THE RELATIONSHIPS BETWEEN MEMBER PARTICIPATION, TRUST, BEHAVIOURAL LOYALTY, AND THE MODERATING EFFECT OF ETHNICITY: AN EXPLANATORY STUDY OF VALUE CO-CREATION AMONG COOPERATIVE MEMBERS IN SARAWAK

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ABSTRACT

This study examined value co-creation and its effect on trust and behavioural loyalty among cooperative members. Trust plays a crucial role in determining the members' loyalty. Despite a plethora of studies on consumer trust and loyalty in the marketing literature, little has been done in regards to the value co-creation in the context of cooperative in Malaysia. Due to cultural differences, the moderating effect of ethnicity was also investigated. Thus, the study lays the foundation by examining the effects of four dimensions of member participation, which is an important component of value co-creation, on trust and behavioural loyalty as well as the moderating effect of ethnicity on the path relationship. Questionnaires were distributed to the Malay and Dayak members of the credit cooperatives in Sarawak. Variance-based structural equation modeling was then developed to perform latent variable analysis. The results showed that information seeking, personal interaction and responsible behaviour have significant positive effects on trust. In addition, trust was also found to have significant positive effect on behavioural loyalty. The test on moderation showed that there is no moderating effect of ethnicity on the relationship between trust and behavioural loyalty despite cultural differences. The contribution stems from a better knowledge of the antecedents of trust by incorporating value co-creation in the context of cooperatives. This study also contributes to the research and practice of value co-creation by delving into its effect on trust and behavioural loyalty.

Keywords: Cooperative; Member participation; Value co-creation; Trust; Loyalty

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1. INTRODUCTION

The service logic is recently changing the course of marketing research by emphasizing the role of co-creation in services. Since its introduction, the concept of value co-creation has undergone a series of reconceptualizations and refinements along with the development of academic thought on critical marketing concepts, such as value, service, markets, and the roles of customers and service providers, which has led to a rather disparate literature (Tronvoll, Brown, Gremler & Edvardsson, 2011). According to Vargo and Lusch (2008), there are 10 propositions made in the service logic with the purpose of reevaluating the fundamentals of value creation, services, as well as the roles of customer and service providers. In the context of services, providers and customers interact in order to create values. One of the propositions that has been debated is the roles of the customers in the value co-creation process. The customers are no longer considered as a passive actor of value embedded by the producers in goods and services, but are rather the main value creator by determining a product's or a service's value in use (Gronroos, 2008).

Cooperatives are social enterprises that are formed and owned by a group of individuals for the purpose to meet their social and economic benefits (Rosmimah et al., 2011). The underlying philosophy of cooperatives is essentially service and the well-being of members. As such, cooperatives are non profit oriented and will always prioritize the members' welfare when making key decisions (Tchami, 2007). Members, who are the customers of a cooperative, play an important role in realizing the value co-creation.

As of December 2016, there were 13,428 registered cooperatives in Malaysia with 7.06 million members (Malaysian Cooperative Societies Commission, 2017). Relating this to the entire population in Malaysia, which is slightly above 30 million, 39 percent of them are members of the cooperatives. In Sarawak, there were 978 cooperatives which consist of 322, 881 total members. In a cooperative business context, member participation remains as an important determinant in the value creation process.

Studies by Parahalad and Ramaswamy (2000) and Vargo and Lusch (2004) indicated a change in the marketing philosophy, which implies active participation of customers in the value creation. However, there are still gaps in the literature to support the relational aspects of co-creation with respect to the marketing concepts. Generally, studies show that trust, commitment and satisfaction are related to future intention (Ulaga & Eggert, 2006). Trust among members of a cooperative is a major issue to be addressed, which eventually leads to their loyalty. In addition, customer loyalty is one of the intangible assets for the organization and a source of competitive advantage. Nevertheless, there is lack of study done in the cooperative context thus far to understand member participation towards trust and loyalty. Due to cultural differences, the elements of ethnicity between the Malays and Dayaks were also examined. Rossiter and Chan (1998) highlighted that ethnicity is an important factor in consumer's research and ethnic micro culture in which it may influence the society and affect their decision making.

Therefore, the present study investigated the relationship between member participation, trust and behavioural loyalty in case of credit cooperative service. Due to cultural differences between the Malays and Dayaks in Sarawak, this will likely contribute to further our understanding on the phenomenon. Thus, ethnicity was incorporated in the model as a moderator to assess its effect on the relationship between trust and behavioural loyalty. The findings are expected to have

managerial implications from marketing perspectives and future research in service marketing in the context of cooperative movement in the country and the developing economies.

The remainder of this paper is organized as follows. We briefly delineate a review of literature on behavioural loyalty, customer participation in value co-creation, customer participation and trust, trust and behavioural loyalty, and the implication of cultural differences. Thereafter, we present underlying theories of service dominant logic (S-D logic) and social exchange coupled with an appropriate research model that governs this study. Next, we discuss methodology and report the findings respectively. Discussions and conclusions are presented towards the end of the paper.

2. LITERATURE REVIEW

2.1. Customer Loyalty

Customer loyalty can be defined as "customer commitment in doing business with a particular organization, purchases of goods and services repeatedly, and recommend it to family and friends" (Mcllroy & Barnett, 2000, p.348). According to Ehigie (2006), loyalty can be defined as a feeling of commitment on the part of the customer to a product, brand marketer or services: whether they are staying with the same provider, likely to take out new products with the bank and recommend the bank's services. Loyalty is also translated when the customer's intent to return to a service provider as well as their intention to recommend the provider to others (Bendall-Lyon & Powers, 2003) and a customer's desire to continue the relationship (even if competitors lower the prices), willingness to recommend to a friend and intentions to continue patronizing (Ball, Coelho & Vilares, 2006).

There are two dimensions of customer loyalty; behavioural and attitudinal. In one hand, behavioural dimension refers to a customer's behaviour on repeat purchases and indicates a preference to a brand or service. On the other hand, attitudinal dimension refers to customer's intention to repurchase and recommend, which are good indicators of loyal customers (Dick & Basu, 1994). Nowadays, customer loyalty is a critical factor for conducting businesses in a highly competitive market; and credit cooperative as well as banking institutions are at no exception (Yusman, Jati Kasuma, Christopher, Hamizah & Haswardi, 2014). The present study explored behavioural loyalty as it is vital for the cooperatives to understand, maintain, and reinforce the favourable behaviours of the cooperative members.

2.2. Customer Participation in the Value Co-creation

Customer participation is defined as "the degree to which the customer is involved in producing and delivering the service" (Dabholkar, 1990, p. 484). Customer participation behaviour refers to all forms of customer involvement and engagement in the value-creation process (Dong, Evan & Zou, 2008). Value co-creation in a service context takes place in a social setting; the more pleasant, congenial, and positive the social environment is, the more likely customers are to engage in value co-creation (Lengnick-Hall, Claycomb & Inks, 2000).

Early research identifies two types of customer value co-creation behaviour; customer participation behaviour and customer citizenship behaviour. The former refers to a required (in-role) behaviour

necessary for successful value co-creation. The latter refers to a voluntary (extra-role) behaviour that provides extraordinary value to the firm but, is not necessarily required for value co-creation (Bove, Pervan, Beatty & Shiu, 2008; Groth, 2005; Yi & Gong, 2008; Yi, Nataraajan & Gong, 2011). This research uses customer participation behaviour in narrow sense, which includes only required behaviours necessary for the successful service creation. This is considered necessary to attain an appropriate performance in the value co-creation. According to Yi and Gong (2012), customer participation dimension is built upon four factors namely; information seeking, information sharing, responsible behaviour, and personal interaction. According to Kellogg, Youngdahl and Bowen (1997), customers seek information to clarify service requirements and satisfy other cognitive needs. More specifically, customers constantly search for information regarding service status and service parameters. Besides, they also need information on how to perform their tasks as value co-creators as well as what they are expected to do and how they are expected to perform during a service encounter.

For a successful value co-creation, customers should provide resources such as information for use in value co-creation processes (Lengnick-Hall, 1996). In the absence of essential information from the customers, employees are unable to commence their duties. By sharing information with the employees, the customers can ensure that the employees will provide a service that meets their particular needs (Ennew & Binks, 1999).

Responsible behaviour occurs when customers recognize their duties and responsibilities as partial employees (Ennew & Binks, 1999). For a successful value co-creation between customers and employees, the customers ought to be cooperative, observing the rules and policies and accepting directions from the employees (Bettencourt, 1997).

Personal interaction refers to interpersonal relations between customers and employees, which are necessary for a successful value co-creation (Ennew & Binks, 1999). Kelley, Donnelly and Skinner (1990) coin the term "customer functional quality" to represent the interaction between customers and employees, which includes interactional aspects such as courtesy, friendliness, and respect.

2.3. Customer Participation and Trust

The process of co-creation increases the likelihood of positive future intention because the firm generates unique insights into the co-creating customers' sources of value (Randall, Gravier & Prybutok, 2011). In general, trust, commitment and component satisfaction are related to future intention (Ulaga & Eggert, 2006). A study by Yi, Nataraajan & Gong (2011) found that customer participation behaviour reduces employee's workload, which indirectly positively affects employee's commitment and trust. The degree of customer participation plays a significant role in building mutual trust about the firm's business activities (Sul, 2005). Moreover, customer participation can be a valuable resource for increasing cross-selling opportunities, assessing customers' needs, and reinforcing the customization.

2.4. Trust and Behavioural Loyalty

Morgan and Hunt (1994) conceptualize trust as a state that exists when one party has confidence in an exchange partner's reliability and integrity. Trust relates to the customer's confidence that the organization will reliably provide satisfactory service in a manner that is competent, honest, fair, responsible, helpful, and benevolent. According to Ranaweera and Prabhu (2003) suggesting that trust has stronger emotion compared to satisfaction in which it may predict loyalty better. Banks should focus on credibility of trust (belief that the provider will deliver as promised) and benevolence trust (belief that the service provider is acting in the best interest of the customers) with their customers (Yap, Ramayah & Wan Nushazelin, 2012). Study by Hansen, Morrow and Batista (2002) empirically found that cognitive and affective trust among members of a cooperative is having a positive effect on cooperative members' perception of performance and satisfaction and members' retention.

2.5. The Implication of Cultural Differences

Malaysia is a multi-ethnic country in South East Asia. Despite being a multi-ethnic country, Malaysia is formed predominantly by Malays (50.4%), followed by Chinese (24.6%). In Sarawak, Dayaks are the majority (Department of Statistic Malaysia [DOS], 2010). Malay, Chinese and Dayak are three different ethnic groups upholding their distinctive cultural identities (De Run, 2007). Malays are defined as people who speak Malay, lead the Malay way of life and are of the Islamic faith (Asmah, 1983) and endogamy seems to be the rule (Asmah, 1983; Purcell, 1965). They are believed to have migrated from Yunnan (Asmah, 1983) or Sumatra (Asmah, 1977). Malays are the largest ethnic group in Malaysia (Mardiana, 2000). Dayak is a generic term that refers to the non-Muslim indigenous people of the Borneo Island in the East Malaysia. They are the farming people, inhabiting the middle and upper reaches of rivers in Borneo.

Ethnicity is seen as a crucial factor in examining and understanding the functions and viability of most contemporary societies including multicultural societies like Malaysia (Abraham, 1999). The multilingual and multiethnic culture of Malaysia can be at best termed as truly Asian Culture. Interest in the influence of culture on consumers' view and behaviour has been growing greatly due to the diversification of consumer profiles and changing of technological environment (Douglas & Craig, 1997). Research conducted by Joy, Kim and Laroche (1991) found that ethnicity is a factor that influences the use of patterns of most financial institutions in Malaysia. A study found there is a slight difference between beliefs of Malay young adults and others in advertising compared to the difference between the beliefs of Chinese and Dayak young adults (Ting, De Run & Ramayah, 2015). A study by Jati Kasuma (2012) proved that ethnicity does not have a moderating effect on the relationship between relationship quality and microenterprise loyalty. Cultural characteristics should therefore be considered as equally important by the cooperatives to further understand their customers. Perception of the customers towards the quality of the service differ in terms of demographics such as gender, ethnicity, education and income (Zineldin & Jonsson, 2000).

2.6. Underlying Theories

2.6.1. Service Dominant Logic (S-D Logic)

S-D logic has been known as a potential philosophical foundation for a scientific discipline of service. According to Spohrer and Maglio (2008, p. 19), "service-dominant logic might provide just the right perspective, vocabulary, and assumptions on which to build a theory of service systems, their configurations, and their modes of interaction". The advancement of service science continues to incorporate many S-D-logic conceptualizations, such as value co-creation and

resource integration (Spohrer, Maglio, Bailey & Gruhl, 2007; Spohrer & Maglio, 2008). Value cocreation is one of the cornerstones of the S-D-Logic (Vargo & Lusch, 2010). Value co-creation in the service research has been introduced to explain a new paradigm that characterises the interaction as depicted by the beginning of the service tendered by the exchange between producers and customers that make up the experience of the service. The focus of value co-creation is important for the organization to survive in the competition, getting the acceptance from the society and able to achieve its mission (Yi & Gong, 2012).

2.6.2. Social Exchange Theory

Social exchange theory suggests that social behaviour is the consequence of the exchange process. The central idea of this theory is that both parties enter into and maintain exchange relationships with others with the expectation that, by exercising so, they will be rewarding (Blau, 1964). Grounded on this idea, trust is a consequence of value co-creation. The social exchange theory argues that behaviour is a key of an exchange procedure that will maximize the benefits and minimize the costs whilst generating the benefits. The purpose of the affect theory of social exchange is to incorporate emotions as a core characteristic of social exchange processes, where a social exchange is conceptualized as a joint activity, with at least two parties, and each party has some other values (Lawler, 2001). Although service loyalty is occassionally viewed as a result of cognitive rather than emotional consumer outcomes, the current study focuses on service loyalty as a result of emotional responses (Pritchard, Havitz & Howard, 1999). The affect theory of social exchange postulates that social relationships are a source of emotions and attempts to characterize the distinct emotional effects of different exchange structures (Lawler, 2001). The theory can be applied to a wide range of contexts including compliments from acquaintances, support among coworkers, information flows among firms, trading among nations and relationships between firms and customers.

3. RESEARCH MODEL AND HYPOTHESES

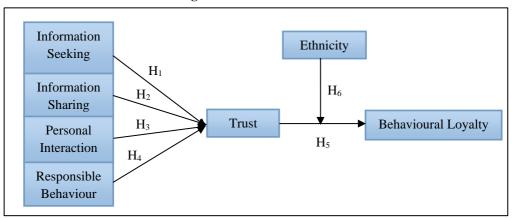


Figure 1: Research Model

The above research model was developed based on Yi & Gong (2012), Ball, Coelho and Machas (2004) and Sudhahar, Israel, Britto and Selvam (2006). Ethnicity was introduced and tested in the research model in view of the cultural differences between Malays and Dayaks that may influence the use patterns of credit cooperative services in Sarawak. In Malaysia, there are three main or distinct cultural groups: the Malays, the Chinese and the Indians. Because of the different values and lifestyles across the ethnics, it has been inferred that various groups employ different and embedded cultural dimensions in choosing their banks (Jati Kasuma, 2012). As the context of this particular study refers to members of a credit cooperative, credit cooperative also runs its business operation like a bank institution that gives credit supports and facilities.

In view of the above model, six directional hypotheses were formulated as follows:

- *H*₁: Information seeking has positive effect on trust
- *H*₂: Information sharing has positive effect on trust
- *H₃:* Personal interaction has positive effect on trust
- *H*₄: *Responsible behaviour has positive effect on trust*
- *H*₅: *Trust has positive effect on behavioural loyalty*

*H*₆: The relationship between trust and behavioural loyalty is moderated by ethnicity such that it will be significantly different between the Malays and Dayaks

4. METHODOLOGY

Since the Dayaks make up the largest ethnic group in Sarawak and the Malays are the largest and most dominant group in Malaysia, they have brought significant contribution to the growth of cooperative and to its movement in the country as a whole. The composition of the Dayak ethnic is almost 40 percent of the total population as compared 24 percent of Malays in Sarawak (Department of Statistic, 2010). Dayak has become a convenient label to refer to the Iban, Bidayuh, and the Orang Ulu as they are the most populous groups. Sarawak's cultural and racial compositions are more diverse than Peninsular Malaysia. The differences of culture between these two groups of cooperative member in Sarawak have contributed to the success of ethnic cooperative in the state. This study examines their participation in value co-creation activities towards loyalty. The target populations were all Malays and Dayaks who represent the credit cooperative members in Sarawak.

In accordance to the research problems and objectives, quantitative approach which assumes positive stance was carried out in the present study. All the statements pertaining five (5) dimensions forming members' participation in value co-creation, trust and behavioural loyalty were adapted from the past literatures (Yi & Gong, 2012; Ball et al., 2004; Ball et al., 2006 & Sudhahar et al., 2006). The key variables were measured by using multiple statements in order to ensure greater degrees of freedom when partitioning the data into groups. This also allows measurement error adjustments so as to increase the reliability and predictive validity (Hair, Hult, Ringle & Sarstedt, 2014). A post-hoc Harman single-factor was performed after the data collection so as to ensure variance of the data was not explained by one single factor, thus addressing common method bias (Podsakoff, et al, 2003). The statements were measured based on a 7-point Likert scale; with score of 1 (Strongly Disagree) to 7 (Strongly Agree). A questionnaire was prepared in

both English and Malay languages to collect the necessary information and responses. Selfadministered questionnaires were then distributed to the respondents across the state.

A non-probability purposive sampling technique was utilized so as to ensure the sample data characteristics were matched with the objectives of the study. As such, the respondents were the members and consumer of credit cooperative who had been using credit and service facilities provided by their credit cooperative. By using G-Power Analysis software, with the effect size of f square 0.15, α error pro 0.05, power Gf 0.8 with a number of 6 tested predictors, therefore 98 respondents are the minimum sampling for this study. Out of 400 self-administered questionnaires distributed to the respondents, only 309 questionnaires were returned and useful for analysis which resulted in the response rate of 77.2 percent. The response rate of over 70 percent indicates that a non-response error is not a concern (Nulty, 2008). The raw data were subsequently transferred to SPSS 22.0 and imported to SmartPLS 3.0 to perform the latent variable analysis.

5. FINDINGS

5.1. Respondent Profile

Table 1 shows the demographic profiles of 309 Malay and Dayak respondents who participated in this study. Most of the respondents are male and aged between 41 and 50 years old.

Variable		Frequency	Percentage
Gender	Male	169	54.7
	Female	140	45.3
Ethnicity	Malay	210	68.0
	Dayak	99	32.0
Age	21-30	57	18.4
	31-40	81	26.2
	41-50	86	27.8
	Above 50	85	27.5

Source: Author's calculation

5.2. Measurement Model

Table 2 presents construct reliability and convergent validity for all constructs that were examined in this study. The composite reliability (CR) values of 0.943 (BEL), 0.907 (INSE), 0.911 (INSH), 0.946 (PINT), 0.945 (RES), and 0.961(TRU) demonstrate that these constructs have high levels of internal consistency. In general, all constructs demonstrate good convergent validity. The average variance extracted (AVE) of all constructs achieve the minimum threshold value of 0.5 which indicates the items explain more than 50 percent of the construct's variances (Hair et al., 2014).

Construct	Item	Loading	Composite Reliability	AVE
Behavioral Loyalty	BEL1	0.902	0.943	0.805
	BEL2	0.897		
	BEL3	0.900		
	BEL4	0.890		
Information Seeking	INSE1	0.847	0.907	0.765
	INSE2	0.883		
	INSE3	0.893		
Information Sharing	INSH1	0.794	0.911	0.720
	INSH2	0.911		
	INSH3	0.878		
	INSH4	0.806		
Personal Interaction	PINT1	0.908	0.946	0.777
	PINT2	0.887		
	PINT3	0.926		
	PINT4	0.907		
	PINT5	0.770		
Responsible Behaviour	RES1	0.908	0.945	0.812
	RES2	0.930		
	RES3	0.882		
	RES4	0.882		
Trust	TRU1	0.841	0.961	0.833
	TRU2	0.929		
	TRU3	0.939		
	TRU4	0.916		
	TRU5	0.935		

 Table 2: Internal Consistency and Convergent Validity

Source: Author's compilation

Table 3 and **Table 4** show the results of discriminant validity using Fornell and Larcker (1981) criterion as well as Henseler's HTMT (2015) criterion, respectively. Overall, the square root of AVE for each construct indicates larger value than the correlation estimates. It indicates that all the constructs are distinctly different from one another, thus, implying that each construct is unique and captures the phenomena that are not represented by other constructs in the model (Hair et al., 2014).

	Table 3: Fornell and Larcker Criterion						
	BEL	INSE	INSH	PINT	PES	TRU	
BEL	0.897						
INSE	0.381	0.875					
INSH	0.478	0.573	0.849				
PINT	0.623	0.485	0.699	0.882			
RES	0.559	0.478	0.766	0.775	0.901		
TRU	0.793	0.373	0.44	0.584	0.519	0.913	

Note: Diagonal elements shaded and highlighted in bold represent the square root of AVE. Off diagonal elements are simple bivariate correlations between the constructs.

Source: Author's compilation

In addition, Henseler's HTMT criterion, which imposes more stringent assessment than the earlier criterion, suggests that all constructs are at $HTMT_{0.85}$ threshold (Henseler, Ringle & Sarstedt, 2015) as illustrated in **Table 4**.

Table 4: HTMT Criterion						
	BEL	INSE	INSH	PINT	PES	TRU
BEL						
INSE	0.419					
INSH	0.526	0.654				
PINT	0.671	0.531	0.770			
RES	0.605	0.521	0.848	0.836		
TRU	0.846	0.404	0.475	0.619	0.551	

Criteria: Discriminant validity is established at HTMT_{0.85}

Source: Author's compilation

The SRMR is an absolute measure of fit and is defined as the standardized difference between the observed correlation and predicted correlation. As the result shows 0.070, which is less than 0.08, the model is surmised to have a good fit (Hu & Bentler, 1999).

5.3. Assessment of the Structural Model

Prior to the assessment of structural model, it is important to ensure that there is no collinearity issue in the inner model of the study. **Table 5** presents the outcome of the collinearity test.

	BEH	TRU
INSE		1.520
INSH		2.912
PINT		2.725
RES		3.316
TRU	1.01	

 Table 5: Collinearity Assessment

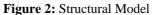
Source: Author's compilation

Based on **Table 5**, the result showed that the Variance Inflation Factor (VIF) value for each construct is lower than the offending value of 5 (Rogerson, 2001) suggesting that there is no collinearity issue persists in the study.

Table 6 presents the results of path coefficient assessment using bootstrapping procedure for each hypothesized relationship in the model as illustrated in **Figure 2**. Four relationships were found to be significant at 99 percent confidence interval (INSE->TRU, β =0.114, t=2.285, LL=0.04, UL=0.211; PINT->TRU, β =0.439, t=5.270, LL=0.317, UL=0.596; RES->TRU, β =0.175, t=1.751, LL=-0.01, UL=0.329; TRU->BEL, β =0.793, t=27.935, LL=0.737, UL=0.834). In another word, information seeking, personal interaction and responsible behaviour have significant positive effects on trust. In the same vein, trust has a significant positive effect on behavioural loyalty. The relationship between ethnicity and behavioural loyalty as well as the relationship between information sharing and trust were found to be non significant (ETC->BEL, β =0.006, t=0.190, LL=-0.05, UL=0.055; INS->TRU, β =-0.066, t=0.841, LL=-0.194, UL=0.066).

BEL2 5138 BEL1 BELA Moderating Effect TRUS Behl TRU4 Ethnic **TRU** Trust Ethnic TRU2 TRU1 Personal Interact Resp Behaviour Info Seek Info Share PINT2 PINT4 PINTS RES2 ß PINT¹ **PINT3** VSE1 SE2 3 ISH1 ISH2 EHS SHO ISH4 RES1 RES4

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Relationship	β	S.E.	T Stats.	р	LL	UL	Decision
INSE \rightarrow TRU	0.114	0.05	2.285	0.011	0.04	0.211	Supported
INSH →TRU	-0.066	0.079	0.841	0.200	-0.194	0.066	Not Supported
PINT \rightarrow TRU	0.439	0.083	5.270	0.000	0.317	0.596	Supported
RES \rightarrow TRU	0.175	0.1	1.751	0.040	-0.01	0.329	Supported
TRU \rightarrow BEH	0.793	0.028	27.935	0.000	0.737	0.834	Supported

Table 6: Path Coefficient Assessment

Note: LL indicates Lower Limit and UL Indicates Upper Limit at 95% and 99% confidence Interval *Source*: Author's compilation

The assessment of coefficient of determination (\mathbb{R}^2), the effect size (f^2) and the predictive relevance (\mathbb{Q}^2) of exogenous variables on endogenous variable in this study are presented in **Table 7**.

Tuble IT D							
	\mathbb{R}^2	Q^2	Trust	Effect Size			
BEH	0.629	0.501	1.68	Large			
TRU	0.360	0.297					
INSE			0.013	Weak			
INSH			0.002	None/Weak			
PINT			0.111	Small to Medium			
RES			0.014	Weak			

Table 7: Determination Of Coefficient (R²), Effect Size (f²) And Predictive Relevance (Q²)

Source: Author's calculation

Based on **Table** 7, the value for coefficient of determination (R^2) is 0.629. This suggests that the changes in the exogenous variables (information seeking, information sharing, personal interaction and trust) explain 62.9 percent of variances in the behavioural loyalty. The remaining 37.1 percent of variances in the behavioural loyalty are explained by other factors that were not considered in the model. The Q^2 value of 0.501 for behavioural loyalty, which is larger than 0 (Hair et al., 2014), suggests that all exogenous variables possess predictive ability over the endogenous variable. Each exogenous variable (INSE, $f^2 = 0.013$; INSH, $f^2 = 0.002$; and RES, $f^2 = 0.014$) has almost weak-to-small effect sizes. In addition, PINT ($f^2 = 0.111$) and TRU ($f^2 = 1.678$) indicate small-to-medium and large effect sizes, respectively, on the endogenous variable. Cohen's (1988) computation of effect size is used in which 0.02, 0.15, 0.35 represent small, medium and large effects respectively.

Table 8: Result Of Moderating Effect Of Ethnicity

	В	S.E.	T-Stats	р	LL	UL
TRU*Ethnicity \rightarrow BEH	0.011	0.071	0.149	0.882	-0.153	0.123

Table 8 illustrates the moderating effect of ethnicity on the relationship between trust and behavioural loyalty (β =0.011, t=0.149). We found that ethnicity does not moderate the relationship between trust and behavioural loyalty.

6. DISCUSSION AND CONCLUSION

This paper empirically examined the relationship between member participation and trust as well as the effect of trust on loyalty among the members of credit cooperative in Sarawak. Information seeking, personal interaction and responsible behaviour were found to have significantly positive effects on trust, however only information sharing was found to have non significant effect on the trust. This implies that information sharing does not influence trust among the cooperative members although they share the information during the service interaction. Some empirical studies identify the benefits of customer participation for the firm in terms of increasing the level of trust (Vega-Vazquez, Revilla-Camacho & Cossio-Silva, 2013). The finding also found that trust among cooperative members significantly lead to behavioural loyalty. This corresponds with a study by Liang and Wang (2006) among financial service industry in Taiwan which empirically evidenced found that higher level of trust would lead to higher level of behavioural loyalty.

Trust is also found to have a positive effect on loyalty. Trust helps to attract new customers which subsequently retain the existing ones besides promoting overall satisfaction. Trust among members is very crucial in a cooperative organization. As a members' based organization which is democratically controlled by the members, trust towards their cooperative will indirectly encourage them to participate in the economic and social programs more actively. Study by Hansen, Morrow and Batista (2002) empirically found that cognitive and affective trust among members of a cooperative is having a positive effect on cooperative members' perception of performance and satisfaction and members' retention. Interestingly, we also found the large effect size of personal interaction in predicting trust.

Non significant moderating effect of ethnicity on the relationship between trust and behavioural loyalty might be attributable to the high degree of tolerance and understanding among the target populations. A study by Jati Kasuma (2012) proved that ethnicity does not have a moderating effect on the relationship between relationship quality and loyalty of microenterprise owners towards banks in Malaysia.

Value co-creation is one of the most accessible competitive advantage because of the ease of the implementation and its effects on future intention. In addition, value co-creation has long been praised as the next source of competitive advantage for service providers in the 21st Century. The focus of value co-creation lies in the interactions which the service providers establishes with their customer and the value outcomes from the co-creation process. Credit cooperative, which offers commercial service, should develop an efficient business strategy in service co-creation as to enhance and maximise service delivery which results in improved member's satisfaction and loyalty. Credit cooperative should also focus on the building credibility of trust in pursuing their collection of goals.

There are a number of limitations of this study, which suggest potential areas for further research. First, we study members of a cooperative from only one industry in cooperative- the credit service. Although our primary goal has been to investigate the effect of members' participation in a cooperative credit service context, further studies might consider other cooperative industries such as consumer, agriculture as well as other service context as to ascertain the generalizability of the results. Secondly, instead of using behavioural loyalty as an outcome variable, using second-order construct that consists of attitudinal and behavioural can be performed. Another interesting idea is

to know the weight of co-creation on attitudinal and behavioural loyalty in comparison to the rest of determinants. Finally, it would be beneficial to conduct a qualitative study on the value cocreation so as to gain an in-depth understanding of the phenomenon in the study. It is important to delve into the factors that act as antecedents and consequences of the behaviour of cooperative members pertaining co-creation which would allow the development of more intergrative model.

Cooperative sector is booming and nowadays more and more people are considering to join cooperative as to fulfill their economic and social benefits. Throughout this study, the researchers have discovered an important dimension of value co-creation that have impacted the trust among cooperative members. To build the trust among members, it requires them to co-create value together with their service provider by actively participating in the cooperative service activities. When the trust exists, this will result into their behavioural loyalty. Although ethnicity does not moderate the relationship between trust and behavioural loyalty among cooperative members, this study is considered as an empirical evidence that proves ethnicity between the Malays and Dayaks as a cultural factor is not a requisite that could possibly strengthen the relationship between trust and loyalty among them. Hence, this study has also helped the cooperative movement to keep track the important dimensions of co-creation and continuously monitor as to ensure maximum trust among their members. The study also provides better understanding of different value co-creation activities and contributing to their success for cooperative movement to operationalize value co-creation as competitive advantage.

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