

Exploring Consumers' Intent to Purchase Sustainable Cotton Products Using the Theory of Planned Behavior

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Introduction & Need for Research

Since the COVID-19 pandemic, demand for products with environmental or sustainable claims have surpassed the growth of similar products without these claims (Frey et al., 2023). These claims include agricultural topics such as organic, environmental sustainability, and animal welfare (Frey et al., 2023), which all fall under the USDA's three pillars of sustainability: environmental, economic, and social sustainability (USDA, n.d.a). Demand for sustainable products is also being fueled within agriculture with the \$3.1 billion in USDA funding for Partnerships for Climate-Smart Commodities (USDA, n.d.b). These programs focus on providing agricultural producers with financial and technical support, testing field data reporting processes, and developing the market and revenue streams for sustainable agricultural products (USDA, n.d.b). Now, with the increased push for sustainability in agriculture, cotton growers have expressed a need for their sustainability efforts to be communicated with consumers (Kitten et al., 2024). Based on previous scholars, with increased communication about agriculture and its associated products, consumers tend to have more favorable attitudes (Rumble & Irani, 2016), which presents an opportunity for agricultural communicators to develop effective communication about sustainable agricultural products. Previous literature in agricultural communications has investigated consumer purchasing behaviors for agricultural products (Holt et al., 2018; Stollar et al., 2022), but very little research has investigated consumer preferences when buying sustainable cotton products.

Theoretical Framework

Consumer purchasing behavior has often been described using the Theory of Planned Behavior (TPB) (Holt et al., 2018; Stollar et al., 2022). TPB states attitude, subjective norms, and perceived behavioral control influence one's intent to adopt or change a behavior (Ajzen, 1991). Attitude includes an individual's behavioral beliefs, subjective norms encompass perceived social expectations, and perceived behavioral control is the degree to which an individual has the ability and power to implement a behavior (Ajzen, 1991). Previous studies guided by TPB also introduce moral norms as a way to better understand the impact of perceived external and societal pressures (e.g., moral obligation, responsibility to perform) on an individual's behavior (Liu et al., 2020); whereas subjective norms pertain to the external pressures from those closest to the individual (Ajzen, 1991). Studies in environmental communications also include moral norms when investigating sustainability due to its societal impacts (Fileri et al., 2021).

Methods

The purpose of this study was to explore the relationships between attitude, subjective norms, moral norms, perceived behavioral control, and intent when consumers buy sustainable cotton products. Qualtrics was used to create the questionnaire, deliver the survey, and recruit respondents for the online questionnaire. All 1,589 respondents in the non-probability sample were 18 years or older and the primary shopper for their household. Additionally, we set quotas for the respondents' income to be representative of the U.S. Census data. Respondents answered

a series of questions about specific TPB variables (Ajzen, 1991) adapted from previous literature: their attitude, subjective norms, moral norms, perceived behavioral control, and intent when buying sustainable cotton products. All scales met the minimum criteria for $\alpha = .75$ as suggested by Wimmer & Dominick (2014). Attitude ($\alpha = .89$) was measured using 5-point semantic differential scales (*bad/good, useless/useful, trivial/fundamental, insignificant/significant, unappealing/appealing, foolish/wise*) responding to the statement, “I believe sustainable cotton production is...” (Bearden et al., 2011). Respondents rated their level of agreement on a 5-point Likert Scale (1 = *Strongly Disagree*; 5 = *Strongly Agree*) for the remaining variables: subjective norms ($\alpha = .87$; Borges et al., 2016; Liu et al., 2020), moral norms ($\alpha = .92$; Liu et al., 2020), perceived behavioral control ($\alpha = .78$; Borges et al., 2016; Liu et al., 2020), and intent ($\alpha = .88$; Carfora et al., 2019). For example, to measure subjective norms, respondents rated statements such as, “people who are important to me want me to buy sustainable cotton products.” Data were analyzed in SPSS Version 29 using Field’s (2017) correlation procedures.

Results

A series of Pearson Correlation Coefficients were used to understand the relationships between the TPB variables and intent to purchase sustainable cotton products (Table 1). Each TPB variable was found to be *significant* and *positively* correlated to intent. According to Davis (1971), attitude was moderately associated ($r = .47$), subjective norms were substantially associated ($r = .67$), moral norms were very strongly associated ($r = .71$), and perceived behavioral control was substantially associated ($r = .65$).

Table 1

Pearson Correlation Coefficients Between TPB Variables and Intent to Purchase (N = 1,589)

	Attitude	Subjective Norms	Moral Norms	Perceived Behavioral Control
Intent	.47**	.67**	.71**	.65**

Note: ** Correlation is significant at the .01 level

Conclusions & Recommendations

These findings confirm prior literature that attitude, subjective norms, and perceived behavioral control, as outlined in TPB, impact consumers’ decisions to buy agricultural goods (Holt et al., 2018; Stollar et al., 2022). However, the external factors, subjective norms and moral norms, tend to have the strongest relationship. This implies an individual’s societal obligation and personal pressures have the most impact on their intent to buy sustainable cotton products. As previously found, moral norms are an important addition in environmental communications (Fileri et al., 2021), and the results of this study suggest agricultural communicators and educators should measure moral norms in future TPB research. Communicators should utilize message frames focused on increasing salience and connection to a consumer’s subjective norms and moral norms in sustainability messaging. Future research in this area should focus on continued expansion of the TPB model to include moral norms.

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