Locally Grown: Examining Attitudes and Perceptions About Organic Cotton Production and Manufacturing Between Mississippi Cotton Growers and Consumers.

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Introduction: Cotton accounts for producing a multitude of products that meet the demand of the everyday consumer and remains one of the most popular natural fibers on the apparel market (Cotton Inc., 2013). From an economic standpoint, cotton is an essential crop that has a cash value of over $6 billion per year, and it accounts for $35 million of the United States Gross Domestic Product (Cotton Inc., 2014). Although the sale of organic products has shown an increasing growth rate, the majority of U.S. cotton farmers that have converted to organic production are from the Southwest Texas region (Funtanilla, Lyford, & Wang, 2009). In order for the cotton industry to exceed future expectations and continue global market success in a sustainable marketplace, participants in the supply chain must not only focus on immediate profitability, but also focus on building and promoting awareness of the sustainable organic cotton market (National Cotton Council, 2013). Therefore, the purpose of this study is to examine attitudes and perceptions about organic cotton of Mississippi cotton growers and producers in comparison to fashion conscious consumers including: advantages/disadvantages of growing and production processes, quality control, consumer preferences, and competitive price structures/profit margins.

Review of Literature: In the past decade, industries across the globe have taken the initiative to incorporate sustainable practices into their daily operations, and Cotton Incorporated is one non-government organization that moved towards sustainability before it gained significance in the global marketplace (Cotton Inc., 2014). As defined by the USDA, “Organic production is not simply the avoidance of conventional chemical inputs, nor is it the substitution of natural inputs for synthetic ones. Organic production entails the use of cover crops, green manures, animal manures, and crop rotations to fertilize the soil, maximize biological activity and maintain long-term soil health” (USDA, 2007). Conventionally grown cotton is perceived to be a harmful fiber due to the usage of synthetic chemicals and pesticides, while traditional cotton farmers are perceived to lack understanding of the organic cotton market and its increasing demand (Chouinard & Brown, 1997). Barriers including startup costs, long certification processes, and lack of profitability measures keep growers and producers from converting to organic production practices. Without profitability assurance, farmers remain hesitant about farming organically despite the sustainable advantages and health benefits that result from organic production (Funtanilla et al., 2009). Consumers' opinions on organic cotton and the benefits differ; not everyone is willing to pay a higher price for a product that has health and environmental benefits unless it is associated with a popular brand or retailer with high quality. According to Gam (2011), consumers hesitate to purchase sustainable clothing because they have a higher markup with shallow assortments, functionality disadvantages, and consumers are skeptical about the environmental benefits due to lack of information about the products. If consumers do choose to add value to organic cotton, the attributes that lead to consumer value are "comfort, health, and conservation” (Chen, 2012).

Hypothesis: The hypothesized results from conducting the survey are that undergraduate students are not eager about paying the higher price for organic fabric unless the fabric is associated with a popular brand or retailer. Even if fashion conscious consumers agree with sustainable initiatives, they are still not aware that they may or may not be purchasing organic cotton products. Farmers benefit from the higher profit margin and the elimination of harmful chemicals, but farmers will not have significant understanding about the organic cotton market demand and the startup costs related to organic cotton production. Without the support from the consumers and growers/producers, the sustainable organic cotton market will fail to increase on account of discouragement from the internal and external supply chains and poor marketing strategies for sustainable initiatives.

Methodology: A sample size of 16 local Mississippi growers and/or producers and 44 undergraduate students in the Apparel, Textiles, and Merchandising program at a mid-major southeastern university were chosen to participate in the study. Instruments were developed based on current research and the definition of organic cotton production defined by the USDA. They were modified for content validity by local Extension professors and Cotton Specialists including Associate Extension Professor Dr. Darrin Dodds. The growers and/or producers survey and the consumer-based survey were administered electronically on Qualtrics, paper versions were made available upon request. Surveys for regional Mississippi growers and/or producers were distributed during the Cotton Row Crop Short Course, hosted by extension services in December of 2013, on campus. Following the informed consent for participation in the research study, participants completed a brief survey on perceptions of organic cotton production. Results from single-item measures indicated the level of awareness and understanding of the two groups as well as attitudes and perceptions regarding organic cotton and its quality and price margins.

Results: Statistical analyses and frequency variables indicated unique findings on the perception of organic cotton from the viewpoints of local Mississippi growers and/or producers and Apparel, Textiles, and Merchandising students (18-24 demographic). For the MS growers and producers, 76.5% of the sample size stated that their farming is not done organically (as defined by the USDA), and 82.4% feel that cotton production does not negatively affects the environment. When it comes to identifying growers and producers' attitudes about organic cotton production being a marketing strategy, the data results show that 52.9% do believe that it is just a retail marketing strategy and nothing more. If growers and producers were to see at least a 25-40% price premium difference between organic cotton and conventional cotton, 25% of the growers and/or producers would be willing to convert to organic cotton production while 37.5% would not be willing to convert to organic cotton production. Conversely, frequency results from Apparel, Textiles, and Merchandising students indicated 63.6% were somewhat familiar or not familiar at all with organic cotton production. 81.8% felt that organic cotton production, as outlined by the USDA, could improve the environment, despite the aforementioned lack of familiarity with organic cotton production. However, 40.9% of the consumers are not aware whether they own clothing items made from organic cotton, yet 52.3% of the consumer group are willing to pay 10-25% more for clothing made from organic cotton.

Frequency comparisons indicated a strong disconnect on sustainability, quality, and price related to the organic cotton market between growers and/or producers and consumers. Over 80% of farmers believe that conventional cotton production does not have negative effects on the environment, while over 62% of consumers surveyed reported that organic cotton production could improve the environment, based on current negative perceptions of conventionally grown cotton. There exists a perceived quality difference between farmers and consumers, since 75% of growers and producers indicated that they do not perceive a quality difference between organic and conventionally grown cotton, while 72.7% of the consumers indicted organically grown cotton is capable of producing a higher quality product compared to conventionally grown cotton. Even with an increase in organic cotton prices (25-40% higher premium), only 25% of growers and producers would be willing to convert, while a majority (52.3%) of consumers would not be willing to spend more than 25% for an organically-grown cotton product.

Discussion: Based on these results, disconnect of information exists between regional cotton growers/producers and consumers. Consumers indicate the negative effects of conventionally grown cotton, yet many report little to no knowledge about organic cotton production, while growers/producers immediately dismiss organically grown cotton as a retail marketing strategy. If the beginning and end of the supply chain are reporting significantly different perceptions about organic cotton, the breakdown of communication and information exchange limits the ability to create a sustainable future for the organic cotton industry. Without efficient and authoritative information and public relations, organic cotton will continue to struggle to gain a foothold in a marketplace dominated by sustainable synthetics. Recommendations based on this research, include incorporating consumer perceptions into the discussion on organic cotton through extension services to relate this information to growers/producers about end-use demand. By attending regional conferences and informational sessions related to marketing campaigns, farmers and consumers can work towards dissolving the gap between their perceptions and attitudes of organic cotton production. The Organic Trade Association is responsible for promoting organic production standards to the industry. Therefore, promotional activities geared towards boosting growers and/or producers plus consumers' confidence in organic production would help the sustainable initiative gain momentum in various regions other than the Southwest. In addition, consumers need additional information to make an informed buying decision about organic cotton, including a cost-benefit analysis of organic cotton products compared to conventionally grown cotton products and efficiency measurements to determine if organic growers and/or producers can reach maximum output using organic techniques. While these recommendations may not resolve issues highlighted by this research, efforts to increase the transparency of information along the supply chain may better promote sustainability and discussions related to environmentally friendly sourcing practices. For further study, the sample size would need to expand to include other regions including the Southwest region where organic cotton production is more popular, as well as a broader consumer base.

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