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Factors Affecting Producers' Trust and the Role of Trust as a Mediator to build Producers' Loyalty in Ethiopia Banana Value Chain

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ABSTRACT— Due to rapid transitions in the agri-food chain, collaboration and coordination between buyers and sellers are particularly important. Collaboration established on relational factors like trust. In Ethiopia banana value chain, the business relationship between farmers and local collectors is not long-lasting. They involve informal marketing relationships established based on the merits of the trading partners. Local collectors act opportunistically, and it affects producers' level of trust and their willingness to involve in a long-term relationship. Thus, this paper aimed to determine the factors that affect producers' trust and its role to build producers' loyalty which facilitates collaboration for two groups of farmers; cooperative members and independent farmers. The study found that price satisfaction and social satisfaction are the main determinants of trust, while the former is for the independent farmers, and the latter is for the cooperative members. Trust highly determines producers' loyalty, especially for independent farmers, and it also plays a significant mediating role between two factors (price satisfaction & social satisfaction) and producers' loyalty. The cooperative members have a better level of trust and loyalty for their buyers than that of the independent farmers. Thus, local collectors need to avoid their opportunistic behavior and develop trust in their sellers by satisfying their price and social satisfaction. In another way, the government should strengthen all the farmers' cooperatives to enable them to provide market choices for all the farmers other than its members, and more importantly, it needs to initiate and helps the farmers to become cooperative members.

KEYWORDS: Banana, Ethiopia, Loyalty, Trust

1. INTRODUCTION

Banana is one of the most commonly grown fruit crops in both large-scale commercial farm and smallholder farmers, and also the most widely consumed fruit in Ethiopia [1]. According Central Statistics Agency (CSA) (2016), banana covered 68.11% of the total fruits produced for Meher Season's Private Peasant Holdings in 2013/14 in the country. Smallholder farmers have contributed approximately 99.65% of total banana production in the country from 2014/15, with only 0.35% of the commercial farm contribution [3] Among other regions in the country, of the total fruits produced for Meher Season's Private Peasant Holdings in 2013/14, the largest proportion 72.30% has been covered by the Southern Nation Nationalities and People Region (SNNPR) [2]. Among zones in the SNNP region, Gamo Gofa Zone, particularly Arba Minich Zuria and Mirab Abaya districts contribute a lot. For farmers in these two districts, banana is one of a number one cash crop which has a paramount contribution for their livelihood development, through food security, income generation, and provides employment opportunity for the youth [4]. The districts also have more than 80% of the market share of bananas in Ethiopia and 40% of the central market/Addis Ababa [5]. Regardless of its economic importance, banana marketing is not yet developed in the country in general in the two districts in particular. Market technical and economic efficiency remains extremely low [5,6]. The producer to local collectors marketing governance structure is a market relationship characterized by spot market exchange. They involve informal marketing relationships [7] established based on the merits of the trading

partners, and their business relationships are not also long-lasting [8]. There is no standardized grading, information transmission, and a pricing system [9]. Therefore, the price the farmers receive depends on the types of buyers, seasons, and types of produce (quality) [10]. The farmers who sell for cooperatives have better information access [9] however, cooperatives are not strong enough to compete with private traders and provide market choice [5,8], as a result, farmers mainly sell their bananas to private local traders, who withhold market information and arbitrarily decide on market price. Consequently, farmers received the farm gate banana price lower than its potential [8], and it affects farmers' trust in their buyer and willingness to involve in a longterm relationship.

Now a day, rapid transitions in the agrifood chain lead to major supply chain structures change [11]. The market environment also becoming highly competitive with changing consumers' needs and expectations. This requires increasing collaboration and coordination between buyers and sellers [12], especially for perishable products like fruits [13]. Collaboration between actors in the value chain, determined by relational factors like level of trust [14]. Trust in buyers contributes a lot to build a smooth transaction, which could reduce transaction costs [9]. It also plays an important role to build producers' loyalty [14, 15,16]. Loyalty result from some unconsciously perceived factors than that of rational valuation [17]. According to Boniface et al. (2010), producer loyalty has been defined as a producers' motivation to sell their product frequently and to involve in durable relationships with buyers, and to advocate favorably about it. Having a durable relationship between the trading partners provides benefits for both buyers and sellers. However, buyers exhibit opportunistic behavior and take advantage of farmers who in turn, do not consider the buyers as trustworthy, resulting in producer dissatisfaction, which leads them to be disloyal [14]. Given this, having a better understanding of the factors that determined trust and loyalty is an important precondition for the predictions of the ongoing and future efforts to increase value chain collaboration. Despite the importance of collaborative marketing for better market performance, there is an acute shortage of studies in the country that address marketing relationships. There are studies conducted abroad [13,14,15], with a similar area of the current study. Nevertheless, neither of the first two considered the mediating role of trust and the impact of social satisfaction, and Mutonyi et al. (2016), examined only the impact of producers' price satisfaction on producers' trust. The current study addressed three factors (Price satisfaction, Social satisfaction, and Collaborative communication) together for two groups of producers (independent farmers and Cooperative members) that had never considered before, and contribute to the existing literature and fill the gap, especially in fruit sectors. Besides, area & crop-specific study is essential as the study conducted in one area may not be equally important to design policy for the improvements of the value chain in any other area [14].

2. Factors affecting producers' trust

Trust plays an important role in facilitating the trading partners' marketing relationships by stimulating and building a common understanding [18]. Through the development of trust, it is easy to build producers' loyalty [14, 15, 16]. In a situation where there are no objective exchange standards, producers evaluate the buyer's trustworthiness and suitability based on relational factors like price satisfaction [14,18], social satisfaction [19], and collaborative communication [13, 15, 19, 20, 21]. Jiang & Naude (2011) stated that in a situation, the trading partners behave opportunistically, the relationships are mostly unstable, and partners are willing to continue the relationship as far as expected benefits can be received. As per Boniface et al. (2010), by keeping their promise regarding price and payment method, buyers can develop better producers' trust and thereby loyalty. In general, farmers with high trust in their buyers are more loyal and committed to the relationships while those with lower trust engaged in the spot market [13,23]. Price satisfaction: Matzler et al. (2007) defined price satisfaction as "the psychological result of a difference between price expectation and price perception". It also refers to a positive emotional state driving from price-related factors and the

perception of obtaining a satisfied and fair price [15]. It positively influences the level of trust [25], by building confidence and reliability between trading partners contributing to building long-term relationships [14, 13]. As per Matzler et al. (2007), price satisfaction is a five-dimension construct these are price-quality ratio, price fairness, price reliability, price transparency, and relative price. Price-transparency and price-quality ratios are not incorporated in this study since they are appropriate variables in the study area scenario. Because to consider price-transparency, there is no clear communication regarding buyers' price, which is culturally acceptable by farmers, and there is no standard grading system to measure the price-quality ratio [14].

H1: Price satisfaction positively influence producers' trust in buyers

Social satisfaction: the satisfaction of the business partners often needs to consider the psychosocial element of their relationships called social satisfaction [19]. Social satisfaction refers to being gratified with the social outcomes of the relationships, for instance, an exchange partners may 'appreciate the relations with its partner on a personal level, likes working with it, because it believes the partner is concerned, respectful, and willing to exchange ideas' (Geyskens et al. 1999 p.224 as cited in [18,26].

H2: Social satisfaction positively influence producers' trust in buyers

Collaborative Communication: is considered as an essential element to develop and maintain the business partners' relationships [28]. According to Schrage (1990), as cited in [22] it refers to the process of communication, business partners jointly participate in the process of constructing meaning and mutual understanding of meaning, in a shared space for a particular purpose. Collaborative communication influences the business relationship through the development of commitment, cooperation, and performance [19,27]. In collaborative communication between business partners' information sharing, discussing each other's expectations, and providing credible information regarding the relationship between offered price and quality is crucial [22]. Mohr et al. (1996) stated that communication between business partners is said to be collaborative when it fulfilled four conditions: frequency of information: refers to how frequently partners have contact with each other; formality: routinized interaction; bi-directional feedback; and the use of rationality as a way of achieving influence.

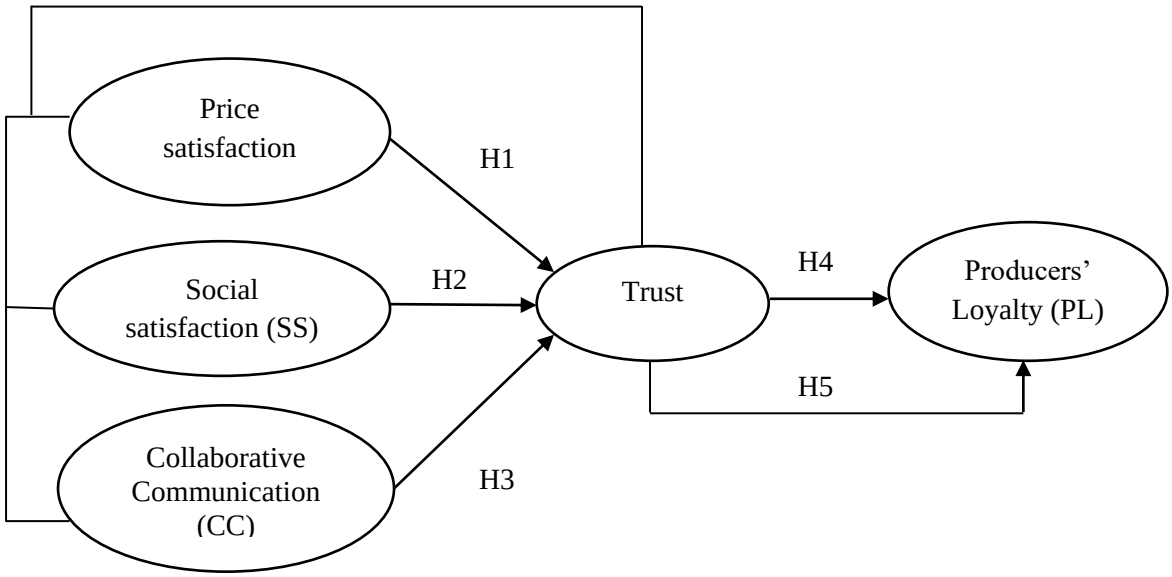
H3: Collaborative communication positively influences producers' trust in buyers.

3. Conceptual Framework and Hypothesis Development

The study conceptualizes based on two market relation theories. Social exchange theory (SET) describes the process of establishing and maintaining relationships [29]. Its key notion is that anyone involves and maintains relationships based on the assumption that doing so is rewarding (economic/price and social rewards). If the relationships satisfy both economic and social expectations, parties develop trust in their business partners and become committed and loyal for a given business partnership [19]. Equity theory states individuals should receive benefits or rewards equivalent to their relative effort or input [30,31]. It used to explain the importance of fairness in a business partnership. Fairness positively influences commitment and aspirations for the business relationship to continue. Thus, the central assumption taken from this theory is that fairness is a crucial factor in establishing and maintaining long-term business relationships. Moreover, Batt (2003), explained as producers' satisfaction with the business partners depends on how well their expectations are fulfilled, and this satisfaction directly influences the producers' willingness to maintain relationships.

H4: Trust positively influence Producers' loyalty

H5: Trust mediates the influence of collaborative communication, price satisfaction, and social satisfaction on producers' loyalty.



Source: Authors' Diagram Based on Reviewed Literature

Figure 1. Conceptual Framework of the study

4. Material and Methodology

4.1. Research Design

The study conducted in Arba Minch Zuria and Merab Abaya districts. The sample districts were selected using multistage sampling with purposive sampling by considering its production potential. The sample size is 250 smallholder farmers (150 from Arbaminch zuria and 100 from Mierab Abaya). It was determined based on the structural equation model requirements. It requires a minimum of 10 respondents per estimated parameter [33,34,35] and the parameter estimated understudy was 22 (it becomes 17 at the time of data analysis because variable dropped due to convergent validity issue), thus, it requires a minimum of 220 sample respondents and 30 samples added to compensate missing data and inappropriate response (if any). The sample respondents selected using systematic sampling. The data were collected through structured questionnaires, observations, and focus group discussions.

4.2. Measures for variables and Mathematical Model

The study conceptualized using Structural Equation Modeling (SEM) because it analyzed relationships, addressed both direct and indirect effects of the variables (mediation), and the variables used are latent (are not observed directly). Thus, the ideal analysis tool for such kinds of study is SEM. SEM has two components, namely the Measurement Model and Structural model. The measurement model is used to evaluate how well the observed (measured) variables combines to identify underline hypothesized construct (latent variables). While the structural model describes the hypothesized relationships among latent variables and the two models together form a full structural model [33, 35, 36]. For all identified variables a total of 26 items were adopted from the reviewed literature [14, 15, 18, 19, 22, 24, 25, 27, 28, 37] and summarized in table 1. To measure the condition of all those items 5-point Likert scale (1= Strongly Disagree, 2=Disagree, 3= Neutral, 4=Agree, and 5= Strongly Agree) are used.

Table 1. Variables used and measurements

Constructs		**Items**	**Descriptions of the items (dimension)**
Trust		Trust1	I have confidence that my main banana buyer will buy my banana
		Trust2	My buyer does not make false claims
		Trust3	I believe in the information provided by my buyer (price, quality, quantity)
		Trust4	My buyer is quick to handle my complaints
		Trust5	My buyer cares for my welfare
Producer's Loyalty		Loyalty1	I frequently selling banana for the same buyer for the last one or more year/s
		Loyalty2	I will ask other banana producers to seek assistance from my buyer
		Loyalty3	I will be happy to recommend my buyer to other banana Producers
		Loyalty4	I will continue to do more business with my current buyer in the future
		Loyalty5	If I have another alternative buyer, I will remain with this buyer
Price satisfaction	Price Fairnes (PF)	PF1	My buyer does not take advantage over me
		PF 2	My buyer is always consistent with the same pricing formula
		PF 3	My buyer offers me a fair and reasonable price
	Relative Price (RP)	RP1	Terms and condition of my buyer are better tailored to my needs than those of other buyers
		RP2	I am convinced that my buyer is the best choice
		RP3	I do not believe another buyer will have the same or even better banana price offer
	Price Reliability (PR)	PR1	Banana price changes are communicated properly
		PR2	Banana price changes are communicated Timely
		PR3	My buyer keeps all promises regarding the banana price
Social Satisfaction		Concerned	My buyer is concerned about me (willing to provide any solution for my problems)
		Willing to exchange idea (WEI)	My buyer is willing to exchange idea with me
		Respectful	Interactions between me and my buyer are characterized by mutual respect.
Collaborative communication		Frequency	My buyer keeps me informed regularly
		Credibility	My buyer provides me credible information
		Reciprocal Feedback (RFB)	There is open and two-way communication between me and my buyers

While building the model and performing all the estimation, for the sake of model simplicity, to have normally distributed data and increase reliability, it uses item parceling approach through computing the mean value for multiple item questions listed above (Loyalty, trust, and price satisfaction) and using item mean scores instead of the individual item scores [38, 39, 40]. As per the conceptual framework of this study, the standardized parameter estimates for the model computed using the following equations [41, 42].

The Measurement Model

$$PF_i = \lambda_1 PS + \sigma_1 \quad (1)$$
$$RP_i = \lambda_2 PS + \sigma_2 \quad (2)$$
$$PR_i = \lambda_3 PS + \sigma_3 \quad (3)$$
$$Concerned_i = \lambda_4 SS + \sigma_4 \quad (4)$$
$$WEI_i = \lambda_5 SS + \sigma_5 \quad (5)$$
$$Respectful_i = \lambda_6 SS + \sigma_6 \quad (6)$$
$$Frequency_i = \lambda_7 CC + \sigma_7 \quad (7)$$
$$Credibility_i = \lambda_8 CC + \sigma_8 \quad (8)$$
$$RFB_i = \lambda_9 CC + \sigma_9 \quad (9)$$

The Structural Model

$$Trust_i = \Gamma'_1 PS + \Gamma'_2 SS + \Gamma'_3 CC + \zeta_1 \quad (10)$$
$$PL_i = \beta Trust + \zeta_2 \quad (11)$$

The Mediation model

$$PL_i = c_1 PS + c_2 SS + c_3 CC + \varepsilon \quad (12)$$
$$Trust_i = a_1 PS + a_2 SS + a_3 CC + \varepsilon \quad (13)$$
$$PL_i = c'_1 PS + c'_2 SS + c'_3 CC + bTrust + \varepsilon \quad (14)$$

Where, PS, SS, CC are latent exogenous variables; PL: is endogenous dependent variable. Trust: is endogenous mediator variable. λ represent the relationship between the latent exogenous variables and its measures, and σ represent measurement error. Γ represents the effect of exogenous independent variables on dependent variables; ζ, represents disturbance term; and β represents the effect of the endogenous variable on dependent variables. c and c' is the coefficients relating the independent variables and dependent variable (PL) without mediator, and adjusted for the mediator respectively, b: the coefficient relating the mediator to the dependent variable adjusted to the independent variable, and a: the coefficient relating the independent variable to the mediator, and ε Residuals.

4.3 Variable Validity and Reliability Checking

The data analyzed through AMOS 22 software with SPSS. Confirmatory factor analysis (CFA) made to estimate the parameter of the model variance, covariance, and the residual error variance of the observed variables. For reliability, convergent and discriminant validity test, composite reliability (CR) (> 0.7,) Average variance Extracted (AVE) (> 0.5), and the square root of AVE (greater than the correlation value of the factors with other factors in the model) have been used respectively [34]. The model fitness assessed through $\chi 2$, which deals with a measure of misfit for the model to be fit, the p-value for $\chi 2$ should be larger than .05. However, $\chi 2$ criticized for its sensitivity to sample size when the sample size is large the chi-square value is always statistically significant indicating that model fit is unacceptable, although the model may be a close fit to the observed data. Thus, to reduce the influence of sample size on the chi-square value, a normed chi-square ($\chi 2/df$) < 5.0 was developed. Comparative Fit Index (CFI) value ≥.95, Root Mean Square Error of Approximation (RMSEA) value ≤.06, and Normed Fit Indices (NFI), with value, varies from 0 to1 (1 represents a perfect fit) were also used to measure the model fitness.

5. Results and Discussions

5.1. Descriptive results

Out of the total 250 sample questionnaires, 234 questionnaires are valid for the analysis, with the response rate of 93.6%. An independent t-test conducted between the members of the cooperatives and independent farmers, and it shows as there is a significant difference between the levels of trust and loyalty between the two groups. Accordingly, as can be seen from table number 3, the average level of trust estimated for members (3.84, ± 0.821) and independent farmers (2.53, ± 1.049). The average level of loyalty found to be for members (4.11, ± 0.803) and independent farmers (2.66, ±1.096).

Most of the independent farmers are not satisfied with their marketing relationships. Because, traders are discussing and determining the market price together, all of them have the same pricing formula. They did not allow anyone to enter the market and fully control the market. Consequently, it makes farmers disloyal for their buyer and they conduct the market transaction with the one who can provide them credit, keep his promise in making the payment on a specified time and full amount (when the transaction made on credit), and buy regularly (especially during the production season) for a certain period of times and shift to another buyer whenever necessary.

Table 2. Levels of trust and loyalty for Cooperative Members and Independent Farmers

Variables	Independent Farmers (170)		Cooperative Members (64)		t	df	Sig. (2-tailed)
	Mean	Std. Dev.	Mean	Std. Dev.			
Trust	2.53	1.049	3.84	0.82	-10.09	143	.000
Loyalty	2.66	1.096	4.11	0.80	-10.87	149	.000
PF	2.35	1.049	3.40	1.32	-5.746	95	.000
RP	2.40	1.088	3.39	1.24	-5.576	101	.000
PR	2.52	1.184	3.60	1.29	-6.058	232	.000
Concerned	2.66	1.278	3.62	1.13	-5.606	127	.000
WEI	2.51	1.246	3.55	1.13	-5.843	232	.000
Respectful	2.59	1.281	3.55	1.208	-5.183	232	.000
Frequency	2.57	1.282	2.89	1.311	-1.692	232	.092
Credibility	2.61	1.338	2.70	1.281	-.501	232	.617
RFB	2.58	1.336	2.84	1.428	-1.339	232	.182

Source: Authors' estimation

Notes: Mean values calculated from survey items stated in table 1

5.2.Statistical analysis through Structural Equation Modeling (SEM)

The multi-collinearity test conducted through the linear regression test, and there is no multicollinearity among the predictor variables as all the VIF values are less than the cutoff point 10. The normality test also carried out by evaluating the kurtosis value, and it is in an appropriate region <7, thus the data is normally distributed so that the co-variance based estimation approach is used to estimate the structural model using Maximum Likelihood estimation method. For the linearity test, curve estimation conducted for all the relationships in the model, and it determined that all relationships are sufficiently linear to be tested using a covariance-based SEM algorithm.

5.2.1 Confirmatory Factor analysis (CFA)

Confirmatory factor analysis was performed, and all variables were well loaded on their respective latent variables with loading value above 0.5. The composite reliability (CR) results are also above 0.7, the estimated values of average variance extracted (AVE) are greater than 0.5, and the square root of AVE for all variables is greater than the variable's correlation with other variables in the model. The model also satisfied all model fit indices (χ/df .749 and p=.805, CFI=1.000, NFI=0.986, RMSEA= 0.000).

Table 3. Validity Test Result

Factors	CR	AVE	Correlation Matrix and SQR AVE		
			CC	SS	PS
CC	0.906	0.763	**0.873**		
SS	0.897	0.743	0.103	**0.862**	
PS	0.881	0.713	0.127	0.267	**0.844**

Source: Authors' estimation

Note: shown in bold on the diagonal of Table 3 represent for the square root of AVE

5.2.2. Structural Model

The model is well fitted for all fit indices with estimation result, the chi-square (χ2) test= 1.368 and P-value 0.004, the comparative fit index (CFI) =.986, the Tucker-Lewis index (TLI) =.981, Normed Fit Index (NFI) =.949 and RMSEA value 0.028. All latent exogenous variables perform well in the measurement models for both groups, with all factors loading above the recommended levels of 0.70.

For the full data set, price satisfaction (0.582) is the most important factor that determines producers' trust, followed by social satisfaction (0.365). The finding is consistent with the previous studies [14, 15, 18]. The study confirmed that fulfilling the producers' price and social expectation alone is not sufficient to build producers' loyalty. Rather buyers are expected to build producers' trust through price [14] and social satisfaction [18], thereby achieve producers' loyalty. The results also assured the concept of Social Exchange Theory. Regardless of the previous study [15], collaborative communication does not have a significant impact on producers' trust. This might be because of producers' expectations, they believe that traders are not reliable and interactive in providing market information, and they accept it as the rule of the game. Thus, they do not measure their buyer's trustworthiness in terms of communication effectiveness. Results about trust confirm findings of previous studies [14, 15, 18], found that trusting buyers would result in remaining loyal. The two identified variables explain 48% of the variance in producers' trust, and trust explains 68% of the variance in producers' loyalty.

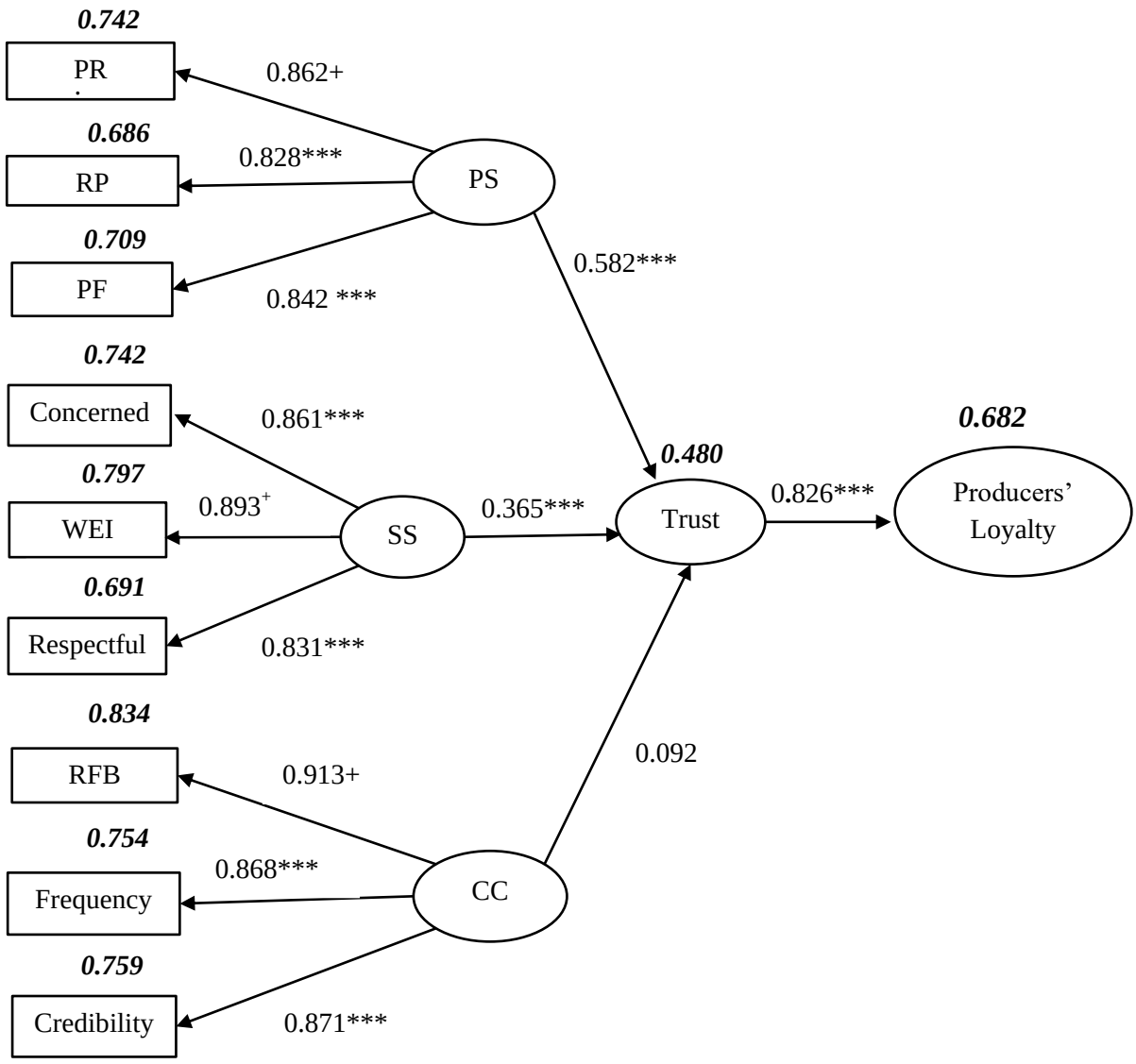


Figure 2. Hypotheses test result for the full data set

Note: For all the three Figurs (2,3,&4), numbers in *italics* are squared multiple correlations (R^2) in the structural model and communalities in the measurement model. *** (**) statistically different from zero at the 1% (5%) significance level; In the structural model, → are regression weights and in the measurement model ← are factor loadings. +Parameter was constrained to one before estimation, thus no significance levels were computed.

For cooperative members, social satisfaction (0.457) is the most important influential factor of producers' trust, followed by Price satisfaction (0.366). This may be attributed to the fact that the price of cooperatives remains low and the same for all types of banana as compared with individual traders. However, since the cooperative does not practice fraud marketing over farmers, they believe that cooperatives care for their welfare. The two variables found to explain 36% of the variance in producers' trust, and trust explains 40% of the variance in producers' loyalty.

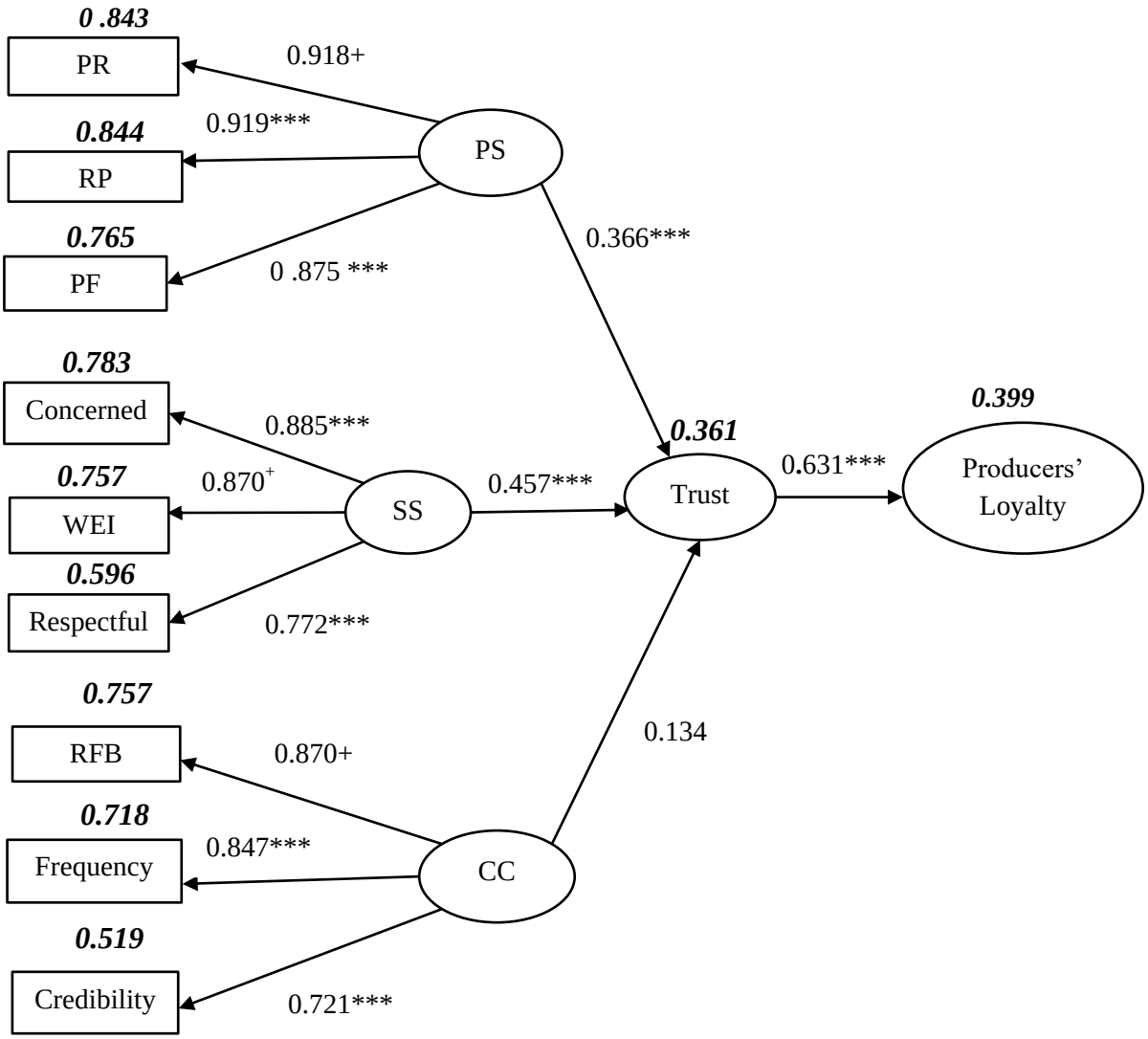


Figure 3. Hypotheses test result for the Members of the Cooperatives

For independent farmers, price satisfaction (0.616) is the most important factor, followed by social satisfaction (0.250). This could be due to individual buyers' opportunistic behavior. Even if independent farmers are not satisfied by their buyers, due to the absence of choice, they are doing business with their buyers for more than a year. But, they are not in a position to continue that partnership if they may get any possible alternatives, and are not advocating their buyer favorably. The result is in line with the finding of Walter et al. (2000). The two identified variables explain 45% of the total variance in producers' trust, and trust explains 65% of the total variance in producers' trust.

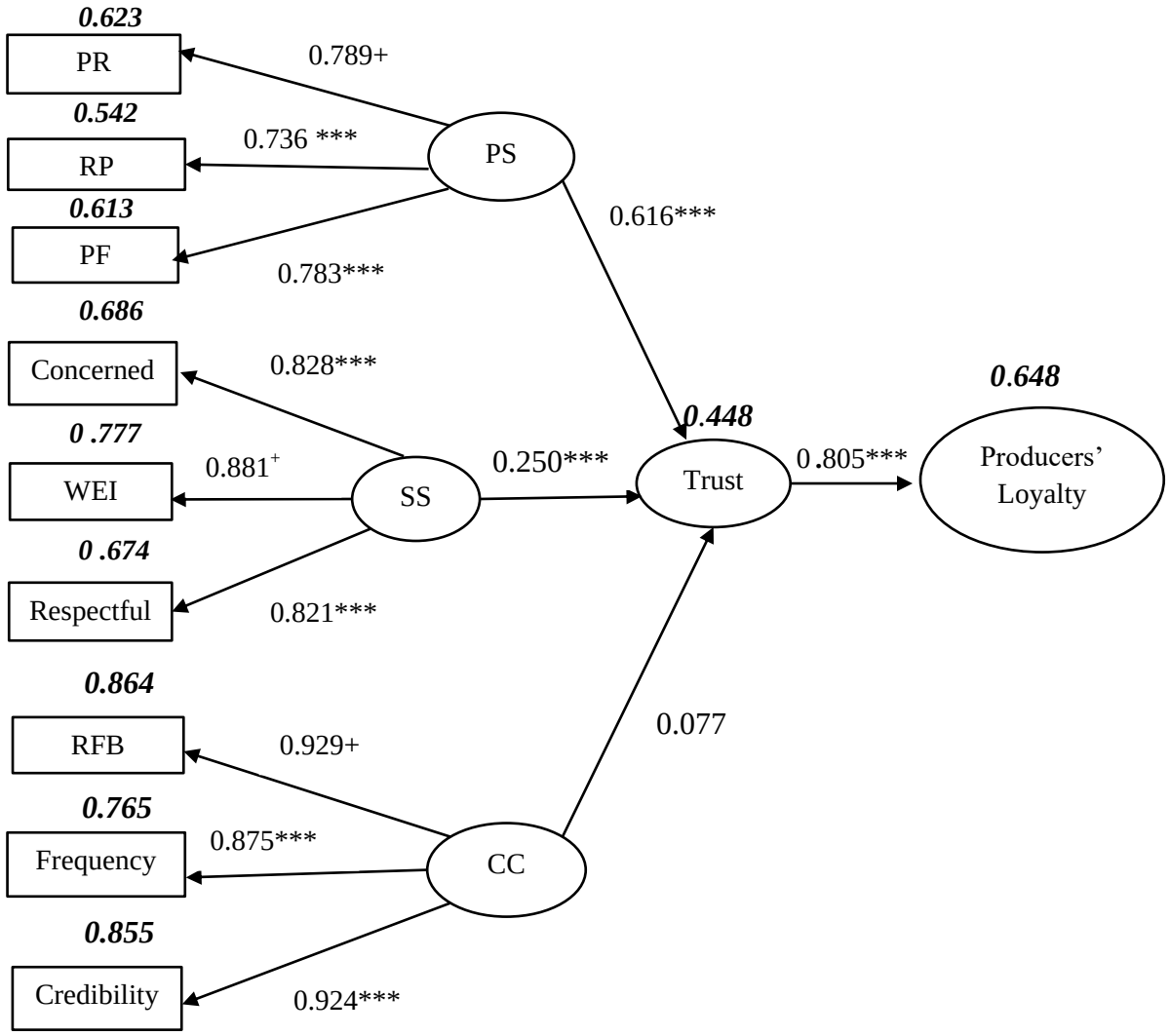


Figure 4. Hypotheses test result for Independent Farmers

5.2.3. The Mediation role of trust to build producers' loyalty

To estimate the mediating role of trust between the identified predictor variables (price satisfaction, social satisfaction, and collaborative communication) and loyalty, the Baron & Kenny (1986) approach and bootstrap were employed to find out the indirect effect [45]. The assumption under the first approach is, the sampling distribution of the estimate follows a normal distribution. Though literature [46] stated in testing an indirect effect, the normality assumption is not applicable, and the normality-theory based method of testing mediation does not accomplish well in testing the indirect effect. Thus, since the bootstrap methods do not in line with the normality assumption and provide the interval estimates, it becomes an appropriate way to estimate mediation [45]. Accordingly, table number 4 shows that the introduction of the mediator (trust) lowered the coefficient of all indicators and the p-value (except price satisfaction). Baron & Kenny (1986) approaches show as there is partial mediation but, the bootstrap result shows as trust plays a full mediation role between two factors (price satisfaction, and social satisfaction), and producers' loyalty, while there is no mediation between collaborative communication and producer loyalty. This might be because of collaborative communication does not have a significant effect on trust.

Table 4.Pooled Mediation test for predictor variables, trust, and loyalty

Relationships (H5)	Direct without mediator	Direct with Mediator	Indirect (Bootstrap result)
PS -Trust -Loyalty	.579***	.193***	Sig. Fully mediated
SS- Trust- Loyalty	.348***	.104 (.018)	Sig. Fully mediated
CC- Trust- Loyalty	.134 (.009)	.078**(.042)	Not Sig. No mediation

Source: Authors' estimation

Note: ***P <0.001, **P<0.05

6. Conclusion and Policy Implication

Price satisfaction and social satisfaction are the main determinants of producers' trust, and the former is for the independent farmers while the latter for the cooperative members. The Cooperative members have a better price and social satisfaction, develop a good level of trust, and remain loyal to their buyer while for independent farmers, the reverse is true. The local collectors act opportunistically, abuse the farmers, and took advantage of them. Consequently, it contributes to low vertical coordination and collaboration between them. The implication is that through satisfying the producers' price and social expectation, it could be to improve producers' trust and loyalty which in turn promotes vertical coordination and collaboration between producers and their buyers. The government bodies particularly the marketing and cooperatives office, in collaboration with agricultural and natural resource offices in the study area, would better work in a way that strengthens all the farmers' cooperatives to improve their financial capacity and enable them to provide market choices for all farmers other than their members. In general, to enjoy the profits that come from synergy, buyers need to develop trust in their suppliers by satisfying their price and social expectation and avoid opportunistic behavior. Besides, it needs to initiate and helps the farmers to be a member of the cooperatives since the cooperatives provide them better relational rewards (economic and social) than that of local collectors, thereby it could be possible to realize vertical coordination between buyers and sellers.

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