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PERSONALITY TRAITS OF ILLINOIS AGRITOURISM ENTREPRENEURS

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ABSTRACT

The number of farms participating in agritourism is on the rise. While many resources are available for individuals that are considering entering the agritourism industry, they tend to focus on the economic, environmental, and/or legal factors of the business model, excluding the role psychological factors, such as, personality traits can have on business creation and success. This article examines the personality traits of Illinois agritourism entrepreneurs as related to the Five-Factor Model (FFM). Illinois agritourism entrepreneurs and non-entrepreneurs only differ statistically for the personality trait of agreeableness and select demographic variables have an influence on the BFI scale score means of select personality traits. This information draws attention to an aspect of business that is often overlooked, specifically in the agriculture industry. University extension offices, farm bureaus, and/or agritourism associations can use the information gleaned from this study when publicizing resource guides for individuals considering entering the agritourism industry. It can also be beneficial to current agritourism businesses for the purposes of succession planning and hiring.

[JEL Classification: L260 Entrepreneurship]

INTRODUCTION

Agritourism

The number of farms participating in agritourism is on the rise in the United States. From 2007 to 2012 the number of U.S. farms participating in agritourism increased 42%. During the same time frame, the number of farms participating in agritourism in the state of Illinois increased 25%. From 2007 to 2012 the income generated by agritourism in the United States increased from \$566.8 million to \$704.0 million – a 24% increase while the state of Illinois experienced a 14% increase in the income generated by agritourism (USDA, National Agricultural Statistics Service, 2014). There are a number of reasons that agritourism is an attractive business venture for farm operators. First, it can generate additional income, not related to traditional cash-crop operations. Second, agritourism can diversify a farmer operator's income portfolio, serving as a protective cushion against the many uncertainties of cash-crop operations. Third, it can provide for more complete usage of assets, often utilizing land and buildings not suitable for cash-crop operations. Lastly, it can expand employment opportunities for household and/or family members (USDA, Economic Research Service, 2007).

Personality Traits

Personality is defined by the American Psychological Association as, "individual differences in characteristic patterns of thinking, feeling, and behaving" (Personality, n.d.). Personality traits are defined as, "enduring, predictable characteristics of individual behavior that explain differences in individual actions in similar situations" (Koe, Nga, and Shamuganathan, 2010). An individual's personality is the sum total of his or her personality traits (Yildiz, 2012). While a number of methods exist for the purpose of assessing personality traits, the Five-Factor Model (FFM) has been the predominant method used in entrepreneurial research since the 1980's (Brandstatter, 2011; Yildiz, 2012). The FFM is a well-established paradigm that asserts that an individual's personality traits can be globally defined by five basic factors: openness to experience (O), conscientiousness (C), extraversion (E), agreeableness (A), and neuroticism (N) (Korner, et al., 2015; McCrae, 1991). Because personality traits are measurable, enduring, and based on an individual's unique experiences much research has

been conducted to examine the similarities and differences of personality traits between different groups of people. One such group that has been greatly studied is entrepreneurs.

Entrepreneurial Personality

An entrepreneur is defined by Merriam-Webster as “a person who starts a business and is willing to risk loss in order to make money” (Entrepreneur, n.d.). While many factors play a role in an entrepreneur’s decision to start a business, research suggests that personality is a significant factor. Research has consistently shown that entrepreneurs have a similar profile of personality traits (as related to the FFM) and that the expression of said traits is different for entrepreneurs than other individuals, specifically managers (Zhao and Seibert, 2006).

Personality Traits and Agritourism

Given the steady growth of agritourism throughout the United States, it is not surprising that many resources exist to help individuals considering entering the industry. While some academic research exists, the majority of resources available have been published by specialty organizations or state extension offices. Though the quality of the resources varies, one thing they have in common is their heavy focus on the economic, environmental, and/or legal factors of the agritourism business model. Most resources exclude the role psychological factors, such as, personality traits can have on business creation and success. Of the resources that don’t exclude this aspect of business, the discussion is often limited and not founded on the FFM as most entrepreneurial studies have been (Agritourism – An overview, n.d.; Bagi and Reeder, 2012; Bruch et al., 2005; Hatch, n.d.; Illinois Agritourism, n.d.; Wicks and Merrett, 2003). Though the resources currently available for prospective agritourism entrepreneurs are useful, there is room for improvement, especially in regard to defining the personality traits of agritourism entrepreneurs as related to the FFM.

The Five-Factor Model (FFM), also known as the Big Five Model adopts the basic tenets of trait theory. Trait theory ascertains that individuals can be characterized in terms of patterns of thoughts, feelings, and actions that can be quantitatively accessed and show some degree of cross-situational consistency (Pervin and John, 1999). The FFM approach holds that these

patterns of thoughts, feelings, and actions can be summarized in terms of five basic factors: openness to experience (O), conscientiousness (C), extraversion (E), agreeableness (A), and neuroticism (N) (OCEAN for short) and is a well-established paradigm (Korner, et al., 2015; McCrae, 1991). Though descriptive, the five factors should be thought of as a global characterization of an individual's personality as they do not fully exhaust the description of personality (McCrae and John, 1992).

Defining the Five Factors

Openness to Experience (O)

Openness to experience "...describes the breadth, depth, originality, and complexity of an individual's mental and experiential life" (Brandstatter, 2011). It represents an individual's tendency to be thoughtful, perceptive, creative, and imaginative (Judge and Bono, 2000). Adjectives often used to describe individuals with a high openness to experience include artistic, curious, original, insightful, and one of vast interests (McCrae and John, 1992). By contrast, individuals scoring low on openness to experience can be characterized as behaving in a conventional, unanalytical manner and having a narrow range of interests (Wang, Chang, Yao, and Liang, 2016).

Conscientiousness (C)

Conscientiousness "...describes socially prescribed impulse control that facilitates task- and goal-directed behavior, such as thinking before acting, delaying gratification, following norms and rules, and planning, organizing, and prioritizing tasks" (Brandstatter, 2011). Conscientiousness is indicated by achievement and dependability (Judge and Bono, 2000). Adjectives often used to describe individuals with a high level of conscientiousness include efficient, organized, responsible, and reliable (McCrae and John, 1992). By contrast, individuals with a low level of conscientiousness, though not necessarily lacking in moral principles, can be characterized as less disciplined in applying said principles (Wang et.al., 2016).

Extraversion (E)

Extraversion "...implies an energetic approach toward the social and material world..." (Brandstatter, 2011). It represents an individual's tendency to be outgoing, assertive, and thrill-

seeking (Judge and Bono, 2000). Adjectives often used to describe individuals with a high level of extraversion include talkative, energetic, active, and enthusiastic (McCrae and John, 1992; Pervin and John, 1999). By contrast, individuals scoring low on extraversion tend to be more independent and steady (Wang et.al., 2016).

Agreeableness (A)

Agreeableness "...contrasts a prosocial and communal orientation toward others with antagonism and includes traits such as altruism, tender-mindedness, trust, and modesty" (Brandstatter, 2011). Agreeableness consists of tendencies to be kind, gentle, and warm (Judge and Bono, 2000). Adjectives often used to describe individuals with a high level of agreeableness include appreciative, generous, trusting, forgiving, and sympathetic (McCrae and John, 1992). By contrast, individuals scoring low on agreeableness tend to be manipulative, competitive rather than cooperative, skeptical of other's intentions, and self-centered (Wang et.al., 2016).

Neuroticism (N)

Neuroticism "...contrasts emotional stability and even-temperedness with negative emotionality..." (Brandstatter, 2011). It refers to the tendency to be anxious, fearful, depressed, and moody (Judge and Bono, 2000). Individuals with high levels of neuroticism tend to be easily upset (Pervin and John, 1999). Adjectives often used to describe individuals with a high level of neuroticism include tense, touchy, and unstable (McCrae and John, 1992). By contrast, individuals scoring low in neuroticism tend to be calm, relaxed, and self-confident, even in stressful situations (Wang et.al, 2016).

The Influence of Personality Traits

A question that has occupied scholars for decades is, "Do entrepreneurs differ from others in terms of their basic personality?" (Zhao and Seibert, 2006). Much research has been devoted to answering this question over the years and because the Five-Factor Model (FFM) is a widely-accepted method of identifying personality traits and can be measured using a variety of standardized assessments, it is frequently used (Brandstatter, 2011). While the FFM has been used to study a multitude of correlations, including academic achievement and trauma

patient profile, entrepreneurial intention is arguably one of the most frequently studied correlations (Antoncic et.al., 2015; Espiritu-Olmos and Sastre-Castillo, 2015; Haider, et al., 2002; Komarraju et.al, 2011).

Research has consistently shown that certain personality traits stimulate individuals to establish a business (Antoncic et.al, 2015; Espiritu-Olmos and Sastre-Castillo, 2015; Zhao, Seibert, and Lumpkin, 2010). A 2015 study sought to determine a correlation between entrepreneurial intention and personality traits. It concluded that personality traits are the largest explanatory factor as related to entrepreneurial intention. While the study did find a significant relationship between entrepreneurial intention and demographic information such as gender and education, personality traits were by far the largest explanatory factory with all but one of the five factors (neuroticism) being strongly significant (Espiritu-Olmos and Sastre-Castillo, 2015). The results of this study support those of a 2010 study that found a significant positive influence between agreeableness, openness to experience, and conscientiousness on entrepreneurial intention. The same study also found a negative influence between neuroticism and entrepreneurial intention (Koe, Nga, and Shamuganathan, 2010). While both studies are supportive of one another, it is important to note that the population used for both was college students, not actual entrepreneurs (Espiritu-Olmos and Sastre-Castillo, 2015; Koe, Nga, and Shamuganathan, 2010).

Another study conducted in 2010 used a population of actual entrepreneurs rather than students to identify the relationship between personality traits and entrepreneurial behavior. However, it did not use the FFM to measure personality traits, choosing rather to focus on need for achievement, internal locus of control, and tolerance for ambiguity (Okhomina, 2010). A study conducted in 2015 used the FFM and a population of employed adults, a portion of which included actual entrepreneurs, to identify the relationship between personality traits and entrepreneurial behavior. Results of the study indicated that openness to experience, extraversion, and agreeableness are positively related to entrepreneurial behavior. Results also indicated that conscientiousness and neuroticism are negatively related to entrepreneurial behavior. The same study also concluded that gender has an impact on personality traits with four of the five factors found to be significantly different between men and women (openness –

higher for men and conscientiousness, extraversion, and agreeableness – higher for women) (Antoncic et.al, 2015). A 2010 study looked not only at the correlation between personality traits on entrepreneurial intention, but also on entrepreneurial firm performance. Results of this study slightly contradict those of the 2015 study and show that conscientiousness, openness to experience, neuroticism, and extraversion are all positively related to entrepreneurial intention (Zhao, Seibert, and Lumpkin, 2010).

While the results from these studies strongly suggest that entrepreneurs differ from others in terms of personality, it was a 2006 study that confirmed that entrepreneurs do in fact differ from at least one specific category of individuals; managers. The results of this study indicated that entrepreneurs scored significantly lower than managers on neuroticism and agreeableness. The results also indicated that entrepreneurs scored significantly higher than managers on openness to experience and conscientiousness. As related to extraversion, this study found no statistically significant difference, suggesting that entrepreneurs and managers do not differ on this dimension of personality (Zhao and Seibert, 2006).

While all of the studies previously noted provide great information on the relationship between personality traits and entrepreneurs, none focused on entrepreneurship within the agriculture industry. A 2015 study changed that when they worked with agriculture students at a university to study entrepreneurial intention as related to the FFM. Results of this study revealed that extraversion, openness to experience, conscientiousness, and agreeableness positively predicted entrepreneurial intention. Neuroticism was found to have no significant impact on entrepreneurial intention (Wang et.al, 2016). While these results are in line with literature from other industries, they are not reflective of actual agricultural entrepreneurs. Thus, more research on this topic is needed in the agriculture industry, specifically, research involving actual entrepreneurs.

The primary purpose of this study is to identify the personality traits of Illinois agritourism entrepreneurs as related to the Five-Factor Model (FFM). The specific objectives of this study are to:

1. Determine the Big Five Inventory (BFI) scale score means of Illinois agritourism entrepreneurs for each personality trait as related to the FFM.

2. Determine if the BFI scale score means of Illinois agritourism entrepreneurs differ from non-entrepreneurs for each personality trait as related to the FFM.
3. Determine if select demographic variables have an influence on the BFI scale score means for each personality trait as related to the FFM.

Personality Traits and Agritourism

Agritourism is a growing sector of the agriculture industry. While there is considerable literature available on agritourism development, most of it focuses heavily on the economic, environmental, and/or legal factors that can affect the business, often overlooking the role psychological factors, such as personality traits, can have on business creation and success. Furthermore, no research touches on the differences in personality traits often seen between entrepreneurs and managers (Agritourism – An overview, n.d.; Bagi and Reeder, 2012; Bruch et al., 2005; Hatch, n.d.; Illinois Agritourism, n.d.; Wicks and Merrett, 2003). Of the literature available that does identify the importance of an entrepreneur’s personality; its discussion is often limited and not founded on the FFM as entrepreneurial research in other industries has been.

A 2012 study identified four categories that affect farmer participation in agritourism, one of which being “characteristics of the farmer.” The four variables measured for this category included the farmer’s age, education, access to the Internet, and use of paid farm management advice. While the role personality can play on entrepreneurial success was noted in the literature review of the study, it was not a researched variable (Bagi and Reeder, 2012). Another study conducted in 2003 identified a key point of a successful five-point business model as “critically looking at yourself and your team.” However, it mentions nothing about personality traits, instead encouraging prospective agritourism entrepreneurs to consider questions such as, if the business venture is something they really want to do and if they are willing to have visitors on their property (Wicks and Merrett, 2003).

In addition to academic research, multiple resources are also available for prospective agritourism entrepreneurs. An overview of agritourism is available from the National Agricultural Law Center; however, it is rooted in the legalities of agritourism and makes no

mention of personality traits (Agritourism – An overview, n.d.). The LSU Ag Center Research and Extension has multiple resources available for prospective agritourism entrepreneurs. In each resource, there is a section on personality that encourages individuals to assess their personality to see if they are someone that would be well suited for agritourism. While a nod in the right direction, the assessment is only comprised of five, somewhat vague questions (Hatch, n.d.). The University of Tennessee provides a comprehensive resource for prospective agritourism entrepreneurs that help individuals set goals, create a business plan, learn ways to mitigate risk, and even assess their personality. This resource explains that there are several personality traits that are common among successful entrepreneurs and provides a 25-question assessment to help individuals determine if they possess such traits (Bruch et al., 2005). While this resource is a useful tool, the questions are primarily focused on the individual's feelings towards the business endeavor. As such, results could be easily influenced by the participants' present attitude or feelings towards the business endeavor. Though the research and resources currently available for prospective agritourism entrepreneurs are useful, there is room for improvement and a gap in the literature as related to the personality traits of agritourism entrepreneurs.

A review of the literature illustrates that entrepreneurs do differ from others, specifically managers in terms of personality traits. The literature provides an understanding of these differences for a variety of industries. However, the research conducted to identify said differences often uses students as focus groups rather than actual entrepreneurs as was the case in the only entrepreneurial research involving agriculture. Agritourism is a fast-growing sector of agriculture in the United States as a whole and in the state of Illinois. While much literature is available for prospective agritourism entrepreneurs, it tends to focus on the economic, environmental, and/or legal factors of the business, often excluding the important role psychological factors, such as, the personality traits of entrepreneurs can play in the creation and success of a business. It is the lack of literature available for prospective agritourism entrepreneurs as related to the influence of personality traits on business creation and success, specifically literature using the FFM that led to this study.

METHODOLOGY

Population and Sample

The target population for this study was agritourism entrepreneurs in Illinois. The sample frame for this study was a listing of Illinois agritourism businesses obtained from the University of Illinois Extension website (Illinois Agritourism, n.d.). As of January 2016, there were 226 agritourism businesses included in this listing. Prior to contacting the businesses, approval to administer a survey to human subjects was obtained from Institutional Review Board (Protocol 864392-2). Surveys were sent via postal mail or email to all 226 businesses. Sixteen surveys were undeliverable, making the sample selection for this study, 210 businesses. The dependent variables of this study were personality traits as related to the FFM; openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism. The independent variables of this study were position (entrepreneur vs. non-entrepreneur), gender (male or female), age of the respondent, and years the business has been in operation.

Survey Instrument Development

Two identical survey instruments were created for this mixed-methods study (Dillman, Smyth, and Christian, 2014). Survey instrument consisted of three parts. The first part contained 11 demographic questions. Of the 11 demographic questions, two were numeric open-ended questions and eight were nominal closed-ended questions. Of the eight nominal closed-ended questions, five questions included an open-ended selection to allow participants to respond in their own words if they felt the response options provided did not accurately describe themselves or their business.

The second part of the survey instrument contained questions used to assess the participant's personality using the Five-Factor Model (FFM). While numerous, validated assessments exist to measure personality traits using the FFM, the Big Five Inventory (BFI) was chosen for use in this study for its short length. Though it only consists of 44 questions, the BFI does not sacrifice psychometric properties or content coverage and is considered a reliable, validated assessment tool when used to measure a participant's personality as related to the FFM. In studies that compared individual and peer ratings of the BFI to longer, more costly

assessment tools, such as, the NEO PI-R and NEO-FFI the reliability of the BFI held up. In a study comparing longer assessments, the BFI ranked second in terms of reliability with an average mean of .83 versus an average mean of .89 for the longer assessments (Pervin and John, 1999). The BFI was used in this study with expressed permission from the Berkley Personality Lab. All 44 questions of the BFI are ordinal closed-ended questions presented using a bipolar, Likert-type scale: 1=Disagree Strongly, 2=Disagree a Little, 3=Neither Agree nor Disagree, 4=Agree a Little, and 5=Agree Strongly. Of the 44 questions, ten questions assessed the trait openness to experience, nine questions assessed the trait conscientiousness, eight questions assessed the trait extraversion, nine questions assessed the trait agreeableness, and eight questions assessed the trait neuroticism. Each question was specific to a single personality trait and participants had no knowledge of the personality trait assessed by each question (John, Donahue, and Kentle, 1991; John, Naumann, and Soto, 2008). The numeric values associated with the bipolar, Likert-type scale were omitted from the survey as Dillman, Smyth, and Christian (2014) suggest the use of such values can confuse participants and/or cause them to attribute unintended meaning to them, both of which can affect how the participant responds and adversely impact results.

Data Collection

The survey instrument was sent to participants via email (if a valid email address was available) and via postal mail (if a valid email address was not available). In both situations, a letter was included explaining the importance and goals of the research, as well as, how valuable their participation was to the study. The letter was identical for both survey instruments.

A total of 53 surveys were mailed. Of the surveys sent, four were returned as “Undeliverable”. An alternate postal address was sought for the four survey instruments returned as “Undeliverable”, but to no avail. A total of 173 emails were sent, with 12 being returned as “Undeliverable”. Email addresses for the 12 emails returned as “Undeliverable” were checked for accuracy. Because all twelve email addresses used were found to be correct, alternative email addresses were sought, but to no avail. The BFI data was scored as instructed

by Berkley Personality Lab and average scores for each of the Five-Factor Model personality traits calculated, both for individual participants and the study as a whole.

RESULTS

Of the 49 viable survey instruments sent via postal mail, 24 were returned. Of those returned, three declined to participate and 21 were completed in full. Of the 161 viable survey instruments sent via email, 33 participants started the survey, however, only 32 completed the survey in full – one participant completed only the demographic section. As a result of both methods, 53 usable surveys were received which represents a response rate of 25.2%.

Given the low response rate of this study, it was deemed important to examine the data for a non-response bias. When data of non-responders is unknown, comparing early and late responders can be used to check for non-response bias (Tudor et al. 2014). There were a total of 37 early responders and 16 late responders. The non-response bias was analyzed in SPSS using the Individual Samples t-Test to compare the means for gender, age, years in operation and BFI score scale scores for each of the five personality traits. The Independent Samples t-Tests showed no significant difference between early and late responders in five of the eight measured categories: gender, extraversion, agreeableness, conscientiousness, and neuroticism. A significant difference was found between early and late responders in three of the eight measured categories: age, years in operation, and openness to experience. Early responders were more likely to be younger, have been in operation for fewer years, and be less open to experience.

To assess the content reliability of the survey instruments, the 44 questions of the BFI Assessment found in the second part of the survey instruments were analyzed in SPSS using the Cronbach Alpha test. The BFI Assessment is used to measure five very distinct personality traits. As such, the reliability of the assessment was analyzed as related to each personality trait, not the assessment as a whole. Upon analysis, the assessment, as related to each personality trait, was found to be of acceptable reliability with all alpha values greater than 0.60 (Lowenthal, 2001).

Table 1: Cronbach's Alpha

	Cronbach's Alpha
Extraversion (E)	0.80
Agreeableness (A)	0.76
Conscientiousness (C)	0.70
Neuroticism (N)	0.64
Openness (O)	0.75

Given the presence of a bias between early and late responders, the reader is cautioned that the potential for non-response bias exists and is urged to use caution when interpreting the results of this study.

Demographics

Of the 53 respondents, 27 (50.9%) were male and 26 (49.1%) were female. In addition, 35 (66%) of the respondents identified themselves as the founder of the business (entrepreneur) and 18 (34%) identified themselves as the current owner or manager of the business (non-entrepreneur). Of the respondents that identified themselves as the founder of the business, 22 (57.1%) cited starting the business from a hobby or passion, 11 (28.6%) cited starting the business for extra income, and five (14.3%) selected "Other" for this response. The reason cited for respondents that selected "Other" varied and included reasons such as retirement planning and being asked to do so by others. The average age of respondents was 56.5 years of age and ranged from 28 years of age to 81 years of age. This varies slightly from a 2012 agritourism study that found the average age of agritourism business operators to be 61 years of age (Bagi and Reeder, 2012). The number of years the business has been in operation varied tremendously among respondents from one year to 150 year, with an average of 24.8 years. Respondents were also asked to describe the location of their business. 38 (71.7%) identified their business as being in a rural location on the same property as their home, nine (17.0%) identified their business as being in a rural location, but on a different property than their home, two (3.8%) described their business as being in a non-rural location with products produced and marketed on-site, one (1.9%) described their business as being in a non-rural location with products marketed on-site but produced elsewhere, and three (5.7%) described

the location of their business as ‘Other’. Regarding the individuals involved in the daily operations of the business (multiple selections permitted), 51 (96.2%) cited themselves, 34 (64.2%) cited their spouse, 20 (37.7%) cited their children, seven (13.2%) cited their siblings, and 16 (30.2%) cited ‘Other’. Persons listed when ‘Other’ was selected, mostly included family members such as parents, grandparents, and nieces and nephews. Lastly, when asked of employment status outside of the business, 12 (22.6%) indicated that they were employed full-time outside of the business, five (9.4%) indicated that they were employed part-time outside of the business, and 36 (67.9%) indicated that they were not employed outside of the business.

Table 2: Demographics

		N			N
Gender	Male	27	Ownership	Founder	35
	Female	26		Not the Founder	18
Reasons for Starting the Business	Extra Income	11	Are you employed outside of the business?	Yes (full-time)	12
	Hobby/Passion	22		Yes (part-time)	5
	Other	5		No	36
Business Location	Rural (on the same property as my home, products marketed are produced here)	38	Who is involved in the day-to-day operations of the business?	Self	51
	Rural (on a different property than my home, products marketed are produced here)	9		Spouse	34
	Non-Rural (products are marketed and produced on this property)	2		Children	20
	Non-Rural (products are marketed on this property, but produced elsewhere)	1		Siblings	7
	Other	3		Other	16

BFI Scale Score Means of Illinois Agritourism Entrepreneurs

The first objective of this study was to determine the BFI score means of Illinois agritourism entrepreneurs for each personality trait as related to the Five-Factor Model (FFM). Personality traits were assessed using the Big Five Inventory (BFI) personality assessment. The responses to the 44 questions of the BFI (part two of the survey instrument) were converted to five-point scale scores using instructions provided by the Berkley Personality Lab in which one indicates a very low level of expression and five indicates a very high level of expression of the personality trait (John, Donahue, and Kentle, 1991; John, Naumann, and Soto, 2008). BFI scale-score means for Illinois agritourism entrepreneurs (identified in this study as the founder of the business) were as follows: openness to experience (3.70), conscientiousness (4.20), extraversion (3.52), agreeableness (4.11), and neuroticism (2.58).

The second objective of this study was to determine if the personality traits of Illinois agritourism entrepreneurs (N=35) differ from non-entrepreneurs (N=18). At the 0.05 level, a significant difference was only found for the personality trait of agreeableness ($p=0.0409$) with non-entrepreneurs being more agreeable than entrepreneurs (Table 3). These findings contradict the 2006 research of Zhao and Siebert comparing entrepreneurs and managers in which they found a statistically significant difference between the two groups for all personality traits, except extraversion, with entrepreneurs scoring higher on openness to experience and conscientiousness and lower on neuroticism and agreeableness than managers.

An Independent Samples t-Test was used to determine if there was a difference in the OCEAN BFI scale score means between males and females. A significant difference was found for the personality trait of agreeableness ($p=0.0342$) with females being more agreeable than males (Table 3). The BFI scale score means for this study are very similar to those found in a 2015 study, with the only difference being for the trait of openness to experience. Whereas this study found the BFI scale score means of male respondents to be lower than those of female respondents for the trait of openness to experience, the 2015 study found the opposite (Antoncic et.al, 2015).

Table 3: Ownership and Gender

	Entrepreneur	Not-Entrepreneur	Male	Female
Extraversion (E)	3.52	3.73	3.45	3.73
Agreeableness (A)	4.11	4.43	4.07	4.38
Conscientiousness (C)	4.2	4.28	4.19	4.27
Neuroticism (N)	2.58	2.39	2.43	2.61
Openness (O)	3.7	3.76	3.64	3.81

An Independent Samples t-Test was used to determine if there was a difference in the OCEAN BFI scale score means between new businesses (in operation five years or less) and other businesses (in operation six years or longer). A significant difference was not found for any of the personality traits.

CONCLUSIONS

The first conclusion that can be drawn from this study is that Illinois agritourism entrepreneurs tend to have a lower BFI scale score mean than non-entrepreneurs for each of the five personality traits. Interestingly, these differences were only found to be statistically significant for the trait of agreeableness. While this finding is consistent with previous research, the fact that significant differences were not found for the traits of openness to experience, conscientiousness, and neuroticism contradicts previous research, suggesting the results of this study are unique to the agritourism industry. Agritourism entrepreneurs are fundamentally different from traditional entrepreneurs in terms of risk propensity. Whereas traditional entrepreneurs are willing to take risk, most agritourism entrepreneurs enter the industry in an attempt to mitigate risk for their primary business; cash-crop operations (Entrepreneur, n.d.; USDA, Economic Research Service, 2007). Additionally, the majority of agritourism businesses in the United States are classified as small, family-operated businesses (USDA, National Agricultural Statistics Service, 2014). The information gathered from this study in regards to who is involved in the daily operations of the business supports this statement as related to Illinois agritourism, making it a fair assumption that Illinois agritourism entrepreneurs and non-entrepreneurs are most often related, and may have even been raised in the same home. Given this information and that personality traits are believed to be influenced by an

individual's unique interaction with his or her internal and external environment, it could be reasoned that the BFI scale score means for Illinois agritourism entrepreneurs and non-entrepreneurs are similar because of their familial ties and similar life experiences (Koe, Nga, and Shamuganathan, 2010; Yildiz, 2012). In contrast, traditional businesses are typically comprised of individuals with no relation and diverse life experiences, which could explain the disparity seen in BFI scale score means between entrepreneurs and managers in other entrepreneurial research.

Another conclusion that can be drawn from this research is that demographic variables do have an effect on respondent BFI scale score means. Men for example tend to have a lower scale score mean for all personality traits than do females. However, these differences were only found to be statistically significant for the trait of agreeableness. This is interesting because previous studies found a significant difference for all personality traits, except neuroticism. This study also found age to have an impact on respondent BFI scale score means. A statistically significant difference was found to exist for the personality trait of neuroticism. As past research has not included this variable, the results of this study are important as they provide a comparative model for future research, both as related to the personality traits of agritourism entrepreneurs, as well as, entrepreneurs of other industries. This study also found the number of years the business has been in operation to have no impact on BFI scale score means. Just as with age, past research has not included this variable. As such, the results of this study are important as they provide a comparative model for future research.

Overall, the results of this study draw attention to the psychological aspect of business: an important aspect of business that has been overlooked in the past, specifically in the agriculture industry. This study helps to round out current literature on agritourism, which tends to focus heavily on the economic, environmental, and/or legal factors affecting the industry. As such, this information could be useful for university extension offices, farm bureaus, and agritourism associations when publicizing resource guides for use by individuals considering entering the agritourism industry. While the BFI assessment was used in this study with expressed permission from the Berkley Personality Lab for research purposes, a link exists on their website that allows individuals to take the BFI assessment electronically and receive

instant feedback. Organizations publishing resource guides could find it beneficial to provide a direct link to this assessment in their document. Though the primary focus of this study was agritourism entrepreneurs, useful information was also gleaned as to the personality traits of non-entrepreneurs, which for the purposes of this study included current owners and/or managers. As such, this study could also prove beneficial to current agritourism businesses for the purposes of hiring and succession planning. This study helps to diversify the field of entrepreneurial research, drawing attention to a previously un-researched industry. Furthermore, the results of this study challenge the findings of existing entrepreneurial research, which should be of interest to entrepreneurial researchers.

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