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Socially Responsible Knowledge and Behaviors: Comparing Upper- Vs. Lower-Classmen

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1 SOCIALLY RESPONSIBLE KNOWLEDGE AND BEHAVIORS: COMPARING UPPER- VS.
2 LOWER-CLASSMEN

3
4 *Utilizing a sample of undergraduate students and survey research*
5 *methods, this study examined knowledge on issues of social responsibility within*
6 *the apparel and textiles industry, comparing the sophistication among upper-*
7 *versus lower-classmen. The study also investigated the differences between*
8 *students in their socially responsible apparel purchasing behavior. Findings*
9 *revealed that approximately half of the sample indicated being knowledgeable*
10 *about socially responsible clothing businesses. Participants were also generally*
11 *informed of environmental issues related to apparel production. Overall, upper-*
12 *classmen were more informed about labor issues and tended to be more engaged*
13 *in socially responsible apparel purchasing behavior. The findings of this study*
14 *are useful to educators in creating effective curriculum to encourage greater*
15 *socially responsible purchasing behavior.*

16
17 Issues of social responsibility, including those related to labor standards and the
18 environmental impacts of apparel production, have increasingly gained significance over the last
19 decade or more as the apparel industry has adopted a more globalized business model. As
20 reported by Dickson, Loker, and Eckman (2009), “There is clearly an upswing in public opinion
21 that apparel brands and retailers, along with those that manufacture textiles and apparel, must do
22 something to protect people and the environment” (p. 22). Specifically, a number of key issues
23 surround the production and sourcing of apparel goods today, including, “forced labor, low

1 wages, excessive hours of work, discrimination, health and safety hazards, psychological and
2 physical abuse, lack of awareness of workers' rights, and lack of worker representation for
3 negotiations with management" (Dickson et al., p. 6). Moreover, while media outlets and
4 various scholars and industry professionals tend to more commonly document labor abuses
5 occurring in factories throughout the world, with more apparel companies implementing
6 initiatives to address working conditions, according to Dickson et al., the environmental impacts
7 in the production of textile and apparel goods has also emerged as a significant issue for firms.
8 These issues include the energy and use of toxic chemicals in the production of fibers and fabrics
9 in addition to the release and disposal of chemicals and other solid wastes in textile and apparel
10 production.

11 As part of their book, *Social Responsibility in the Global Apparel Industry*, Dickson et al.
12 (2009) discuss the future of social responsibility within the apparel industry, noting tactics and/or
13 strategies for both encouraging and improving business social responsibility. The authors
14 document a variety of initiatives related to these objectives, including streamlining monitoring
15 for compliance, expanding stakeholder involvement, raising reporting standards, and
16 empowering workers. Additionally, the authors' address the importance of educating and
17 involving consumers in promoting sustainability throughout the apparel supply chain. As
18 reported by Dickson et al., "Through their purchasing, consumers can pull the economy and
19 effect change in business as well as contribute to the formation of a virtuous circle of business
20 development and social responsibility" (pp. 313-314).

21 In this regard, this study will include an analysis of consumers' knowledge of issues of
22 social responsibility in apparel production, comparing the level of sophistication among students
23 of differing educational stages. Missing from the literature on social responsibility are extensive

1 studies examining the extent of consumers' knowledge on issues of social responsibility within
2 the apparel industry, including consumers' sophistication on issues of labor standards and the
3 environmental impacts in the production of apparel goods. Part of this study also explores the
4 degree to which students engage in socially responsible apparel purchase behavior, including an
5 assessment comparing the purchasing considerations of upper- vs. lower-classmen. This study
6 will lend valuable insight as educators note the importance of fostering greater socially
7 responsible purchasing behavior among consumers.

8

9 Review of Literature

10 Many variables influence socially responsible consumer behaviors. Stern (2000)
11 categorizes these variables into four major types: attitudinal factors, contextual forces, personal
12 capabilities, and habit or routine. Attitudinal factors include an individual's values, beliefs and
13 attitudes. The second variable, contextual forces, is a combination of a variety of factors,
14 including interpersonal influences, community expectations, monetary incentives, the ease or
15 difficulty of specific actions, constraints existing in the human-built environment, and other
16 features of the social, cultural, and political environments. All individuals have different skills,
17 knowledge, and capabilities; and therefore, personal capabilities are the third major variable
18 influencing consumer decisions and behaviors. The final variable, habit or routine, is of
19 particular interest to this study. Specifically, it refers to the relationship between the personal
20 capability variable of knowledge and socially responsible consumer behaviors.

21 *Relationship of Knowledge with Socially Responsible Consumer Behavior*

22 Previous research indicates that knowledge plays a role in a wide range of socially
23 responsible consumer behaviors (Antil, 1984; Henion, 1972; Roubanis, 2008; Schahn & Holzer,

1 1990; Tanner & Kast, 2003), including product purchasing and solid waste disposal. In
2 considering factors influencing socially responsible purchasing, studies have found a relationship
3 between consumer knowledge and the purchasing of consumer products. For example, Tanner
4 and Kast (2003) discovered that having adequate knowledge to distinguish between
5 environmentally friendly and environmentally harmful food products was a factor highly
6 associated with the extent of a consumer's socially responsible food purchases. Similarly, in a
7 study by Zanolli and Naspetti (2002), consumers who purchased organic food products more than
8 once per week had greater product knowledge compared to infrequent organic food consumers.
9 In their study of consumer purchase decisions for beverages, van Birgelen, Semijn, and Keicher
10 (2009) learned that consumers most likely to purchase beverages packaged in environmentally
11 preferable containers also have a high level of environmental awareness.

12 In examining more general socially responsible purchasing behaviors, Roubanis (2008)
13 compared the environmentally responsible consumption behaviors of U.S. vs. Japanese college
14 students. As a result, the American students, whose education focused more on global
15 responsibility and the well-being of others, showed a greater tendency when making buying
16 decisions to consider the proenvironmental attributes of the products they purchased. Studies by
17 Schahn and Holzer (1990) and Meinhold and Malkus (2005) also found a relationship between
18 environmentally aware purchases and environmental protection knowledge, with consumers who
19 have greater environmental knowledge being more likely to engage in proenvironmental
20 purchase behaviors.

21 Similar to the above research, studies examining the recycling of consumer products have
22 repeatedly found that individuals who are more knowledgeable about environmental issues and
23 recycling practices are more likely to engage in actual recycling behaviors. For example,

1 Arbuthnot (1977) found that users of recycling centers tended to be those with greater education
2 and more environmental knowledge. Knowledge about environmental conservation was also
3 found to predict participation in curbside recycling (Oskamp et al., 1991). Moreover, recyclers
4 have been previously identified as those who possess more knowledge about how to recycle,
5 where to recycle within their communities, and the products and materials accepted for recycling
6 (De Young, 1989; Ellen, 1994; Gamba & Oskamp, 1994; Vining & Ebreo, 1990).

7 *Relationship of Knowledge with Socially Responsible Apparel Purchasing Behavior*

8 Despite the existence of a body of literature examining the role knowledge plays in
9 socially responsible consumer behaviors, very few studies have investigated the relationship
10 from the perspective of apparel purchasing behaviors. Furthermore, among these studies there is
11 some disagreement as to the nature of the knowledge-behavior relationship.

12 Within the limited existing body of knowledge, there is evidence of, in recent years, an
13 increase in consumer awareness and education of labor exploitation and environmental abuses in
14 the production of apparel goods ("New student activism takes on sweatshops," 1999; Van der
15 Werf, 1999). For example, Dickson (1999) found that consumers are concerned with labor issues
16 in the apparel industry, particularly for domestic workers as compared to workers in offshore
17 factories. Moreover, consumers indicated a willingness to boycott retailers who participate in
18 labor abuses and were supportive of banning products made by child laborers. As part of
19 Dickson's study, consumers expressed a desire for greater governmental regulations to protect
20 apparel industry workers and standardized labeling on apparel goods to differentiate among
21 products made in a socially responsible manner.

22 It has also been determined that a significant relationship exists between consumers'
23 knowledge about issues of social responsibility in the apparel industry and support for socially

1 responsible businesses (Dickson, 2000). Those who understand how apparel consumption
2 affects the environment are found to decrease clothing waste through behaviors such as
3 purchasing second-hand clothing, recycling clothing, and purchasing classically-styled garments
4 (Stephens, 1985). Hustvedt and Dickson (2009) found that market segments that use
5 environmental factors to inform their apparel purchase decisions, such as the use of organic
6 materials in apparel, tend to overall be more aware of the environmental impacts of clothing
7 production.

8 Despite the findings in some studies that a positive relationship between knowledge and
9 socially responsible consumption behavior exists, other literature suggests that although
10 consumers may be educated about issues related to social responsibility, this knowledge does not
11 necessarily influence purchase behavior (Carrigan & Attalla, 2001; Kim & Damhorst, 1998). As
12 Titus and Bradford (1996) found, differences exist among consumers who possess sophisticated
13 consumer characteristics and sophisticated consumer behavior. However, possessing knowledge
14 about issues of social responsibility does not guarantee that consumers will engage in more
15 ethical buying practices and decisions. Carrigan and Attalla (2001) noted an awareness of issues
16 of corporate social responsibility among consumers; yet, the ethical behavior of a firm or their
17 record on social responsibility was not a strong factor influencing consumers' purchasing
18 decisions. This relationship was particularly true if consumers did not perceive the ethical issue
19 as affecting them directly or if they indicated no personal stake in the issue itself. Consumers in
20 the Carrigan and Attalla study also noted that, compared to the ethical behavior of a firm, price,
21 quality, and value were more important purchasing decision criteria, and overall, an
22 unwillingness to purchase from ethical firms if there was a perception that the process was
23 inconvenient was expressed. Additionally, Kim and Damhorst (1998) found an insignificant

1 relationship between knowledge of issues of social responsibility in the textile and apparel
2 industry and socially responsible purchasing behavior.

3 Therefore, given the inconsistency of findings related to knowledge and socially
4 responsible consumption behavior, the purpose of this study is to examine the extent of students'
5 knowledge on issues of social responsibility within the apparel and textiles industry. Related to
6 this, the sophistication of these issues among upper-classmen (those in their third, fourth, or fifth
7 years) vs. lower-classmen (those in their first or second years of college) will be analyzed. The
8 study will also examine differences in students' socially responsible apparel purchasing
9 behavior. The information gleaned from this study will be useful to both educators and industry
10 professionals. From an educational perspective, the findings will contribute to the development
11 and implementation of learning outcomes for courses and other educational programs focused on
12 issues of social responsibility. Relevant to those involved in consumer action campaigns related
13 to industry practices, this study will also assist in answering the question, "Do students possess
14 the knowledge necessary to engage in socially responsible apparel purchasing?" Furthermore,
15 "To what extent do students reportedly engage in socially responsible apparel purchasing
16 behavior?"

17

18 Method

19 *Sample*

20 This study utilized an online survey method. An e-mail, which included a link to the
21 online survey, was sent to all undergraduate students enrolled in the apparel and textiles
22 discipline at one institution in the Midwestern United States ($N = 225$). The survey was
23 accessible for a three-week period. As a method to recruit participants, reminder e-mails were

1 sent each week during the three weeks to all non-respondents. Upon completion of the survey,
2 students had the opportunity to enter for a cash drawing. This information was kept separate
3 from participants' responses. All data collected in the study remained anonymous and
4 confidential. Prior to data collection, human subjects approval was obtained from the
5 Institutional Review Board at the participating institution.

6 *Instrument*

7 The instrument implemented in this study contained a total of 63 items and four different
8 scales. The scales assessed knowledge of labor and environmental issues in the apparel industry,
9 personal attitudes towards labor issues in apparel manufacturing, general environmental
10 attitudes, and apparel purchasing behaviors. Each of the scales utilized a five-point scale ranging
11 from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). The survey also included standard measures to
12 collect demographic information about the participants in the study, such as gender, age, and
13 year in school. Students were asked to indicate the average total spent on a monthly basis for
14 new clothing and accessory items.

15 To assess students' knowledge and attitudes of labor exploitation issues in apparel
16 production, the survey instrument incorporated the Knowledge of and Concern with Apparel
17 Social Issues Scale (Dickson, 1999). Participants were asked to indicate their level of agreement
18 on 22 different statements. Specifically, as part of the scale, eight items were included to
19 measure participants' beliefs about social issues in the apparel industry, such as the use of child
20 labor and the treatment of workers in both domestic and foreign factories. Five items were
21 included to measure students' knowledge of and concern with social issues in the industry, such
22 as whether students believed to be knowledgeable, informed about, and concerned with general
23 issues in domestic and offshore manufacturing, and specific issues affecting workers in apparel

1 manufacturing. Further statements related to students' attitudes toward possible actions against
2 sweatshops and the extent of personal sacrifice consumers may make in eradicating sweatshops.
3 These items included participants' beliefs on efforts to ban goods produced by child laborers,
4 boycotting firms that exploit workers, and the effectiveness of government and industry
5 regulations in protecting workers in apparel manufacturing facilities.

6 Measurement of students' knowledge of environmental issues related to the production
7 and recycling of apparel goods was assessed through the previously developed and tested
8 Environmental Apparel Knowledge Scale (Kim and Damhorst, 1998). The scale included 11
9 different statements regarding chemical pollutants produced in the manufacture and processing
10 of synthetic and natural fibers, the recycling and biodegradability of goods made of natural
11 fibers, including those with special finishes, and federally mandated standards for clean air and
12 water imposed on textile manufacturing companies.

13 Also included in the questionnaire was the New Environmental Paradigm (NEP) Scale
14 (Dunlap, Van Liere, Mertig, & Jones, 2000). The NEP Scale is a widely implemented measure
15 of proenvironmental orientation. This scale asked students to respond to 15 statements related to
16 their ecological beliefs and human-environment relationships. Statements of the scale measured
17 participants' perceptions on whether humans have the right to modify the natural environment,
18 the extent to which humans are abusing the environment and producing an "ecological crisis",
19 the availability of natural resources, and the potential for a major ecological catastrophe.

20 To explore students' apparel purchasing behavior, a series of eight different statements
21 was used. These items were created to examine whether students were willing to pay a premium
22 price for goods made "sweatshop free" or in an eco-friendly manner, if students had ever
23 boycotted an apparel brand or retailer because of labor or environmental abuses, and the level of

1 students' involvement and engagement in seeking out a firm's policies of social responsibility
2 prior to making a purchasing decision.

3 *Data Analysis*

4 The generation of descriptive statistics on the demographic variables and the constructs
5 of the instrument scales provided an overview of the sample as well as an understanding of
6 participants' knowledge of issues of social responsibility in apparel production and current
7 apparel purchase behavior. Comparison of the responses among lower- vs. upper-classmen
8 occurred through the utilization of independent sample t-tests, with the assumption of equal
9 variances tested with Levene's Test (Pallant, 2005).

10

11 Findings

12 *Overview of Sample*

13 Seventy-eight students participated in the study. Similar to many apparel and textile
14 undergraduate programs in the U.S., the majority of the sample (87.2%) were female students.
15 The mean chronological age of participants was 21. On average, students reported spending
16 between \$101-150 on new clothing and accessory items on a monthly basis. Among the
17 participants, approximately 34.6% of the sample stated being in their first or second years of
18 school, with the remaining students (55.1%) reportedly in their third, fourth, or fifth years. Eight
19 students (roughly 10.3% of the sample) did not respond to this question, thus, their responses
20 were not included in the final data analysis.

21 *Knowledge of and Concern with Apparel Social Issues*

22 In order to understand the characteristics of the sample, analysis of descriptive statistics
23 on the individual items of each scale occurred. As seen in Table 1, among the variables of the

1 Knowledge of and Concern with Apparel Social Issues Scale (Dickson, 1999), approximately
 2 half of the sample, if not more, indicated being knowledgeable about socially responsible
 3 clothing businesses (55%) and informed about issues pertaining to both U.S. clothing
 4 manufacturing businesses (49%) and foreign clothing manufacturing businesses (62%). A
 5 majority of participants also reported a concern with issues affecting workers in U.S. clothing
 6 manufacturing businesses (74%) and foreign clothing manufacturing businesses (83%).

7 ** Insert Table 1 **

8 *Apparel Purchasing Behavior Related to Social Issues*

9 Overall, a smaller proportion of participants reported socially responsible apparel
 10 purchasing behavior characteristics (Table 2). Specifically, among the participants,
 11 approximately one-quarter of the sample stated previously boycotting an apparel brand or retailer
 12 because of reports that goods were produced in a sweatshop or because workers were treated
 13 unfairly (27%), while only 33% of respondents reported that a company's record on the
 14 treatment of workers influenced a prior purchasing decision. Thirty-six percent of the sample
 15 reported to have paid more previously for clothes and accessories made under fair labor
 16 standards or in a "sweatshop free" factory. Only a small number of students indicated that they
 17 have actively sought out or inquired about conditions in which a firm's goods were produced
 18 prior to making a purchasing decision (14%).

19 ** Insert Table 2 **

20 *Knowledge of and Concern with Environmental Issues*

21 Among the items of the Environmental Apparel Knowledge Scale (Kim & Damhorst,
 22 1998), as shown in Table 3, the majority of the sample agreed that the manufacturing and
 23 processing of synthetic (79%) and natural fibers (66%) produces chemical pollutants. Over half

1 of participants believed that goods made of natural fibers can be recycled (59%) and are
 2 biodegradable (64%), while 77% of participants recognized that fabrics with special finishes
 3 create problems for recycling. Only 30% of students were aware of federally mandated
 4 standards for clean air and water imposed on textile manufacturing companies. Additionally,
 5 among the items of the NEP Scale (Dunlap et al., 2000), 56% of participants disagreed with the
 6 statement that humans have the right to modify the natural environment. Eighty percent of
 7 participants agreed that humans are severely abusing the environment, with another 56%
 8 agreeing that the availability of natural resources is limited. Overall, 70% of students agreed
 9 with the statement that a potential exists for a major ecological catastrophe (Table 4).

10 ** Insert Table 3 **

11 ** Insert Table 4 **

12 *Apparel Purchasing Behavior Related to Environmental Issues*

13 In measuring purchasing behavior of eco-friendly goods (Table 2), a smaller proportion
 14 of students reported to have previously boycotted an apparel brand or retailer because of reports
 15 that the company had poor environmental policies or practices (21%). Forty-one percent of
 16 students stated to have paid more previously for clothing and accessory items made in an
 17 environmentally conscious manner, however, only a small number of students indicated that they
 18 have actively sought out or inquired about a firm's environmental policies or practices prior to
 19 making a purchasing decision (12%). Approximately one-third of the sample reported that a
 20 company's environmental record influenced clothing purchase decisions (31%).

21 *Comparison of the Knowledge of and Concern with Apparel Social Issues between Class Levels*

22 Among the items of the Knowledge of and Concern with Apparel Social Issues Scale
 23 (Dickson, 1999), a significant difference ($p < .05$) between the responses of the lower- vs. upper-

1 classmen were found on eight of the 22 items. Specifically, in comparing the mean responses of
 2 the two groups, the upper-classmen (those in their third, fourth, or fifth years) were more likely
 3 to agree that child labor is a general practice among U.S. manufacturers ($t = 3.05, p = .003$) and
 4 that U.S. clothing manufacturers do not always pay their employees at least the local minimum
 5 wage ($t = 3.58, p = .001$). Moreover, the upper-classmen were more likely to agree that U.S.
 6 clothing manufacturers require workers to oftentimes work more than 40 hours a week ($t = 2.62,$
 7 $p = .011$) and in general, do not provide safe, non-hazardous workplaces for employees ($t = 3.05,$
 8 $p = .003$). The upper-classmen indicated a stronger belief that they are informed about issues
 9 pertaining to both domestic ($t = -2.65, p = .010$) and foreign apparel manufacturing ($t = -2.19, p$
 10 $= .032$). As compared to lower-classmen, the upper-classmen were more likely to consider
 11 country of origin prior to making a purchase decision ($t = 2.13, p = .037$) and tended to be more
 12 likely to make an extra effort to buy from a socially responsible business if the product was
 13 comparable with those available from other businesses ($t = -2.97, p = .004$).

14 *Comparison of Apparel Purchasing Behaviors between Class Levels*

15 Related to students' apparel purchasing behavior, a significant difference ($p < .05$)
 16 between the responses of the upper and lower classmen was observed for five of the eight items.
 17 Upper-classmen were more likely to report that they have boycotted an apparel brand or retailer
 18 in the past because of reports that goods were produced in a sweatshop or because workers were
 19 treated unfairly ($t = -3.60, p = .001$). The upper-classmen in the sample also indicated a greater
 20 willingness to pay a premium for clothing and accessory items that were made under fair labor
 21 standards or in a "sweatshop free" factory ($t = -2.69, p = .009$). Lower- classmen were found to
 22 be less likely to actively seek out or inquire about the conditions in which a firm's goods were
 23 produced prior to making a purchasing decision ($t = -3.81, p = .0001$). Upper-classmen were

1 more influenced in their purchasing decisions by a company's record on the treatment of workers
2 ($t = -3.54, p = .001$) and their environmental practices and policies in the production of goods (t
3 $= -2.46, p = .016$).

4 *Comparison of the Knowledge of and Concern with Environmental Issues between Class Levels*

5 Data analysis did not find significant differences in responses among lower- and upper-
6 classmen on the items of the New Environmental Paradigm (NEP) Scale (Dunlap et al., 2000).
7 Among the items of the Environmental Apparel Knowledge Scale (Kim and Damhorst, 1998), a
8 significant difference between upper- and lower-classmen was found on two of the 11 items.
9 Specifically, upper-classmen were more likely to agree that special finishes on fabrics may create
10 problems for recycling ($t = -2.84, p = .006$) and natural fibers are biodegradable ($t = -2.23, p =$
11 $.029$).

12

13

Discussion

14 An analysis of the data revealed that approximately half of the sample indicated being
15 knowledgeable about socially responsible clothing businesses and issues pertaining to both
16 domestic and foreign manufacturers. A large proportion of the sample also reported a concern
17 with labor issues in the industry. The students participating in the study were generally informed
18 of environmental issues related to the production and recycling of apparel goods and showed a
19 relatively high proenvironmental orientation. Overall, however, a much smaller proportion of
20 the total sample reported socially responsible apparel purchase behavior, including boycotting a
21 firm or brand because of labor or environmental abuses or a willingness to pay a premium price
22 for "sweatshop free" or environmentally preferable goods. Only a small number of students
23 inquired about a firm's practices prior to making a purchasing decision.

1 These findings somewhat contradict those reported by Kim and Damhorst (1998), who
2 found that among U.S. college students, knowledge of environmental issues related to the
3 apparel industry was limited. Furthermore, participants in the Kim and Damhorst study did not
4 consider environmental issues when making apparel purchasing decisions. Students in this study
5 were also not found to take into consideration the environmental impacts of apparel production
6 when making purchasing decisions, however, they were relatively informed of environmental
7 issues related to the apparel industry.

8 The findings of this study are also different from those reported by Dickson (1999).
9 Specifically, Dickson reported that U.S. consumers are not knowledgeable about issues related to
10 the global apparel industry nor do they believe that labor abuses occur within the domestic
11 apparel manufacturing industry. On the other hand, students in the present study seemed more
12 knowledgeable about issues of social responsibility in both the domestic and foreign apparel
13 industries, confirming that education has the potential to affect consumer awareness of these
14 issues.

15 In comparing the responses of upper- vs. lower-classmen, the upper-classmen
16 participating in this study were more informed about labor issues in apparel production and
17 tended to be more likely to purchase socially responsible goods. In general, upper-classmen
18 indicated a stronger likelihood of boycotting a retailer or brand because of labor abuses and
19 paying a premium price for goods produced in a socially responsible manner. Lower-classmen
20 seemed less influenced by a company's socially responsible practices and policies in making
21 apparel purchase decisions.

22 These findings have important implications for college educators. Due to differences
23 found among upper- vs. lower-classmen in this study, in addition to those reported by previous

1 authors sampling a more general population of consumers, the results highlight the value of
2 education in informing students of labor and environmental abuses related to the apparel
3 industry. Clearly, there is relevance in including curriculum focusing on these issues in
4 undergraduate programs, with the goal of making students more knowledgeable about issues of
5 social responsibility and sustainability. In order to encourage greater socially responsible
6 purchasing behavior among consumers, the first step is to create more awareness of these issues.

7 *Limitations and Call for Further Research*

8 The sample for this study included traditional college-age students attending one
9 university in the Midwestern United States. As such, the findings on participants' knowledge of
10 issues of social responsibility in the apparel industry and purchase behavior of socially
11 responsible goods may not be generalizable to the larger population of students. However,
12 despite the homogeneity of the sample, the purpose of this study was to explore the extent of
13 students' knowledge on these issues, comparing participants at differing educational stages. The
14 findings do lend valuable insight regarding students' knowledge of issues pertaining to both
15 domestic and foreign manufacturers, including those related to labor standards and the
16 environmental impacts of apparel production. This study also revealed that differences existed
17 between upper- and lower-classmen in their apparel purchase behavior, with upper-classmen
18 more engaged in socially responsible consumption practices. Future research should continue to
19 explore the topics of this study further, utilizing a sample of students of diverse disciplines and
20 majors, ages, socio-economic status, and ethnic backgrounds.

21

22

23

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1 Table 1. Participants' Knowledge of and Concern with Apparel Social Issues

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Issue	Mean	Frequency (%)				
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Use of child labor is generally not a practice among clothing manufacturers						
U.S. clothing manufacturers	3.97	10.26	24.36	21.79	29.49	14.1
Foreign clothing manufacturers	1.65	61.54	26.92	5.15	6.41	0
Clothing manufacturers generally pay their employees at least the local wage						
U.S. clothing manufacturers	3.96	16.67	17.95	17.95	42.31	5.13
Foreign clothing manufacturers	4.60	50	30.77	11.54	6.41	0
Clothing manufacturers generally have their employees work no more than 40 hours per week						
U.S. clothing manufacturers	2.59	19.23	29.49	25.64	24.36	1.28
Foreign clothing manufacturers	1.55	57.69	33.33	5.13	3.85	0
Clothing manufacturers generally provide non-hazardous workplaces for their employees						

Table 1 (continued).

Issue	Mean	Frequency (%)				
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
U.S. clothing manufacturers	2.97	15.38	16.67	29.49	32.05	6.41
Foreign clothing manufacturers	1.79	38.46	47.44	11.54	1.28	1.28
I am knowledgeable about socially responsible clothing businesses	3.53	0	10.26	34.62	47.44	7.69
I believe that I am informed about issues in clothing manufacturing						
U.S. clothing manufacturing	3.38	1.28	16.67	33.33	39.74	8.97
Foreign clothing manufacturing	3.54	1.28	12.82	24.36	53.85	7.69
I am concerned with issues affecting workers in clothing manufacturing businesses						
U.S. clothing manufacturing	3.79	1.28	5.13	19.23	61.54	12.82
Foreign clothing manufacturing	4.05	1.28	2.56	12.82	56.41	26.92

Table 1 (continued).

Issue	Mean	Frequency (%)				
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Sale of products made by child labor should be banned	3.86	1.28	10.26	26.92	24.36	37.18
There should be more government regulations protecting workers in the clothing manufacturing industry	4.41	0	2.56	6.41	38.46	52.56
I would boycott buying clothing from businesses that do not act responsibly toward their employees	3.62	0	10.26	35.9	33.33	19.23
I wish there was a label on jeans telling consumers if they were made by socially responsible manufacturers	4.04	1.28	5.13	17.95	39.74	35.9
I would settle for a lower quality garment in order to buy something from a socially responsible clothing business	3.40	1.28	16.67	33.33	38.46	10.26
If I found the same pair of jeans at a lower price from a clothing business whose business practices I was unsure of, I would buy it from this business rather than one that I know is socially responsible.	2.78	7.69	35.9	32.05	19.23	5.13

Table 1 (continued).

Issue	Mean	Frequency (%)				
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I would buy from socially responsible clothing businesses only if I really liked the product	3.33	2.56	19.23	30.77	37.18	10.26
I do not usually consider where clothing is made, as long as it suits my wardrobe needs.	3.29	5.13	20.51	26.92	34.62	12.82
I would make an extra effort to buy from a socially responsible business if the product was comparable with those available from other businesses.	4.03	0	3.85	21.79	41.31	32.05

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1 Table 2. *Participants' Apparel Purchasing Behaviors*

Issue	Mean	Frequency (%)				
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
<i>In the past, I have boycotted an apparel brand or retailer because of reports that the company</i>						
Goods were produced in an sweatshop	2.74	7.79	50.65	14.29	14.29	12.99
Had a poor environmental policies or practices	2.56	7.79	55.84	15.58	14.29	6.49
<i>In the past, I have paid more for clothes and accessories that I knew were made</i>						
Under fair labor standards	3.06	5.19	28.57	29.87	27.27	9.09
In an environmentally conscious manner	3.12	5.19	28.57	24.68	32.47	9.09
<i>In the past, before making a purchase, I have actively sought out or inquired about</i>						
The conditions in which a company's clothes or accessories were manufactured	2.43	10.39	53.25	22.08	11.69	2.60
A company's environmental policies or practices	2.39	10.39	55.84	22.08	7.79	3.90

Table 2 (continued).

Issue	Mean	Frequency (%)				
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
In the past a company's record on the treatment of workers in the production of their clothing or accessories influenced my purchase decision.	3.01	3.90	33.77	29.87	22.08	10.39
In the past, a company's record on environmental practices and policies in the production of their clothing or accessories influenced my purchase decisions.	2.99	5.19	32.47	31.17	20.78	10.39

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1 Table 3. *Participants' Environmental Apparel Knowledge*

Issue	Mean	Frequency (%)				
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Chemical pollutants are produced during manufacturing of synthetic or manufacture fibers such as polyester	4.09	0	2.86	18.57	45.71	32.86
Chemical pollutants are produced during processing of natural fibers such as cotton	2.36	24.29	41.43	15.71	11.43	7.14
Federally and regionally mandated standards for clean air and water have not yet been imposed on textile companies	2.86	7.14	22.86	50.0	17.14	2.86
Air pollution can occur during some common dye processes of textiles	4.03	0	1.43	17.14	58.57	22.86
Textile dyeing and finishing processes use a lot of water	4.23	1.43	1.43	10.0	47.14	40.0
Fibers such as wool cannot be commercially recycled	2.30	24.29	34.29	31.43	7.14	2.86
Disposable diapers have substantially contributed to the quantity of textile products discarded in landfills	3.74	1.43	1.43	40.0	35.71	21.43

Table 3 (continued).

Issue	Mean	Frequency (%)				
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Special finishes on fabrics may create problems for recycling	4.11	0	2.86	20.0	40.0	37.14
Phosphate-containing laundry detergents can be a source of water pollution	3.79	0	2.86	38.57	35.71	22.86
Natural fibers are usually biodegradable	3.66	1.43	14.29	20.0	45.71	18.57
The use of larger quantities of natural fibers by the apparel industry will significantly decrease energy consumption	3.11	5.71	21.43	38.57	24.29	10.0

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1 Table 4. *Participants' Environmental Attitudes*

Issue	Mean	Frequency (%)				
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
We are approaching the limit of the number of people the earth can support	3.51	2.74	16.44	24.66	39.73	16.44
Humans have the right to modify the natural environment to suit their needs	2.45	16.44	39.73	27.4	15.07	1.37
When humans interfere with nature it often produces disastrous consequences	3.84	2.74	4.11	20.55	52.05	20.55
Human ingenuity will insure that we do not make the earth unlivable	2.93	8.22	21.92	42.47	23.29	4.11
Humans are severely abusing the environment	4.03	5.48	4.11	10.96	41.1	38.36
The earth has plenty of natural resources if we just learn how to develop them	3.37	6.85	16.44	26.03	34.25	16.44
Plants and animals have as much right as humans to exist	4.34	0	2.74	10.96	35.62	50.68
The balance of nature is strong enough to cope with the impacts of modern industrial nations	2.29	13.70	54.79	21.92	8.22	1.37

Table 4 (continued).

Issue	Mean	Frequency (%)				
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Despite our special abilities humans are still subject to the laws of nature	4.14	0	0	15.07	56.16	28.77
The so-called “ecological crisis” facing humankind has been greatly exaggerated	2.23	20.55	45.21	24.66	9.59	0
The earth is like a spaceship with very limited room and resources	3.52	0	15.07	28.77	45.21	10.96
Humans were meant to rule over the rest of nature	2.29	26.03	35.62	24.66	6.85	5.48
The balance of nature is very delicate and easily upset	3.63	0	10.96	27.4	49.32	12.33
Humans will eventually learn enough about how nature works to be able to control it	2.48	19.18	30.14	36.99	10.96	2.74
If things continue on their present course, we will soon experience a major ecological catastrophe	3.92	1.37	6.85	21.92	38.36	31.51

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