poor (Walmart)</td>
<td>High ($79)</td>
<td>Absent (NOT carry the GOTS label)</td>
</tr>
<tr>
<td>Scenario 7</td>
<td>Poor (Walmart)</td>
<td>Low ($19)</td>
<td>Present (carry the GOTS label)</td>
</tr>
<tr>
<td>Scenario 8</td>
<td>Poor (Walmart)</td>
<td>Low ($19)</td>
<td>Absent (NOT carry the GOTS label)</td>
</tr>
</tbody>
</table>
**Measures**

**Product stimuli**

For the purpose of the experiments, hypothetical advertisements were selected as the stimuli, which were developed through a set of pretests. The pretests were used to obtain feedback, assess the clarity of the questions, and assess the reliability of the measures of the variables with respect to the questionnaire. In the pretest phase, 25 college students were invited to participate. A long sleeve shirt was selected as the product category for the experiment due to the feedback from the pre-test and the item’s popularity among young college shoppers. The long sleeve shirt is a category involving fewer changes in style and less affected by fashion trends; therefore, it is expected that price, quality, and brand name are the major factors affecting consumer purchase decisions.

**Independent variables**

CSR reputation was manipulated to distinguish between a poor reputation and a good reputation. Walmart, a multinational discount store, was chosen as the company with a poor CSR reputation. Patagonia, the California-based outdoor and sportswear manufacturer that sets out to be an environmentally friendly supplier of outdoor gear, was chosen as the company with a good CSR reputation (Husted and Allen, 2007). We used real corporations in our experiment so the participants would conjure up perceptions of reputation and knowledge in their evaluation of the retailers and products (Dodds *et al.*, 1991; Lwin and Williams, 2006). Price was manipulated at two levels: low ($19) and high ($79). Similarly, the availability of the GOTS organic label was manipulated at two levels: absence and presence (see Table II).

**Dependent variables**

Items measuring perceived quality were adopted from Larceneux, Benoit-Moreau, and Renaudin (2012). Some of the sample items were “This product is safer and better to wear than others” and “This product seems to have been made following an environmentally friendly process”. Based on the previous research on consumer trust (Perrini *et al.*, 2010), we developed three items for consumer trust. Some of the sample items were “Consumers can trust the organic claim on this product” and “I trust this organic product”. Intentions to purchase were measured using two items (Rao and Monroe, 1989). The participants were asked to indicate the likelihood of buying the product being shown in the experiment. Each statement was rated on a 5-point Likert scale (1 = strongly disagree; 5 = strongly agree).

**Manipulation checks.**

Manipulation checks were conducted at the end of experiment. The manipulation check for CSR reputation asked respondents about their judgments of the social responsibility reputation of the company included in their scenario. Respondents were asked to rate their level of agreement with the following three statements, “The company that makes this product has a good reputation in terms of social responsibility”, “The company that makes this product cares for the natural environment”, and “The company that makes this product cares for its customers and
employees” (Perrini et al., 2010). The questionnaire also included a 1-item manipulation check for price. Respondents were asked to rate their level of agreement with the statement “The price of the product is high” (Dodds et al., 1991). All manipulation checks were done on a five-point Likert scale (from 1 = “strongly disagree” to 5 = “strongly agree”).

**Sample and data collection**

We used college students as research subjects because younger educated consumers are more environmentally conscious and socially responsible (Euromonitor International, 2016; The Nielsen, 2015). An intercept survey approach was used to administer a written questionnaire to a sample of college students in selected campus dining facilities of a large state university in the USA. The sampling design for this study was a combination of convenience sampling (any college student who happened to be at a selected dining facility) and random probability sampling (trained interviewers approached any student they encountered with no screening for particular characteristics). After they agreed to participate, the survey subjects were randomly assigned to one of eight treatment groups. In the experiment task, participants were asked to imagine that they are purchasing a shirt on the internet and come across a description of an organic cotton shirt. The description contained generic attribute information about the cotton shirt: “This mid-weight flannel shirt is made of 100 per cent organic cotton that provides a warm layer over a tee”. The retailer’s name and logo, product price, and the availability of organic label were embedded in the scenario advertisements. After reading the description, participants were asked to complete a questionnaire that collected information on the dependent variables, manipulation check and standard demographics.

**Data analysis and results**

**The sample**

Of the 330 collected questionnaires, 305 responses were considered valid and were used in the study. In total, 25 subjects were dropped either because of their incomplete responses or because the questionnaires were improperly filled out. Most participants were between the ages of 18 and 25 (94 per cent), and 182 respondents were women (60 per cent). The majority of the respondents (90 per cent) reported having purchased a shirt online before. To investigate the effect of demographic variables (gender, age and ethnicity) on respondents’ evaluation of perceived quality, trust and purchase intentions, independent t-tests were conducted to determine whether there is statistical evidence that the associated population means are significantly different. The results of the t-tests showed that there were no significant differences in the mean scores across age and ethnic groups at the 0.05 level of significance; however, we did find a significant statistical difference between gender groups in their evaluation of product quality and trust for organic clothing products. Specifically, the results indicate that there is a statistically significant difference between the mean scores for males and females ($t = −3.41, p = 0.001$) on perceived quality. These findings imply that female respondents ($M_{Female} = 3.43$) perceive higher quality of organic clothing products than male respondents ($M_{Male} = 3.01$). The results also suggest that there is a statistically significant difference between the mean scores for males and females ($t = −2.18, p = 0.039$) in consumer trust, which implies that female respondents ($M_{Female} = 3.35$) trust organic clothing products more than male respondents ($M_{Male} = 3.14$).
Inspection of Q-Q Plots revealed that both perceived quality and consumer trust were normally distributed for both gender groups and that there was homogeneity of variance as assessed by Levene’s test for equality of variances.

**Manipulations**

To check whether our manipulations of CSR reputation and product price were successful, we conducted two separated one-way analysis of variance (ANOVA). We performed the first manipulation check to assess whether the participants perceived the intended CSR reputation differences in the scenarios. The analysis showed that Patagonia ($M = 3.55$) was perceived to have a better CSR reputation than Walmart ($M = 3.04$) [$F (1, 303) = 28.87, p = 0.000$], indicating that manipulation has been perceived as we intended. The second manipulation check involved assessing the difference between the two price levels (low/high). The results of ANOVA indicated that significant differences between the two price levels ($M_{low-price} = 2.39$ vs $M_{high-price} = 3.67$) [$F (1, 303) = 111.21, p = 0.000$]. The Levene’s test showed that there is not a significant difference between the two CSR groups’ variances or the two price groups’ variances.

**Reliability and validity of measures**

An exploratory factor analysis (EFA) was first done on the 8 items measuring perceived quality, consumer trust, and purchase intentions with a varimax rotation. Exploratory factor analysis produced three distinct factors among the items. The values of Cronbach’s alpha for “perceived quality”, “consumer trust”, and purchase intentions” were 0.70, 0.81, and 0.74, respectively. Thus, they were accepted as being reliable for the research.

Next, a confirmatory factor analysis (CFA) for the measurement model with three constructs was performed to assess the convergent and discriminant validity of the three dependent variables. The goodness-of-fit statistics indicated that all criteria met the recommended values in the measurement model ($\chi^2/df = 2.63$; GFI = 0.97; AGFI = 0.93; CFI = 0.98; RMR = 0.04, and RMSEA = 0.07). The results confirmed convergent validity as all items loaded significantly ($p < 0.001$) on the underlying latent constructs (Anderson and Gerbing, 1988). Discriminant validity was tested by conducting $\chi^2$ difference tests between all possible pairs of constructs (Anderson and Gerbing, 1988). The $\chi^2$ difference tests confirmed significant lower $\chi^2$ values ($p < 0.001$) for the unconstrained model for all comparisons that were tested, implying the achievement of discriminant validity (Bagozzi and Phillips, 1982).

**Hypothesis tests**

We conducted a multivariate analysis of variance (MANOVA) with CSR reputation, product price and organic label as the independent variables. Perceived quality (PQ), consumer trust (CT) and purchase intentions (PI) were the dependent variables. Table III presents the means and standard deviations of the eight cells (2 × 2 × 2 design) involved in the experiment design for this study.

The results of MANOVA indicated a significant main effect of CSR reputation (Wilks lambda = 0.90, $F = 10.67$), a significant main effect of product price (Wilks lambda = 0.96, $F = 3.96$), and
a significant three-way interaction effect among the three independent variables (Wilks lambda = 0.97, \( F = 2.82 \)) (Table IV). Univariate analyses indicated that the significant interaction is driven by its effect on perceived quality and consumer trust. No other findings were significant. To interpret the various individual and combined effects, a series of specific sub-design analyses were conducted and the results are presented in Table IV.

Table III. Descriptive statistics

<table>
<thead>
<tr>
<th>Dependent variables</th>
<th>CSR reputation</th>
<th>Product price</th>
<th>Organic label</th>
<th>Mean</th>
<th>SD</th>
<th>n</th>
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</thead>
<tbody>
<tr>
<td>PQ</td>
<td>Poor</td>
<td>Low</td>
<td>Absent</td>
<td>2.85</td>
<td>0.70</td>
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<tr>
<td></td>
<td></td>
<td>Present</td>
<td>3.18</td>
<td>0.85</td>
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<tr>
<td></td>
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<td>Absent</td>
<td>3.27</td>
<td>0.89</td>
<td>39</td>
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<tr>
<td></td>
<td></td>
<td>Present</td>
<td>3.05</td>
<td>0.93</td>
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<tr>
<td>Good</td>
<td>Low</td>
<td>Absent</td>
<td>3.61</td>
<td>0.89</td>
<td>38</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Present</td>
<td>3.31</td>
<td>0.93</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>Absent</td>
<td>3.41</td>
<td>0.71</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Present</td>
<td>3.62</td>
<td>0.92</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>CT</td>
<td>Poor</td>
<td>Low</td>
<td>Absent</td>
<td>3.08</td>
<td>0.78</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td></td>
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<td>0.80</td>
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<tr>
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<td>Absent</td>
<td>3.11</td>
<td>0.83</td>
<td>39</td>
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<tr>
<td></td>
<td></td>
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<td>3.01</td>
<td>0.93</td>
<td>39</td>
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</tr>
<tr>
<td>Good</td>
<td>Low</td>
<td>Absent</td>
<td>3.53</td>
<td>0.67</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Present</td>
<td>3.26</td>
<td>0.87</td>
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<tr>
<td></td>
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<td>0.86</td>
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<tr>
<td></td>
<td></td>
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<td>0.92</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>PI</td>
<td>Poor</td>
<td>Low</td>
<td>Absent</td>
<td>2.50</td>
<td>0.88</td>
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<tr>
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<td></td>
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<td>0.77</td>
<td>34</td>
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</tr>
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<td></td>
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<td>0.76</td>
<td>39</td>
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</tr>
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<td></td>
<td></td>
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<td>2.35</td>
<td>0.91</td>
<td>39</td>
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</tr>
<tr>
<td>Good</td>
<td>Low</td>
<td>Absent</td>
<td>3.16</td>
<td>0.93</td>
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</tr>
<tr>
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<td>0.77</td>
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</tr>
<tr>
<td></td>
<td>High</td>
<td>Absent</td>
<td>2.89</td>
<td>0.95</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Present</td>
<td>3.00</td>
<td>1.09</td>
<td>39</td>
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</tr>
</tbody>
</table>

Table IV. MANOVA and univariate results

<table>
<thead>
<tr>
<th>Variable</th>
<th>MANOVA results</th>
<th>Perceived quality</th>
<th>Consumer trust</th>
<th>Purchase intentions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Wilks’ Lambda</td>
<td>Mean square</td>
<td>Mean square</td>
<td>Mean square</td>
</tr>
<tr>
<td>CSR reputation (A)</td>
<td>0.90</td>
<td>10.67***</td>
<td>12.32</td>
<td>19.16***</td>
</tr>
<tr>
<td>Product price (B)</td>
<td>0.96</td>
<td>3.96**</td>
<td>0.72</td>
<td>1.05</td>
</tr>
<tr>
<td>Organic label (C)</td>
<td>0.99</td>
<td>0.22</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>A x B</td>
<td>0.99</td>
<td>1.39</td>
<td>0.19</td>
<td>0.30</td>
</tr>
<tr>
<td>A x C</td>
<td>0.99</td>
<td>0.52</td>
<td>0.20</td>
<td>0.31</td>
</tr>
<tr>
<td>B x C</td>
<td>0.98</td>
<td>2.38</td>
<td>0.01</td>
<td>0.02</td>
</tr>
<tr>
<td>A x B x C</td>
<td>0.97</td>
<td>2.82**</td>
<td>5.25</td>
<td>8.27**</td>
</tr>
</tbody>
</table>

Notes: *\( p \leq 0.05 \); **\( p < 0.01 \); ***\( p < 0.001 \)

The first set of hypotheses (\( H1a \), \( H1b \), and \( H1c \)) predicted that conditions with a better CSR reputation would be associated with higher perceived quality, higher levels of consumer trust, and higher purchase intentions when compared to conditions with a poorer CSR reputation. The ANOVA results indicated that CSR reputation had a significant positive effect on perceived quality (\( M_{\text{Good Reputation}} = 3.49, M_{\text{Poor Reputation}} = 3.09; F = 19.16, p = 0.000 \)), consumer trust (\( M_{\text{Good Reputation}} = 3.43, M_{\text{Poor Reputation}} = 3.09; F = 12.64, p = 0.000 \)), and purchase intentions (\( M_{\text{Good Reputation}} = 3.49, M_{\text{Poor Reputation}} = 3.09; F = 22.21, p = 0.000 \)).
Reputation = 3.08, $M_{\text{Poor Reputation}} = 2.54; F = 27.70, p = 0.000)$. Thus, hypotheses 1a, 1b and 1c were all supported by the empirical data. This implies that retailers’ CSR reputation plays a crucial role in assessing quality, earning consumers’ trust, and influencing their purchase decisions toward organic clothing products.

The second set of hypotheses ($H2a$, $H2b$, and $H2c$) predicted that product price would positively influence perceived quality and consumer trust, but negatively influence purchase intentions. The ANOVA results support a significant negative price impact on purchase intentions ($M_{\text{High price}} = 2.71, M_{\text{Low Price}} = 2.94; F = 4.66, p = 0.030$), but not on perceived quality ($F = 1.05, p = 0.31$) and consumer trust ($F = 0.00, p = 0.99$). Thus, hypothesis 2b was supported by the empirical data, and hypotheses 2a and 2c were not supported. Therefore, the expected influence of price was only partially confirmed by the evidence.

The third set of hypotheses predicted that organic label could positively influence consumers’ perceived quality, trust, and purchase intentions. Neither of these effects were significant ($p > 0.05$). Thus, hypotheses 3a, 3b and 3c were not supported.

In addition, the subsequent three-way ANOVA results indicated that the three-way interactions among CSR reputation (poor vs. good) x price (low vs. high) x organic label (absent vs. present) was positive and significant for perceived quality ($F = 8.27, p = 0.004$) and consumer trust ($F = 3.86, p = 0.05$). Some insights into the nature of the three-way interactions were provided by dividing the data into two sets, one for the company with a good CSR reputation and one for the company with a poor CSR reputation. The nature of the three-way interactions was shown graphically in Figure 2. Specifically, for companies with a poor CSR reputation, when an organic label is absent from their products, higher-priced products are believed to possess higher quality than lower-priced products ($F = 5.45, p = 0.02$). In the case of consumer trust, for companies with a good CSR reputation, when an organic label is also present on their products, higher-price results in higher level of trust in these products than lower-price ($F = 3.82, p = 0.05$).

**Figure 2.** Three-way interaction effects on perceived quality and consumer trust

The linear regression results provided evidence of the positive impact of perceived quality ($\beta = 0.22, t$ value = 3.05, $p < 0.05$) and consumer trust ($\beta = 0.43, t$ value = 6.03, $p < 0.001$) on consumers’ purchase intentions toward organic cotton apparel. This suggests that both product
quality and consumers trust are important mediators of consumer intentions to purchase organic apparel products. Thus, both hypotheses 4 and 5 were supported.

**Discussion and conclusion**

Our research is the first empirical effort to investigate the key factors that may influence young consumers’ perceptions of quality, trust and purchase intentions of organic products by considering the joint use of CSR reputation, product price, and an organic label, which represents a realistic buying condition. The findings of this study represent an important step forward in better understanding consumers’ buying behavior toward green products. The conceptual framework developed in this study can be used to develop a framework for future studies investigating consumers’ perceptions and purchase behavior toward other green products. The following section focuses on important implications for business practitioners.

An interesting, but not surprising, finding from this study is that female consumers perceive higher quality and trust organic clothing products more than male consumers. It confirms that demographics influence organic purchasing behavior. The findings are consistent with previous studies, which indicate that female young consumers are more committed to environment trends and are more likely to buy environmentally friendly products than male consumers (Hughner et al., 2007; Mostafa, 2007). As a result, apparel products made from organic fibers appear to be more attractive in niche markets (e.g. socially responsible female consumers).

Consistent with previous studies, the results of our study confirm that retailers’ CSR reputation plays a crucial role in consumers’ product evaluation, building consumers’ trust, and in turn developing their intentions to buy organic products. The three-way interactions suggest that a good CSR reputation allows a company to charge premium prices for green products. These results indicate that American young consumers value CSR reputation and use it as a purchasing criterion. This suggests that if a company wants to achieve long-run success in the organic market, its brand (company and product) must be connected with a good CSR reputation. Indeed, one of the direct implications of our study is that mainstream retailers should try to improve their social and environmental performance if they want to enlarge their presence in the organic market. Specifically, socially responsible companies need to engage in strategic CSR programs that are meaningful to their customers. Managers should also communicate their social responsibility efforts to the target audience and develop marketing communications that provide details about how their companies have helped address specific social issues (Mohr et al., 2001). Another implication is that manufacturers or retailers with good CSR reputation (e.g. Patagonia) should leverage their competitive advantage in selling trust-intensive products by extending organic lines (both private labels and others).

Respondents in this study indicated price as a major obstacle to purchasing organic apparel products, a finding well in accordance with earlier studies (Ellis et al., 2012; Gam et al., 2010; Tsakiridou et al., 2008). Currently, organic cotton products are generally ten to thirty percent more expensive than comparable items made from conventional cotton (Lin, 2009). The findings imply that the higher price of organic apparel products can have a negative influence on demand and deter price-conscious consumers from buying these products. Young people (the subjects in this study) are not willing to pay the price premium for organic products, usually a
result of their low-financial status. To promote organic apparel products and persuade these consumers to make a purchase, marketers could consider using price promotions. Interestingly, the positive effects of higher product prices also emerged from the significant three-way interactions among CSR reputation, price and organic label. As we reported earlier, consumers do not perceive a high price itself as a sign of quality for organic apparel products. However, we found when organic products are not officially certified as organic (not bearing an organic label) and are manufactured or sold by a company with a poor CSR reputation (e.g. Walmart), higher prices correspond well to higher levels of perceived quality. For companies with a poor CSR reputation, they may have an economy organic brand. However, consumers may be suspicious of their organic products promoted as high quality but with a low price. Therefore, in these situations, marketers such as Walmart need to match the price of an organic product with its quality as perceived by consumers in the market segment being targeted. Similarly, our results suggest that a high price alone can’t earn consumer trust on organic products. However, when apparel products are officially certified as organic and are manufactured or sold by a company with a good CSR reputation (e.g. Patagonia), consumers feel that higher-priced organic products are more trustworthy than lower-priced organic products. This implies that good CSR reputation and the organic label work together to set consumer expectations of a higher price for an organic product. Therefore, in these situations, marketers such as Patagonia should price their organic products at a comparable level to their reputation and focus their marketing endeavors mainly on consumers who are willing and able to pay a premium for organic products.

Contrary to previous studies (Larceneux et al., 2012), we found that organic label has no impact on either of the dependent variables. The possible reason could be because USA consumers are not familiar with the GOTS label or they do not trust the information provided by the label, even though GOTS is considered as the world’s leading standard for textiles made from organic fibers. We suggest that certified organic manufacturers/retailers and the organization of GOTS need to continue consumer education efforts to inform consumers about the benefits and guarantees of organic certification, to improve consumer confidence in the organic label. They should advise consumers to look for GOTS-certification next time they buy organic clothing or textiles to get what they pay for. In addition, policy makers should find ways to convince leading brands and industrial firms about the importance of using an organic label as a means to encourage organic consumption.

The results of this study confirm that both product quality and consumer trust are important mediators of consumer intentions to purchase organic apparel products. Our results are compatible with the current evidence that consumers buy organic products mainly for the quality benefits, and they are more likely to buy these products from a trusted manufacturer or retailer. The importance of trust in buying organic apparel products can be explained by the fact that consumers generally cannot distinguish organic products from conventional ones by their look and appearance. Findings from this study suggest that earning a customer’s trust on organic products should start with building corporate social responsibility reputation and a trusted brand.

**Limitations**

Some limitations must be taken into account when considering the findings presented here. First, the CSR reputation construct used in this study relied on consumer perceptions about the CSR
activities of the retailers we studied. However, these perceptions do not necessarily coincide with
the actual corporate social performance. Second, our study is about two retailers, two levels of
price and a single product, future studies must explore how the underlying conceptual model
works for a wider range of products, prices, situations, and settings (Rao and Monroe, 1989).
Third, the objective of the study was to examine the key factors that may influence young
consumers’ perceptions of quality, trust and purchase intentions of organic apparel products.
Although young consumers represent one of the most promising market for green products, the
sample, however, was a convenience sample consisting of college students only. Further, the
respondents were all from the same university. As such, the results may not be representative of
young consumer segment in general. Finally, the three-way interaction among CSR reputation,
product price, and organic labels was significant, whereas none of the conditional two-way
interactions that constituted this interaction were significant. This issue deserves attention in
future empirical studies.

References


   and recommended two-step approach”, Psychological Bulletin, Vol. 103 No. 3, pp. 411-423. [Crossref],
   [ISI], [Google Scholar] [Infotrieve]

   holistic construal”, Administrative Science Quarterly, Vol. 27 No. 3, pp. 459-489. [Crossref], [ISI],
   [Google Scholar] [Infotrieve]

   [Crossref], [ISI], [Google Scholar] [Infotrieve]

   willingness to pay for “green” goods: evidence from Patagonia’s introduction of organic cotton
   sportswear”, Journal of Economics & Management Strategy, Vol. 18 No. 1, pp. 203-233. [Crossref],
   [ISI], [Google Scholar] [Infotrieve]

   Scholar] [Infotrieve]

   impact of social norms on pro-environmental behaviour, a cross-cultural approach”, International
   Journal of Consumer Studies, Vol. 40 No. 2, pp. 179-185. [Crossref], [ISI], [Google
   Scholar] [Infotrieve]


15. Fishbein, M. (1963), “An investigation of the relationships between beliefs about an object and the attitude toward that object”, Human Relations, Vol. 16 No. 3, pp. 233-239. [Crossref], [ISI], [Google Scholar] [Infotrieve]


33. Mitchell, A.A. and Olson, J.C. (1981), “Are product attribute beliefs the only mediator of advertising effects on Brand attitude?”, Journal of Marketing Research, Vol. 18 No. 3, pp. 318-332. [Crossref], [ISI], [Google Scholar] [Infotrieve]


46. Wang, P. (2007), Consumer Behavior and Willingness to Pay for Organic Products, San Jose State University, San Jose, CA.