



# Article Determinants of Consumers' Retention and Subjective Well-Being: A Sustainable Farmers' Market Perspective

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Abstract: Farmers' markets have received much attention in many countries, and the amount of research on farmers' markets is gradually increasing. The consumption process of consumers at farmers' markets include both economic and social aspects, but most past studies have only focused on a single aspect. The economic perspective mainly focuses on transaction issues such as purchase motives, quality, satisfaction, purchase behavior, and post-purchase behavior, whereas the social perspective focuses on the social relations and psychological feelings created when consumers go to markets. This study aimed to integrate the economic and social perspectives and analyze the relationships among product performance evaluation, relational capital, repurchase intention, and subjective well-being of consumers at farmers' markets after their purchase experiences. I chose three recurrent farmers' markets in Taiwan, obtained 358 valid samples, and performed structural equation modelling analysis. The results indicated that the economic product performance exerted a significant and positive influence on repurchase intention, but its influence on subjective well-being was not significant. In contrast, the social relational capital was found to be a positive and significant factor of both repurchase intention and subjective well-being. On the whole, relational capital is more important than product performance. The suggestions for practice were as follows. First, farmers' markets have economic and social value and are thus worth being promoted by government agencies. Second, the managers of farmers' markets should implement a set of management mechanisms to ensure product performance and also create a market atmosphere that facilitates social interactions between farmers and consumers.

**Keywords:** farmers' market; product performance; relational capital; repurchase intention; subjective well-being

## 1. Introduction

Under the influence of global agri-food systems, local production for local consumption has become an alternative route of agricultural development aside from mainstream agriculture in many countries [1], its methods including community-supported agriculture, farm-to-school programs, culinary tourism, and farmers' markets. Local production for local consumption aims to lower transportation costs. Farmers produce and sell their products themselves, reducing food miles and carbon footprints, thus being friendly to the environment. In this way, consumers can obtain fresh and safe local agricultural products. Shortening the distance between farmers and consumers also enables them to establish face-to-face channels of interaction and build mutual trust, which can consolidate interpersonal interactions and institutional norms and strengthen ties between consumers and local agriculture. Farmers' markets, which have advantages in site conditions and local products and possess community relations from the place of production to the dining table, are said to be crucial platforms in implementing local production for local consumption and have the ability to create agricultural production-sales models that take both environmental protection and friendly relationships into account.

As an alternative method of agricultural development, farmers' markets are based on biodiversity, environmental protection, food system localization [2], reduction of food miles, and the concept of smallholding. Their focus is to provide farmers and consumers with the opportunity to communicate face to face and to offer fresh agricultural products containing local culture. Although researchers have yet to reach a consensus on whether localized food systems are more environmentally friendly than globalized or modernized food systems [3,4], studies have demonstrated that via re-spatialization and re-socialization [5,6], farmers' markets can reduce food miles and carbon footprints and thus contribute to environmental sustainability [7–9].

With the rising trends of alternative agriculture and the "real food" revolution [10], farmers' markets have proliferated in Northern America, Western Europe, and Asia, and they are aspiring to set themselves apart from highly professionalized, resource-intensive global agri-food systems, which modern supermarkets are representative of. Farmers' markets have actually been around for a long time. They have often formed at locations in cities or towns in the form of retail stores or stands and enabled farmers and consumers to make face-to-face transactions and get to know each other. The increase of modern, transnational chain supermarkets around the world have caused these traditional farmers' markets to gradually disappear. Gradually, consumers, who are at the end of the food supply chain, no longer knew where their food came from or what value concepts and local culture were held within the production processes of the food. Consequently, the social ties and mutual trust that were originally embedded within the production and consumption of local food faded away. The recent regeneration of farmers' markets represents a shift in consumer focus in three aspects: from the price and quantity of agricultural products to their value and quality, from synthetic food to authentic food, and from conspicuous consumption to conscious consumption [11].

Cook [12] asserted that consumption is closely connected to leisure. Although the farmers' markets in different countries may operate differently, most of them are not limited to face-to-face buyer-seller relationships in which the farmers sell directly to the consumers. Rather, they attach more value to the interactions and interpersonal connections between the farmers and the consumers. In these interaction processes, the farmers can personally explain the unique qualities of their agricultural products, the environment they are produced in, and the ways they can be eaten. Thus, consumer participation in farmers' markets include consumption-oriented economic interactions and leisure-oriented social interactions [13]. The former involves the economic perspective of the consumer purchase behavior at farmers' markets, which mostly focuses on three aspects. The first is purchase motives and preferences, such as freshness [12,14], quality [15,16], taste [17], price, and food safety [18,19]; the second is purchase behaviors and repurchase behaviors [20,21], and the spillover effects of consumption at the markets on local economy [22–24]. The latter meaning "leisure-oriented social interaction" refers to the social perspective of the purchase consumer behavior at farmers' markets. Less research has been done on this topic. Some studies have investigated issues associated with the social interactions between consumers and farmers or other consumers at farmers' markets, such as trust and social capital [11,25,26]; another study examined the influence of consumer participation in the market on family relationships, quality of life, and subjective well-being [27].

In short, the majority of past studies on the purchase consumer behavior in farmers' markets have focused on the economic perspective and discussed market transaction elements such as purchase motives, quality, satisfaction, purchase behavior, and post-purchase behavior. Less attention has been given to the social perspective, which includes the social relations and psychological feelings created when consumers go to markets and communicate face-to-face with farmers or encounter other consumers. Social capital can be divided into two forms: relational capital, which is the private good that individual members within an organization can invest in, accumulate, and use at their own discretion; and system capital, which is the collective good that the members within

an organization invest in and accumulate together [28]. This study aims to integrate the two aforementioned perspectives ("consumption-oriented economic interactions" and "leisure-oriented social interactions") and combine two economic constructs, namely, the market performance evaluation and repurchase intentions of consumers, and two social constructs, namely, the relational capital formed by consumers at farmers' markets and their subjective well-being, into a single research framework. In conclusion, the consumption processes at farmers' markets contain the characteristics of both purchase experiences and social experiences. In practice, more attention is often paid to purchase experiences, whereas social experiences are overlooked. Past studies involving farmers' markets have mostly focused on purchase motives, purchase behavior, market segmentation, and marketing strategies as well as on the prepurchase and post-purchase stages. The contribution of this study is that it extends research on farmers' markets to post-purchase behavior and psychological feelings, integrates economic and social perspectives, compiles relevant literature, and structurally analyzes the relationships among four crucial concepts: product performance evaluation, relational capital, repurchase intention, and subjective well-being of consumers. Specifically, the objectives included the following:

- 1. examining the correlation between product performance and relational capital,
- 2. determining the influences of product performance and relational capital on repurchase intention and subjective well-being, and
- 3. comparing the importance of product performance and relational capital to repurchase intention and subjective well-being.

This study makes the following contributions to research on consumers at farmers' markets. First, most of the past studies on purchase behavior at farmers' markets have focused on market segmentation or the purchase motives, preferences, and purchase intentions of consumers [16]. This study adopted product performance, a construct associated with the evaluation of product quality in farmers' markets, as the antecedent variable of consumer repurchase intention and subjective well-being to further academic understanding in this aspect. Next, despite the many studies regarding the influence of leisure activities on subjective well-being [29–31], research has yet to be done on the influence of consumption activities at farmers' markets on the subjective well-being of consumers. Finally, this study integrated the economic and social perspectives, examined the correlation between product performance and relational capital at farmers' markets, and investigated the influences of these two constructs on repurchase intention and subjective well-being. This paper is a pioneer in this respect.

#### 2. Literature Review and Hypothesis Development

A farmers' market can be described as a recurrent market at a fixed location where farm products are sold by farmers themselves directly to the public [25,32]. Most of the vendors at farmers' markets are smallholders themselves and sell their products at farmers' markets to supplement their income, and the markets will often lay down criteria for farmers hoping to participate. The promotion of farmers' markets brings several substantial benefits, such as (1) reducing the distance between farmers and consumers so that they can build trust as well as steady production and supply; (2) decreasing food miles, marketing margins, and quality loss; (3) re-familiarizing the public with local agricultural products and boosting the local economy; and (4) increasing local food supply and the overall domestic food self-sufficiency rate. In addition to the benefits above, farmers' markets have various functions. One is serving as cultural attractions for agrileisure [27], and another is serving as incubators to provide training for agricultural entrepreneurs and develop networks and social ties that help farmers participating in the markets to improve product quality, marketing, and management effectiveness. Another function of farmers' markets is that they promote social well-being. They enable direct, face-to-face interactions, which enhances the social embeddedness between consumers and farmers.

and personal subjective well-being [13,33–35]. The purpose of this framework is to determine the influence of the performance evaluation given by consumers to products at farmers' markets and the relational capital that they accumulate during social interactions on their repurchase intention and subjective well-being.

### 2.1. Product Performance

Consumption at a farmers' market can be divided into three stages: prepurchase, encounter, and post-purchase [36]. The prepurchase stage includes the following steps: awareness of need, information search, evaluation of alternatives, and purchase decision. In the encounter stage, where the consumer actually goes to the market to make purchases, the consumer can communicate and interact face to face with the farmers and other consumers. During this process, the consumer can get to know the production philosophies and agricultural products of the farmers and accumulate social capital via the social interactions in the process at the same time. In the post-purchase stage, the consumer evaluates service/product performance, which in turn impacts their future intentions/expectations, including word-of-mouth, repurchase intention, and subjective well-being [37,38]. The evaluation of product performance begins in the prepurchase stage, when the consumer begins to form expectations of the quality, safety, and superiority of agricultural products at the farmers' market. Later, the consumer then compares the expectations with the actual feelings of using/eating the agricultural products. Thus, in meaning, the evaluation of product performance is similar to product satisfaction. Product performance is therefore a crucial factor of repurchase intention and even subjective well-being.

#### 2.2. Relational Capital

Based on the social embeddedness theory, Hinrichs [39] indicated that economic interactions and social interactions exist simultaneously within farmers' markets. The process of consumer transactions socially embedded with the interactions of farmers and physically embedded with the contexts of farmers' markets and local communities. Consumers generally go to farmers' markets with their friends and family [40]. At the same time, they have social interactions with farmers or other consumers while they make purchases at the market. Thus, relational capital forms during the purchase process. In this study, I define relational capital as "the valued number of resources an actor can employ and use through direct or indirect personal relations with other actors who control those resources and in which the actor is intentionally investing and which should eventually pay off" [28]. During the purchase encounters at farmers' markets, consumers engage in purchase behavior and economic interactions based on purchase motives, product information, and their experiences with certain sellers in the past.

Lyson et al. [41] indicated that from a neoclassical perspective, the economic meaning of farmers' markets may not be very important. However, from the community perspective, farmers' markets are venues where consumers can obtain high-quality agricultural products while establishing relational capital. They stated that " ... [farmers' markets] can nurture local economic development, maintain diversity and quality in products, and provide opportunities for producers and consumers to come together to solidify bonds". Offer [42] pointed out that the reciprocal transactions between buyers and sellers at farmers' markets are "preferred when trade involves a personal interaction, and when goods and services are unique, expensive or have many dimensions of quality". Hunt [15] advocated that a correlation exists between the social interactions that consumers engage in at farmers' markets and the quality of the agricultural products that they purchase. He pointed out that the social interaction and information-sharing functions of farmers' markets enable consumers and producers to influence each other. Producers can get to know what quality requirements consumers have of agricultural products and improve their production methods accordingly, while consumers can acquire more information and purchase agricultural products of higher quality. Based on the above, consumers then form evaluations of product performance in the post-purchase stage. At the same time, consumers also have discussions with the friends and family accompanying them during the

purchase process as well as form and accumulate relational capital at the farmers' market from their social interactions with farmers [43]. Accordingly, the first hypothesis of this study is as follows:

**H1.** *A positive and significant correlation exists between the product performance evaluation and relational capital of consumers at farmers' markets.* 

#### 2.3. Repurchase Intention

I view repurchase intention as the probability that a consumer will revisit a seller or repurchase a product based on previous purchase behavior or experience in a farmers' market and after considering various factors [44,45]. Several marketing studies have demonstrated that the quality evaluation and satisfaction with regard to purchased products are antecedents of many loyal customer behaviors, such as repeat purchase, positive word-of-mouth, and the propensity to buy more. Thus, the evaluations that consumers make of product quality at farmers' markets are an important factor influencing their repurchase intention. Accordingly, I put forward the following hypothesis:

**H2a.** The product performance evaluation of consumers at farmers' markets exerts a positive impact on their repurchase intention.

In a study on customers at a farmers' market in Italy, Cassia et al. [46] discovered that the factors influencing customer satisfaction include tangible factors, such as product quality, comparative prices, and convenience, and the social capital factors that exist among customers, farmers, and territory. Research [47] has also found that the perceived social embeddedness of customers at an organic farmers' market exerted a positive influence on their repurchase intention. Conceptually speaking, both social capital and social embeddedness are closely associated with relational capital. Accordingly, I put forward the following hypothesis:

H2b. The relational capital of consumers at farmers' markets exerts a positive impact on their repurchase intention.

#### 2.4. Subjective Well-Being

The experience, feeling, and understanding of well-being varies from person to person. Subjective well-being can be defined as a type of positive mental experience that an individual forms towards his or her own existence and progress and that is generated from the collective effects of factors such as objective conditions and satisfaction of needs [48]; it includes cognitive and affective aspects. The cognitive aspect equates subjective well-being with life satisfaction, and it is an overall evaluation based on the standards that an individual holds towards his or her quality of life. The affective aspect regards subjective well-being as the positive and negative evaluations that an individual has towards his or her current happiness and sense of value. As can be seen, well-being is a comprehensive concept combining an individual's life satisfaction, happiness, and sense of value. Similar concepts include satisfaction with life, quality of life, and happiness [49].

Numerous factors can influence subjective well-being, such as personality, self-efficacy, social relations, socioeconomic status, work, consumption, and leisure [50]. The purchase experiences at farmers' markets, which contain both consumption and leisure, are naturally a factor as well. Marketing research has shown that the primary task of salespeople is to convey superior value to customers so as to maintain and improve the well-being of customers and society [51]. Based on this definition, consumers should form favorable evaluations of product performance from the marketing activities of farmers at markets, which in turn influences their subjective well-being. However, health research [52] has indicated that personality, health, interpersonal network, and various domain satisfactions can explain 70–80% of subjective well-being. Still, literature regarding tourism has pointed out that the overall customer satisfaction of tourists (similar to the evaluation of tourism product performance) wields a positive influence on subjective well-being [53]. Based on the arguments above, I believe that the product performance perceived by consumers after making their purchases

at a farmers' market exerts a positive impact on their subjective well-being. I thus formulated the following hypothesis:

**H3a.** The product performance evaluation of consumers at farmers' markets exerts a positive impact on their subjective well-being.

Relatively more research exists on the influence of relational capital on subjective well-being. Studies show that some concepts similar to relational capital in meaning, such as social factors [46], social capital [54,55], and interpersonal trust [56], have an impact on subjective well-being. More specifically, social capital such as marriage, family, friends, and neighbors can offer individuals with timely and important social support, thereby bringing them joy, a sense of belonging, and self-esteem, which in turn enhances subjective well-being. Similarly, when consumers go to farmers' markets, the relational capital formed from their interactions with the friends and family accompanying them and their face-to-face interactions with the farmers will increase their subjective well-being. Accordingly, I put forward the following hypothesis:

**H3b.** The relational capital of consumers at farmers' markets exerts a positive impact on their subjective well-being.

Figure 1 exhibits the conceptual model of this study, presenting the relationships among the four constructs, namely, product performance, relational capital, repurchase intention, and subjective well-being, and the hypotheses that will be tested.



Figure 1. Proposed conceptual model.

#### 3. Methodology

#### 3.1. Construct Measurement

A structured questionnaire was developed to collect data, including four demographic variables, namely, participant gender, age, educational background, and average monthly household income and the four potential constructs, namely, product performance, relational capital, repurchase intention, and subjective well-being. Gender included male and female. Age was originally divided into six groups: under 20 years old, 21~30 years old, 31~40 years old, 41~50 years old, 51~60 years old, and over 61 years old. However, after compiling the statistics, I rearranged them into three groups: under 40 years old, 41~60 years old, and over 61 years old. Educational background was originally divided into four groups: junior high school or below, senior/vocational high school, university/junior college, and graduate school or above. However, after compiling the statistics, I rearranged them into three groups: senior/vocational high school or below, university/junior college, and graduate school or above. However, after compiling the statistics, I rearranged them into three groups: NTD 20,000 or lower, NTD 20,001~40,000, NTD 40,001~60,000, NTD 60,001~80,000, NTD 80,001~100,000, NTD 100,001~120,000, NTD 120,001~140,000, NTD 140,001~160,000, and NTD 160,000 or lower, NTD 40,001~80,000, NTD 40,001~80,000, NTD 40,000 or lower, NTD

In addition to the demographic variables of the participants such as gender, age, educational background, and average monthly household income, the potential constructs of this study all contained several indicators, each calculated using a single question item measured on a five-point Likert scale. The responses ranging from strong disagreement to strong agreement were given 1 to 5 points, respectively. After referring to the literature [57,58], I divided product performance into three variables, namely, product quality, product safety, and product superiority. Relational capital was divided into four variables, namely, face-to-face interaction, communication and understanding, learning experience, and development of friendship [59,60]. Repurchase intention was divided into three variables: repurchasing frequency, repurchase quantity, and repurchase priority [21,43]. Subjective well-being was divided into four variables: life satisfaction, happiness, fulfillment, and self-reported health [56,61]. The question items regarding product performance were worded in the negative direction and reverse scored. All of the question items in the questionnaire were reviewed and revised by three experts familiar with farmers' markets to ensure content validity. Table 1 presents the potential constructs, indicators, and their question items:

Potential Construct	Indicator	Question Item		
Product performance	Product quality Product safety Product superiority	The product quality does not meet my expectations. The product is not guaranteed to be safe. The products seem no different from those from other sales channels.		
Relational capital	Face-to-face interaction Communication and understanding Learning experience Development of friendship	The farmers personally sell their products, which offers more opportunities for face-to-face interaction. I can get to know the farmers better by talking with them directly. The market farmers and I can learn from each other. I can become friends with the market farmers.		
Repurchase intention	Repurchase frequency Repurchase quantity Repurchase priority	I am willing to come to this market more frequently. I am willing to purchase more at this market. I will choose to buy agricultural products from this market over those from other sales channels.		
Subjective well-being	Life satisfaction Happiness Fulfillment Self-reported health	I am satisfied with my life. I think I am happy. I am living a fulfilled life. I think I am in good health.		

Table 1. Potential constructs, indicators, and question items.

## 3.2. Data Collection

I first prepared a structured questionnaire and then chose three recurring farmers' markets in Taiwan that had been around for a long time. Two sold environmentally friendly agricultural products, whereas the other sold organic agricultural products. All three markets are managed by a market committee consisting of member vendors who ensure that all agricultural products sold at the market are produced, processed, and marketed by the farmers themselves and that all the agricultural products pass safety inspections and organic produce verification. I adopted convenience sampling of consumers with purchase experiences at these three markets. As convenience sampling was employed, the analysis results may not be representative of the entire population [62]. The interviewer confirmed that the participants were return customers who had purchased products at the market in the past before administering the questionnaire. The survey was conducted from February to April in 2016. A total of 394 questionnaires were distributed. After eliminating incomplete questionnaires, I obtained a total of 358 valid questionnaires, representing a valid recovery rate of 89.5%. Most of the valid samples were from women (65.9%), and over half of the participants were between the ages of 41 and 60 (54.2%). The highest level of education attained by most of the participants was university or junior college (60.3%), and in monthly household income, the largest group was between NTD 40,000 and NTD 80,000 (37.7%). Table 2 shows the sample characteristics in detail.

	n	%		n	%
Gender			Age		
Female	236	65.9	40 years old or under	121	33.8
Male	122	34.1	41 to 60 years old	194	54.2
			61 years old or above	43	12.0
Educational background			Monthly household income		
Senior high school or lower	59	16.4	NTD 40,000 or lower	78	21.8
University or junior college	216	60.3	NTD 40,001 to NTD 80,000	135	37.7
Graduate school or higher	83	23.2	NTD 80,001 NTD 120,000	84	23.5
-			NTD 120,001 or higher	61	17.0

Table 2. Sample characteristics.

## 4. Results

#### 4.1. Analysis of Descriptive Statistics

Table 3 presents the descriptive statistics of different participant groups with regard to the four potential constructs. On the whole, relational capital received the highest score (mean = 4.23, SD = 0.62) and was followed by repurchase intention (mean = 4.12, SD = 0.71), subjective well-being (mean = 3.91, SD = 0.59), and product performance (mean = 2.75, SD = 0.74). Looking at the individual latent variables, I found that female participants expressed higher product performance evaluations, relational capital, and repurchase intention than male participants after their purchase experiences, and they also perceived greater subjective well-being than male participants on the whole. Older participants displayed both higher product performance evaluations and repurchase intentions than younger participants. Participants between the ages of 41 and 60 presented the highest relational capital, and those under the age of 40 showed poorer subjective well-being. Participants with higher educational backgrounds expressed poorer product performance evaluations as well as higher relational capital, repurchase intention, and subjective well-being. Participants with higher monthly household income presented higher product performance evaluations, relational capital, product performance evaluations, relational capital, product performance evaluations as well as higher relational capital, repurchase intention, and subjective well-being. Participants with higher monthly household income presented higher product performance evaluations, relational capital, and subjective well-being, whereas those with slightly lower monthly household income (NTD 40,001~80,000) displayed the highest repurchase intention.

	Quality	Performance	Relational	Capital	Repurchase Intention		Subjective Well-Being	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Female	2.76	0.72	4.26	0.65	4.18	0.71	3.95	0.58
Male	2.74	0.77	4.19	0.56	4.01	0.68	3.84	0.60
Age								
40 years old or under	2.56	0.65	4.21	0.61	4.06	0.71	3.86	0.56
41 to 60 years old	2.83	0.75	4.25	0.63	4.13	0.70	3.92	0.61
61 years old or above	2.91	0.73	4.23	0.55	4.26	0.64	3.92	0.63
Educational background								
Senior high school or lower	3.12	0.76	4.16	0.53	3.92	0.68	3.89	0.58
Senior high school or lower	2.75	0.71	4.23	0.63	4.16	0.71	3.89	0.60
University or junior college	2.51	0.72	4.27	0.63	4.17	0.68	3.96	0.58
Monthly household								
income								
NTD 40,000 or lower	2.67	0.77	3.85	0.68	3.97	0.71	3.85	0.68
NTD 40,001 to NTD 80,000	2.77	0.71	3.86	0.59	4.17	0.70	3.86	0.59
NTD 80,001 NTD 120,000	2.81	0.78	3.92	0.60	4.07	0.72	3.91	0.60
NTD 120,001 or higher	2.67	0.74	3.91	0.54	4.08	0.66	3.91	0.54
Total	2.75	0.74	4.23	0.62	4.12	0.71	3.91	0.59

Table 3. Descriptive statistics of different population groups in potential constructs.

#### 4.2. Measurement Model Test

Prior to structural equation modeling (SEM) analysis, I performed an outlier test, a normality test, and multicollinearity test to ensure that the data fulfilled basic assumptions [63,64]. The results of the Q-Q plot indicated no problematic outliers in the measurement results of the individual constructs. The highest absolute value of the skewness coefficients of the four constructs was 1.201, and the highest absolute value of the kurtosis coefficients was 4.890. For a normal distribution, the absolute values of the skewness and kurtosis coefficients must be less than 3 and 10, respectively [64]. Thus, all four constructs can be regarded as following normal distributions. The most reliable index for multicollinearity testing is the variance inflation factor (VIF). The VIF of the two exogenous latent variables in this study, product performance and relational capital, was 1.022, thereby indicating lack of a high correlation between the two [65]. The measurement model was first tested, then structural equation modeling (SEM) analysis was conducted using AMOS 20. The measurement model test results indicated that the overall fitness of the measurement model was acceptable (see Table 4) with  $\frac{X^2}{df} = 2.126$ , RMSEA = 0.056, GFI = 0.938, and AGFI = 0.908. Table 4 shows that the composite reliability of the potential constructs ranged from 0.724 to 0.905, all exceeding 0.70 and thus indicating acceptable reliability [66]. According to Anderson and Gerbing [67], the requirements for convergent validity include standardized factor loading greater than 0.400 and reaching the 0.001 level of significance as well as average variance extracted (AVE) greater than 0.500. As shown in Table 3, the standardized factor loadings of the potential constructs ranged from 0.531 to 0.919 and all reached statistical significance (p < 0.001). Except for the AVE value of product performance being 0.469, the AVE values of all the other potential constructs exceeded 0.500. Thus, the convergent validity of the potential constructs was acceptable.

Constructs and Variables	Standardized Loading	CR	AVE	Cronbach's $\alpha$
Product performance		0.724	0.469	0.720
Product quality	0.753 ***			
Product safety	0.622 ***			
Product superiority	0.672 ***			
Relational capital		0.905	0.705	0.900
Face-to-face interaction	0.832 ***			
Communication and understanding	0.919 ***			
Learning experience	0.852 ***			
Development of friendship	0.747 ***			
Repurchase intention		0.897	0.744	0.895
Repurchase frequency	0.855 ***			
Repurchase quantity	0.910 ***			
Repurchase priority	0.821 ***			
Subjective well-being		0.878	0.651	0.859
Life satisfaction	0.829 ***			
Fulfillment	0.919 ***			
Happiness	0.888 ***			
Self-reported health	0.531 ***			

Table 4. N	leasurement	model	test.
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Goodness-of-fit:  $\chi 2/df = 2.126$ , RMSEA = 0.056, GFI = 0.938, AGFI = 0.908, \*\*\* p < 0.001.

Chin [68] pointed out that AVE values greater than 0.500 and coefficients of the correlation between constructs being lower than the square roots of the AVE values are required for discriminant validity. The AVE values of the constructs in the model ranged from 0.469 (close to 0.500) to 0.744, and their square roots fall between 0.685 and 0.863 (see Table 5). Thus, the measurement model has suitable discriminant validity.

	Product Performance	Relational Capital	Repurchase Intention	Subjective Well-Being
Product performance	0.685			
Relational capital	0.146	0.840		
Repurchase intention	0.300	0.357	0.863	
Subjective well-being	0.068	0.229	0.238	0.807

Table 5. Correlation matrix of constructs and square roots of their AVE values.

Note: The bold figures on the diagonal are the root values of potential constructs.

## 4.3. Structural Equation Modeling (SEM) Analysis Results

After confirming the suitability of the measurement model, I conducted SEM analysis to test model fitness and the hypotheses. The important fitness indices of the overall theoretical model were as follows:  $\chi^2/df = 2.233$ , GFI = 0.935, AGFI = 0.905, and RMSEA = 0.059. Except for RMSEA being slightly higher than 0.05, the remaining indices all reached the ideal criteria.

The analysis results of the overall theoretical model (Figure 2) indicate a significant and positive correlation between product performance and relational capital ( $\Psi = 0.20$ , p < 0.01). Thus, H1 is supported. The influence of product performance on repurchase intention was positive and significant ( $\beta = 0.30$ , p < 0.001), thereby supporting H2a. The influence of relational capital on repurchase intention was positive and significant ( $\beta = 0.32$ , p < 0.001). Thus, H2b is supported. The standardized coefficients of the influences of product performance and relational capital on repurchase intention were 0.30 and 0.32, respectively. I can thus say that the effect sizes of the two on repurchase intention are roughly the same. The influence of product performance on subjective well-being was positive but did not reach the level of significance ( $\beta = 0.08$ , p < 0.22). Thus, H3a is not supported. The influence of relational capital on repurchase intention and the support of relational capital on repurchase intention and the level of significance ( $\beta = 0.08$ , p < 0.22). Thus, H3a is not supported. The influence of relational capital on repurchase intention and the level of significance ( $\beta = 0.08$ , p < 0.22). Thus, H3a is not supported. The influence of relational capital on repurchase intention are roughly the same.



**Figure 2.** Structural equation modelling (SEM) analysis results. Note: \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001. The dashed line indicates that the influence was not statistically significant.

#### 5. Discussion and Conclusion

Farmers' markets have many functions, such as directly connecting farmers and consumers and promoting local production for local consumption. Furthermore, they can serve as cultural attractions, which can provide opportunities for rural tourism. They offer opportunities for training in production and marketing so that farmers can improve their effectiveness in marketing and management. Finally, they provide venues for social interactions and social embeddedness between consumers and farmers and improve their social well-being. This study combined the economic and social perspectives of consumer participation in farmers' markets and examined the relationships among important concepts of the post-purchase stage of consumer consumption at farmers' markets, namely, product performance, relational capital, repurchase intention, and subjective well-being.

The first finding was that a significant and positive correlation exists between product performance and relational capital, which indicates that farmers' markets can provide consumers with quality,

safe, and superior agricultural products as well as the opportunity to form and accumulate diverse relational capital such as face-to-face interactions, communication and understanding, learning, and development of friendship. Consumers who perceived greater product performance at farmers' markets accumulated more relational capital, so the two have a mutually complementing effect. In other words, farmers' markets with greater product performance can better enable consumers to form and accumulate relational capital during the consumption process. This result confirms the views expressed in previous studies [10,41,42], in which the social interactions such as conversations and information-sharing between buyers and sellers at farmers' markets enable consumers to establish social capital. At the same time, they promote consumers' understanding of market product characteristics and their ability to choose products of good quality, thereby leading to good product performance evaluation.

The second finding was that product performance and relational capital are both important factors of the repurchase intention of consumers, and the two are roughly equal in importance ( $\beta$  values equaling 0.30 and 0.32, respectively). The analysis results indicate that the effects of product performance and relational capital on repurchase intention are almost the same. In other words, whether consumers can experience high-quality interpersonal relationships and social interactions during consumption processes is just as important to customer loyalty to farmers' markets as whether consumers can purchase safe and high-quality agricultural products. Thus, existing customers can be encouraged to return to the market using an economic approach: for example, improving the quality of the agricultural products on sale to increase consumer ratings and satisfaction regarding the products. A social approach, which involves improving the quality of interactions between producers and consumers and providing consumers with deep psychological attachment and social support, could also prove effective. The analysis results indicate that these approaches are of equal significance.

The third finding was that the economic product performance does not have a significant impact on the subjective well-being of consumers at farmers' markets. This is consistent with the results derived by Cassia et al. [46] and Chen and Scott [47]. In contrast, the social relational capital does have a significant impact on the subjective well-being of consumers. This means that the economic perspective of whether consumers can buy safe and high-quality agricultural products at farmers' markets does not affect their subjective well-being. However, if a consumer has a good consumption experience with good interpersonal relations and social interactions at a farmers' market, then he or she will be more likely to go again. On the whole, the economic product performance and the social relational capital are of equal importance to repurchase intention. However, only the social relational capital is significant to subjective well-being. The question of whether product performance or relational capital is more important in this study is thus answered. The empirical data of this study indicates that the social relational capital is more important the economic product performance.

The managerial implications of the literature review and research findings are as follows. (1) Consumers can engage in more in-depth social interactions or establish close relational capital at markets, and at the same time, information exchanges enable them to acquire more product information and purchase agricultural products of greater quality. Thus, farmers' market planners should aim to provide high-quality agricultural products and maintain a friendly, social atmosphere that is conducive to communication. (2) To enhance consumer loyalty and repurchase intention, measures to improve the quality of economic and tangible products are necessary; however, measures to improve the social and intangible qualities of the environment cannot be ignored. (3) Aside from contributing to the local economy and serving as a form of leisure consumption, shopping at farmers' markets can enhance the subjective well-being of the consumers. In policy planning, administrative departments should encourage the establishment and promotion of farmers' markets.

Finally, I put forward five suggestions for future research. First, research applying both the economic perspective and social perspective to farmers' markets is still new; I suggest that future studies develop and test different constructs and frameworks to enrich research in this respect. Second, there are still many other factors that impact the product performance evaluation, relational capital, repurchase intention, and the well-being of consumers at farmers' markets, such as

demographic variables, personality, and socio-economic status, which I did not include in our analysis model. Future studies can use control variables or interference variables to encompass these factors and thereby enhance the rigor of research in this respect. Third, the operations of farmers' markets involve various stakeholders, including the government, communities, managers, farmers, and consumers. Future studies should include all of the aforementioned stakeholders as participants when investigating a topic. Fourth, including different demographic variables such as gender, age, educational background, and income in the SEM for multi-group path analysis to compare the moderating effects of different population groups would be interesting and meaningful. There were only 358 valid samples in this study, which was not enough for said analysis. It is recommended that future studies collect more samples for multi-group path analysis. Fifth, because of using convenience sampling, this research may have compromised the representativeness of the sample. Future studies can use random sampling method to enlarge sample's representativeness.

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