

Segmenting Fair-Trade Apparel Consumers Based on Product Knowledge

Segmenting
Fair-Trade
Apparel
Consumers
Based on
Product
Knowledge

Tae-Im Han · Rachel Han

Assistant Professor, Fashion Merchandising Program, Dept. of STEM Education & Professional Studies,
Darden College of Education, Old Dominion University, Norfolk, VA, USA

Assistant Professor, Conrad N. Hilton College of Hotel and Restaurant Management,
University of Houston, Houston, TX, USA

(Received May 25, 2017; Revised June 27, 2017; Accepted June 28, 2017)

Abstract *The purpose of this research was to develop a typology of fair-trade apparel consumers and present a clear overview of the influence of product knowledge on consumer behaviors. A two-step cluster analysis was used to classify respondents into sub-groups based on their level of self-perceived knowledge and purchase experience. In addition, ANOVA was used to test the predictive validity of the cluster solution. Income was the only demographic variable that significantly differed across groups. The more familiar and more experienced group had higher income than the other groups. Psychographic data showed that attitudes and moral norms varied across groups. The more familiar and more experienced group had more positive attitudes and higher level of moral norms than the less familiar and less experienced group. In terms of behavioristic data, groups differed significantly in purchase intentions and willingness to pay more for fair-trade apparel. That is, the more familiar and more experienced group was willing to pay more and had higher purchase intentions than the less familiar and less experienced group. Overall, the level of product knowledge and purchase experience were considerably low. This study thus confirmed the need to increase consumers' familiarity related to fair-trade apparel products.*

Key words *Fair-trade, Knowledge, Consumer Behavior, Cluster-analysis*

Introduction

Growing awareness about the social impact of consumption has created a demand for more ethical product alternatives. Apparel industry is no exception suggesting variety of products that involve social issues that matter to consumers. Among those, fair-trade products that offer support for employment and human rights are obtaining unprecedented popularity in recent years. Fair-trade is undoubtedly a growing category in the retail sector. For example, in 2014, there were 12%, 28%, and 42% increase in retail sales of fair-trade coffee, cotton, and processed fruits respectively (Fairtrade International, 2015). It is reported that certification of Fair Trade USA now appears on 20 apparel brands (Cheng, 2015).

Workers' rights and safe working conditions are major concerns especially in the fashion and apparel industry since majority of the work cannot be mechanized and requires human labor (Jones & Williams, 2012). In 2013, a garment factory collapsed in Bangladesh killing more than 1,000 people. This incident has put a spotlight on working conditions in the fashion and apparel industry and as a result, the concept of fair-trade is gaining ground. For consumers, purchasing products that label themselves as fair-trade is one way to shop ethically and sustainably. Fair-trade adheres to "a philosophy focused on paying a fair wage, improving the daily life of workers, enhancing working conditions, and contributing to environmental sustainability" (Littrell, Ma, & Halepete, 2005, p. 408).

However, many consumers face high barriers to purchasing these products. For example, lack of knowledge is one of the main reasons that consumers do not buy products with ethical certifications. Approximately 60% of participants from a study stated that they had never purchased such products simply due to their lack of knowledge (Demeritt, 2002). Product knowledge is considered to be a key determinant of consumers' buying decisions, however, there are very limited empirical findings on how product knowledge influences ethical buying behaviors. Previous studies indicated that people generally feel positively toward products with ethical certifications (Ha-Brookshire & Norum, 2011; S. Lin, 2009) in spite of the fact that they do not know much about them. When people were provided with learning opportunities related to these products, not only their knowledge level increased significantly but it also led their attitudes to a more positive directions (Ha-Brookshire & Norum, 2011). Previous studies have shown that providing more information or increasing knowledge about ethical products affects attitude formation (Ha-Brookshire & Norum, 2011; Han & Stoel, 2016) but further investigation is needed on how individuals' level of product knowledge influences purchasing behaviors. Moreover, examining diverse consumer characteristics in relation to product knowledge would be of interest to scholars as well as retailers who wish to identify important consumer segments to target their marketing efforts.

It is reported that familiarity with ethical issues related to the apparel industry is considerably low among consumers (Ha-Brookshire & Norum, 2011). This could be problematic, especially to retailers, because familiarity and knowledge about products are essential factors that influence consumers' buying decisions (Alba & Hutchinson, 1987). In addition, academic and public attention towards fair-trade consumption has been increasing in the past few years, but information about consumers who are more involved in the purchase of fair-trade products is still not fully provided.

Therefore, the purpose of this research was to develop a typology of fair-trade apparel consumers and present a clear overview of the influence of product knowledge on consumer behaviors. This research categorizes consumers based on their knowledge level (i.e., self-perceived knowledge and previous purchase experience) to examine the difference across subgroups on consumers' demographic, psychographic, and behavioristic data.

Literature Review

Product knowledge

Product knowledge is generally defined as “product related information stored in memory, such as information about brands, products, attributes, evaluations, decision heuristics and usage situations” (Selnes & Gronhaug, 1986, p. 67). Previous research has shown that consumers with higher knowledge have broad generalized knowledge about a product category, including diverse models available in the market, product attributes, and how those attributes affect performance (Mitchell & Dacin 1996). Consumers with lower knowledge, on the other hand, have less generalized knowledge about a product category. Their knowledge mostly consists of episodic experiences related to the product and accrue indirectly from others who actually own that product.

Objective and subjective measures have been commonly used to measure product knowledge. Subjective knowledge (i.e., self-perceived knowledge) is based on an individual’s own interpretation of what he/she knows about the product, while objective knowledge (i.e., actual knowledge) is based on others’ objective evaluation (Selnes & Gronhaug, 1986). Mitchell (1982) suggested that researchers should choose objective or subjective measures depending on their research objectives. Objective measures are more preferable when research objectives involve examining consumer behaviors of choosing between different product alternatives or encoding new information (Selnes & Gronhaug, 1986). Subjective measures of product knowledge have significant effects on motivation to perform various behaviors; an individual who perceives he/she is very knowledgeable about a specific product will feel more confident and perceive less risk associated with the purchase (Cox, 1967).

Previous literature has shown that greater level of knowledge or awareness concerning ethical products is associated with forming positive attitudes toward the purchase (Aertsens, Mondelaers, Verbeke, Buysse, & Van Huylenbroeck, 2011). Examining the effect of product knowledge is crucial especially in this study domain because consumers have relatively poor understanding of fair-trade products. A recent survey showed that majority of consumers have low level of knowledge and feel confused when shopping for ethical products. Lack of knowledge was reported to be a major barrier to purchasing these products (Manget, Roche, & Munnich, 2009).

For the present research, two constructs were used to measure an individual’s knowledge level: 1) self-perceived knowledge (this construct is conceptually identical to subjective knowledge) and 2) purchase experience. Self-perceived knowledge which is a self-assessed measure can be defined as one’s own perceptions of what or how much they know about the product (Selnes & Gronhaug, 1986). Researchers mentioned that self-perceived knowledge or subjective knowledge is a more significant motivation for purchase behaviors than objective knowledge, the accurate and objective information about a product stored in one’s memory (Feick, Park, & Mothersbaugh, 1992; Selnes & Gronhaug, 1986). Pieniak, Aertsens, and Verbeke (2010) examined the effect of knowledge on socially responsible purchasing and found that self-perceived knowledge was strongly and directly associated with purchase behaviors while objective knowledge was only indirectly related to purchase behaviors through self-perceived knowledge.

Purchase experience is generally assessed by an individual's self-reported experience with the product domain or category. For instance, Bettman and Park (1980) classified participants into knowledge categories based on their self-reported possession, usage, and information search experience related to the product. Various studies using purchase experience as a measure of product knowledge have suggested that its nature is distinct from that of objective or subjective knowledge (e.g., Alba & Hutchinson, 1987; Bettman & Park, 1980; Brucks, 1985). Not only is purchase experience closely related to product knowledge but it also was found to be a critical predictor of later behavior and purchase intentions (Pollard, Kirk, & Cade, 2002). Consumers generally purchased depending on their experience in the past and continued purchasing according to those habits. Although some researchers have suggested that purchase experience is not knowledge per se, particular type of knowledge accrues with continual experience with the product (Raju, Lonial, & Mangold, 1995).

Segmentation variables

It is becoming increasingly important that companies locate their most desirable group of consumers to whom they should promote their products or services. Marketers suggest that it is generally more effective to apply marketing strategies to a specific target market, rather than the entire consumer market. Market segmentation is a method commonly used by marketers to break up the market into meaningful segments.

Segmentation variables are "characteristics of people in the overall (mass) market that aids in dividing it." (Schoell, Gultinan, Pritchett, & Pritchett, 1988, p. 214). Demographic, psychographic, behavioristic, and geographic data are considered as major segmentation variables that are typically used for target marketing. Kotler (1997) suggested that consumer markets need to be divided based on these four variables to develop effective marketing strategies. Each market segment categorized by these variables consists of people who share a similar set of needs and wants. It is, therefore, worthwhile for a company to design a particular product or service for a market if there are enough people in this segment. The present study created consumer sub-groups based on knowledge level related to fair-trade products and examined differences in consumers' demographic, psychographic, and behavioristic information. Only people living in the U.S. were recruited for the study, and geographic data were not further examined.

Demographic data (Characteristics of consumers including age, gender, income, and education): Several studies have examined socially responsible consumers in terms of their demographic characteristics. Anderson and Cunningham (1972) suggested that younger consumers were more socially aware, while the income level had no impact on determining these consumers. Dickson's (2001) study on the effect of no-sweat labels on apparel purchase found that ethical buying behaviors were not influenced by demographic variables such as income, age, and employment status.

Psychographic data (Information on attitudes and values of consumers): Attitudes can be defined as "the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question" (Ajzen, 1991, p. 188). Previous studies have supported the strong and positive relationship between

attitude and purchase of fair-trade products (Han & Stoel, 2016; Ma, Littrell, & Niehm, 2012). Also, moral norms, “personal feelings of moral obligation or responsibility to perform, or refuse to perform, a certain behavior.” (Ajzen, 1991, p.199), are found to be especially powerful in predicting human behaviors in the ethical domain (Conner & Armitage, 1998).

Behavioristic data (Information about consumers’ purchasing activities): According to the theory of planned behavior (Ajzen, 1991), behavioral intention is a strong predictor of the actual behavior. Previous studies on ethical consumption have found that an individual’s intentions to purchase significantly lead to the actual purchasing behavior (e.g., Saba & Messina, 2003; Tarkiainen & Sundqvist, 2005). Additionally, consumers’ willingness to pay (WTP) for fair-trade products can be a strong predictor of fair-trade demand that directly leads to purchasing activities. Laroche, Bergeron, and Barbaro-Forleo (2001) suggested that concerns or attitudes towards social issues are significantly related to WTP for ethical products.

Consumers within the same demographic segment may have very different psychographic and behavioristic characteristics. Therefore, companies need to take into account consumer attitudes, values, and purchasing habits when seeking marketing opportunities (C. F. Lin, 2002).

Methods

Sample

Data were collected in August 2015 using a web-based survey with 250 U.S. residents. This study only included Generation Y participants because they tend to be the major target for fair-trade retailers. When defining this demographic cohort, researchers commonly use birth years ranging from the late 1970s to around 2000 (Schewe & Noble, 2000). Generation Y is characterized as the most civic-minded among all generations responding positively to social issues (Sheahan, 2005), and with annual buying power of 200 billion dollars, it is the most consumption oriented generation (Sullivan & Heitmeyer, 2008) that has a huge influence across all industry sectors from fashion to food.

Participants were recruited from Amazon Mechanical Turk (Mturk), a crowdsourcing web service that has been widely used for recruiting research subjects. Here a researcher uploads a posting that explains the survey, and individuals review and decide to undertake the survey for which they are eligible. Table 1 shows the demographic summary statistics of the sample. For the current study, there were higher numbers of male (66%) than female (34%) participants. A majority of participants were in their twenties (65.2%) and Caucasian (76.4%) with personal income of less than \$35,000 (60%). Slightly less than half of the participants (43.2%) had obtained a bachelor’s degree, and 28.8% of them had some college education. Recent U.S. census data (U.S. Census Bureau, 2016) showed that 50.8% of Americans were female, the median age was 37.2 years, and 72.4% were Caucasians. Additionally, the median household income during 2011-2015 was \$53,889 and 29.8% had Bachelor’s degree or higher during the same time period. Comparison to U.S. census data suggests that there were overrepresentation of male, lower-income, and higher-education groups in our sample.

Table 1.
Demographic summary statistics of the sample

	(n=250)
Variable	Frequency %
Gender	
Male	165 66.0
Female	85 34.0
Age	
20-24	65 26.0
25-29	98 39.2
30-34	59 23.6
35-37	28 11.2
Race	
Caucasian	191 76.4
Black or African American	12 4.8
Hispanic or Latino	17 6.8
American Indian or Alaska Native	2 0.8
Asian	26 10.4
Other	2 0.8
Annual personal income	
Less than \$10,000	47 18.8
\$10,000 - \$24,999	55 22.0
\$25,000 - \$34,999	48 19.2
\$35,000 - \$49,999	48 19.2
\$50,000 to \$74,999	39 15.6
More than \$75,000	13 5.2
Education	
Did Not Complete High School	1 0.4
High School/GED	24 9.6
Some College	72 28.8
Associate Degree	26 10.4
Bachelor's Degree	108 43.2
Master's Degree	13 5.2
Advanced Graduate/Professional work or Ph.D.	5 2.0
Other	1 0.4

Instruments

An online questionnaire in which respondents self-report their responses was developed to measure the constructs used for the study: self-perceived knowledge, purchase experience, demographic data (age, gender, education level, and income), psychographic data (attitudes and moral norms), and behavioristic data (purchase intentions of fair-trade apparel and willingness to pay more for fair-trade apparel) (Table 2).

Purchase experience, age, gender, education level, income, and willingness to pay more for fair-trade apparel were measured with a single item. Purchase experience was measured by asking respondents how many times they had purchased fair-trade products within the past 12 months and they needed to choose an answer from the following options: 0 time; 1 time; 2 - 3 times; 4 - 5 times; and more than 6 times. To measure willingness to pay more for fair-trade apparel, participants were asked how much more they were willing to pay for fair-trade apparel compared to conventional apparel products. Participants then had to select one from the six answer choices: I will not pay more for fair-trade apparel; less than 5%; 5 - 10%; 10 - 20%; 20 - 40%; more than 40%.

Multiple items that measured self-perceived knowledge, attitudes, moral norms and purchase intentions were from previous studies and were modified to fit the study topic. Four items were used to measure self-perceived knowledge which were developed by Flynn and Goldsmith (1999) and included statements like "I know pretty much about fair-trade apparel," "I feel knowledgeable about fair-trade apparel," and "Compared to most other people, I know more about fair-trade apparel." Respondents' level of agreement was rated on a seven-point Likert-type scale (1=strongly disagree, 7=strongly agree). Items that measured attitudes were adopted from Bansal and Taylor (2002) and Conner, Warren, Close, and Sparks's (1999) research that applied the theory of planned behavior model. Respondents were asked to describe their attitudes toward buying fair-trade apparel and responses were rated on a seven-point scale regarding the following descriptions: negative - positive, unpleasant - pleasant, foolish - wise, a bad idea - a good idea, undesirable - desirable. In terms of moral norms, similar to Taute and McQuitt's (2004) measure, respondents were asked to rate their agreement on a seven-point scale for three statements including "I am willing to help others," and "I think helping is important." Finally, to measure purchase intentions of fair-trade apparel, respondents indicated the extent to which they will try to buy the product on a seven-point scale. It had three statements including "I would like to purchase fair-trade apparel in the future," and "If I see fair-trade apparel, I intend to purchase or consider purchasing it." (Conner et al., 1999; Kang, Liu, & Kim, 2013). Reliability of these variables were examined: Cronbach's alphas ranged from 0.90 to 0.94, indicating good levels of internal consistency (Nunnally & Bernstein, 1994).

Table 2.
Survey measurements

Variable	Item(s)
Self-perceived knowledge	I know pretty much about fair-trade apparel. I feel knowledgeable about fair-trade apparel. Among my circle of friends, I'm one of the "experts" on fair-trade apparel. Compared to most other people, I know more about fair-trade apparel.
Purchase experience	How many times have you purchased fair-trade products within the last 12 months? (0 time; 1 time; 2-3 times; 4-5 times; more than 6 times)
Attitudes	How would you describe your attitude toward buying fair-trade apparel? For me buying fair-trade apparel would be: negative - positive unpleasant - pleasant foolish - wise a bad idea - a good idea undesirable - desirable
Moral norms	I am willing to help others. I think helping others is important. Charity is the right thing to do.
Purchase intentions	I would like to purchase fair-trade apparel in the future. If I see fair-trade apparel, I intend to purchase or consider purchasing it. If I see a retail store selling fair-trade apparel, I intend to visit the store to purchase a product.
Willingness to pay more for fair-trade apparel	How much more will you pay for fair-trade apparel compared with conventional apparel products? (I will not pay more for fair-trade apparel; less than 5%; 5 - 10%; 10 - 20%; 20 - 40%; more than 40%)

Results

A two-step cluster analysis was used to classify respondents into sub-groups based on their level of self-perceived knowledge and previous purchase experience of fair-trade products. According to the results, a three cluster solution was suggested. ANOVA results confirmed the significant difference among the three clusters in terms of their self-perceived knowledge and purchase experience scores.

The self-perceived knowledge score was calculated by summing the scores on each of the four items that measure the construct using 7-point Likert scales and thus ranged between 4 and 28. Purchase experience was a single-item measure and the score ranged between 1 and 5. The overall mean scores were 11.44 and 1.84 for self-perceived knowledge and purchase experience respectively. Mean scores and

standard deviations of self-perceived knowledge and purchase experience of each cluster are presented in Table 3. Three clusters were suggested by the cluster analysis results including (1) less familiar and less experienced, (2) more familiar and more experienced, and (3) more familiar and less experienced. The description and comparison of the three clusters are as follows.

1) Less familiar and less experienced: This group was by far the largest among the three clusters ($n= 101$, 40.4%). It mostly consist of people with low level of self-perceived knowledge and low purchase experience related to fair-trade products. The self-perceived knowledge score was only 6.19 out of a total of 28 points which indicates that most people from this group do not know much about fair-trade apparel. Similarly, purchase experience score was considerably low; it was only 1.07 out of a total of 5 points. This means that people in this group, on average, had never purchased a fair-trade product in the past 12 months. The result is consistent with previous research that suggest many consumers have low level of knowledge related to products with ethical certifications (Ha-Brookshire & Norum, 2011; S. Lin, 2009).

2) More familiar and more experienced: This group consists of 30.8% ($n=77$) of the sample and has moderate level of self-perceived knowledge and several experience related to fair-trade products. Although the self-perceived knowledge score was significantly higher than the first cluster and highest among the three clusters, it was only 15.45 out of a total of 28 points which indicates only a moderate level of knowledge. This result once again highlights consumers' lack of knowledge related to fair-trade apparel. Purchase experience score was 3.32 which means that people from this group had purchased fair-trade products 2 - 3 times in the past 12 months.

3) More familiar and less experienced: This group was the smallest among the three clusters ($n= 72$, 28.8%). People from this group feel relatively knowledgeable about fair-trade apparel but have low experience with fair-trade products. The self-perceived knowledge score was just slightly lower compared to the more familiar and more experienced group but purchase experience score was significantly lower. Similar to the less familiar and less experienced group, people in this group, on average, had never purchased a fair-trade product in the past 12 months. This implies that their moderate level of knowledge related to fair-trade apparel may have originated from indirect experience with the product rather than direct purchase or usage experience.

The results showed that consumers generally have very low experience related to fair-trade products. The overall mean score of previous purchase experience of fair-trade products was 1.84 out of 5. This number (1.84) is between response 1 and response 2 and they indicate that the person had used fair-trade products 0 time and 1 time respectively in the past 12 months. More than half (56.8%) of the respondents answered they had no purchase experience of fair-trade products within the timeframe.

Table 3.
Cluster means (standard deviation) of self-perceived knowledge and purchase experience

	Cluster 1: Less familiar & less experienced (n=101)	Cluster 2: More familiar & more experienced (n=77)	Cluster 3: More familiar & less experienced (n=72)	F
self-perceived knowledge	6.19 (2.19)	15.45 (5.31)	14.47 (2.77)	182.99***
purchase experience	1.07 (0.26)	3.32 (0.66)	1.33 (0.48)	553.32***

Note. *** $p < 0.001$

The results regarding the demographic, psychographic, and behavioristic data are shown in Table 4. Regarding demographic data, ANOVA results showed that there was significant difference in consumers' income level, $F(2, 247)=5.77$, $p < 0.01$, across groups; Tukey's HSD post hoc test indicated that the more familiar and more experienced group had significantly higher income level ($M=3.53$ $SD=1.46$) than the other two groups. However, the more familiar and less experienced group ($M=2.93$ $SD=1.50$) did not significantly differ from the less familiar and less experienced group ($M=2.80$ $SD=1.48$). Age did not significantly differ, $F(2, 247)=0.20$ $p=0.82$, across groups; the mean age of all three groups were reported to be approximately 29. In addition, Chi-Square results showed that gender ($2, N=250$)= 4.00 $p=0.14$, and education level, ($14, N=250$)= 17.86 $p=0.21$ did not differ significantly across the three groups. Commonly for all three groups, there were more male participants than female participants and the highest proportion of participants had reported that bachelor's degree was the highest level of education they had attained. As a result, income level was the only factor that was found to differ among clusters with respect to demographic variables.

Examining psychographic data showed that attitudes toward purchasing fair-trade apparel, $F(2, 247)=7.41$ $p < 0.01$, and moral norms, $F(2, 247)=11.66$ $p < 0.001$, significantly varied across groups. Tukey's HSD post hoc test indicated that the more familiar and more experienced group had significantly more positive attitudes ($M=28.70$ $SD=5.07$) than the less familiar and less experienced group ($M=25.73$ $SD=5.24$). However, its difference with the more familiar and less experienced group ($M=27.26$ $SD=5.00$) was non-significant. The difference between the less familiar and less experienced group and the more familiar and less experienced group was also non-significant. Attitudes toward purchasing fair-trade apparel was calculated by summing the scores on each of the five item using 7-point Likert scales. Therefore, attitudes scores ranged from 5 to 35. The mean scores of this construct were over 25 in all three groups which were fairly high. This implies that consumers overall have positive attitudes toward buying fair-trade apparel in spite of the prevalence of low level of knowledge related to the product.

The more familiar and more experienced group also had significantly higher level of moral norms

(M=15.69 SD=3.10) than the other two groups. The difference between the more familiar and less experienced group (M=14.44 SD=3.43) and the less familiar and less experienced group (M=13.42 SD=2.87) was non-significant.

Table 4.
Difference in demographic, psychographic, and behavioristic data

	Less familiar & less experienced	More familiar & more experienced	More familiar & less experienced	F	Chi- Square
Demographic					
Age	29.28 (4.63)	29.31 (4.91)	28.88 (4.51)	0.20	
Gender					
Male	74 (73.3%)	47 (61%)	44 (61.1%)		4.00
Female	27 (26.7%)	30 (39%)	28 (38.9%)		
Education					
Did Not Complete High School	0 (0%)	1(1.3%)	0 (0%)		17.86
High School/GED	14 (13.9%)	5 (6.5%)	5 (6.9%)		
Some College	31(30.7%)	22 (28.6%)	19 (26.4%)		
Associate Degree	13 (12.9%)	8 (10.4%)	5 (6.9%)		
Bachelor's Degree	35 (34.7%)	34 (44.2%)	39 (54.2%)		
Master's Degree	6 (5.9%)	6 (7.8%)	1 (1.4%)		
Advanced Graduate/ Professional work or Ph.D.	1 (1.0%)	1 (1.3%)	3 (4.2%)		
Other	1 (1%)	0 (0%)	0 (0%)		
Income					
Less than \$10,000	27 (26.7%)	6 (7.8%)	14 (19.4%)	5.77**	
\$10,000-\$24,999	19 (18.8%)	17 (22.1%)	19 (26.4%)		
\$25,000-\$34,999	20 (19.8%)	14 (18.2%)	14 (19.4%)		
\$35,000-\$49,999	20 (19.8%)	16 (20.8%)	12 (16.7%)		
\$50,000-\$74,999	12 (11.9%)	18 (23.4%)	9 (12.5%)		
More than \$75,000	3 (3.0%)	6 (7.8%)	4 (5.6%)		
Psychographic					
Attitudes	25.73 (5.24)	28.70 (5.07)	27.26 (5.00)	7.41**	
Moral norms	13.42 (2.87)	15.69 (3.10)	14.44 (3.43)	11.66***	
Behavioristic					
Purchase intentions	12.36 (3.63)	15.49 (3.08)	13.79 (3.54)	18.16***	
Willingness to pay more	1.89 (0.92)	3.00 (1.03)	2.36 (1.04)	27.60***	

Note. Numbers for age, attitudes, moral norms, purchase intentions, and willingness to pay more indicate means (standard deviation). Numbers for gender, education, and income indicate frequencies (percentage within cluster).
** $p < 0.01$, *** $p < 0.001$

In terms of behavioristic data, groups differed significantly in both purchase intentions, $F(2, 247)=18.16$ $p<0.001$, and willingness to pay more for fair-trade apparel, $F(2, 247)=27.60$ $p<0.001$. That is, the more familiar and more experienced group had significantly higher purchase intentions ($M=15.49$ $SD=3.08$) and was willing to pay significantly more for fair-trade apparel ($M=3.00$ $SD=1.03$) than the less familiar and less experienced group (purchase intentions $M=12.36$ $SD=3.63$; willingness to pay more $M=1.89$ $SD=0.92$) and the more familiar and less experienced group (purchase intentions $M=13.79$ $SD=3.54$; willingness to pay more $M=2.36$ $SD=1.04$). Differences between the less familiar and less experienced group and the more familiar and less experienced group were also significant. People who know more and feel familiar with fair-trade apparel tend to have more positive purchase behaviors than people with low level of knowledge related to the product. Willingness to pay more for fair-trade apparel scores were 1.89, 3.00, and 2.36 for the three groups. This result shows that most people have intention to spend more for buying fair-trade apparel compared with conventional apparel products. In particular, people in the more familiar and more experienced group answered they would pay a significantly higher amount: 5 - 10% more than conventional apparel on average.

Discussion

Certified ethical apparel needs to be offered to a wider market audience to make a positive change in the industry, similar to organic foods making a great impact in the mainstream food industry (Cheng, 2015). This goal may be achieved by increasing knowledge of and familiarity with products among consumers to motivate sales in the market.

The present study supported the need to increase consumers' knowledge level related to fair-trade products. Overall, the level of self-perceived knowledge was considerably low which was similar to previous findings on ethical consumer behaviors (Ha-Brookshire & Norum, 2011; S. Lin, 2009). The average score of self-perceived knowledge was only 11.44 out of 28. The findings directly show the prevalence of lack of consumers' knowledge on fair-trade apparel products and thus call for a greater attention on consumer education in this field. Considering the current rise in consumer interest and market demand for fair-trade products, greater dissemination of accurate and timely information of fair-trade issues that can help increase consumers' awareness is necessary.

Similarly, the results showed that consumers had very low experience with fair-trade products. Majority of the respondents had never purchased fair-trade products in the past 12 months. The results present the need to put more focus in promoting fair-trade products and increase the availability to a wider group of consumers.

The current study confirmed that consumers generally have positive attitudes toward purchasing fair-trade apparel. Participants in this study considered buying fair-trade apparel as a positive, pleasant, wise, good, and desirable decision. Moreover, participants, on average, were willing to pay more money for fair-trade apparel compared to conventional apparel. This is in stark contrast to the finding above that the majority of people have very few experience of buying fair-trade products. Lack of product

knowledge as well as low experience with the product may have played a major role in preventing consumers from actually buying these products. The findings present implications to marketers by highlighting consumers' preference toward fair-trade apparel. This can possibly lead to generating more sales, provided that marketers enhance product knowledge and familiarity among consumers in this industry sector.

Product knowledge is considered being of crucial importance as it influences various stages of consumer behavior such as purchase decisions, product evaluation, and satisfaction (e.g., Brucks, 1985; L. Y. Lin & Chen, 2006; Sujana, 1985). Consumers with greater level of knowledge on ethical products generally have more positive attitudes toward the purchase (Aertsens et al., 2011). Han and Stoel (2016) found that knowledge about fair-trade leads to forming positive attitudes which in turn strongly affects the purchase of fair-trade apparel. Therefore, fair-trade retailers need to identify consumers who have more knowledge related to fair-trade concepts to target their marketing efforts and increase sales. On the other hand, fair-trade retailers also need to locate consumers who are not yet familiar with fair-trade and place greater efforts in giving opportunities to learn more about ethical issues in the apparel industry as a way to promote their business.

The largest group (42% of the sample) resulting from the cluster analysis consisted of consumers who have very low level of self-perceived knowledge and purchase experience related to fair-trade apparel. Previous literature has stated that lack of knowledge is a major barrier to purchasing ethical products (Manget et al., 2009). Therefore, marketers may consider directing more promotional efforts to target this group as potential buyers. For example, they can implement marketing plans that offer general information about fair-trade concepts and develop marketing materials that can increase consumers' familiarity level and awareness of fair-trade products.

This study segmented the consumer market based on individuals' self-perceived knowledge and previous purchase experience related to fair-trade products. Difference across subgroups was examined in terms of their demographic, psychographic, and behavioristic information. The three subgroups were found to be considerably different in terms of their psychographic and behavioristic characteristics. That is, consumers' knowledge level had a strong impact on their attitudes towards purchasing fair-trade apparel, moral norms, purchase intention, and willingness to pay more for fair-trade apparel. However, income level was the only demographic variable that significantly varied across groups. Although participants were classified based on their knowledge level related to fair-trade, there was no difference in education level among groups. This finding implies that the current curriculum in higher education may not contain sufficient sustainability learning opportunities that can increase our knowledge on ethical products as well as the impact of business practices on our social environment. Ha-Brookshire and Norum (2011) mentioned that even students of apparel and fashion disciplines in higher education have very few chances to learn and talk about sustainability issues in the apparel industry. Curricula in this area are rather focused on product development, merchandising, and consumer behavior that teach students the techniques of how to sell more products. It would be important to provide more opportunities that can deliver sustainability information and, thus, help people gain more knowledge and further influence ethical buying behaviors.

Findings of this study suggest that psychographic and behavioristic segmentation variables can be

effectively used to identify consumers who are more knowledgeable and possibly become more involved in purchasing fair-trade apparel. Kotler and Armstrong (1999) suggested that traditional demographic variables including age, gender, education, and income cannot fully describe the characteristics of the consumer segment because people in one demographic group generally have very different psychographic characteristics. A good market segmentation strategy depends on choosing relevant segmenting variables. Demographic data are most commonly used for market segmentation but research suggest that diverse segmentation variables should be used to effectively divide the market (e.g., Kotler & Armstrong, 1999; C. F. Lin, 2002). This study showed that psychographic and behavioristic variables can provide more complete information for market segmentation than traditional demographic data. Therefore, fair-trade marketers need to closely examine consumers' lifestyle, personality, and purchasing habits to develop marketing strategies and satisfy consumer demand in each sub-market.

This study classified consumers based on the knowledge of fair-trade products and identified differences across subgroups. The findings provide a sound basis for the theoretical understanding of fair-trade consumers. Despite the contribution of the research, it is important to address its limitations and offer suggestions for future studies. First, the sample of this research consisted only of Generation Y consumers (approximately 65% were in their twenties) who are living in the U.S. Limiting the sample to a young age group from the U.S. can restrict the generalizability of the study results. Future studies might consider conducting similar research with a more heterogeneous consumer sample that involves various types of demographics and nationalities.

There is another sampling issue that could be a threat to external validity. When comparing with U.S. population data, the sample of this study was biased toward males and appeared to be overly representative of lower-income and higher-education groups. This bias in the sample might have affected the results such as the non-significant differences among the groups in education levels. To accurately represent Generation Y consumers, future studies would need to obtain a sample that better reflects the population characteristics.

Another limitation of this study is the weakness of employing Amazon MTurk, an online platform for recruiting subjects to perform tasks. It is plausible that Mturk users have different characteristics than general consumers. For example, Goodman, Cryder, and Cheema (2013) found that Mturk sample are less extraverted and have lower self-esteem than general consumers which presents challenges to some study domains. Future studies may use samples that better represent the overall population and increase the external validity of the study.

Furthermore, this study incorporated variables such as attitudes, moral norms, and purchase intentions that have been widely examined in previous studies of ethical consumption. Future studies may consider including unique and interesting variables to expand our knowledge on fair-trade consumers and offer practical insights to retailers. De Pelsmacker and Janssens (2007) mentioned that ethical products often suffer from poor credibility and lack of accurate information available to consumers. Accordingly, skepticism which involves consumers' trust associated with the claims (Yiridoe, Bonti-Ankomah, & Martin, 2005) made on fair-trade products may be incorporated to see its impact on purchase decisions.

Also, considering the crucial role of product-related factors in ethical buying (Shaw & Clarke, 1999), it would be meaningful to examine variables such as price, convenience, and availability related to fair-trade products. In-depth interviews with a small group of people could be helpful in identifying some significant variables that are important to consumers of fair-trade products.

References

- Aertsens, J., Mondelaers, K., Verbeke, W., Buysse, J., & Van Huylenbroeck, G. (2011). The influence of subjective and objective knowledge on attitude, motivations and consumption of organic food. *British Food Journal*, *113*(11), 1353-1378.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior, and Human Decision Processes*, *50*(2), 179-211.
- Alba, J. W., & Hutchinson, J. W. (1987). Dimensions of consumer expertise. *Journal of Consumer Research*, *13*(4), 411-454.
- Anderson, T. W., & Cunningham, W. H. (1972). The socially conscious consumer. *Journal of Marketing*, *36*(July), 23-31.
- Bansal, H. S., & Taylor, S. F. (2002). Investigating interactive effects in the theory of planned behavior in a service-provider switching context. *Psychology & Marketing*, *19*(5), 407-425.
- Bettman, J. R., & Park, C. W. (1980). Effects of prior knowledge and experience and phase of the choice process on consumer decision processes. *Journal of Consumer Research*, *7*(3), 234-248.
- Brucks, M. (1985). The effects of product class knowledge on information search behavior. *Journal of Consumer Research*, *12*(1), 1-16.
- Cheng, A. (2015, July 7). 'Fair trade' becomes a fashion trend. *The Wall Street Journal*. Retrieved from <http://www.wsj.com/articles/fair-trade-becomes-a-fashion-trend-1436307440>
- Conner, M., & Armitage, C. J. (1998). Extending the theory of planned behavior: A review and avenues for further research. *Journal of Applied Social Psychology*, *28*(15), 1429-1464.
- Conner, M., Warren, R., Close, S., & Sparks, P. (1999). Alcohol consumption and the theory of planned behavior: An examination of the cognitive mediation of past behavior. *Journal of Applied Social Psychology*, *29*(8), 1676-1704.
- Cox, D. (1967). *Risk taking and information handling in consumer behavior*. Cambridge, MA: Harvard University Press.
- Demeritt, L. (2002). *All things organic 2002: A look at the organic consumer*. Bellevue, WA: The Hartman Group.
- De Pelsmacker, P., & Janssens, W. (2007). A model for fair trade buying behaviour: The role of perceived quantity and quality of information and of product-specific attitudes. *Journal of Business Ethics*, *75*(4), 361-380.
- Dickson, M. A. (2001). Utility of no sweat labels for apparel consumers: Profiling label users and predicting their purchases. *The Journal of Consumer Affairs*, *35*(1), 96-119.

-
- Fairtrade International. (2015). *Global fairtrade sales*. Retrieved from <https://annualreport14-15.fairtrade.net/en/global-fairtrade-sales/>
- Feick, L., Park, C. W., & Mothersbaugh, D. L. (1992). Knowledge and knowledge of knowledge: What we know, what we think we know and why the difference makes a difference. *Advances in Consumer Research*, 19(1), 190-192.
- Flynn, L. R., & Goldsmith, R. E. (1999). A short, reliable measure of subjective knowledge. *Journal of Business Research*, 46(1), 57-66.
- Goodman, J. K., Cryder, C. E., & Cheema, A. (2013). Data collection in a flat world: The strengths and weaknesses of Mechanical Turk samples. *Journal of Behavioral Decision Making*, 26(3), 213-224.
- Ha-Brookshire, J., & Norum, P. (2011). Cotton and sustainability: Impacting student learning through Sustainable Cotton Summit. *International Journal of Sustainability in Higher Education*, 12(4), 369-380.
- Han, T., & Stoel, L. (2016). The effect of social norms and product knowledge on purchase of organic cotton and fair-trade apparel. *Journal of Global Fashion Marketing*, 7(2), 89-102.
- Jones, A. R., & Williams, G. (2012). Perceptions of fair trade labelling and certification: three case studies. *Journal of Fashion Marketing and Management*, 16(2), 246-265.
- Kang, J., Liu, C., & Kim, S. (2013). Environmentally sustainable textile and apparel consumption: The role of consumer knowledge, perceived consumer effectiveness and perceived personal relevance. *International Journal of Consumer Studies*, 37(4), 442-452.
- Kotler, P. (1997). *Marketing management analysis, planning, implementation, and control* (9th ed.). Englewood Cliffs, NJ: Prentice-Hall International.
- Kotler, P., & Armstrong, G. (1999). *Principles of marketing* (8th ed.). Upper Saddle River, NJ: Prentice-Hall.
- Laroche, M., Bergeron, J., & Barbaro-Forleo, G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products. *Journal of Consumer Marketing*, 18(6), 503-20.
- Lin, C. F. (2002). Segmenting customer brand preference: Demographic or psychographic. *Journal of Product & Brand Management*, 11(4), 249-268.
- Lin, L. Y., & Chen, C. S. (2006). The influence of the country-of-origin image, product knowledge and product involvement on consumer purchase decisions: An empirical study of insurance and catering services in Taiwan. *Journal of Consumer Marketing*, 23(5), 348-65.
- Lin, S. (2009). Exploratory evaluation of potential and current consumers of organic cotton in Hawaii. *Asia Pacific Journal of Marketing and Logistics*, 21(4), 489-506.
- Littrell, M. A., Ma, Y. J., & Halepete, J. (2005). Generation X, baby boomers, and swing; Marketing fair trade apparel. *Journal of Fashion Marketing and Management*, 9(4), 407-419.
- Ma, Y. J., Littrell, M. A., & Niehm, L. (2012). Young female consumers' intentions toward fair trade consumption. *International Journal of Retail and Distribution Management*, 40(1), 41-63.
- Manget, J., Roche, C., & Munnich, F. (2009). *Capturing the green advantage for consumer companies*. Boston, MA: The Boston Consulting Group.
- Mitchell, A. A. (1982). Models of memory: Implications for measuring knowledge structures. *Advances in*

-
- Consumer Research*, 9(1), 945-951.
- Mitchell, A. A., & Dacin, P. F. (1996). The assessment of alternative measures of consumer expertise. *Journal of Consumer Research*, 23(December), 219-240.
- Nunnally, J. C., & Bernstein, I. H. (1994). The assessment of reliability. *Psychometric Theory*, 3(1), 248-292.
- Pieniak, Z., Aertsens, J., & Verbeke, W. (2010). Subjective and objective knowledge as determinants of organic vegetables consumption. *Food Quality and Preference*, 21(6), 581-588.
- Pollard, J., Kirk, S. F. L., & Cade, J. E. (2002). Factors affecting food choice in relation to fruit and vegetable intake: A review. *Nutrition Research Reviews*, 15(2), 373-387.
- Raju, P. S., Lonial, S. C., & Mangold, W. G. (1995). Differential effects of subjective knowledge, objective knowledge, and usage experience on decision making: An exploratory investigation. *Journal of Consumer Psychology*, 4(2), 153-180.
- Saba, A., & Messina, F. (2003). Attitudes towards organic foods and risk/benefit perception associated with pesticides. *Food Quality and Preference*, 14(8), 637-645.
- Schewe, C. D., & Noble, S. M. (2000). Market segmentation by cohorts: The value and validity of cohorts in America and abroad. *Journal of Marketing Management*, 16(1-3), 129-142.
- Schoell, W. F., Gultinan, J. P., Pritchett, B. M., & Pritchett, T. K. (1988). *Marketing: Contemporary concepts and practices* (3rd ed.). Boston, MA: Allyn and Bacon.
- Selnes, F., & Gronhaug, K. (1986). Subjective and objective measures of product knowledge contrasted. *Advances in Consumer Research*, 13(1), 67-71.
- Shaw, D., & Clarke, I. (1999). Belief formation in ethical consumer groups: An exploratory study. *Marketing Intelligence & Planning*, 17(2), 109-119.
- Sheahan, P. (2005). *Generation Y: Thriving and surviving with generation Y at work*. Prahran, Victoria: Hardy Grant.
- Sujan, M. (1985). Consumer knowledge: Effects on evaluation strategies mediating consumer judgments. *Journal of Consumer Research*, 12(June), 31-46.
- Sullivan, P., & Heitmeyer, J. (2008). Looking at Gen Y shopping preferences and intentions, exploring the role of experience and apparel involvement. *International Journal of Consumer Studies*, 32(3), 285-295.
- Tarkiainen, A., & Sundqvist, S. (2005). Subjective norms, attitudes and intentions of Finnish consumers in buying organic food. *British Food Journal*, 107(11), 808-22.
- Taute, H., & McQuitty, S. (2004). Feeling good! Doing good! An exploratory look at the impulsive purchase of the social good. *Journal of Marketing Theory and Practice*, 12(2), 16-27.
- U.S. Census Bureau (2016). U.S. Census Bureau QuickFacts. Retrieved from <https://www.census.gov/quickfacts/>
- Yiridoe, E. K., Bonti-Ankomah, S., & Martin, R. C. (2005). Comparison of consumer perceptions and preference toward organic versus conventionally produced foods: A review and update of the literature. *Renewable Agriculture and Food Systems*, 20, 193-205.