

MDPI

Article

Factors Related to Profitability of Agritourism in the United States: Results from a National Survey of Operators

Chadley R. Hollas ^{1,*}, Lisa Chase ¹, David Conner ², Lori Dickes ³, R. David Lamie ⁴, Claudia Schmidt ⁵, Doolarie Singh-Knights ⁶ and Lindsay Quella ²

- ¹ UVM Extension, University of Vermont, Brattleboro, VT 05301, USA; Lisa.Chase@uvm.edu
- ² Center for Rural Studies, University of Vermont, Burlington, VT 05405, USA; David.Conner@uvm.edu (D.C.); lindsay.quella@uvm.edu (L.Q.)
- Ollege of Behavioral, Social and Health Sciences, Clemson University, Clemson, SC 29634, USA; lorid@g clemson edu
- College of Agriculture, Forestry and Life Sciences, Clemson University, Clemson, SC 29634, USA; dlamie@clemson.edu
- Department of Agricultural Economics, Sociology, and Education, Pennsylvania State University, State College, PA 16801, USA; cschmidt@psu.edu
- Davis College of Agriculture, Natural Resources and Design, West Virginia University, Morgantown, WV 26506, USA; dosingh-knights@mail.wvu.edu
- * Correspondence: crhollas@gmail.com

Abstract: Agritourism is a growing area of the tourism sector with many positive social and economic benefits for farmers, their communities, and for tourists. While researchers have been studying the phenomenon for several decades, factors that lead to profitable outcomes for agritourism operators are still not well understood, hindering the effectiveness of agritourism development and the systems of support available to farmers. Using a survey of 1834 farms and ranches open to visitors in the United States, the goal of this study is to identify the factors that influence the profitability of agritourism operations. This study shows that several factors have positive associations with increased agritourism profitability, such as the number of years of experience of the operator, farm scale (acreage and total farm revenue), providing on-farm product sales, and offering events and entertainment. Off-farm product sales and being a female operator have a negative association with profitability in agritourism. We discuss the implications of our findings on agritourism operators, suggest their utility for tourism planning and rural community development professionals, and offer suggestions for future research.

Keywords: agritourism; rural tourism; profitability; food tourism; agricultural economics



Citation: Hollas, C.R.; Chase, L.; Conner, D.; Dickes, L.; Lamie, R.D.; Schmidt, C.; Singh-Knights, D.; Quella, L. Factors Related to Profitability of Agritourism in the United States: Results from a National Survey of Operators. Sustainability 2021, 13, 13334. https://doi.org/10.3390/su 132313334

Academic Editors: SoJung Lee and Jichul Jang

Received: 20 July 2021 Accepted: 5 November 2021 Published: 2 December 2021

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

1. Introduction

Demand for farm and food experiences is an important driver of rural tourism, including agritourism, in the United States and globally. These enterprises can also have an impact on broader communities as visitors' agritourism experiences reshape their decisions upon returning home [1]. While definitions of agritourism vary across different contexts and locales, consensus remains that on-farm activities focused on agriculture are at its core [2–6]. Agritourism is often experience-focused and place-based; however, tangible farm products may play a role in the visitors' encounter [7]. Relating to the French concept of les produits du terroir, which roughly translates to "taste of place", the broad definition of terroir is an important concept closely related to agritourism, as farms in the US, Europe and destinations around the globe emphasize their unique culture, food traditions, landscape aesthetics, and cultural geography [8,9].

Prior to the suspension of global travel in 2020, agritourism was rapidly increasing around the world, with two-fold growth in the global market projected from 2018 to 2025—\$5.7 billion to \$12.9 billion [10,11]. In 2017, only 6.4% of farmers in the US sold directly to

Sustainability **2021**, *13*, 13334

consumers and the value of those sales was 0.7% (\$2.8 billion) of total farm sales [11,12]. While the sector has enjoyed steady growth in recent years, non-local agritourism that relies on long-distance travel and large gatherings has been severely impacted by the COVID-19 pandemic. The United Nations' World Tourism Organization has also emphasized food-focused tourism, that which promotes a sustainable food system, is crucial to the recovery of tourism post-pandemic and its potential for "promoting understanding among different cultures, and of bringing people and traditions closer together" [13].

Despite the interest in agritourism on the demand side (from tourists) and the supply side (from farmers, ranchers, and tour operators), limited research is available to guide practitioners as they make management decisions about agritourism destination development and investment. Although there are many non-economic benefits to both agritourism operators and the regions where they operate [14,15] the success of agritourism entrepreneurs requires attention to issues of profitability. Some studies have explored profitability in agritourism [16–19], which differs from the profitability of farms more broadly [20]. However, these studies were not conducted at the national scale.

The goal of this study is to identify the factors that influence the profitability of agritourism operations on the national scale in the United States. We emphasize both positive and negative relationships so better-informed decisions can be made by agritourism operators and those who support them. We begin with a summary of the relevant literature and describe the research methods for conducting an online survey of agritourism operators and analyzing the data using multiple regression techniques. We then present results and explore implications for practitioners and for future research.

2. Literature Review

As the economic and social fabric of rural places has undergone changes in the past century, communities around the world have experienced a transition from economic dependence on natural resource extraction (e.g., agriculture, timber) to service-based economies, particularly tourism [1,21,22]. In response, entrepreneurial farmers and ranchers have merged traditional rural livelihoods with tourism into the alternative agricultural enterprise and rural tourism phenomenon known as agritourism [23,24]. A growing interest in local food systems has provided new business opportunities for small- and medium-sized farms throughout the world to engage with visitors to their regions through agritourism [14,25,26]. While several definitions of agritourism have been devised [4], this study looks to Chase et al.'s [2] conceptual framework of agritourism with five overlapping categories including education, hospitality, recreation, entertainment, and product sales. At the core of agritourism are on-farm experiences deeply connected to agriculture.

While the agritourism experience can be a direct connection between tourism and the agricultural setting [4,5], the active participation of tourists in farm activities is not a requisite. Thus, agritourism encompasses a diverse range of activities including agrarian activities as well as overnight farm stays, hayrides, corn mazes, and use of farmland for bird watching, hiking, horseback riding, hunting, and other recreational activities. Chase et al.'s [2] conceptual framework of agritourism includes educational programs, often involving exhibits, demonstrations, and workshops around specific topics and skills. These educational experiences can include animal interactions, picking-your-own produce, and touring the farm or its facilities [27].

Agritourism entrepreneurs have been referred to as members of the 'creative class' [28], as they innovatively synthesize the previously independent sectors of agriculture and tourism [29]. As Chase and Grubinger [27] discuss, farm stands, community supported agriculture, value-added processing and other commercial food enterprises on the farm often overlap with, and are complemented by, agritourism. Thus, agritourism also complements the still-growing demand for culinary tourism experiences [8] and can also include other forms of tourism such as heritage tourism [30] and nature tourism [31]. It is clear then, that agritourism is a multi-faceted experience connected to, and taking place on, a farm [27] and offers a great opportunity for destinations to connect their agricultural

Sustainability **2021**, *13*, 13334

traditions and tourism [23]. While tourism scholars and practitioners around the world have been studying agritourism for over a decade, there is not yet a conclusion on how agritourism can benefit farms and communities, and, most importantly to this study, what actions and attributes contribute to a successful, sustainable agritourism operation.

Finding Profitability in Agritourism

Studies have shown, while the growth of agritourism is influenced by the availability of infrastructure for offering visits to farms [32], it is also reliant on farmers' willingness to participate [33]. Thus, it is imperative researchers explore the factors that may impede or encourage their participation. Bagi and Reeder [34] explored this. Their study suggested that the factors positively impacting the likelihood of agritourism participation were proximity to urban centers (cities with at least 10,000 residents), the education level of agritourism hosts, internet access, using consultants for farm advice, and participation in conservation programs. Farmer participation in agritourism also varied by geographic location. Bagi and Reeder found that if a farm were located in the Southern Plains or Rocky Mountain regions of the United States, there was a much higher probability they offer agritourism experiences [34]. Khanal et al. [35] utilized spatial regression models, zip-code, and county level data to investigate the determinants of agritourism operation locations. The researchers found that higher median household income, higher level of education, and the context of wood product manufacturing had a positive relationship to the likelihood of the establishment of an agritourism enterprise [35]. Interestingly, according to this same study, the likelihood of the number of agritourism farms in a county decreased with a higher number of female-owned firms and increased with a higher number of veteran-owned firms in a county. Additionally, Van Sandt et al. [36] found that "travel infrastructure, region and rurality, characteristics of the local economy, and proximity to outdoor attractions are all significantly associated with the probability of a county being an agritourism hot spot" (p. 1).

Researchers have also begun to uncover the perceived benefits of agritourism to the agritourism host. Studies have cited both economic and non-economic benefits that range from supporting local heritage and improving the financial standing of family farms, to improving the economic vitality of the broader community [14,30,37]. Namely, Tew and Barbieri [7] investigated the perceived benefits of agritourism from the operators' perspective. Their findings suggested that, while agritourism can improve the financial well-being of farmers, it could also serve as a marketing tool for related farm products. This suggests agritourism is similar to other forms of tourism in which souvenirs come to represent the memories of a place and experience [38,39]. The additional product sales that result from the agritourism experience highlights its potential impacts on the profitability of agritourism. Advances in the use of digital marketing, e-commerce, and the building of virtual communities create opportunities to extend the agritourism experience even further [40].

To date, some research has been undertaken which explores the profitability of agritourism in specific contexts [16–19]. In one of the more relevant and recent publications, Lucha et al. [18], used data from a survey in Virginia to determine the operational, financial, and demographic characteristics that have the most significant impact on agritourism farms' profitability. The authors found that larger farms that focus on agritourism tend to be more profitable than smaller ones, especially if their agritourism enterprises are more of a priority [18]. Additional factors related to profitability were operator education and the stated motivation that agritourism enterprises were meant to increase farm income. This is consistent with the suggestions of Barbieri and Mshenga [16], that agritourism operations with more employees, or a larger acreage, are more profitable. This study also suggested that operations achieved significantly greater annual gross sales if they have been in business for longer and have owners/operators who are primarily dedicated to agriculture, are male, white, and are more involved with business associations [16]. In contrast, Schilling et al. [19], using USDA National Agricultural Statistics Service (NASS)

Sustainability **2021**, 13, 13334 4 of 17

Census of Agriculture data, concluded that agritourism enhances profits among small-scale and lifestyle farms but had little to no impact on the net cash income per acre generated by commercial-scale farms. These studies present valuable data which inspire further inquiry into ways agritourism efforts might find success in the United States.

3. Materials & Methods

3.1. Research Questions

The present study builds upon existing literature on the viability of agritourism in the United States. Our goal is to better understand which factors contribute to agritourism profitability. By looking at agritourism profitability from farms on a US national scale, something that has not yet been accomplished, we hope to provide unique insights into this still growing sector [10–12]. To aid with analysis, variables from the literature discussed above were distributed into three categories: farmer demographics (characteristics segmenting farmer owner/operators), farm firmographic (characteristics segmenting farms) [41], and geographic region (characteristics segmenting farms by location); product and experience offerings; and motivations. The specific variables within each of these categories are outlined in Table 1.

Table 1. Overview of regression variables.

Variable Category	Variable Name	Definition		
Farmer	Education	Formal education (years)		
Demographics	Female	Coded 1 is respondent is female 0 otherwise		
Demographics	Age	Farmer age (years)		
	Gross Farm Revenue	Gross Farm Revenue (US Dollar)		
	Annual_Visits	Total Farm Visits (paid and unpaid) 2018		
Farm Firmographics	50+MileVisitors	Percentage of visits from people who traveled 50 miles or more (one-way)		
0 1	Days_open	Number of days per year farm/ranch operation is open to visitors		
	Experience	Years Experience in Agritourism		
	City distance	Distance from a city of at least 50,000 people (miles)		
C 1: W : 11	Midwest	Farm is in USDA Midwest Region		
Geographic Variables	Southern	Farm is in USDA Southern Region		
	Western	Farm is in USDA Western Region		
	Animals	Coded 1 if farm produces animal products, 0 otherwise		
	Crops	Coded 1 if farm produces field crops, 0 otherwise		
	Value-added	Coded 1 if farm produces value-added products, 0 otherwise		
	OnFarmSales	Coded 1 if farm sells food on the farm, 0 otherwise		
Farm Offerings	Lodging	Coded 1 if farm offers on-farm lodging, 0 otherwise		
C	Education	Coded 1 if farm offers on-farm education, 0 otherwise		
	Entertainment	Coded 1 if farm offers on-farm entertainment, 0 otherwise		
	OutdoorRec	Coded 1 if farm offers outdoor recreation, 0 otherwise		
	OffFarmSales	Coded 1 if farm sells food off the farm, 0 otherwise		
	Motivation_Family	Coded 1 if the respondent rated "provide family employment" as very of somewhat important, 0 otherwise		
	Motivation_Revenue	Coded 1 if the respondent rated "increase farm/ranch revenue" as very o somewhat important, 0 otherwise		
Motivations	Motivation_Social	Coded 1 if the respondent rated "social interaction with public" as very or somewhat important, 0 otherwise		
	Motivation_Educate	Coded 1 if the respondent rated "educate public about agriculture" as ver or somewhat important, 0 otherwise		
	Motivation_Goodwill	Coded 1 if the respondent rated "build goodwill in community" as very or somewhat important, 0 otherwise		
	Motivation_DiverseMarkets	Coded 1 if the respondent rated "diversify farm/ranch market channels" as very or somewhat important, 0 otherwise		
	Motivation_DiverseOfferings	Coded 1 if the respondent rated "diversify farm/ranch offerings" as very or somewhat important, 0 otherwise		
	Motivation_Traffic	Coded 1 if the respondent rated "increase traffic to on-farm sales" as very or somewhat important, 0 otherwise		

When designing this study, we referred to methods suggested in Veal's seminal text [42]. Borrowing from the previously reviewed literature and the categories men-

Sustainability **2021**, 13, 13334 5 of 17

tioned above, we present the following research questions, which include sub-questions where noted:

Demographics, Firmographics, and Geographics

Research Question 1. Which demographic variables measured have a significant relationship to agritourism profitability?

Research Question 2. Which firmographic variables measured have a significant relationship to agritourism profitability?

Research Question 3. Which geographic variables measured have a significant relationship to agritourism profitability?

The Farm Experience

Research Question 4. Which types of products or crops offered on the farm have a significant relationship to agritourism profitability?

Research Question 5. Which types of agritourism activities (on-farm sales, lodging, education, entertainment and events, and outdoor recreation) have a significant relationship to agritourism profitability?

Research Question 6. Does offering off-farm sales have a significant relationship to agritourism profitability?

Motivations

Research Question 7. Which operator motivations will have a significant relationship to agritourism profitability?

In the following sections we present our study, offer discussion on what can influence the profitability of agritourism operations, and delve into how both researchers and practitioners can support the viability of healthy communities of agritourism operators.

3.2. Sampling and Data Collection

This study presents the results of an online survey of agritourism owners and operators from across the United States of those operations that hosted visitors on their farms, ranches, or vineyards for experiences and/or product sales. Agritourism operations with on-farm sales such as pick-your-own experiences and farm stands on the property were included in the survey. Farms with direct-to-consumer sales that only took place off-site, such as farmers markets off the farm, were not included in the survey.

Development of the survey instrument integrated three sources: (1) synthesis of related literature (referenced above), (2) qualitative interviews of 23 farms and ranches in 5 US states (Vermont, Oregon, California, Minnesota, and West Virginia) [15], and (3) survey instruments previously applied to related studies used with the permission of authors [2,7,43–46]. The questions measured four types of attributes, building on categories outlined in the literature review: farmer demographic, farm firmographic, and geographic region; product and experience offerings; and motivations. While all variables included in the survey were derived from the sources above, motivation variables were developed mostly from the 23 qualitative interviews. A complete list of the independent variables and their definitions are listed in Table 1. The net income (profit) of agritourism for each respondent is the dependent variable for our analysis; therefore, it is omitted from these tables.

For this study, we asked respondents to select their estimated total farm revenue for 2018, total revenue from agritourism in 2018, and their net income (profit) from agritourism in 2018. Profit (net income) is undeniably difficult to measure accurately. The most reliable method for studies on profitability is simply to ask the respondents about their profitability [47]. Recent studies presenting ways to objectively measure small business 'success' admit that measuring profit is very nuanced [47–49] and does not consider the varied non-financial goals by which many small-business entrepreneurs and agritourism operators are motivated [14,24,29,50,51]. This further emphasizes the need for understanding what factors influence profit so we can better understand agritourism operations' "performance in the short run and the business's strength and ability to thrive in the long run" ([48], p. 257).

Sustainability **2021**, 13, 13334 6 of 17

The research team worked with practitioners within the university-based Cooperative Extension System, State departments of agriculture and tourism, and private agritourism associations to reach out to respondents in each state and region of the United States. The online survey was sent through these networks as a link embedded in an email with an introduction to the study. The research team then used a snowball sampling approach whereby the agritourism operators recruited their peers to complete the survey. A snowball approach allowed for a further expansion of the initial sample. Other sampling methods were considered, particularly a random sample; however, there exists no farm-level listing from which a sample could have been drawn. Due to the sampling method used, we do not have an accurate count of how many responses were solicited. However, we received 1834 complete survey responses. The survey was open for responses from November 2018 to February 2019.

3.3. Data Analysis

Data were scrubbed, with some variables recoded for the regression analysis. In particular, questions on motivations were originally measured on a five-point scale but were recoded into a dichotomous scale. Due to skewed responses on the extremes of our five-point scale, we sought to recategorize the motivation variables into variables of status, i.e., either a particular motivation was present for a farmer or it was not. This dichotomization, while controversial, is accepted as a remedy for cases such as this [52]. For this regression, motivation variables were coded 1 if the respondent answered 4 or 5 (important or very important), 0 if they answered 1, 2 or 3 (not at all important, not very important, neutral).

Given the number of variables being measured, it was imperative we develop a model which considers the potential interdependency of the variables at hand. We conducted a multiple regression analysis, to determine the significant relationships, if any, that existed between profitability and the variables discussed. For this regression, we used IBM SPSS Statistics for Windows, Version 26.0. A multiple regression is a useful analysis tool here, as supported by previous research on agritourism profitability and farm characteristics [44,53]. This method of analysis has also shown its utility in studies interested in the likelihood of particular outcomes (profitability, here) [54]. A restricted nested model was created including only regressors with a T-statistic greater than one in absolute value. Given F-test results comparing the models, the full model below was chosen:

Agritourism Profit = b0 + b1 Education + b2 Female + b3 Age + b4 Gross Farm Income + b5 Annual_Visits + b6 50+MileVisitors + b7 Days_open + b8 Experience + b9 Midwest + b10 Southern + b11 Western + b12 Animals + b13 Crops + b14 Value-added + b15 + Lodging + b16 Education + b17 Entertainment + b18 OutdoorRec + b19 OffFarm-Sales + b20 Motivation_Family + b21 Motivation_Revenue + b22 Motivation_Social + b23 Motivation_Educate + b24 Motivation_Goodwill + b25 Motivation_DiverseMarkets + b26 Motivation_DiverseOfferings + b27 Motivation_Traffic

Table 1 provides the names of key variables as well as definitions of each variable (including units where applicable).

4. Results

The final sample included 1834 farmers, ranchers, and vineyard owner/operators, who welcomed visitors to their operations, from all 50 states. The majority (58%) of respondents were female. The mean age was 55 years, and the average respondent had a total of 16 years of formal education (i.e., a 4-year college degree). The farms were spread across the four regions of the United States (Figure 1), with the greatest portion coming from the Southern region (29%) and the fewest number from the Midwest (21%).

Sustainability **2021**, 13, 13334 7 of 17

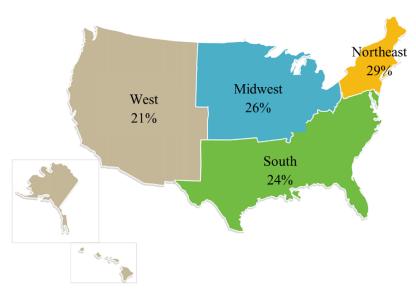


Figure 1. Survey Responses by Region.

The responding farms were likely to offer on-farm sales (77%), produce crops (62%) and offer educational experiences to visitors (55%). Fewer numbers of responding farms offer lodging (19%) and outdoor recreation (27%). When asked about their motivations for offering agritourism experiences, all of the listed motivations were rated as important by a majority of the respondents. Survey respondents were most motivated by social interaction with the public and educating the public about agriculture (with 90% of respondents selecting 'important' or 'very important'), followed by building goodwill in the community (84%) and increasing revenue (84%). Though still important to the majority of respondents, providing family employment (71%), diversifying farm/ranch offerings (72%), and diversifying farm/ranch market channels (73%) were the least important goals indicated.

The results (shown in Table 2) reveal several variables relating significantly to agritourism profitability. Female agritourism ownership is statistically significant with a negative coefficient, meaning that female ownership lends to less profitable agritourism enterprises efforts. Gross farm revenue, percentage of visitors traveling from more than 50 miles away, and years of experience for the operator all have a significant, positive relationship to agritourism profitability. The results indicate that the USDA-defined region [55] where the farm is located is not a significant variable, except in the South, where there is a positive relationship. All else being held equal, agritourism businesses in the South were more profitable. Offering on-farm sales and entertainment both have significant positive impact on profitability, while off-farm sales have a negative impact.

Variable Category	Variable	Mean Value	Coefficient	Standard Error
Farmer Demographics	Education	16.40	-0.03	0.031
	Female	0.58	-0.397 **	0.163
	Age	55.40	-0.001	0.007
	Experience	13.75	0.046 ***	0.006
Farm Firmographics	Gross Farm Revenue	491,060	0.000000381 ***	0
	Annual_Visits	404,200	0.000000000751	0
	50+MileVisitors	35.8	0.008 **	0.003
	Days_open	181	0.001	0.001
Geographic Variables	City distance	32.66	-0.005	0.004
	Midwest	0.21	0.065	0.232
	Southern	0.29	0.46 **	0.215
	Western	0.26	0.219	0.239

Table 2. Regression results.

Sustainability **2021**, 13, 13334 8 of 17

Variable Category	Variable	Mean Value	Coefficient	Standard Error
Farm Offerings	Animals	0.43	-0.228	0.171
	Crops	0.62	0.158	0.17
	Value-added	0.44	0	0.166
	OnFarmSales	0.77	0.643 **	0.257
	Lodging	0.19	-0.169	0.213
	Education	0.55	-0.061	0.172
	Entertainment	0.48	0.628 ***	0.165
	OutdoorRec	0.27	0.085	0.183
	OffFarmSales	0.43	-0.414 **	0.164
Motivations	Motivation_Family	0.78	0.312 *	0.18
	Motivation_Revenue	0.84	1.518 ***	0.33
	Motivation_Social	0.90	0.503 **	0.205
	Motivation_Educate	0.90	-0.392	0.262
	Motivation_Goodwill	0.88	-0.42	0.255
	Motivation_DiverseMarkets	0.73	-0.013	0.212
	Motivation_DiverseOfferings	0.74	0.173	0.207
	Motivation Traffic	0.76	0.247	0.212

Table 2. Cont.

Additionally, three agritourism operator motivation variables are statistically significant all with a positive coefficient. Those who are motivated by providing family employment, increasing farm/ranch revenue and social interactions are, ceteris paribus, more likely to net higher amounts of profit from agritourism. These results are expanded below and discussed, under headings that follow those in Table 2.

5. Discussion

As farms adapt to changing food demands [1] and changes in their rural communities [56], agritourism will continue to be seen as a viable way to add to the revenue and profit potential of farm operations. Travelers will also continue to flock to farms [57] as they seek out activities within the landscapes and cultures of rural areas [9,58]. However, farm operators must be mindful of their farms' characteristics and the variability in potential for profit across agritourism activities. The following sections expand on our results, discussing each of the hypotheses presented in the previous sections.

5.1. Demographics, Firmographics, and Geographics

Demographic characteristics of agritourism entrepreneurs have been widely acknowledged to have an impact on their profitability [16,18]. Our results showed some variables have significant relationships to profitability. However, the following sections detail and discuss answers to each of the research questions.

Research Question 1. Which demographic variables measured have a significant relationship to agritourism profitability?

Our results confirm the findings of previous studies, and show that most, but not all, demographic categories impact agritourism profitability. Additionally, we found no significant correlation between age or education and profitability, which was noted in other studies [17,18]. More research would be needed to truly understand why these variables seem to not be related to profitability. However, first consider family farms in which generations of knowledge is passed down to the operator. It is logical to expect that age and education would have little relationship to profitability in these cases. In other cases, such as farms formed in entrepreneurial environments by first- or second-generation operators, age and education might matter more. However, research has shown that, irrespective of sector, entrepreneurial success has a weak relationship with both age [59] and human capital factors (including education) [60]. Gender, however, was one of the most strongly correlated of all variables.

^{*} *p*-value < 0.10, ** *p*-value < 0.05, *** *p*-value < 0.01.

Sustainability **2021**, 13, 13334 9 of 17

Being female was negatively associated with profitability. With a confidence level of 95%, our results indicate that females are less likely to be profitable with their agritourism efforts. This is consistent with existing literature [16,61–65] and was true across all other demographics (holding constant other variables). Previous research has shown that female agritourism operators as farmers face distinctive challenges from their male counterparts [62,65,66]. The results of this study also show that the motivations of female agritourism operators differ from that of male operators. One possible explanation for this relationship is that female agritourism operators define success differently, not just solely focusing on profit [63,64]. In addition, McGehee et al. ([50], p. 2006) found that women in agritourism were more "focused on 'expense reducing', rather than the 'income-inducing' activities preferred by their male counterparts". Later in this section we discuss these motivations and how they might relate to profitability. More comprehensive research into gender specific issues is needed to adequately understand this phenomenon. As such, issues related to gender, race, and ethnicity of farm ownership and its impact on profitability remain prominent and should be considered when planning future studies.

The only other demographic indicator of profitability among respondents to this study was the number of years of experience the respondent had in agritourism. As expected, those operators with more years' experience in agritourism are more likely to report higher profits, though the correlation is not especially strong. This makes clear that new entrepreneurs have a chance to succeed in agritourism, despite possibly being in competition with established operators or multi-generational family operations.

Research Question 2. Which firmographic variables measured have a significant relationship to agritourism profitability?

Previous studies have indicated that firmographic characteristics are important determinants of profitability in agritourism. Our results did not conform with this research and shows that firmographic characteristics were not good determinants of agritourism profitability. The first variable of note, Gross Farm Revenue, was highly significant to a farm's profitability in agritourism. This, however, does not leave much room for discussion as the relationship was not strong enough for us to consider it practically significant. As posited by prominent scholars in econometrics (e.g., [67]), a variable may be statistically significant (due to a large t statistic) while having a coefficient with diminutitive magnitude and, therefore, of little economic or practical significance. What this does show, however, is that a successful farm enterprise (success in selling crops or value-added products) is not undeniably a successful agritourism enterprise (selling activities and experiences). These enterprises require different sets of skills.

Additionally, our data did not indicate a significant relationship between farm size and profitability. However, according to previous research, farms with larger scales of operations have shown to be more profitable [16,18]. This research would imply that smaller agritourism operations might need to consider strategies that are different from their larger counterparts. Our results suggest that farm size does not matter. Despite our results indicating minimal effect of farm size, it would still be wise for agritourism operations to build networks and collaborate as this has been shown to benefit tourism development more broadly [68–70]. Clustering with other agritourism operations or complementary tourism assets can help to increase scope and scale sufficiently to increase and meet consumer demands.

Our data did not indicate any significant relationships between profitability and the number of visits annually or the number of days open. A possible explanation for this is that many farms remain open longer and receive more visitors, without charging each visitor for their experience. The opposite can also be true (a farm may be open fewer hours but could charge each visitor). Additionally, while significant, the relationship between a farm's percentage of visitors from 50 or more miles away has minimal impact on their profitability. In regional studies of agritourism in the United States, researchers have found farms' proximity to urban population centers has minimal effect on profitability. This study was conducted at a time when many agritourism enterprises have decades of experience

Sustainability **2021**, 13, 13334 10 of 17

(the mean of our sample is almost 14 years' experience). It is possible that operators are recognizing their inherent disadvantages (distance from cities, number of days open) and have implemented strategies to manage their competitiveness with farms located in areas with longer travel seasons or with those that may be within more populated regions.

Research Question 3. Which geographic variables measured have a significant relationship to agritourism profitability?

Spatial factors, though, have long been established as a large part of tourism mobilities and the demand for various destinations [71], particularly within agritourism [72]. Thus, it is not surprising that geography impacts the success of agritourism efforts and their potential for profitability. However, as shown in previous studies [16], a farm's location relative to a city with a population of 50,000 or more people, was not correlated to profit in this study. Our analysis uncovered a significant, but relatively weak, positive relationship between higher profitability and the number of visitors that originated 50 miles or more away from the destination farm. This has been seen in other forms of tourism [73] and suggests that agritourists with more distant origins might be inclined to spend more money on agritourism activities.

Agritourism operators that are able to attract visitors from farther distances appear to have higher profitability than those with primarily local audiences. Presumably, these audiences are spending money on products and experiences more enthusiastically than would a regular, local customer. This emphasizes agritourism's role, as in other forms of tourism, as a driver of economic export that has also been shown in studies previous to this one [10,74,75]. There was also a strong and significant correlation to a farm's location in one of the four US regions and profitability; respondents located in the Southern states were more likely to be profitable. Our analysis held constant the number of days open, which accounts for possible regional differences in seasonality. As this study and others show, this relationship could be due to the characteristics of farms or farm owners in the South, or the result of farmer motivations. Another plausible explanation of farms being more profitable in the US South is the varying profitability of specific agritourism activities, the popularity of which differs from region to region within the United States. A more thorough analysis into regional differences in the US is needed to better understand why respondents to this survey in the South were more likely to be profitable.

5.2. The Farm Experience

As seen in prior studies [16–18], we find total farm revenue has positive impacts on agritourism profitability. This survey and the succeeding analysis sought to also examine the sources of this revenue and how that might relate to a farm's profitability. While most agritourism activities included in the survey did not have a significant relationship to higher profits, a farm's profit and offering on-farm direct sales and events and entertainment appeared to be significantly related, relative to off-farm offerings. There were similarly strong positive correlations between offering these types of activities and profits from agritourism.

Research Question 4. Which types of products or crops offered on the farm have a significant relationship to agritourism profitability?

As our results show, the crops or products offered on a farm do not have a significant relationship to the profitability of the farm's agritourism enterprises. The variety of farms across the United States, whether it is a vineyard in the South or an aquaculture experience in the West, are equally positioned to achieve profitability in agritourism. This is likely due to the various regions adapting their agritourism experiences to fit the agricultural identities of their regions, based on seasonality, traditional crops, traditional rural lifestyles. It has been noted that entrepreneurship in agritourism is associated less with the type of farm, and more with adopting the activities that meet the farm's or farmers' needs best [76]. Where differing potential of farms' and ranches' profitability emerge, however, is in the type(s) of agritourism activity they offer to visitors.

Sustainability **2021**, 13, 13334 11 of 17

Research Question 5. Which types of agritourism activities (on-farm sales, lodging, education, entertainment and events, and outdoor recreation) have a significant relationship to agritourism profitability?

The results highlighted in the previous section show the type of activity offered has a significant impact on the profitability of an agritourism operation. According to our analysis, those farms that offer on-farm direct sales or events and entertainment for visitors are more likely to be profitable. What is not clear, and what this study is not able to explore, is why these activities are more likely to induce profitability, nor has any research previously sought to answer this question. Anecdotally, we can consider that both onfarm direct sales, and events and entertainment involve the widespread marketing of the on-farm experience, with the goal of each to attract as many paid visitors as possible.

In contrast, those activities showing no significant relationship to profitability (lodging, educational experiences, and outdoor recreation) have more smaller market audiences and might have stricter inherent limits on their participation capacity. Lodging, in particular, has a negative, yet insignificant relationship to profitability. This relationship is likely due to inherent nuances of marketing and managing lodging experiences in rural areas [77]. The lack of significance observed may be due to wide differences between operational efficiencies associated with lodging [78]. More research is needed to better understand this result. Other insights from our results, such as the negative relationship of engaging in off-farm sales to profitability, however, are quite easier to explain.

Research Question 6. Does offering off-farm sales have a significant relationship to agritourism profitability?

The results indicated that a farm engaging with off-farm sales has a negative impact on agritourism profitability. As previously reviewed, Tew and Barbieri [7] suggest that agritourism can be a marketing tool for the farm's product, that perhaps revenues or profits from agritourism may not be direct. This finding is worth additional exploration and does not preclude the importance of marketing a farm or its products through off-farm sales. It may be true that off-farm sales can negatively impact agritourism profitability because they occur off the farm, starving the farm of resources such as staff, while our definition of agritourism in this survey was limited to on-farm sales and experiences. When viewed in combination with other factors or even as a marketing tool, off-farm sales may be more valuable than this model reveals. This is worth considering, though, as tourism practitioners seek to engage with the farms that surround their communities. The results indicate that, in order to support the sustainability of agritourism in their communities, tourism development and marketing professionals should explore ways to not only encourage the participation of tourists in farmers' markets and locally-inclined restaurants, but also in activities on the farms themselves.

Due to farm characteristics' variable associations with profitability, the present study further confirms the importance of the adoption of operation diversification strategies towards profitability for all types of agritourism operators. Additionally, collaborating with other agritourism operations or with entities in complementary sectors as a rural network [68,69] might enhance their potential viability. The presence of the farm offering experiences discussed above can help inform decisions made with agritourism efforts, closures, or expansions. However, profitability is not always determined by the farmers' or farms' characteristics. Our results indicate the motivations behind engaging in agritourism can influence an operator's profitability.

5.3. Motivations

Research Question 7. Which operator motivations will have a significant relationship to agritourism profitability?

Research has previously indicated that a wide variety of motivations drive farm operators to engage in agritourism [7,14,24,37,44]. This study sought to examine the relationships of these motivations to profitability. The results briefly described in the previous sections

Sustainability **2021**, 13, 13334 12 of 17

indicated that an operators' motivations can have an effect on the profitability of their agritourism enterprise. Our survey asked about a variety of economic and non-economic motivations of farmers for participating in agritourism, yet only a few had a significant relationship to profitability. The most significant relationship we uncovered was that between profitability and the farmers' motivations to increase their farms' revenue. This is a prevalent motivator for farms' participation in agritourism [24]. The present study shows that the more important increasing revenue was to the farmer, the more likely they were to be profitable. This relationship was not only significant (at the 99% confidence level) but was also the but also has the largest value coefficient we observed in this study. The lowest, but still significant, coefficient value within motivations we found was between profitability and a farmers' motivation to provide family employment. Among those respondents to our survey, those farmers that were motivated by providing employment for their family were more likely to be profitable. This indicates family operations that are interested in maintaining family involvement in the business are more likely to achieve profitability. This motivation has more to do with the success of the family than it does the success of the business, if it were to exist beyond the family.

The model employed in this study did not adequately explore the variances in the motivations of different genders. Previous research suggests that the motivations and goals that inspire agritourism entrepreneurs of different genders are similar [50,79]. The *meanings* behind these motivations, however, were defined differently by male and female respondents [50].

The motivations we explored, however, do not always focus on the farm, its owners, and its employees (or family). Social interactions are an integral part of the agritourism experience [80]. Often, 81% of the time in this survey, these social interactions can be a motivator for farm operators offering agritourism experiences on their farm. Being motivated by the social interactions inherent in agritourism was strongly, positively correlated to profitability. While this survey did not differentiate between host-tourist interactions and that between hosts, as a professional network, the relationship has been supported in previously published research. This social interaction, not just between the visitors and farmers, but between agritourism operators themselves is a key feature of successful agritourism efforts [69]. Therefore, it is imperative that agritourism entrepreneurs and tourism planning professionals alike design experiences that encourage social interactions between agritourism entrepreneurs. Such interactions can achieve the dual objectives of sharing best practices among entrepreneurs as well as fostering collaborative partnerships between businesses.

6. Conclusions

In conclusion, this study found relationships between variables such as activity type and operator motivations, which supports their inclusion as some of the many variables influencing farm profitability [20].

6.1. Theoretical Implications

This paper is inspired by the interdisciplinary research around sustainable rural development and inspires more research in that area. Creating sustainable rural communities requires many factors but several key characteristics must be in place: a relative degree of economic diversification, a robust small business sector, and a place identity, among many other things. Understanding the ways rural communities can diversify and spur small business activity is critical for the health and wellbeing of our rural communities. Agritourism has the ability to enhance these things, the placemaking of rural spaces, improve the economic diversity of the local farming sector and develop individual community assets [7,23,46]. To ensure these benefits are realized, the financial viability of individual agritourism operations is imperative and we must seek to understand what impacts this viability.

Sustainability **2021**, 13, 13334 13 of 17

While this study is not conclusive on what will guarantee agritourism profitability, its contributions progress scholarship towards a deeper understanding of this nuanced sector. Prior to this one, studies on agritourism in the United States had only been undertaken at the regional level. By looking at agritourism in the United States from a national view, we can better contrast the evolution of the phenomenon with other places around the globe.

The individual results of this study also contribute to the diligent work of other agritourism scholars. Especially those such as operators' motivation's relationship to profitability and the agritourism activities that might, or might not, be associated with profitability, as reviewed in the previous discussion. As we conclude, future studies should continue to consider the variables included in the discussion, as well as other factors, to develop a comprehensive view of the relationships between agritourism operators, enterprise profitability, and the impacts on rural tourism. There are plenty of areas to continue this conversation, particularly among extension and outreach professionals.

6.2. Practical Implications

For communities and regions that offer small business management training and development, understanding the unique needs of potential agritourism operators could allow for more successful training programs and ultimately greater farm profitability. There is substantive research on the motivations of small business owners and entrepreneurs, as discussed earlier in this paper. Understanding the types of motivations that result in profitability of farms could help focus rural tourism and community development efforts. For example, university Extension programs could customize outreach efforts towards rural entrepreneurs interested in tourism and increasing social interaction to facilitate the types of agritourism operations that might enhance these areas. Small business development efforts often tap into individual motivation(s) and rural small business development should consider motivating drivers in their training and mentoring efforts. Practitioners may even create and suggest innovative ways to monetize these non-economic motivations, should that align with the individual operators' goals.

While the positive relationship of an entrepreneur's years of experience in agritourism with greater profitability is not surprising, this finding illustrates the importance for policymakers and rural development professionals to build networks of support and knowledge with experienced entrepreneurs. As agritourism operators gain additional experience, they, as innovators, consider and test new ideas to diversify agritourism operations [29]. As such, the influence of different agritourism activities on profitability underscores the importance of agritourism diversification and innovation. Operators might use this information to modify alterable characteristics and/or their product/experience mix in order to enhance profitability. More research could help minimize these risks.

Agritourism may also provide for a wide set of opportunities for female entrepreneurs. The gender-related results we shared highlight opportunities for rural policymakers and community development professionals to provide outreach and training for women and underserved communities to support a diverse group of rural tourism entrepreneurs.

6.3. Limitations and Future Research

Due to this study's limitations, there are also opportunities for researchers to further understand these complex relationships. The negative relationship between female-owned agritourism operations and profitability calls for additional research and exploration therein and of the variation in types of operations. While agriculture has historically been a male-dominated field, more women today are involved in farming operations [81,82]. Thus, it demands more attention. Specifically, as an example, how large are the differences in profitability? Gender can also be fluid, which calls for more research into success in agritourism for gender identities outside of the binary male-female. Additionally, the variables used in this study could be explored further, for example, "distance to a city of 50,000 or more". How much does distance and time from a city matter in the

Sustainability **2021**, 13, 13334 14 of 17

agritourism experience, as opposed prominence of ecologically natural/agrarian aspects of an experience sought by many participants of agritourism?

Future surveys should also explore questions related to agritourism entrepreneur motivations related to environmental sustainability, among many other motivations. Samples representative of all states in the United States, as well as other countries would also be a benefit to studies in the future. Both academics and practitioners could benefit from a more detailed view of, as an example, which forms of events and entertainment are most profitable, and how this varies across the aforementioned geographies. The snowball sampling approach used in this study has strengths as it can tap into social and professional networks that may otherwise be difficult to access. However, reliance on individuals and organizations for sharing survey information adds a layer of uncertainty to survey distribution. Additionally, this approach may result in an unbalanced sample with varying levels of representation across different geographics and demographics.

Our understanding of agritourism would also benefit from testing additional modelling approaches, as well as testing interaction effects of other variables of interest. However, the research approach used in this paper provides a foundation for understanding important variables impacting agritourism profitability in the United States. Profitability of any firm is closely related to revenue generation, so it is not surprising that we find a positive relationship between revenue and agritourism profitability. This raises questions about which specific types of farms might be more profitable, i.e., do the types of crops grown on a farm matter for agritourism profitability? These questions should be explored.

This study measured relationships of variables to profitability. As mentioned previously, profitability does not tell the full story of the success of a business nor of an economy [47,48]. Understanding the relationships between farm characteristics and 'success' (both subjective and objective measures) could benefit scholarship. Further, there is still room for more theoretical applications within research on agritourism. How do profitable agritourism enterprises affect the social fabrics of rural communities? How do rural identities shift with the success of tourism within its communities? These and many other questions are outside the scope of this study but should not be ignored. Even with these limitations, this was the first US national agritourism survey of its scale and it has resulted in important information for researchers, agritourism operators, rural communities, and policymakers.

Author Contributions: All authors were involved in the conceptualization, methodology, and analysis related to this article. The original outline and draft were initially prepared by D.C.; substantial revisions and additions were made by C.R.H. Major edits and additions were made by L.C., L.D., R.D.L. and C.S. All authors assisted with reviewing and editing. All authors have read and agreed to the published version of the manuscript.

Funding: This research was funded by Critical Agriculture Research and Extension (CARE) grant no. VTN32556 from the USDA National Institute of Food and Agriculture.

Institutional Review Board Statement: Ethical review and approval were waived for this study, due to US Federal Exemption Category 2: "Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior, unless: (a) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (b) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation".

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Data and supporting reports can be found at https://www.uvm.edu/vtrc/agritourism-survey accessed on 7 July 2021.

Conflicts of Interest: The authors declare no conflict of interest.

Sustainability **2021**, 13, 13334 15 of 17

References

1. Kim, S.; Lee, S.K.; Lee, D.; Jeong, J.; Moon, J. The effect of agritourism experience on consumers' future food purchase patterns. *Tour. Manag.* **2019**, *70*, 144–152. [CrossRef]

- 2. Chase, L.C.; Stewart, M.; Schilling, B.; Smith, R.; Walk, M. Agritourism: A conceptual framework for industry analysis. *J. Agric. Food Syst. Community Dev.* **2018**, *8*, 13–19. [CrossRef]
- 3. Lamie, R.D.; Chase, L.; Chiodo, E.; Dickes, L.; Flanigan, S.; Schmidt, C.; Streifeneder, T. Agritourism around the globe: Definitions, authenticity, and potential controversy. *J. Agric. Food Syst. Community Dev.* **2021**, *10*, 1–5. [CrossRef]
- 4. Phillip, S.; Hunter, C.; Blackstock, K. A typology for defining agritourism. *Tour. Manag.* 2010, 31, 754–758. [CrossRef]
- 5. Sharpley, R.; Sharpley, J. Rural Tourism: An Introduction; International Thomson Business Press: London, UK, 1997.
- 6. Sznajder, M.; Przezborska, L.; Scrimgeour, F. Agritourism; CAB International: Wallingford, UK, 2009.
- 7. Tew, C.; Barbieri, C. The perceived benefits of agritourism: The provider's perspective. *Tour. Manag.* 2012, 33, 215–224. [CrossRef]
- 8. Ellis, A.; Park, E.; Kim, S.; Yeoman, I. What is food tourism? *Tour. Manag.* **2018**, *68*, 250–263. [CrossRef]
- 9. Trubek, A.B.; Lemasson, J.; Jordan, H.L. *Produits du Terrior: Similarities and Differences between France, Québec and Vermont. Opportunities for Agriculture Working Paper Series, 1*(2); Center for Rural Studies/Food Systems Research Collaborative, University of Vermont: Burlington, VT, USA, 2010.
- 10. Peihong, Z.; Yali, Z. Global Agritourism Market Report, History and Forecast 2014–2025, Breakdown Data by Companies, Key Regions, Types and Applications; QY Research Group: Beijing, China, 2019.
- 11. Veal, A.J. Research Methods for Leisure and Tourism, 5th ed.; Pearson: London, UK, 2017.
- 12. United States Department of Agriculture National Agricultural Statistics Service, 2017 Census of Agriculture: State and County Data. 2019. Available online: https://www.nass.usda.gov/Publications/AgCensus/2017/index.php (accessed on 13 May 2021).
- United Nations. Gastronomy Key to Supporting Hard-Hit Tourism Industry. United Nations Western Europe. 2020. Available online: https://unric.org/en/gastronomy-key-to-supporting-hard-hit-tourism-industry/ (accessed on 13 May 2021).
- 14. Nickerson, N.; Black, R.; McCool, S. Agritourism: Motivations behind farm/ranch business diversification. *J. Travel Res.* **2001**, 40, 19–26. [CrossRef]
- 15. Quella, L.; Chase, L.; Conner, D.; Reynolds, T.; Wang, W.; Singh-Knights, D. Visitors and values: A qualitative analysis of agritourism operator motivations across the U.S. J. Agric. Food Syst. Community Dev. 2021, 10, 1–15. [CrossRef]
- 16. Barbieri, C.; Mshenga, P.M. The role of the firm and owner characteristics on the performance of agritourism farms. *Sociol. Rural.* **2008**, *48*, 166–183. [CrossRef]
- 17. Khanal, A.R.; Mishra, A.K. Agritourism and off-farm work: Survival strategies for small farms. *Agric. Econ.* **2014**, 45 (Suppl. 1), 65–76. [CrossRef]
- 18. Lucha, C.; Ferreira, G.; Walker, M.; Groover, G. Profitability of Virginia's Agritourism Industry: A Regression Analysis. *Agric. Resour. Econ. Rev.* **2016**, 45, 173–207. [CrossRef]
- 19. Schilling, B.J.; Attavanich, W.; Jin, Y. Does agritourism enhance farm profitability? J. Agric. Resour. Econ. 2014, 39, 69–87.
- 20. Tey, Y.S.; Brindal, M. Factors influencing farm profitability. In *Sustainable Agriculture Reviews*; Lichtfouse, E., Ed.; Springer: Berlin/Heidelberg, Germany, 2015; pp. 235–255.
- 21. Gartner, W.C. A perspective on rural tourism development. J. Reg. Anal. Policy 2005, 35, 33–42.
- 22. Strzelecka, M.; Boley, B.B.; Woosnam, K.M. Place attachment and empowerment: Do residents need to be attached to be empowered? *Ann. Tour. Res.* **2017**, *66*, 61–73. [CrossRef]
- 23. Bowen, R.L.; Cox, L.J.; Fox, M. The interface between tourism and agriculture. J. Tour. Stud. 1991, 2, 43–54.
- 24. McGehee, N.G.; Kim, K. Motivation for agri-tourism entrepreneurship. J. Travel Res. 2004, 43, 161–170. [CrossRef]
- 25. Kloppenburg, J., Jr.; Lezberg, S.; De Master, K.; Stevenson, G.; Hendrickson, J. Tasting food, tasting sustainability: Defining the attributes of an alternative food system with competent, ordinary people. *Hum. Organ.* **2000**, *59*, 177–186. [CrossRef]
- 26. Martinez, S. Varied interests drive growing popularity of local foods. *Amber Waves* **2010**, *8*, 10–17. Available online: https://www.ers.usda.gov/amber-waves/2010/december/varied-interests-drive-growing-popularity-of-localfoods/ (accessed on 15 June 2021).
- 27. Chase, L.C.; Grubinger, V. Food, Farms, and Community: Exploring Food Systems; University of New Hampshire Press: Amherst, MA, USA, 2014.
- 28. Gretzel, U.; Jamal, T. Conceptualizing the creative tourist class: Technology, mobility, and tourism experiences. *Tour. Anal.* **2009**, 14, 471–481. [CrossRef]
- 29. Dickes, L.; Arogundade, T.; Lamie, D. Rural innovation and entrepreneurial motivation: The case of agritourism with new and beginning farmer. *Int. J. Entrep.* **2020**, 24, 1–12.
- 30. LaPan, C.; Barbieri, C. The role of agritourism in heritage preservation. Curr. Issues Tour. 2014, 17, 666–673. [CrossRef]
- 31. Rilla, E.L.; George, H. Agritourism and Nature Tourism in California; University of California Press: Berkley, CA, USA, 2011.
- 32. Stanovčić, T.; Peković, S.; Vukčević, J.; Perović, D. Going entrepreneurial: Agro-tourism and rural development in northern Montenegro. *Bus. Syst. Res. J.* **2018**, *9*, 107–117. [CrossRef]
- 33. Bhatta, K.; Ohe, Y. Farmers' willingness to establish community-based agritourism: Evidence from Phikuri village, Nepal. *Int. J. Tour. Sci.* **2019**, *19*, 128–144. [CrossRef]
- 34. Bagi, F.S.; Reeder, R.J. Factors affecting farmer participation in agritourism. Agric. Resour. Econ. Rev. 2006, 41, 189–199. [CrossRef]

Sustainability **2021**, 13, 13334 16 of 17

35. Khanal, A.R.; Honey, U.; Omobitan, O. Diversification through 'fun in the farm': Analyzing structural factors affecting agritourism in Tennessee. *Int. Food Agribus. Manag. Rev.* **2020**, 23, 105–120. [CrossRef]

- 36. Van Sandt, A.; Low, S.A.; Thilmany, D. Exploring Regional Patterns of Agritourism in the US: What's Driving Clusters of Enterprises? *Agric. Resour. Econ. Rev.* **2018**, 47, 592–609. [CrossRef]
- 37. Ollenburg, C.; Buckley, R. Stated economic and social motivations of farm tourism operators. *J. Travel Res.* **2007**, 45, 444–452. [CrossRef]
- 38. Cohen, E. Souvenir. In Encyclopedia of Tourism; Jafari, J., Ed.; Routledge: London, UK, 2000; pp. 547–548.
- 39. Masset, J.; Decrop, A. Meanings of Tourist Souvenirs: From the Holiday Experience to Everyday Life. *J. Travel Res.* **2021**, *60*, 718–734. [CrossRef]
- 40. Fernández, M.A.; Becerra, R. An analysis of Spanish hotel efficiency. Cornell Hosp. Q. 2015, 56, 248–257. [CrossRef]
- 41. Nusair, K.; Hua, N. Comparative assessment of structural equation modeling and multiple regression research methodologies: E-commerce context. *Tour. Manag.* **2010**, *31*, 314–324. [CrossRef]
- 42. MacCallum, R.C.; Zhang, S.; Preacher, K.J.; Rucker, D.D. On the practice of dichotomization of quantitative variables. *Psychol Methods* **2002**, *7*, 19–40. [CrossRef]
- 43. Barbieri, C. An activity-based classification of agritourists. In Proceedings of the Tourism and the New Global Economy: 45th Annual International Conference of Travel and Tourism Research Association, Brugge, Belgium, 18–20 June 2104.
- 44. Barbieri, C.; Mahoney, E. Why is diversification an attractive farm adjustment strategy? Insights from Texas farmers and ranchers. *J. Rural Stud.* **2009**, *25*, 58–66. [CrossRef]
- 45. Gaede, D.; Leff, P.; Hardesty, S.; Valentine, M.; Sullins, M.; Van Sandt, A. Influences Affecting Agritourism Success in the Western US. 2016. Available online: http://sfp.ucdavis.edu/files/241236.pdf (accessed on 15 June 2021).
- 46. Schilling, B.J.; Marxen, L.J.; Heinrich, H.H.; Brooks, F.J. *The Opportunity for Agritourism Development in New Jersey (Report No.* 1325-2016-103592); Food Policy Institute, Rutgers: New Brunswick, NJ, USA, 2006. Available online: https://ageconsearch.umn.edu/record/151894/files/Agritourism%20Report_%20NJDA%20Final.pdf (accessed on 13 May 2021).
- 47. de Mel, S.; McKenzie, D.J.; Woodruff, C. Measuring microenterprise profits: Must we ask how the sausage is made? *J. Dev. Econ.* **2009**, *88*, 19–31. [CrossRef]
- 48. Haber, S.; Reichel, A. Identifying performance measures of small ventures—The case of the tourism industry. *J. Small Bus. Manag.* **2005**, 43, 257–286. [CrossRef]
- 49. Wood, E.H. An analysis of the predictors of business performance in small tourism and hospitality firms. *Int. J. Entrep. Innov.* **2002**, *3*, 201–210. [CrossRef]
- 50. McGehee, N.G.; Kim, K.; Jennings, G.R. Gender and motivation for agri-tourism entrepreneurship. *Tour. Manag.* **2007**, *28*, 280–289. [CrossRef]
- 51. Barbieri, C.; Tew, C. Perceived impact of agritourism on farm economic standing, sales and profits. In Proceedings of the 2010 Travel and Tourism Research Association Conference, San Antonio, TX, USA, 20–22 June 2010; Volume 34.
- 52. Jens, M. Unger, Andreas Rauch, Michael Frese, Nina Rosenbusch. Human capital and entrepreneurial success: A meta-analytical review. *J. Bus. Ventur.* **2011**, *26*, 341–358.
- 53. Choo, H.; Park, D.B. The role of agritourism farms' characteristics on the performance: A case study of agritourism farm in South Korea. *Int. J. Hosp. Tour. Adm.* **2020**. [CrossRef]
- 54. Amanor-Boadu, V. Diversification decisions in agriculture: The case of agritourism in Kansas. *Int. Food Agribus. Manag. Rev.* **2013**, 16, 57–74.
- 55. Regions: USDA ARS. USDA ARS. Available online: https://www.ars.usda.gov/northeast-area/beltsville-md-bhnrc/beltsville-human-nutrition-research-center/docs/regions (accessed on 26 April 2021).
- 56. Wu, T. Agriculture tourism and the transformation of rural countryside. Tour. Geogr. 2018, 20, 354–357.
- 57. Fortune Business Insights. Agritourism Market Size, Growth, Share | Global Industry Analysis [2027]. Fortune Business Insights. 2020. Available online: https://www.fortunebusinessinsights.com/agritourism-market-103297 (accessed on 24 July 2021).
- 58. Barbieri, C. Assessing the sustainability of agritourism in the US: A comparison between agritourism and other farm entrepreneurial ventures. *J. Sustain. Tour.* **2013**, 21, 252–270. [CrossRef]
- 59. Sexton, D.L.; Bowman-Upton, N. Female and male entrepreneurs: Psychological characteristics and their role in gender-related discrimination. *J. Bus. Ventur.* **1990**, *5*, 29–36. [CrossRef]
- 60. Rosa, P.; Carter, S.; Hamilton, D. Gender as a determinant of small business performance: Insights from a British study. *Small Bus. Econ.* **1996**, *8*, 463–478. [CrossRef]
- 61. Savage, A.; Barbieri, C.E.; Jakes, S.S.; Morais, D.B. *Success of Women in Agritourism: She Will Get What She Wants*; NC State Extension, College of Natural Resources, North Carolina State University: Raleigh, NC, USA, 2018.
- 62. Savage, A.E.; Barbieri, C.; Jakes, S. Cultivating success: Personal, family and societal attributes affecting women in agritourism. *J. Sustain. Tour.* **2020**, 1–21. [CrossRef]
- 63. Schmidt, C.; Goetz, S.J.; Tian, Z. Female farmers in the United States: Research needs and policy questions. *Food Policy* **2021**, *101*, 102039. [CrossRef]
- 64. Wright, W.; Annes, A. Farm women and agritourism: Representing a new rurality. Sociol. Rural. 2014, 54, 477–499. [CrossRef]
- 65. Barbieri, C.; Sotomayor, S.; Aguilar, F.X. Perceived Benefits of Agricultural Lands Offering Agritourism. *Tour. Plan. Dev.* **2019**, *16*, 43–60. [CrossRef]

Sustainability **2021**, 13, 13334 17 of 17

66. Halim, M.F.; Barbieri, C.; Morais, D.B.; Jakes, S.; Seekamp, E. Beyond economic earnings: The holistic meaning of success for women in agritourism. *Sustainability* **2020**, *12*, 4907. [CrossRef]

- 67. Schilling, B.J.; Sullivan, K.P.; Komar, S.J. Examining the Economic Benefits of Agritourism: The Case of New Jersey. *J. Agric. Food Syst. Community Dev.* **2012**, *3*, 199–214. [CrossRef]
- 68. Ammirato, S.; Felicetti, A.M. The potential of agritourism in revitalizing rural communities: Some empirical results. In *Collaborative Systems for Reindustrialization*. *PRO-VE* 2013; Camarinha-Matos, L.M., Scherer, R.J., Eds.; IFIP Advances in Information and Communication Technology 2013, 408; Springer: Berlin/Heidelberg, Germany, 2013.
- 69. Li, J.; Barbieri, C. Demystifying members' social capital and networks within an agritourism association: A social network analysis. *Tour. Hosp.* **2020**, *1*, 41–58. [CrossRef]
- 70. Jamal, T.; Getz, D. Collaboration theory and community tourism planning. Ann. Tour. Res. 1995, 22, 186–204. [CrossRef]
- 71. Pearce, D.G. Towards a geography of tourism. Ann. Tour. Res. 1979, 6, 245–272. [CrossRef]
- 72. Gao, J.; Barbieri, C.; Valdivia, C. Agricultural landscape preferences: Implications for agritourism development. *J. Travel Res.* **2014**, *53*, 366–379. [CrossRef]
- 73. Nyaupane, G.P.; Graefe, A.R. Travel distance: A tool for nature-based tourism market segmentation. *J. Travel Tour. Mark.* **2008**, 259, 355–366. [CrossRef]
- 74. Wang, Y.; Yu, Q.; Fesenmaier, D.R. Defining the virtual tourist community: Implications for tourism marketing. *Tour. Manag.* **2002**, 23, 407–417. [CrossRef]
- 75. Pato, L.; Kastenholz, E. Marketing of rural tourism—A study based on rural tourism lodgings in Portugal. *J. Place Manag. Dev.* **2017**, *10*, 121–139. [CrossRef]
- 76. Zhao, H.; O'Connor, G.; Wu, J.; Lumpkin, G.T. Age and entrepreneurial career success: A review and a meta-analysis. *J. Bus. Ventur.* **2021**, *36*, 106007. [CrossRef]
- 77. Becot, F.; Conner, D.; Kolodinsky, J. Where do agri-food entrepreneurs learn their job and are there skills they wished they had learned? *Int. J. Entrep. Innov.* **2015**, *16*, 207–215. [CrossRef]
- 78. USDA National Agricultural Statistics Service. NASS—Quick Stats. USDA National Agricultural Statistics Service. 2017. Available online: https://data.nal.usda.gov/dataset/nass-quick-stats (accessed on 18 July 2021).
- 79. Chiappe, M.B.; Butler Flora, C. Gendered elements of the alternative agriculture paradigm. *Rural Sociol.* **1998**, *63*, 372–393. [CrossRef]
- 80. Choo, H.; Petrick, J.F. Social interactions and intentions to revisit for agritourism service encounters. *Tour. Manag.* **2014**, *40*, 372–381. [CrossRef]
- 81. Sachs, C.; Barbercheck, M.; Brasier, K.; Kiernan, N.; Terman, A. A New Crop: Women Farmers in a Changing Agriculture. In *The Rise of Women Farmers and Sustainable Agriculture*; University of Iowa Press: Iowa City, IA, USA, 2016; pp. 1–29.
- 82. Pettersson, K.; Cassel, S.H. Women tourism entrepreneurs: Doing gender on farms in Sweden. *Gend. Manag. Int. J.* **2014**, 29, 487–504. [CrossRef]