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The Role of Push and Pull Motivations on Satisfaction and Consumer Loyalty to Agricultural Fairs

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Abstract: The primary objective of this study is to examine the role of push and pull factors in determining consumer trip satisfaction and loyalty to agricultural fairs. We use a modified version of Yoon and Uysal’s causal model, initially proposed to evaluate consumers’ leisure behaviors. In particular, we utilize an exploratory factor analysis approach to identify latent constructs and a structural equation model to assess the impact of consumers’ internal desires for leisure activities (push motivation) and fair attributes (pull motivation) on trip satisfaction and loyalty. Consistent with the existing literature, the structural equation model results show that push and pull motivations play a crucial role in determining visitor satisfaction from attending an agricultural fair. Moreover, both push and pull motivations significantly affect visitor’s loyalty directly and indirectly through their impact on trip satisfaction.

Keywords: agricultural fairs; travel motivations; push and pull factors; trip satisfaction; loyalty

1. Introduction

Agricultural fairs have historically played a critical role in rural economic development by providing a meeting place for trading agricultural products, procuring farm supplies, learning new and innovative farming techniques, and offering a range of recreational services [1–11]. However, advancements in agricultural production and distribution systems, rapid urbanization, innovations in information technology, and a decreasing share of the farm sector in the U.S. economy have significantly diminished the traditional role of agricultural fairs [12–14]. In particular, these changes have transformed the “customer base” of fairs from a primarily rural farming population to an urban and suburban populace mostly unfamiliar with agricultural practices and farm operations [15–17]. As a result, the role of fairs as marketplaces for trading farm products, sourcing farm supplies, and acquiring innovative farming knowledge has been significantly reduced [7,8,14,18].

Despite these structural and demographic changes, agricultural fairs attract many visitors and provide a central venue for promoting agriculture [16]. Recent estimates indicate that about 3500 state and county-level agricultural fairs attract more than 125 million visitors annually, where they can meet, interact, and learn about domestic agriculture in general and its direct impact on the U.S. food supply chain in particular [7,14,19]. However, intense competition from other special event organizers challenges agricultural fairs’ long-term viability [7,20]. To survive in this increasingly competitive business environment, fair managers need to understand their customer needs better, offer a mix of activities that meet or exceed customer expectations and enhance their motivation to attend the events.

Push and pull motivations play a critical role in determining recreational trip decisions. Push motivation “... is a state of need, a condition that exerts a ‘push’ on the individual towards certain types of action that are seen as likely to bring satisfaction” [21–23]. Thus, push motivation attempts to quantify an individual’s internal desire or emotional need for a vacation or a break from routine. On the other hand, pull motivations reflects the level of attractiveness of a special event or holiday. Both push and pull factors play critical roles...
in motivating consumers to seek and participate in leisure activities. Motivation precedes satisfaction in consumer decision processes and is expected to influence consumer behavior (loyalty) through its causal impact on satisfaction [24,25].

Crompton and Mackay (1997) identify three reasons for developing a better understanding of consumer motives for purchasing goods and services, such as trips to agricultural fairs [26]. First, a better understanding of consumer motives provides a sound basis for redesigning fair offerings to match consumer expectations. Second, since motives are closely associated with satisfaction, fairs capable of offering products matching visitor expectations are likely to optimize the consumer satisfaction and increase customer loyalty. As a result, these fairs are likely to receive many repeat customers, gain a competitive advantage, and enhance long-term viability. Third, a thorough understanding of consumer motives provides a better grasp of the consumer decision-making process, which is essential for identifying the target customers and designing an effective product marketing program.

Although the role of motivation in determining visitors’ satisfaction and loyalty to most leisure activities is widely recognized in the literature [24,25,27], its application to agricultural event participation such as agricultural fairs is scarce. Even if the role of motivation is recognized, most studies focus on identifying the primary causes for participating in the event rather than evaluating its impact on visitor satisfaction and destination loyalty [28–30]. For instance, Hixson et al. (2011) assess the reasons for participating in special events and find that place attachment motivates young Australians to participate in recreational activities, including agricultural fairs. Similarly, Phithakitnukoon (2020) reports that visitors’ desire to spend time with the family, escape from daily routines, and gain knowledge about agriculture motivate producers to participate in agricultural fairs in Thailand. This study attempts to fill this gap in the literature by (i) identifying critical factors that motivate people to attend agricultural fairs and (ii) evaluating whether these factors also determine visitors’ satisfaction and (iii) enhance consumer loyalty [31,32].

A nationally representative online panel survey collected respondents’ fair experience, frequency of participation, and perceptions about agricultural fairs. Exploratory factor analysis was conducted to identify significant items or indicators of pull and push motivations, trip satisfaction, and visitor loyalty towards the agricultural fairs. The structural equation modeling approach was adopted to evaluate the impact of push and pull motivations on visitors’ trip satisfaction and their intention to attend the event in the future (loyalty). Results show both push and pull motivations significantly affect fair visitors’ satisfaction. Moreover, push and pull motivations also affect customer loyalty directly and indirectly through their impact on visitors’ trip satisfaction.

The following section reviews methodological studies relevant to the study, presents the conceptual framework used to analyze the data, and briefly describes the survey and estimation approach. The third section presents summary statistics for the variables used in the study and the empirical results. The last section discusses the broader implications and shows some limitations of the study.

2. Materials and Methods

2.1. Conceptual Framework: Experiential Activities and Consumer Behavior

Psychographic attributes such as motivation and satisfaction are critical determinants of consumer behavior, particularly for experiential activities like trips to recreational sites, festivals, exhibitions, or agricultural fairs. Most behavioral models of experiential services postulate that push and pull motivations affect consumer satisfaction and loyalty [24]. Since motivation, satisfaction, and loyalty are unobservable abstract concepts, they cannot be measured directly. Several empirical approaches have been proposed for addressing such variables in the literature [24,25,33–37].

The most recent leisure behavior models cited in the literature include needs hierarchy [38], push–pull factors [26,39], escape-seeking behavior [33], travel cost [40–42], and
travel career ladder [36,43,44]. However, modified versions of push–pull motivations and escape-seeking behavior models are more common in empirical applications [22,24,37,45–51].

In the push–pull factor model, the existing literature [24,25,27] shows that customer (visitor) motivation towards leisure activities is influenced by both biological or psychographic characteristics, such as internal desire or need for a break or vacation (push factors) and external factors primarily related to the attributes of leisure activity (pull factors). The pull motivation reflects a vacation destination’s (such as exhibitions and agricultural fairs) attraction perceived by its visitors. Moreover, push motivation measures an individual’s internal desire or emotional need for a vacation or break from the daily routine. In general, push motivation stimulates the consumer’s desire for recreational activities, and pull motives help select a vacation destination. Thus, the push and pull motivations are often hypothesized to affect consumer leisure behavior by impacting satisfaction obtained from personal involvement in recreational activities [31,32].

In general, consumers’ internal desires (push motivation) for a break from daily routine, who find agricultural fairs more educational and enticing than other alternatives such as a trip to a nearby wilderness area (pull motivation) are most likely to attain a higher level of satisfaction by attending a county or state fair (satisfaction) and choose it over a wilderness area as their next recreational activity (loyalty). Based on this theoretical framework, this study evaluated the relationship between motivation (both push and pull), trip satisfaction, and visitors’ future participation in recreational activities (loyalty) using exploratory factor analysis and a structural modeling approach [52,53].

The conceptual framework used in this study was a modified version of Yoon and Uysal’s (YU) causal model [24]. The YU model draws from leisure/tourism studies to establish the relationship between push and pull motivations and trip satisfaction [52–54] and from the marketing literature to establish the connection between trip (or product/service) satisfaction and customer loyalty [55–57]. Since the motivation indicators are not well identified in the literature, the YU model uses exploratory factor analysis to select six push and pull motivation variables from 40 potential items drawn from survey responses. Their final model includes four latent variables, where each of the first three variables (push motivation, pull motivation, and satisfaction) is estimated using three observed variables. The last construct (destination loyalty) is based on only two indicators. Since the YU model was primarily developed to analyze travel motives, several modifications were made to adapt it to our study based on recent leisure travel literature developments and agricultural fairs’ main offerings.

The revised model used in this study included four push motivation indicators—consumer desire to spend time with family and friends (Family), escape from the usual environment (Escape), enjoy interacting with animals (Interaction), and watch entertaining events and activities (Entertainment). The first two indicators are widely used in the recent travel literature [52–54], while the last two are some of the most anticipated activities by agricultural fair visitors [55,56]. Likewise, the pull motivation included four items—the fair provides the right mix of agriculture-related activities (Agriculture), educational programs (Education), a secure environment (Security), and enough dining options (Food). Since most customers of agricultural fairs in the U.S. are urban and suburban residents who visit fairs with their family and friends, including children, agricultural activities including petting zoos (Agriculture), educational shows about crop/livestock farming (Education), safe and secure environment (Safety), and enough dining options (Food) are some of the critical attributes of agricultural fairs [56,57].

Four variables reflecting visitor’s perception about visiting agricultural fairs as compared to other special events were used for estimating consumer satisfaction—the levels of enjoyment (Enjoyable), pleasantness (Pleasant), excitement (Exciting), and unusualness (Unusual). The YU study also used three indicators, including a variable that compares satisfaction obtained from a visit to a recreational site compared to other alternatives, “compare with other places”, which is similar to the approach used in this study. However, the variables used in our model measured multiple dimensions of the same variable,
“trip satisfaction” [24]. The YU study used only two indicators (i.e., “recommendations to friends/relatives” and “overall feeling to revisit”). On the other hand, we used three indicators that reflected visitor’s perceptions about their last visit to a fair (Last Visit), probability of visiting next year (Future Visits), and visit frequency (Visit Frequency) to measure visitors’ loyalty.

The existing literature on the optimal number of indicators per latent variable is unclear. While some studies recommend the use of a “few best indicators” [58], others argue that the inclusion of more indicators enhances parameter estimate accuracy and reduces bias [59,60]. Most structural equation modeling studies use multiple indicators (three or more) for each latent construct included in the model [58,61]. Figure 1 provides a graphical presentation of the conceptual framework used in our study and identifies potential observed variables that may help measure the latent variables.

![Figure 1. Conceptual model of visitor motivation for attending agricultural fairs.](image)

2.2. Survey Data

The data used in this study came from a web-based panel survey conducted in 2010. The survey included information on fair visitors’ attendance, motivations for visiting the fair, previous experience, probability of future visits, and perceptions of agricultural fairs. Most of the variables were measured using five or seven-point Likert-type scales. The questionnaire was pretested using a small sample of residents in Las Cruces, New Mexico, to improve clarity. The online respondents were randomly drawn from a two million-member online panel managed by Zoomerang, an independent market research company. Approximately 10,200 panelists were invited to participate in the survey via email to fill a target of 500 survey participants. A total of 681 responses was received, of which 161 self-selected not to participate, resulting in 520 usable responses (76% of received responses).
Response bias (or declarative bias) can be severe, particularly in survey data collected through face-to-face interviews, mailed surveys, and online panels [62–64]. Although many factors may cause response bias, several techniques, such as a change in question ordering, survey technique, the person conducting the study, and incentives, are recommended in the literature to reduce it [62,64]. Therefore, the survey included multiple attention checks and reverse coded questions to minimize response bias. Moreover, online panel survey tools automatically dropped respondents who failed to recognize the attention check questions.

2.3. Empirical Model and Estimation

The structural equation model (SEM) consists of two components—structural and measurement models. A general form of the structural model, when it contains both endogenous as well as exogenous latent constructs, is specified as [65,66]

\[ \eta = \beta \eta + \Gamma \xi + \varsigma, \]  

where \( \eta \) and \( \xi \) are continuous unobserved vectors of underlying latent constructs, and \( \beta \) is a matrix of regression coefficients among endogenous variables \( \eta \), which has zeros in the diagonal and \((I - \beta)\) is nonsingular. \( \Gamma \) is a coefficient matrix measuring the direct effect of exogenous latent variables \( \xi \) on dependent variables \( \eta \), \( \varsigma \) is a random vector of error terms, and \( \varsigma \) and \( \xi \) are uncorrelated. Moreover, the model assumes that the latent variables \( \eta \) and \( \xi \) are not directly observable, but \( y \) and \( x \) vectors, which are outcomes (or indicators) of these constructs, are observed with the following relationships:

\[ y = \Lambda_y \eta + \epsilon, \]  
\[ x = \Lambda_x \xi + \delta, \]  

where \( y \) and \( x \) are observed vectors of latent indicators associated with \( \eta \) and \( \xi \), respectively. The coefficient vectors \( \Lambda_y \) and \( \Lambda_x \) are factor loadings, and \( \epsilon \) and \( \delta \) are vectors of error terms associated with the measurement model.

The SEM model assumes multivariate normality and is generally estimated using the maximum likelihood (ML) method. However, all observed variables used in our models were ordinal (measured using a five or seven-point Likert scale); the standard ML approach can lead to inconsistent results, particularly the standard errors and chi-square values. Therefore, as recommended by Joreskog [65,66] and others [67], the empirical model was estimated using a weighted least square (WLS) that corrects for the potential impact of non-normality.

3. Results

3.1. Summary Statistics

The summary statistics presented in Table 1 show that the survey respondents are about 47 years old, primarily white (84 percent), have obtained more than 14 years of schooling, and 60 percent are employed (46 percent full-time and 14 percent part-time). Furthermore, most respondents have attended special events (63 percent) such as exhibitions, concerts, and fairs in the past, spend about $86 in participating in these events, and most are married (50 percent). In addition, the respondents live in a household with more than three people (3.08), have an annual household income of more than $51,000, and get involved in recreational activities as a group (3.27) with their family and friends.

The conceptual model presented in Figure 1 identified fifteen items (observed variables) for measuring four latent variables constructed to evaluate the role of trip motives on consumer satisfaction and loyalty. Table 2 presents the summary statistics for these 15 variables. All eight push and pull motivation indicators were measured using a five-point Likert scale. Among the four push motivation indicators, the variable reflecting the importance of spending time together with family and friends had the highest mean value (3.94), followed by entertainment (3.76), escape from the usual environment (3.66), and the
interaction with the farm animals at the fair (3.51). The last indicator, “interaction”, was not included in the final model due to its low association and cross-loadings with Factor 1 and Factor 3 (see Table 3 for details). These summary statistics indicate that agricultural fairs draw visitors who enjoy group recreational activities that are fun and allow spending quality time with family and friends.

Table 1. Survey respondent profile.

| Variable                                | N   | Mean | Std. Dev. | Minimum | Maximum |
|-----------------------------------------|-----|------|-----------|---------|---------|
| Gender (Female = 1)                     | 520 | 0.53 | 0.50      | 0       | 1       |
| Age                                     | 520 | 43.97| 15.14     | 19      | 75      |
| Event Cost                              | 520 | 85.67| 78.27     | 25      | 250     |
| Marital Status                          |     |      |           |         |         |
| Single                                  | 520 | 0.31 | 0.46      | 0       | 1       |
| Married                                 | 520 | 0.50 | 0.50      | 0       | 1       |
| Divorced, Widowed, Separated Ethnicty   | 520 | 0.17 | 0.38      | 0       | 1       |

Table 2. Survey questions and descriptive statistics for variables included in the model.

| Description                                                                 | Variable                  | Mean   | Std. Dev. |
|----------------------------------------------------------------------------|---------------------------|--------|-----------|
| Customer/Fair Attributes: Using a five-point scale, please indicate how much you agree with the following statements about state and county fairs compared to other types of events: |                           |        |           |
| Push Motivation (Consumer Desire/Need for Attending Fairs)                  |                           |        |           |
| I can spend time with family and friends while at the fair                  | Family                    | 3.935  | 0.840     |
| I get to watch entertaining events and activities at the fair               | Entertainment             | 3.763  | 0.821     |
| I can escape from the usual environment if I go to the fair                | Escape                    | 3.660  | 0.827     |
| I enjoy interacting with animals at a fair                                 | Interaction               | 3.512  | 1.052     |
| Pull Motivation (Fair Attractions)                                         |                           |        |           |
| Fair provides the right mix of agriculture-related activities              | Agriculture               | 3.631  | 0.920     |
| Fair provides enough educational programs                                  | Education                 | 3.488  | 0.995     |
| Fair provides a safe and secure environment                                | Security                  | 3.327  | 0.964     |
| Fair provides enough dining options                                        | Food                      | 3.273  | 1.012     |
| Satisfaction: Using a seven-point scale, how would you rate your satisfaction from visiting a state or county fair as compared to other types of events? |                           |        |           |
| 1 = Not Enjoyable &gt;= 7 = Enjoyable                                      | Enjoyable                 | 5.231  | 1.478     |
| 1 = Unpleasant &lt;= 7 = Pleasant                                          | Pleasant                  | 5.144  | 1.482     |
| 1 = Boring &lt;= 7 = Exciting                                              | Exciting                  | 4.990  | 1.393     |
| 1 = Routine &gt;= 7 = Unusual                                              | Unusual                   | 4.250  | 1.559     |
| Loyalty: When was the last time you attended a state or county fair?       | Last Visit                | 3.646  | 1.391     |
| 1 = Never &lt;= 5 = Recently (within the last year)                        | Future Visits             | 3.398  | 1.206     |
| Please indicate how much do you agree with the following statement:        |                           |        |           |
| The probability that I will attend a fair in the next year is very high.   |                           |        |           |
| Consider your past trips to the fair. How often do you feel you attend a fair? |                           |        |           |
| 1 = Very infrequently &lt;= 5 = Very frequently                           | Frequency                 | 2.506  | 1.216     |
### Table 3. Orthogonal transformation matrix.

| Variable Description                              | Factor 1 (Push Motivation) | Factor 2 (Pull Motivation) | Factor 3 (Satisfaction) | Factor 4 (Loyalty) |
|---------------------------------------------------|----------------------------|------------------------------|--------------------------|-------------------|
| Push Motivation (Consumer Desire)                 |                            |                              |                          |                   |
| Family (time with family and friends)             | 58 *                       | .                            | 35                       | .                 |
| Escape (from busy life)                           | 53 *                       | .                            | .                        | .                 |
| Entertainment (watch shows)                       | 75 *                       | .                            | .                        | .                 |
| Interaction (with animals)                        | 36                         | .                            | 31                       | .                 |
| Pull Motivation (Fair Attributes)                 |                            |                              |                          |                   |
| Education (educational programs)                  | .                          | 65 *                         | .                        | .                 |
| Security (safe environment)                       | .                          | 64 *                         | .                        | .                 |
| Agriculture (agricultural activities)             | .                          | 55 *                         | .                        | .                 |
| Food (enough dining options)                      | .                          | 53 *                         | .                        | .                 |
| Satisfaction (from visiting Fairs)                |                            |                              |                          |                   |
| Pleasant                                          | 31                         | .                            | 86 *                     | .                 |
| Enjoyable                                         | 33                         | .                            | 83 *                     | .                 |
| Exciting                                          | 36                         | .                            | 77 *                     | .                 |
| Loyalty (Participation)                           |                            |                              |                          |                   |
| Visit Frequency                                   | .                          | .                            | .                        | 89 *              |
| Last Visit                                        | .                          | .                            | .                        | 75 *              |
| Future Visits                                     | 31                         | .                            | 31                       | 53 *              |

Note: Factor loadings less than 0.3 are not reported (.), and values higher than 0.40 are flagged (*) in the Table.

Among the four pull motivation indicators used in the study, the right mix of agricultural activities had the highest mean score (3.63), followed by educational programs (3.49), security (3.33), and dining options (3.27). These results illustrate the importance of offering a good mix of agriculture-related activities such as opportunities to interact with live animals, learn about advanced agricultural production techniques, use of new farm equipment and machinery, see and judge different agricultural products, attend livestock shows and rodeos, and other educational programs in consumer decisions to visit the fair. Moreover, a safe environment with excellent dining options is also an essential attraction for attending the fair.

Four latent indicators (measured using a seven-point scale) reflecting visitor satisfaction from attending agricultural fairs compared to other events were included in the survey. The summary statistics show the indicator measuring the level of enjoyment had the highest mean score (5.23), followed by pleasant (5.14), exciting (4.99), and unusual feelings (4.25). However, it was not included in the final model because of its low factor loading with multiple factors. The three indicators included in the final model showed that fair attendees rate their experiences much higher than other alternatives. Similarly, visitor loyalty to fairs was measured using three indicators (measured using a five-point Likert scale) reflecting respondent’s perceptions about the last visit (3.65), probability of making future visits (3.40), and the visit frequency (2.51).

### 3.2. Latent Indicators, Model Fit Indices, and Factor Loadings

An exploratory factor analysis was conducted as an initial check to determine whether the proposed measurement items were consistent with the proposed model. The factor analysis results are reported in Table 3. Although not all measurement items behaved as expected, each of the four factors had at least three variables with significant loadings. Next, the variables with considerable factor loadings were used to estimate the measurement and the structural equation models, and those results are presented in Tables 4 and 5.
Table 4. Overall measurement model parameters and construct reliability (Cronbach alpha).

| Description                  | Factor Loading | Completely Standardized Factor Loading | $R^2$ | Composite Reliability ($\alpha$) |
|------------------------------|----------------|----------------------------------------|-------|---------------------------------|
| Push Motivation              |                |                                        |       |                                 |
| Entertainment (watch shows)  | 1.000          | 0.809                                  | 0.66  | 0.746                           |
| Family (time with family and friends) | 0.834 *** | 0.856                                  | 0.73  |                                 |
| Escape (from busy life)      | 0.519 ***      | 0.724                                  | 0.52  |                                 |
| Pull Motivation              |                |                                        | 0.700 |                                 |
| Agriculture (agricultural Activities) | 1.000   | 0.721                                  | 0.52  |                                 |
| Education (educational programs) | 0.776 *** | 0.717                                  | 0.51  |                                 |
| Security (safe environment)  | 0.743 ***      | 0.667                                  | 0.44  |                                 |
| Food (enough dining options) | 0.615 ***      | 0.568                                  | 0.32  |                                 |
| Satisfaction (from visiting fairs) |            |                                        | 0.944 |                                 |
| Exciting                     | 1.000          | 0.930                                  | 0.87  |                                 |
| Enjoyable                    | 0.783 ***      | 0.976                                  | 0.95  |                                 |
| Pleasant                     | 0.731 ***      | 0.984                                  | 0.97  |                                 |
| Loyalty (prospects for future trips) |            |                                        | 0.830 |                                 |
| Last Visit                   | 1.000          | 0.720                                  | 0.52  |                                 |
| Future Visits                | 0.894 ***      | 0.914                                  | 0.84  |                                 |
| Visit Frequency              | 0.773 ***      | 0.800                                  | 0.64  |                                 |

Note: $t$-Values are reported in parenthesis. The table also includes the squared multiple correlation coefficient ($R^2$) and composite factor reliability (Cronbach coefficient alpha: $\alpha$). *** Denotes statistical significance at a one percent level.

Table 5. Structural model parameters.

| Variable                      | Satisfaction | Loyalty |
|-------------------------------|--------------|---------|
|                               | Coefficient  | Completely Standardized Coefficient | Coefficient  | Completely Standardized Coefficient |
| Pull Factors (Fair Attributes)| 0.350 **    | (2.12) | 0.103  | 0.235 ** | (2.29) | 0.139 |
| Push Factors (Consumer Desire)| 1.167 ***   | (17.43)| 0.788  | 0.443 ***| (4.53) | 0.680 |
| Satisfaction (from Attending Fairs) |        |          | 0.128 **| (2.10) | 0.218 |
| $R^2$                         | 0.70         | 0.58    |

Note: $t$-Values are reported in parenthesis. ***, ** Denote statistical significance at one and five percent levels, respectively.

The Cronbach coefficient alpha, which measures latent variables’ overall reliability, was very high (greater than 0.7) for all four latent variables included in the study, implying high reliability of estimated latent constructs (Table 4). Furthermore, the squared multiple correlation coefficients ($R^2$), which measure the proportion of latent construct variation explained by explanatory variables, ranged from 0.28 to 0.89, indicating a reasonably good fit of the empirical models estimated in the study. Other indices that are widely used in the structural equation modeling literature to assess the goodness of model fit such as the maximum likelihood chi-square ($\chi^2_{(df=54)} = 70.60; p = 0.064$), Yuan–Bentler Chi-Square ($\chi^2_{(df=54)} = 62.14; p = 0.210$), root mean square error of approximation (RMSEA = 0.0243; CI: 0.0–0.0389), the goodness of fit index (GFI = 0.996), adjusted goodness of fit index
In the final model, three indicators were used to measure push motivation: four for pull motivation, three for visit satisfaction, and three for measuring loyalty (see Table 4 and Figure 2 for details). Since the completely standardized coefficients are unit-free (i.e., normalized by dividing estimated coefficients by respective standard deviations), the subsequent discussion focuses on those values. In particular, the fair visitor’s desire to have fun with family and friends, watch entertaining shows, and escape from a busy life was used to measure push motivation. The estimated factor coefficient (completely standardized factor loadings) was highest for the indicator reflecting the fair visitors’ desires to spend quality time together with family and friends (0.76), followed by the indicators entertainment (0.69) and escape (0.59; Table 4). These results show the importance of offering fair programming that is fun and provides ample opportunities for its visitors to get involved in group activities that attract people of different age groups, including children.

Figure 2. Revised model of visitor motivation for attending agricultural fairs with standardized coefficients. Note: The model goodness of fit indices are as follows: Yuan-Bentler Chi-Square ($\chi^2(df = 54) = 62.14; p = 0.210$), RMSEA = 0.024; CI: 0.0–0.039, GFI = 0.996, AGFI = 0.993, CFI = 0.999. All model coefficients are statistically significant at less than five percent level. The numbers shown in the graph are completely standardized coefficients.

Pull motivation was measured using four indicators reflecting the importance of educational activities, safe and secure environment, agriculture-related activities, and the availability of dining options. The estimated results show that the indicator that reflected the importance of a safe and secure recreational environment for all group members, including children, had the most significant impact on pull motivation (i.e., had a completely standardized factor loading of 0.69). Availability of a good mix of agriculture-related activities had the second-highest effect (0.65), followed by educational activities (0.63) and
diverse dining (food) options to satisfy the desire of adults and children of different age groups (0.52).

The latent construct satisfaction was measured using three variables measuring fair customer satisfaction from visiting the agricultural fairs compared to other events—how pleasant, enjoyable, and exciting would a visit to a state or county fair be compared to other potential alternatives? The estimated results showed that pleasantness (as perceived by the visitors) had the highest factor loading (0.95), followed by enjoyable (0.93) and exciting (0.89), indicating that fair organizer’s ability to create a pleasant recreational environment and offer exciting and enjoyable activities plays a vital role in enhancing visitors’ trip satisfaction.

The consumer loyalty construct was measured based on information concerning the consumer’s last visit to a state or county fair, visit frequency, and the probability of attending the fairs next year. All factor loadings (completely standardized coefficients) were higher than 0.60 and statistically significant. The indicator measuring the likelihood of visiting a fair next year had the highest coefficient (0.85), followed by visit frequency (0.72) and the last visit (0.60). The \( R^2 \) values that measured the variation in the dependent variable explained by independent variables included in the model (\( R^2 \) values ranged from 0.36 to 0.71) showed a similar pattern.

3.3. Structural Equation Model Results

Figure 2 presents the overall model fit indices for the structural equation model estimated in this study and the relationship between two exogenous (push and pull motivations) and two endogenous (satisfaction and loyalty) latent constructs. Table 5 displays the estimated parameter of the structural model. The high \( R^2 \) value (0.63) associated with the satisfaction variable showed that push and pull motivations explained a significant portion (63 percent) of visitors’ trip satisfaction variation. On the other hand, the three latent constructs, pull and push motivation and satisfaction, explained 49 percent of the variation in customer loyalty, implying a much stronger relationship among all four latent constructs than observed in most studies [24].

The structural model parameters (standardized parameters) showed that while pull motivation had a small but statistically significant (\( p < 0.05 \)) positive impact (0.08), push motivation had a more statistically significant (\( p < 0.01 \)) and prominent (0.77) effect on satisfaction. Although both pull and push motivations had significantly positive effects, these results suggest that push motivation played a more critical role in determining trip satisfaction.

On the other hand, fair visitors’ loyalty was positively affected by all three other latent constructs. The direct effects of pull motivation, push motivation, and satisfaction on visitor loyalty were 0.12, 0.42, and 0.26, respectively. The pull (0.02) and push (0.20) motivations also influenced customer loyalty indirectly through their impact on visitor satisfaction (the indirect effects are not reported in Table 5). These results showed that the total effects of push motivations on visitor satisfaction and loyalty were much higher (0.77 and 0.62) than pull motivations (0.08 and 0.14). Moreover, trip satisfaction significantly impacted consumer loyalty, implying that satisfied customers are more likely to revisit the fair soon. These results are much stronger than reported in previous studies on tourism motivation [23,24,32,36,69].

4. Discussion

This study utilizes a modified version of the causal model that Yoon and Uysal [24] initially proposed to evaluate the effect of tourism motivations on visitor satisfaction and customer loyalty to analyze agricultural fairs. In particular, the empirical model includes four latent constructs, namely push motivation, pull motivation, trip satisfaction, and customer loyalty, which are analyzed using thirteen observed indicators. We believe these indicators better reflect the visitor’s perceptions and closely relate to the underlying latent construct we examine in this study.
Although the underlying structure of these latent constructs is assumed to be continuous, they are measured using a five or seven-point Likert-type scale. Since the observed variables used in this study are ordinal, the weighted least square (WLS) method, which provides robust parameter estimates and allows us to draw statistically consistent inferences, is used in this study [65,70].

The empirical results show both push and pull motivations play critical roles in determining the level of satisfaction derived from a visit to an agricultural fair compared to other alternatives such as a visit to a nearby wilderness area. In particular, the completely standardized coefficient shows that a one-unit increase in the push motivation index increases trip satisfaction by 0.79 units. Although Yoon and Uysal reported a statistically insignificant impact of push motivation on trip satisfaction (0.41), our estimates show a much higher effect. On the other hand, a one-unit increase in pull motivation index increases trip satisfaction by only 0.10 units. These results are more consistent with the theory than the results reported by Yoon and Uysal, who observed a significant but negative \((-0.54)\) impact of pull motivation on trip satisfaction [24].

The structural equation model results also show that visit motivations (both push and pull) affect consumer loyalty directly and indirectly through impacts on visit satisfaction. In particular, the results show that one unit increase in the push motivation index increases visitor loyalty directly by 0.68 units, while pull motivation and trip satisfaction increase it by only 0.14 and 0.22 units, respectively. Again, our results are theoretically consistent and show a more robust relationship among the four latent constructs analyzed in the study than reported by Yoon and Uysal and other subsequent studies [24,71,72]. Together, these findings suggest that push factors play a more critical role in consumer trip decisions than pull factors. Therefore, in addition to offering a safe and fun-filled environment with multiple options for entertainment, dining, and educational opportunities, fair managers should pay closer attention to visitors’ needs for relaxation and inner desires for intermingling with family and friends by making an effort to understand how push and pull motives affect trip satisfaction and customer loyalty to earn future business.

5. Limitations and Suggestions for Future Research

Our study has several limitations that need to be addressed in future research. First of all, the data used in this study are somewhat dated (about ten years old), and the nature of agricultural fairs and their target population may have changed since then. We want to caution readers to evaluate current changes before making any changes based on the findings of this study. Second, despite our utmost effort to minimize it, response bias (or declarative bias) can be a severe problem, particularly in survey-based studies. Therefore, we caution readers about potential response bias and to be careful in generalizing our research findings.

Moreover, like most empirical studies, this study is based on several simplifying assumptions about the underlying structure of the latent constructs and the estimation procedure that may not be consistent with many real-world applications. Last but not least, we hope that the findings of this study will encourage further studies using more recent data from different types of agricultural events and locations, addressing the limitations of our research.

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References
1. Kniffen, F. The American agricultural fair: The pattern. *Ann. Assoc. Am. Geogr.* 1949, 39, 264–282. [CrossRef]
2. Lin, J.Y. Rural reforms and agricultural growth in China. *Am. Econ. Rev.* 1992, 82, 34–51.
3. Schwartz, L.A. *The Role of the Private Sector in Agricultural Extension: Economic Analysis and Case Studies*; Citeseer: University Park, PA, USA, 1994.
4. Kelly, C.E. “The Consumption of Rural Prosperity and Happiness”: New England Agricultural Fairs and the Construction of Class and Gender, 1810–1860. *Am. Q.* 1997, 49, 574–602. [CrossRef]
5. Brunt, L. Mechanical innovation in the industrial revolution: The case of plough design. *Econ. Hist. Rev.* 2003, 56, 444–477. [CrossRef]
6. Longley, C.; Dominguez, C.; Devji, M. Agricultural Input Trade Fairs and Vouchers in Mozambique: Experiences and Lessons Learned. 2005. Available online: http://oar.icrisat.org/id/eprint/317 (accessed on 12 July 2021).
7. Mitchell, I. The changing role of fairs in the long eighteenth century: Evidence from the north midlands. *Econ. Hist. Rev.* 2007, 60, 545–573. [CrossRef]
8. Chang, H.-J. Rethinking public policy in agriculture: Lessons from history, distant and recent. *J. Peasant Stud.* 2009, 36, 477–515. [CrossRef]
9. Laffin, S.; Anderson, D.E. State Fairs: A Means of Exposing Americas Youth to the Veterinary Profession. *J. Rural Res. Policy* 2010, 5, 1–9. [CrossRef]
10. Dettre, J.D.; Mark, T.B.; Mishra, A.K.; Adhikari, A. Linkage between direct marketing and farm income: A double-hurdle approach. *Agrיבusiness* 2011, 27, 19–33. [CrossRef]
11. Padilla, W.R.; García, J.; Molina, J.M. Knowledge extraction and improved data fusion for sales prediction in local agricultural markets. *Sensors* 2019, 19, 286. [CrossRef] [PubMed]
12. Dimitri, C.; Effland, A.; Conklin, N. The 20th century transformation of US agriculture and farm policy. *Econ. Inf. Bull.* 2005. [CrossRef]
13. Tao, Q.; Jinchuan, S. Taizhou Model: Institutional Innovation and the Development of Private Economy. *China World Econ.* 2008, 16, 106–119. [CrossRef]
14. Roberts, H. Place-Identity and the Geographies of Contemporary County Fairs in Oklahoma. Ph.D. Dissertation, University of Oklahoma, Norman, OK, USA, 2015.
15. Blackburn, D.A. Ag science fairs: The next wave in agricultural literacy. *J. Ext.* 1999, 37, 1–3.
16. Lauzon, G.P. Civic Learning through County Fairs: Promoting the Useful and the Good in Nineteenth-Century Indiana. *Am. Educ. Hist. J.* 2010, 37, 19.
17. Gross, S.; Roosen, J. Effects of information on social trust in farmers regarding animal welfare. *Int. Food Agribus. Manag. Rev.* 2021, 24, 121–137. [CrossRef]
18. Borish, L.J. A Fair Without the Fair, is No Fair at All’: Women at the New England Agricultural Fair in the Mid-Nineteenth Century. *J. Sport Hist.* 1997, 24, 155–176.
19. Adams, D.C.; Salois, M.J. Local versus organic: A turn in consumer preferences and willingness-to-pay. *Renew. Agric. Food Syst.* 2010, 25, 331–341. [CrossRef]
20. Kniffen, F. The American Agricultural Fair: Time and Place. *Ann. Assoc. Am. Geogr.* 1951, 41, 42–57. [CrossRef]
21. Moutinho, L. Consumer behaviour in tourism. *Eur. J. Mark.* 1987, 21, 5–44. [CrossRef]
22. Pestana, M.H.; Parreira, A.; Moutinho, L. Motivations, emotions and satisfaction: The keys to a tourism destination choice. *J. Destin. Mark. Manag.* 2020, 16, 100332. [CrossRef]
23. Kara, N.S.; Mkwizu, K.H. Demographic factors and travel motivation among leisure tourists in Tanzania. *Int. Hosp. Rev.* 2020, 34, 81–103. [CrossRef]
24. Yoon, Y.; Uysal, M. An examination of the effects of motivation and satisfaction on destination loyalty: A structural model. *Tour. Manag.* 2005, 26, 45–56. [CrossRef]
25. Iso-Ahola, S.E. Motivation for leisure. In *Understanding Leisure and Recreation: Mapping the Past Charting Future*; Venture Pub.: State College, PA, USA, 1989; pp. 247–279.
26. Crompton, J.L.; McKay, S.L. Motives of visitors attending festival events. *Ann. Tour. Res.* 1997, 24, 425–439. [CrossRef]
27. Cole, S.; Zhang, Y.; Wang, W.; Hu, C.-M. The influence of accessibility and motivation on leisure travel participation of people with disabilities. *J. Travel Tour. Mark.* 2019, 36, 119–130. [CrossRef]
28. Yiamjanya, S.; Wongleedee, K. International tourists’ travel motivation by push-pull factors and the decision making for selecting Thailand as destination choice. *Int. J. Soc. Educ. Econ. Manag. Eng.* 2014, 8, 1326–1331.
29. Hixson, E.J.; Vivienne, S.; McCabe, S.; Brown, G. Event attendance motivation and place attachment: An exploratory study of young residents in Adelaide, South Australia. *Event Manag.* 2011, 15, 233–243. [CrossRef]
30. Phithakkitnukoon, R.S. Motivations of agro-tourists in visiting agricultural fair: A case study of an agricultural fair in Chiang Mai, Thailand. e-Rev. Tour. Res. 2020, 18, 269–289.
31. Prasad, S.; Nair, K.; Purohit, H. Tourist satisfaction: An analysis of push and pull factors—A case of Qatar tourism. J. Manag. (JOM) 2019, 6, 187–199. [CrossRef]
32. Wen, J.; Huang, S. The effects of push and pull travel motivations, personal values, and destination familiarity on tourist loyalty: A study of Chinese cigar tourists to Cuba. Asia Pac. J. Tour. Res. 2019, 24, 805–821. [CrossRef]
33. Iso-Ahola, S.E. Social Psychological Perspectives on Leisure and Recreation; Charles C. Thomas: Springfield, IL, USA, 1980.
34. Iso-Ahola, S.E. Towards a Social Psychology of Theory of Tourism Motivation: A Rejoinder. Ann. Tour. Res. 1982, 9, 256–262. [CrossRef]
35. Nicholson, R.E.; Pearce, D.G. Why do people attend events: A comparative analysis of visitor motivations at four South Island events. J. Travel Res. 2001, 39, 449. [CrossRef]
36. Hsu, C.H.C.; Cai, L.A.; Mimi, L. Expectation, Motivation, and Attitude: A Tourist Behavioral Model. J. Travel Res. 2009, 49, 282–296. [CrossRef]
37. Lee, T.H.; Hsu, F.Y. Examining how attending motivation and satisfaction affects the loyalty for attendees at aboriginal festivals. Int. J. Tour. Res. 2013, 15, 18–34. [CrossRef]
38. Maslow, A.H. A theory of human motivation. Psychol. Rev. 1943, 50, 370. [CrossRef]
39. Dann, G. Anomie, ego-enhancement and tourism. Ann. Tour. Res. 1977, 4, 184–194. [CrossRef]
40. Hanauer, M.M.; Reid, J. Valuing urban open space using the travel-cost method and the implications of measurement error. J. Environ. Manag. 2017, 198, 50–65. [CrossRef] [PubMed]
41. Acharya, R.N.; Hatch, L.U.; Clonts, H.A. The role of on-site time in recreational demand for wilderness. J. Agric. Appl. Econ. 2003, 35, 159–169. [CrossRef]
42. Acharya, R.N.; Paudel, K.P.; Hatch, L.U. Impact of nostalgia and past experience on recreational demand for wilderness. Appl. Econ. Lett. 2009, 16, 449–453. [CrossRef]
43. Pearce, P.L.; Calabiano, M.L. Inferring travel motivation from travelers’ experiences. J. Travel Res. 1983, 22, 16. [CrossRef]
44. Pearce, P.L.; Lee, U.I. Developing the travel career approach to tourist motivation. J. Travel Res. 2005, 43, 226. [CrossRef]
45. Baloglu, S.; Uysal, M. Market segments of push and pull motivations: A canonical correlation approach. Int. J. Contemp. Hosp. Manag. 1996, 8, 32–38. [CrossRef]
46. Devesa, M.; Laguna, M.; Palacios, A. The role of motivation in visitor satisfaction: Empirical evidence in rural tourism. Tour. Manag. 2010, 31, 547–552. [CrossRef]
47. Mohammad, B.A.M.A.-H.; Som, A.P.M. An analysis of push and pull travel motivations of foreign tourists to Jordan. Int. J. Bus. Manag. 2010, 5, 41.
48. Prebensen, N.K.; Woo, E.; Chen, J.S.; Uysal, M. Motivation and involvement as antecedents of the perceived value of the destination experience. J. Travel Res. 2013, 52, 253–264. [CrossRef]
49. Leong, A.M.W.; Yeh, S.-S.; Hsiao, Y.-C.; Huan, T.-C.T. Nostalgia as travel motivation and its impact on tourists’ loyalty. J. Bus. Res. 2015, 68, 81–86. [CrossRef]
50. Zhang, Y.; Byon, K.K. Push and pull factors associated with the CTTSL game events between on-site and online consumers. Int. J. Sports Mark. Spons. 2017, 18, 48–69. [CrossRef]
51. Telej, E.; Gamble, J.R. Yoga wellness tourism: A study of marketing strategies in India. J. Consum. Mark. 2019, 36, 794–805. [CrossRef]
52. Shi, L.; Cole, S.; Chancellor, H.C. Understanding leisure travel motivations of travelers with acquired mobility impairments. Tour. Manag. 2012, 33, 228–231. [CrossRef]
53. Xie, L.; Ritchie, B.W. The motivation, constraint, behavior relationship: A holistic approach for understanding international student leisure travelers. J. Vacat. Mark. 2019, 25, 111–129. [CrossRef]
54. Baniya, R.; Paudel, K. An analysis of push and pull travel motivations of domestic tourists in Nepal. J. Manag. Dev. Stud. 2016, 27, 16–30. [CrossRef]
55. Conrad, C.C.; Stanford, K.; Narvaez-Bravo, C.; Callaway, T.; McAllister, T. Farm fairs and petting zoos: A review of animal contact as a source of zoonotic enteric disease. Foodborne Pathog. Dis. 2017, 14, 59–73. [CrossRef]
56. Lillywhite, J.M.; Simonsen, J.E.; Acharya, R.N. Designing a better fair: How important are the animals? J. Conv. Event Tour. Manag. 2013, 14, 217–235. [CrossRef]
57. Larsen, M.H. Getting a sense of agriculture: Visitor experiences from an agricultural fair. Sociol. Rural. 2017, 57, 661–681. [CrossRef]
58. Hayduk, L.A.; Littvay, L. Should researchers use single indicators, best indicators, or multiple indicators in structural equation models? BMC Med. Res. Methodol. 2012, 12, 1–17. [CrossRef] [PubMed]
59. Marsh, H.W.; Hau, K.-T.; Balla, J.R.; Grayson, D. Is more ever too much? The number of indicators per factor in confirmatory factor analysis. Multivar. Behav. Res. 1998, 33, 181–220. [CrossRef] [PubMed]
60. Wurpts, I.C.; Geiser, C. Is adding more indicators to a latent class analysis beneficial or detrimental? Results of a Monte-Carlo study. Front. Psychol. 2014, 5, 920. [CrossRef]
61. Bollen, K.A. Latent variables in psychology and the social sciences. Annu. Rev. Psychol. 2002, 53, 605–634. [CrossRef] [PubMed]
62. Matel, A.; Poskrobko, T. Could survey technique or other research conditions “change” our ecological behaviour?–Testing response bias in consumer research. *Ekon. I Środowisko-Econ. Environ.* 2019, 71, 16.

63. Paulhus, D. Measurement and control of response bias. In *Measures of Personality and Social Psychological Attitudes*; Academic Press: New York, NY, USA, 1991; pp. 17–59.

64. McGrath, R.E.; Mitchell, M.; Kim, B.H.; Hough, L. Evidence for response bias as a source of error variance in applied assessment. *Psychol. Bull.* 2010, 136, 450. [CrossRef]

65. Jöreskog, K.G. *LISREL 11: Examples Guide*; Sörbom, D., Ed.; Scientific Software International, Inc.: Chapel Hill, NC, USA, 2021.

66. Jöreskog, K.G. *Structural Equation Modeling with Ordinal Variables Using LISREL*; Technical Report; Scientific Software International, Inc.: Lincolnwood, IL, USA, 2005.

67. Robitzsch, A. Why ordinal variables can (almost) always be treated as continuous variables: Clarifying assumptions of robust continuous and ordinal factor analysis estimation methods. *Front. Educ.* 2020, 5, 177. [CrossRef]

68. Hu, L.T.; Bentler, P.M. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Struct. Equ. Modeling Multidiscip. J.* 1999, 6, 1–55. [CrossRef]

69. Chen, Y.-F.; Mo, H.-E. A Survey of Push and Pull Motivations of Green Event Tourists. *Int. J. Inf. Educ. Technol.* 2014, 4, 260. [CrossRef]

70. Satorra, A. Asymptotic robust inferences in the analysis of mean and covariance structures. *Sociol. Methodol.* 1992, 22, 249–278. [CrossRef]

71. Battour, M.; Ismail, M.N.; Battor, M.; Awais, M. Islamic tourism: An empirical examination of travel motivation and satisfaction in Malaysia. *Curr. Issues Tour.* 2017, 20, 50–67. [CrossRef]

72. Khuong, M.N.; Ha, H.T.T. The Influences of Push and Pull Factors on the International Leisure Tourists’ Return Intention to Ho Chi Minh City, Vietnam—A Mediation Analysis of Destination Satisfaction. *Int. J. Trade Econ. Financ.* 2014, 5, 490. [CrossRef]