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Exploring Consumer Financial Support to Inform Communication about Agricultural Best Management Practices

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Abstract

The benefits to the environment associated with farmer adoption of Best Management Practices (BMPs) is well documented, yet the agricultural industry has resisted widespread acceptance and implementation. Network support, level of education/knowledge, and financial concerns have all been found as contributing factors impacting adoption. Extension agents can increase knowledge levels through direct education with farmers; however, network support in the form of public support and willingness to pay for engagement in BMPs may be the best way to combine the network and financial support farmers need to increase engagement. Unfortunately, little is known about public interest in supporting BMP engagement. This study was conducted to determine public willingness to pay for BMP engagement and identify the characteristics of those willing to pay more for food produced using BMPs so that agricultural communication efforts may be targeted at both consumers and producers. Findings indicated there was public support for BMP adoption and that most supported a 10% increase in food prices when purchasing food produced using BMPs. Recommendations are provided regarding marketing strategies and how agricultural communicators can identify and utilize BMP opinion leaders to assist in educating a broad base of consumers in the cost of BMP engagement.

***Keywords*:** best management practices; communication; willingness to pay

Introduction

Agricultural best management practices (BMPs) are practical approaches for agricultural producers to cost effectively conserve and preserve natural resources (Florida Department of Agriculture and Consumer Services, n.d.). Some examples of BMPs include safe management of agricultural wastes, crop nutrient management, erosion and runoff control, and buffers to prevent the introduction of contaminants to surface and groundwater (Utah State University Extension, 2018). BMPs have been developed by scientists to prevent farmers from overusing natural resources and to reduce the amount of pollutants entering the environment. Water scarcity, land erosion, and biodiversity loss are increasing worldwide (Soil Erosion and Degradation, n.d.; Water consumed this year, n.d.) and impacting farming practices across the globe. The agricultural industry has been proactive in remediating natural resource exploitation while still maintaining sufficient production. However, there remains room for growth as many farmers may be discouraged to engage in BMPs at a high level due to the high cost of altering their practices (Liu et al., 2018; Schaffer & Thompson , 2013). Financial barriers have been identified frequently as reasons why new innovations, such as BMPs, do not get

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adopted (Lamm et al., 2017a; Lamm et al., 2017b; Rogers, 2003). However, agricultural BMPs are not only effective measures with known environmental benefits, but also offer financial benefits to farmers (Bhopal, 2016). Therefore, the implementation of BMPs for producers can protect the environment and be an advantageous business decision.

Despite the environmental and potential financial incentives for using BMPs, farmers' acceptance and implementation of such practices has varied (Prokopy et al., 2008). Prokopy et al. (2008) reviewed 25 years of BMP literature and identified several factors that influenced farmers' adoption of BMPs. These factors included (a) the utilization of social networks, (b) access to information, (c) positive environmental attitudes, and (d) increased environmental awareness in producers (Prokopy et al., 2008). However, the researchers also found that to improve environmental attitudes and to increase environmental awareness it was important that outreach groups in the community (e.g. extension agents) be present to encourage farmers. As such, Prokopy et al. (2008) maintained public encouragement of BMPs through education conducted by agencies and groups such as extension is crucial for achieving change in farmer practices.

Similarly, Baumgart-Getz et al. (2012) examined producers' adoption of BMPs between the years of 1982 and 2007. The studies evaluated were synthesized to create a list of key independent variables in the categories (a) capacity, (b) attitude, and (c) environmental awareness. Prevalent variables included descriptive evaluations of farms (e.g. farm size, age of the farmer), availability of BMP adoption payments, and the previously mentioned factors involving producers' networking and farmers' perceptions of the environment (Baumgart-Getz et al., 2012). The researchers concluded that networking and acquisition of knowledge, such as that offered by extension educators, were significant factors contributing to producers' awareness and eventual adoption of BMPs (Baumgart-Getz et al., 2012). Further, support from BMP adoption payments was not a significant contributor to farmers' adoption of BMP practices. Based on these findings, Baumgart-Getz et al. (2012) asserted that adoption of BMPs was primarily contingent upon social factors rather than financial support or incentive. Therefore, future encouragement of agricultural BMPs adoption may be best actualized through producer networking with the public, rather than through financial incentives.

Public interest and attitude toward sustainable agricultural products, such as products produced using BMPs, has increased steadily in recent years (Kearney, 2010; Lernoud et al., 2017; Vermeir & Verbeke, 2006). However, there has also been increased concern regarding the dissonance in consumers' attitudes and intentions of products developed using BMPs (Vermeir & Verbeke, 2006). In a study conducted to examine young consumers' attitudes and intentions toward sustainably produced food, Vermeir and Verbeke (2006) found consumers who were given informational text about the importance of sustainable consumption had higher intentions of buying sustainable foods than respondents who received other messages. Disbursing informative messages on agricultural BMPs may prove to have similar advantages.

Identifying differences between consumers' who are and are not willing to pay more for products produced using BMPs can help provide a better perspective on how to communicate with specific groups that should be targeted and informed of the potential benefits of BMPs. Since public encouragement is an active part of farmers' adoption of BMPs (Prokopy et al., 2008), it is important to be able to gauge consumers' approval of BMPs versus the costs associated with these practices. While BMPs can be advantageous for agribusinesses, they are often associated with start-up costs and change that can be uncomfortable for farmers (Liu et al., 2018; Schaffer & Thompson , 2013). However, public opinion of and willingness to buy BMP products may be influential on the farmers' adoption of such practices (Miller, 2014). Determining the factors that influence consumers' willingness to pay for food produced using BMPs can thus aid agricultural communicators in marketing BMP products and, ultimately, increasing farmer adoption of such practices.

Conceptual Framework

Social marketing and audience segmentation has been used frequently in agricultural communication research as a means of highlighting specific subgroups to gain insight into possible strategies for addressing complex issues (Huang et al., 2016; Warner et al., 2017). Moreover, audience segmentation is utilized to help ensure the maximum impact is made with an initiative (Andreasen, 2006). Whenever decision makers apply segmentation to their desired audience, resources can be more efficiently allocated by taking into consideration benefits versus costs (Andreasen, 2006). Audience segmentation can be conducted with factors such as gender, ethnicity, and location to determine the most appropriate approach (Andreasen, 2006; Warner et al., 2017). While other approaches to marketing may focus heavily on the primary audience, the strategic approach of audience segmentation considers secondary audiences who can play key roles and influence the primary audience (Atkin & Freimuth, 2001). The role of the public in natural resource conservation as it relates to agriculture closely aligns with the idealism of secondary audiences influencing the primary audience (Prokopy et al., 2008). Therefore, this influence must be evaluated to encourage further expansion of BMPs.

Numerous studies have been conducted regarding consumers' willingness to pay for agriculture products, and socio-demographic information has been utilized often to create profiles on consumer groups (Verain et al., 2012). Variables that have been considered most frequently include age, gender, education, household size, income, and race (Batte et al., 2007; De Groote et al., 2011; Loureiro & Umberger, 2003). Market segmentation studies have also been conducted on consumers' willingness to pay, including evaluations of consumers' perceptions of green electricity, organic products, and environmentally friendly products (Gil et al., 2000; Laroche et al., 2001; Zhang & Wu, 2012). Examining the dissonance between a consumers' willingness to pay can help decision makers make informed choices on policies and strategies that promote agricultural BMPs to consumers.

This study was conducted to explore the differences in consumers' willingness to pay using segmentation from these variables. By identifying any dissonance between groups, opportunities to encourage BMPs can be more effectively focused upon by extension agents. As secondary groups can be significant influencers on primary groups' adoption of a practice (Atkin & Freimuth, 2001), this method of targeting consumer groups can be an effective approach for encouraging producers' adoption of BMPs. Considering producers' likelihood of BMPs adoption is often contingent upon incentives (Miller, 2014), using the approach of networking (Baungart-Getz et al., 2012), is another strategy that should be explored by extension agents to encourage producers' adoption of BMPs. Finding disparities in consumers' willingness to pay for BMPs is the next step in increasing BMP adoption throughout the United States. Further, this study addresses the American Association for Agricultural Education national research priority two: New technologies, practices and products adoption decisions (Lindner et al., 2016).

Purpose and Objectives

The purpose of this study was to examine Florida residents' willingness to pay more for food produced using best management practices (BMPs). The following research objectives guided this study:

1. Determine Florida residents' likelihood of buying and willingness to pay more for food produced using BMPs.
2. Describe the demographic characteristics of Florida residents by the amount they are willing to pay more for food produced using BMPs.

Methodology

A survey research design was employed to reach the objectives of the study. The population of interest was Florida residents age 18 or older. The research presented here was part of a larger study striving to identify the key factors, both social and economic, impacting Florida residents' perceptions of BMPs.

Instrumentation

An online survey questionnaire was used with two sections of the instrument germane to the objectives of the study. The first section was designed to assess respondents' willingness to pay for food grown using BMPs. BMPs were operationalized in this study as behaviors or practices that, when followed, have been found to assist in reducing water pollution into water resources and maintaining, or even improving, water quality and agricultural production. This description of BMPs was provided to respondents.

Respondents were first asked to indicate whether they would pay more for a product grown or raised by a farmer using BMPs (1 = *yes*; 0 = *no*). Respondents who indicated they would be willing to pay more were then asked to indicate the percentage increase they were willing to pay for produce grown using BMPs when compared to produce not produced using BMPs (1 = *10% or $2.75 instead of $2.50 for a small container,* 2 = *25% or $3.13 instead of $2.50 for a small container,* 3 = *50% or $3.75 instead of $2.50 for a small container,* 4 = *75% or $4.38 instead of $2.50 for a small container*). The second section was demographic in nature with eight items used. They included (a) gender, (b) race, (c) area of residence, (d) annual household income, (e) educational attainment, (f) political beliefs, (g) political affiliation, and (h) involvement with agriculture.

Face validity was established by an expert panel of faculty and staff with collective proficiencies in agricultural BMPs and instrument development. The questionnaire was evaluated for readability, layout and style, and clarity of wording. The expert panel deemed the instrument acceptable. Finally, the questionnaire was pilot tested with 50 Florida residents before further distribution to establish content validity.

Sample

A non-probability opt-in sample was utilized to obtain responses from Florida representative of the population of interest. Non-probability sampling is commonly used in public opinion research to make population estimates (Baker et al., 2013). This sampling method has become more common in research to examine public opinion of issues in agriculture and natural resources due to increased access to the internet, the relatively low cost associated with conducted web-based surveys, and greater ease of reaching members of the population of interest (Lamm & Lamm, 2019). Opt-in participation is a method of convenience sampling in which groups of people are recruited and often incentivized to participate in online surveys (Baker et al., 2013). Non-probability sampling is not random in that participants must opt-in to be included in the pool of individuals who may be contacted when respondents are needed (Lamm & Lamm, 2019). As with randomized mailed or random digit dialing surveys, this technique can be subject to coverage and nonresponses biases and may allow for selection bias based on the characteristics of individuals who would opt-in to participate in an online survey (Lamm & Lamm, 2019). It is, therefore, necessary to acknowledge potential limitations in the ability to generalize results beyond the scope of this study (Baker et al., 2013).

Despite potential bias, non-probability opt-in samples have been found to produce results comparable in standard to probability-based samples when appropriate measures are put in place (Baker et al., 2013; Twyman, 2008). Post-stratification weighting methods are often used in non-probability opt-in sampling to help ensure the data reflect the characteristics of the target population as much as possible (Lamm & Lamm, 2019). In this study, demographics were used to balance the results based

on the 2010 Florida census data to ensure the sample reflected the adult Florida population and produced results intended to approximate the population of interest (Baker et al., 2013). Therefore, all demographic items and response categories (e.g. age) were formatted to reflect those in the Florida census in order to employ *post hoc* weighting procedures.

Data Collection

An online link to the questionnaire was distributed by Qualtrics to Florida residents representative of the state population based on the 2010 Census data. Attention filters were used to identify respondents not paying attention to the questions. Respondents who did not complete all items of the instrument, those who did not select the appropriate attention filters, and those who did not fall within the parameters of being a Florida residents 18 years of age or older were excluded from the analysis. A total of 526 useable responses were collected from 1,265 invited residents for a 42% participation rate.

Respondents were split between males (51.7%) and females (48.3%), and the majority (77.6%) were White (see Table 1). Residents ranged between 18 and 80 plus years of age, with more residents in the age categories 40 to 49 years (17.9%) and 50 to 59 years (17.2%) than any other category. The most respondents (40.6%) lived in an urban or suburban area outside of city limits, and the fewest number of respondents (1.6%) lived on a farm in a rural area. The highest level of education completed by the largest number of respondents was a four-year college degree (25.5%), followed by some college with no degree (24.6%), and the largest number of respondents (29.7%) earned less than $30,000 as their combined annual household income. Regarding political affiliation and values, respondents were split fairly evenly between Democrats (33.5%) and Republicans (31.0%), and more respondents (43.5%) held moderate beliefs than any other political belief. Lastly, the majority of respondents (64.6%) had never been involved in agriculture, nor did they have anyone in their immediate family who had ever been involved in agriculture (see Table 1).

Table 1

Weighted Demographic Characteristics of Respondents by Census Categories (N = 526)

Variable	*f*	%
Race		
White	408	77.6
Black	76	14.4
Asian or Pacific Islander	13	2.5
Multiracial	10	1.9
American Indian or Alaska Native	2	.4
Age Category		
40-49	94	17.9
50-59	90	17.2
20-29	86	16.3
30-39	81	15.5
60-69	75	14.2
70-79	49	9.4
80+	33	6.2
18-19	18	3.5
Area of Residence		
Urban or suburban area outside of city limits	214	40.6
Subdivision in a town or city	191	36.3
Rural area, not a farm	65	12.3

Table 1

Weighted Demographic Characteristics of Respondents by Census Categories (N = 526) Continued…

Downtown area in a city or town	48	9.2
A farm in a rural area	8	1.6
Educational Attainment		
4-year college	134	25.5
Some college no degree	129	24.6
High school graduate	118	22.5
2-year college degree	72	13.7
Graduate or Professional degree	63	12.0
Less than 12th grade (did not graduate high school)	9	1.8
Combined Annual Household Income		
Less than $30,000	156	29.7
$30,000-$39,000	76	14.4
More than $100,000	58	10.9
$40,000 - $49,999	57	10.8
$50,000 - $59,999	51	9.6
$70,000 - $79,999	47	8.9
$60,000 - $69,999	36	6.8
$80,000 - $89,999	27	5.2
$90,000 - $99,999	19	3.7
Political Beliefs		
Moderate	229	43.5
Conservative	122	23.1
Liberal	90	17.1
Very Liberal	47	8.9
Very Conservative	39	7.5
Political Affiliation		
Democrat	176	33.5
Republican	163	31.0
Independent	114	21.8
Non-affiliated	66	12.5
Other	6	1.2
Involvement in Agriculture		
I have never been involved in agriculture and no one in immediate family has ever been involved in agriculture	340	64.6
I have been involved in agriculture in the past	73	13.8
I am currently involved in agriculture as a hobby	60	11.4
I am not involved in agriculture but someone in my immediate family is	36	6.8
I am currently involved in agriculture for a living	18	3.5

Note: Age was broken down as per the U.S. Census (2010).

Data Analysis

Respondents were organized within groups based on the percentage increase they were willing to pay for food produced using BMPs. Descriptive statistics were used to describe the demographic characteristics of respondents in each segment. Data were analyzed using SPSS24.

Results

Willingness to Pay more for Food Produced Using BMPs

Objective one sought to determine Florida residents' likeliness to purchase and willingness to pay more for food produced using BMPs. The majority of residents (92%) indicated they would be more likely to buy products from a farmer that uses BMPs. Of the 526 respondents, 64.6% reported being willing to pay more for a product that was grown or raised by a farmer using BMPs. Of the 340 respondents willing to pay more, almost 60% were willing to pay 10% or $2.75 instead of $2.50 for a small container of fruit grown using BMPs when compared to fruit not produced using BMPs. Just over 30% of respondents were willing to pay 25% or $3.13 instead of $2.50 for a small container, and 7.1% were willing to pay 50% or $3.75 instead of $2.50 for a small container. Very few respondents (2.7%) were willing to pay 75% or $4.38 instead of $2.50 for a small container.

Demographic Classifications Based on Amount Willing to Pay for Food

The second research objective sought to describe Florida residents within each willingness to pay (WTP) group. The demographics of respondents in each willingness to pay group are depicted in Table 2. Respondents in the not willing to pay more for BMP products group were White, predominantly male, and lived in an urban areas. The largest number of respondents in this group had obtained less than a college degree and earned less than $30,000 a year in their household. The political values most represented by this group included having moderate political beliefs and being affiliated with the Republican party. Lastly, the majority of respondents in this group had never been involved in agriculture, nor had anyone in their family been involved in agriculture.

Table 2

Demographic Characteristics of Residents Grouped by Percent Willing to Pay (WTP) More

Variable	Not WTP more *n* = 186 %	WTP 10% more *n* = 203 %	WTP 25% more *n* = 104 %	WTP 50% more *n* = 24 %	WTP 75% more *n* = 9 %
Sex					
Female	42.0	57.2	47.4	28.7	43.8
Male	58.0	42.8	52.6	71.3	56.2
Race					
White	76.4	85.6	71.5	51.2	64.7
Black	11.6	8.9	22.2	40.4	35.3
Asian or Pacific Islander	4.2	2.6	0	0	0
American Indian or Alaska Native	0.9	0.2	0	0	0
Multiracial	2.5	2.7	0	0	0
Other	4.4	0	0	8.4	0
Age Category					
18-19	2.9	3.4	4.5	5.5	0
20-29	16.2	13.3	21.0	13.6	37.7
30-39	14.8	13.4	17.5	30.9	12.1
40-49	13.5	17.5	18.8	38.4	50.1

Table 2

Demographic Characteristics of Residents Grouped by Percent Willing to Pay (WTP) More Continued…

50-59	15.2	18.7	20.5	11.6	0
60-69	18.5	12.1	15.0	0	0
70-79	8.9	14.8	2.7	0	0
80+	10.0	6.9	0	0	0
Area of Residence					
A farm in a rural area	1.4	1.6	1.3	0	11.0
Rural area, not a farm	15.7	8.8	14.7	10.5	0
Urban or suburban area outside of city limits	41.5	37.9	42.0	44.6	56.0
Subdivision in a town or city	35.5	42.5	30.7	22.3	19.7
Downtown area in a city or town	5.9	9.2	11.4	22.5	13.2
Educational Attainment					
Less than 12th grade (did not graduate high school)	2.5	1.6	0.6	0	7.9
High school graduate	29.4	18.2	18.2	17.2	42.8
Some college no degree	23.5	27.4	25.6	9.9	9.4
2-year college degree	11.6	15.1	15.4	10.0	17.1
4-year college	23.0	25.5	27.7	35.4	22.7
Graduate or Professional degree	10.1	12.2	12.4	27.5	0
Combined Annual Household Income					

Table 2

Demographic Characteristics of Residents Grouped by Percent Willing to Pay (WTP) More Continued…

Less than $30,000	40.8	24.9	23.2	14.1	24.4
$30,000-$39,000	10.0	16.4	22.3	3.6	0
$40,000 - $49,999	9.7	12.7	5.8	13.1	40.7
$50,000 - $59,999	10.5	9.6	8.6	5.2	15.6
$60,000 - $69,999	7.7	8.8	3.4	0	0
$70,000 - $79,999	3.2	9.4	14.2	23.8	13.2
$80,000 - $89,999	5.3	3.3	8.6	5.0	6.1
$90,000 - $99,999	3.9	3.6	2.0	11.0	0
More than $100,000	9.0	11.2	11.8	24.4	0
Political Beliefs					
Very Liberal	9.2	6.4	11.0	19.0	6.1
Liberal	20.9	16.4	13.9	5.8	19.7
Moderate	42.8	44.2	42.4	50.4	33.4
Conservative	22.9	24.0	24.2	6.3	40.7
Very Conservative	4.2	9.0	8.5	18.5	0
Political Affiliation					
Republican	31.6	32.9	29.2	16.8	30.5
Democrat	29.7	30.2	40.4	52.0	58.5
Independent	19.7	28.3	17.5	9.2	0
Non-affiliated	15.8	8.3	12.8	22.1	11.0
Other	3.1	.3	0		
Involvement in Agriculture					
I am currently involved in agriculture for a living	1.2	3.7	5.0	8.7	13.2
I am currently involved in agriculture as a hobby	9.2	8.7	16.3	22.6	27.6

Table 2

Demographic Characteristics of Residents Grouped by Percent Willing to Pay (WTP) More Continued…

I have been involved in agriculture in the past	9.5	17.1	15.5	10.7	16.1
I am not involved in agriculture but someone in my immediate family is	6.2	5.2	9.6	10.7	11.0
I have never been involved in agriculture and no one in immediate family has ever been involved in agriculture	73.8	65.3	53.5	47.4	32.1

In the group willing to pay 10% more for BMP products, the largest number of respondents were White, female, and living in subdivision in a town or city. A larger number of respondents in this group had acquired some college, had not completed a degree or had a four-year college degree. They earned less than $30,000 a year in their household. These respondents held moderate political beliefs and were affiliated with the Republican and Democratic parties. The majority of respondents in this group had never been involved in agriculture, nor had a family member involved in agriculture.

The group willing to pay 25% more for BMP products tended to be male, middle-aged and Democrats. Similar to the other groups, 53% of the respondents in this group had never been involved in agriculture nor had a family member involved in agriculture. Respondents in the group willing to pay 50% more for BMP products were White or Black men, living in an urban or suburban area outside city limits, and between the ages of 30 and 49. None of the respondents in this group were over 60 years of age. A larger number of respondents in this group had acquired a four-year college degree or a graduate/professional degree, and earned more than $100,000 a year in their household. These respondents held moderate political beliefs and were affiliated with the Democratic party. The majority of respondents in this group (52.7%) had some degree of involvement in agriculture or had a family member involved in agriculture.

Few respondents were willing to pay 75% more for BMP products (n = 9). These respondents were White, men living in an urban or suburban area outside of city limits. Respondents in this group ranged from 20 to 49 years old, with the majority in the age range of 40 to 49 (50.1%). Not a single respondent in this group was over 50 years old. A larger number of respondents in this group had acquired a high school diploma as their highest level of education and earned $40,000 to $49,999 a year

in their household. The majority of respondents in this group were affiliated with the Democratic party. Finally, the majority of respondents in this group had some degree of involvement in agriculture or had a family member involved in agriculture.

Conclusions, Implications and Recommendations

The environmental benefits associated with farmer engagement in BMPs is widely documented yet acceptance and implementations of BMPs is still limited (Lamm et al., 2017a; Lamm et al., 2017b). Many factors contribute to farmer adoption including network support, level of education/knowledge, and financial concerns (Prokopy et al., 2008). Public support and willingness to pay for engagement in BMPs would offer the network and financial support farmers need to increase engagement yet little is known about public interest in supporting BMP engagement with their pocketbook.

The results of this study revealed the overwhelming majority of Florida residents would be more likely to buy products from a farmer who uses BMPs. However, fewer were willing to purchase food grown using BMPs if they had to pay more for it. This finding implies there is a need for agricultural communication efforts that inform the public of the costs associated with BMP production of goods. Further, it may be beneficial to employ marketing strategies that highlight the importance of BMPs to mitigate consumer hesitation when faced with increased prices of BMP products.

Despite the observed dissonance between likelihood of buying BMP products and willingness to pay more, the findings indicated consumers were willing to pay some amount more for food grown using BMPs. However, there were differences in the characteristics of consumers willing to pay more for food grown using BMPs. Segmenting the audience based on percent willing to pay can help in targeting consumer audiences based on the specific price of their products. First, the findings can assist in developing a pricing scheme. Of the residents willing to pay more for BMP products, most were willing to pay 10% or 25% more. Very few were willing to pay 50% more, and that number got even lower when it came to 75% more. As such, it may be in the best interest of Florida producers to adopt BMPs that do not result in the cost of the product exceeding a 25% increase compared to products not produced using BMPs.

The characteristics of residents willing to pay 10% more was split fairly evenly across all demographic characteristics with the exception of race. However, the majority of White residents in the 10% group were consistent with the demographics of the Florida population. This implies there is a wider market for selling BMP products at a 10% increased cost to consumers rather than a need to tailor marketing to a specific sub population. If the additional costs of BMP engagement can keep farmers from increasing more than 10%, consumers will hardly be impacted and be supportive of BMP engagement.

The number of respondents who had some degree of involvement in agriculture, had been involved in agriculture, or had a family member involved in agriculture increased as amount willing to pay increased. This finding indicated consumers who have or have had some connection to agriculture are more likely to purchase food grown using BMPs at an increased price. Perhaps these individuals could be used as opinion leaders within their communities (Rogers, 2003) and accessed by extension agents to tell their story to their neighbors and friends. Since they are already willing to pay more for products produced using BMPs they could be targeted and further educated as BMP activists. A booth could be set up at a local farmers market or CSA pick up spot to discuss the benefits of BMP adoption. At this location, a communicator could strive to identify some of these opinion leaders and collect their contact information so they could be accessed for targeted events or even social media communication campaigns in the future.

While examining socio-demographic characteristics can provide useful insight when marketing BMP products (Andreasen, 2006), future research is needed to examine consumers' overall perceptions of BMPs. According to Verain et al., (2012), socio-demographic variables alone may not give sufficient information for segmenting consumers' preferences. As a disparity was observed between Florida residents' likelihood of buying BMP products and their willingness to pay more for those products, future BMP research should be conducted to include consumer attitudes and beliefs in addition to socio-demographic factors. In addition, research should be conducted outside of Florida to determine if consumer willingness is different in another state that may focus on different crops or have a different growing season.

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