CHAPTER 7

COMPREHENSIVE MODEL OF BSR

BSR management has emerged as an important tool to manage the various supply chain processes. The ways suppliers were managed traditionally are changing with the realization of how the suppliers are critical players of supply chain. Now it has become clear that no organization can sustain alone in the system, so the need to use the potential and capabilities of other members emerge. Directly and indirectly the suppliers provide materials and services to the buyers’ ultimate offerings to the customers. Seeking close working relationship with the supplier has become a mandate to attain efficiency. As observed in the existing literature, most of the studies have been done in western countries with only manufacturing organization as the respondents and taking into account a few aspects of supplier relationship. With this milieu a need to develop a comprehensive model of BSR in Indian context is to be proposed.

7.1 TRUST AND BSR BENEFITS

Trust is one of the important elements of the BSR (Crosby et al., 1990; Webster, 1992; Walter et al., 2003; Shah, 2009). There is a connection in the views of the two organizations on the potential benefits and the extent of trust between them. Identification of the benefits for both parties is the foundation on which close, partnership like relationships can be built. Developing and maintaining high levels of trust has often been identified in the literature as an essential issue in relationships. Trust is considered both a prerequisite and an outcome of relationship (Johnson et al., 2004). Therefore, trust can be considered as an important attribute which has a strong relationship with BSR benefits, so Hypothesis 1 can be formulated as:-
H₀: Trust does not encourage benefits procured in BSR.

H₁: Trust encourages the benefits procured in BSR.

7.2 GOVERNANCE AND BSR BENEFITS

Inter-firm governance mechanisms include using contracts to specify terms and align incentives (Williamson, 1981). Less formal types of collaboration probably involve less clear risk, uncertainty and benefit sharing. Between two organizations risks and benefits are usually shared with formal agreement in areas such as obligation contracting, profit sharing, and the provision of incentive systems for the collaboration parties (Harland et al., 2003). When organizations invest in relation-specific assets and combine resources through governance mechanisms, a supernormal profit can be derived on the part of both exchange parties (Dyer and Singh, 1998). Thus, if the members in relationship advance in governance mechanisms then there may be more clarity and more benefits accrue in the relationship. This suggests Hypothesis 2 to be:-

H₀: Governance mechanisms do not positively affect BSR benefits.

H₁: Governance mechanisms positively affect BSR benefits.

7.3 INFORMATION SHARING AND BSR BENEFITS

Information asymmetry may make it difficult to accurately assess an exchange partner’s behavior (Katsikeas et al., 2009) so in a cooperative relationship, companies interact frequently and share meaningful information (Balakrishnan and Geunes, 2004). Use of information technology tools is also considered a strong driver of supply chain agility (Yusuf et al., 2004). The processes for information exchange are important as they promote coordination, adaptation, and learning (Ring and Van de
Ven, 1992). For adaptability and responsiveness information sharing is very essential (Lee, 2004). Such is the importance of information sharing that Hypothesis 3 can be articulated as:

\[ H_0: \text{Information sharing does not encourage benefits reaped in relationship.} \]

\[ H_1: \text{Information sharing encourages benefits reaped in relationship.} \]

7.4 COOPERATION AND COORDINATION AND BSR BENEFITS

Cooperation and coordination between buyer and supplier affect short-term performance by smoothing deliveries and reducing tactical coordination costs, and also long-term performance by helping firms develop new capabilities (Dyer and Nobeoka, 2000; Novak and Eppinger, 2001). Also the configuration of internal and external coordination practices concerns to the appropriate level of supplier integration leading to maximum performance (Das and Talluri, 2006). Cooperation and Coordination influence the move from adversarial relationship to a close relationship. Hence, Hypothesis 4 can be postulated as:

\[ H_0: \text{Cooperation and Coordination does not enhance benefits procured.} \]

\[ H_1: \text{Cooperation and Coordination enhance benefits procured.} \]

7.5 LONG TERM ORIENTATION AND BSR BENEFITS

When buying firms are unwilling to commit to long term relationships and to make investments to improve suppliers’ performance, suppliers may be unwilling to commit to resource investments that are relationship specific (Krause, 1999). A cooperative long-term manufacturer–supplier relationship is characterized by joint management of value creation for superior productivity through cooperative, synergistic problem solving activities between the exchange parties based on their mutual respect and
long-term perspectives (Sako, 1992). Therefore, it can be said that elements for long
term orientation are important and need to be extended by the buyer with suppliers
who are providing value in products and services to the organization. So Hypothesis 5
can be posited as:-

H₀: Elements for Long term orientation does not help in procuring benefits.
H₁: Elements for Long term orientation help in procuring benefits.

7.6 SUPPLIER DEVELOPMENT AND BSR BENEFITS

Transaction-specific supplier development significantly contributes to the prediction
of buyer-supplier performance improvement (Humphreys et al., 2004). Appropriate
supplier development activities are powerful to substantially back up the buyer firm’s
differentiation as well as cost leadership strategy (Wagner, 2006). Performance
outcomes in quality, delivery and flexibility appear to depend on supplier
development (Krause et al., 2007). So Hypothesis 6 can be formulated as:-

H₀: Developing supplier does not increase BSR benefits.
H₁: Developing supplier increases BSR benefits.

7.7 YEARS OF ASSOCIATION AND BSR BENEFITS

Performance improvements sought by buying firms (Krause, 1999) are often only
possible when they commit to a long term relationship with their key suppliers. The
type of relationship existing between buyer and supplier varies with the length of
relationship (Eisenhardt, 1989). Firms learn to communicate and coordinate with one
another better over time (Mayer and Argyres, 2004). Hence, the longer two partners
work together more benefits associated with relationship quality are likely to follow.
So Hypothesis 7 can be posited as:-
$H_0$: Long years of association do not give more BSR benefits.

$H_1$: Long years of association give more BSR benefits.

7.8 ANALYSIS

This section tries to specify a comprehensive model for BSR (BSR) on the basis of the chosen variables. The functional form for the determination of BSR can be written as

$$BEN = F (TRU, GOV, INFO, CoCo, LTO, DEV, YOA)$$

(7.1)

More specifically, it can be written as

$$BEN = \alpha + \beta_1 TRU + \beta_2 GOV + \beta_3 INFO + \beta_4 CoCo + \beta_5 LTO + \beta_6 DEV + \beta_7 YOA + \mu$$

(7.2)

The error term ‘$\mu$’ in the above equation is supposed to satisfy all the assumptions of the classical regression analysis. It is an unexplained variable other than the variables mentioned above.

In order to test the research hypothesis, regression model was estimated. Table 7.1 represents the model summary.

<table>
<thead>
<tr>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>.678</td>
<td>.459</td>
<td>.433</td>
</tr>
</tbody>
</table>

Table 7.1: Model Summary of BSR Aspects’ Regression Analysis

Predictors: (Constant), TRU, GOV, INFO, CoCo, LTO, DEV, YOA

R is the value of the multiple correlation coefficient between the predictors (YOA, LTO, GOV, DEV, TRU, CoCo and INFO between the buyer and the supplier) and the outcome (BEN). This value is quite high at 0.678 showing positive relationship between the predictors and the dependent variable.
The value of \( R^2 \) in the model is 0.459, which is a measure of how much of the variability in the outcome is accounted for by the predictors. Thus, the predictors collectively account for 45.9 percent of the variation in Benefits reaped in the relationship. The adjusted \( R^2 \) is giving an idea of how well this model generalizes and ideally its value should be close to the value of \( R^2 \). In this case the difference is (0.459 - 0.433 = 0.026 or 2.6 percent). This shrinkage means that if the model were derived from the population rather than a sample it would account for approximately 2.6 percent less variance in the outcome.

Table 7.2: ANOVA Results of BSR Aspects’ Regression Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>8.610</td>
<td>17.222</td>
</tr>
<tr>
<td>Residual</td>
<td>10.142</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>18.752</td>
<td></td>
</tr>
</tbody>
</table>

Predictors: (Constant), TRU, GOV, INFO, CoCo, LTO, DEV, YOA
Dependent Variable: BEN

Table 7.2 shows sources of variation in dependent variable due to independent variables and error terms. Here total variation is 18.752, out of which 8.610 is due to regression and 10.142 is due to residual term. This means, out of total variation in Benefit (BEN) 18.752, 8.610 is due to all independent variables (TRU, GOV, INFO, CoCo, LTO, DEV, YOA) and 10.142 variation is due to other variables (Error Term) which could not be captured. This model is significant because calculated ‘\( F = 17.222 \)’ is greater than tabulated ‘\( F = 2.767 \)’ value.
### Table 7.3: Coefficients of Regressed Aspects of BSR on Benefits

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>t</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.242</td>
<td>6.692</td>
<td></td>
</tr>
<tr>
<td>TRU</td>
<td>.192</td>
<td>2.963*</td>
<td>.528</td>
</tr>
<tr>
<td>GOV</td>
<td>-.007</td>
<td>-.284</td>
<td>.538</td>
</tr>
<tr>
<td>INFO</td>
<td>.151</td>
<td>3.052*</td>
<td>.447</td>
</tr>
<tr>
<td>CoCo</td>
<td>.465</td>
<td>6.790*</td>
<td>.533</td>
</tr>
<tr>
<td>LTO</td>
<td>.325</td>
<td>3.595*</td>
<td>.476</td>
</tr>
<tr>
<td>DEV</td>
<td>-.006</td>
<td>-.131</td>
<td>.455</td>
</tr>
<tr>
<td>YOA</td>
<td>.001</td>
<td>.091</td>
<td>.448</td>
</tr>
</tbody>
</table>

Predictors: (Constant), TRU, GOV, INFO, CoCo, LTO, DEV, YOA  
Dependent Variable: BEN  
(* Significant)

Hence, from the model estimated in the equation 7.2, it can be formulated with the coefficients Table 7.3 as follows:

\[
\text{BEN} = 2.242 + 0.192(\text{TRU}) - 0.07(\text{GOV}) + 0.151(\text{INFO}) + 0.465(\text{CoCo}) + 0.325(\text{LTO}) - 0.006(\text{DEV}) + 0.01(\text{YOA}) \]

\[
\text{))(7.3)\]

In Table 7.3, TRU, as expected, is positively affecting BEN which is statistically significant (P Value = 0.008 and t value = 2.963). Here coefficient of TRU is 0.192 which means if there is 100 percent change in trust factor then it will lead to approximately 20 percent change in benefits. Trust between the two members of supply chain is necessary for dealing in business. The dependence on each other is enhanced by the conviction shown and felt by the parties.

On contrary, GOV has negative impact on benefit which is not statistically significant (P Value = -0.777 and t value = -0.284). Here coefficient of GOV is -0.007 which means if there is 100 percent change in governance factor then it will reversely affect 0.07 percent to benefits. GOV formalize the relationship between the buyer and the supplier which may impede the scope of openness and reliance on each other.

Another variable, INFO, has positive impact on BEN which is statistically significant (P Value = 0.003 and t value = 3.052). Here coefficient of INFO is 0.151 which
means if there is 100 percent change in Information Sharing then it will lead to approximately 15 percent change in BEN. Sharing important information on right time may suave the business chores which enhance the relationship status between the buyer and the supplier.

Similarly, variable CoCo is positively affecting BEN which is statistically significant (P Value = 0.000 and t value = 6.790). Here coefficient of CoCo is 0.465 which means if there is 100 percent change in CoCo, then it will lead to approximately 47 percent change in benefits. The readiness to collaborate reassures the closeness in relationship between the two by enhancing the level of support in need. As a result, it is a very important variable for BSR.

On the similar lines, LTO is positively affecting BEN which is statistically significant (P Value = 0.000 and t value = 3.595). Here coefficient of LTO is 0.325 which means if there is 100 percent change in LTO then it will lead to approximately 33 percent change in benefits. It is also very significant variable for BSR as the members of supply chain deal with the intention of sustaining in long run then it may help in developing stronger ties between the two so as to assist each other in future also.

On the contrary, DEV has negative impact on benefit which is not statistically significant (P Value = 0.896 and t value = -0.131). Here coefficient of DEV is -0.006 which means if there is 100 percent change in DEV then it will reversely affect 0.06 percent to benefits. Still developing the supplier may not have been taken as an important task by the buyer and that is why the buyers still have the perception of not indulging in development of supplier for strategic alliance in future.

Finally, the variable YOA has positive impact on benefit which is not statistically significant (P Value = 0.928 and t value = 0.091). Here coefficient of YOA is 0.001 which means if there is 100 percent change in YOA then it will lead to approximately
0.1 percent change in benefits. Long years of association could not prove to help in enhancing the level of relationship existing between the buyer and the supplier.

For the confirmation of multicollinearity, it has been seen that VIF of variables are 1.894, 1.858, 2.236, 1.876, 2.100, 2.196 and 2.230 which are not more than 2.5. It shows there is absence of serious multicollinearity. Further, for confirmation of multicollinearity it has been seen that TOL of variable are 0.528, 0.538, 0.447, 0.533, 0.476, 0.455 and 0.448 which are more than 0.4 showing there is absence of serious multicollinearity.

In Tables 7.4 and 7.5, step-wise regression has been used to find out the most important and robust determinants of BSR model.

Table 7.4: Model Summary of Stepwise Regression of BSR Aspects

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.541(a)</td>
<td>.292</td>
<td>.288</td>
</tr>
<tr>
<td>2</td>
<td>.632(b)</td>
<td>.399</td>
<td>.391</td>
</tr>
<tr>
<td>3</td>
<td>.650(c)</td>
<td>.423</td>
<td>.411</td>
</tr>
<tr>
<td>4</td>
<td>.677(d)</td>
<td>.459</td>
<td>.444</td>
</tr>
</tbody>
</table>

In Table 7.4, model number 4 is the most efficient model because in this model all variables are significant as observed in Table 7.5. Considering multicollinearity, VIF is low (close to 1) for all variables which implies absence of multicollinearity. For further confirmation of multicollinearity it has been seen that TOL is also close to 1 which means there is absence of multicollinearity in the current study.

Stepwise regression has been used to divide original model to four different models for determining most significant and robust model for BSR.
From stepwise regression (Table 7.5), following four models can be formulated:

**Model One**

\[
\text{BEN} = 2.2346 + 0.438(\text{CoCo}) \] \hspace{1cm} \text{(7.4)}

**Model Two**

\[
\text{BEN} = 1.899 + 0.395(\text{CoCo}) + 0.178(\text{INFO}) \] \hspace{1cm} \text{(7.5)}

**Model Three**

\[
\text{BEN} = 2.334 + 0.450(\text{CoCo}) + 0.177(\text{INFO}) + 0.169(\text{LTO}) \] \hspace{1cm} \text{(7.6)}

**Model Four**

\[
\text{BEN} = 2.228 + 0.472(\text{CoCo}) + 0.144(\text{INFO}) + 0.328(\text{LTO}) + 0.190(\text{TRU}) \] \hspace{1cm} \text{(7.7)}

*Table 7.5: Coefficients of Stepwise Regression of BSR Aspects*

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>2.346</td>
<td>11.09</td>
<td>.000</td>
<td>1.000</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>CoCo</td>
<td>.438</td>
<td>7.819</td>
<td>.000</td>
<td>.974</td>
<td>1.026</td>
</tr>
<tr>
<td>2</td>
<td>(Constant)</td>
<td>1.899</td>
<td>8.866</td>
<td>.000</td>
<td>.974</td>
<td>1.026</td>
</tr>
<tr>
<td></td>
<td>CoCo</td>
<td>.395</td>
<td>7.530</td>
<td>.000</td>
<td>.974</td>
<td>1.026</td>
</tr>
<tr>
<td></td>
<td>INFO</td>
<td>.178</td>
<td>5.120</td>
<td>.000</td>
<td>.974</td>
<td>1.026</td>
</tr>
<tr>
<td>3</td>
<td>(Constant)</td>
<td>2.334</td>
<td>8.455</td>
<td>.000</td>
<td>.820</td>
<td>1.220</td>
</tr>
<tr>
<td></td>
<td>CoCo</td>
<td>.450</td>
<td>7.994</td>
<td>.000</td>
<td>.974</td>
<td>1.026</td>
</tr>
<tr>
<td></td>
<td>INFO</td>
<td>.177</td>
<td>5.190</td>
<td>.000</td>
<td>.974</td>
<td>1.026</td>
</tr>
<tr>
<td></td>
<td>LTO</td>
<td>.169</td>
<td>2.440</td>
<td>.016</td>
<td>.838</td>
<td>1.193</td>
</tr>
<tr>
<td>4</td>
<td>(Constant)</td>
<td>2.228</td>
<td>8.241</td>
<td>.000</td>
<td>.806</td>
<td>1.240</td>
</tr>
<tr>
<td></td>
<td>CoCo</td>
<td>.472</td>
<td>8.555</td>
<td>.000</td>
<td>.880</td>
<td>1.136</td>
</tr>
<tr>
<td></td>
<td>INFO</td>
<td>.144</td>
<td>4.114</td>
<td>.000</td>
<td>.531</td>
<td>1.883</td>
</tr>
<tr>
<td></td>
<td>LTO</td>
<td>.328</td>
<td>3.873</td>
<td>.000</td>
<td>.574</td>
<td>1.742</td>
</tr>
<tr>
<td></td>
<td>TRU</td>
<td>.190</td>
<td>3.098</td>
<td>.002</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependent Variable: BEN

From above four models (7.4 - 7.7), model 7.7 is the most suitable one because in this model all variables are significant which are given in Table 7.5. Considering multicollinearity, VIF is quite low (close to 1) for all variables which implies absence of multicollinearity. For further confirmation of multicollinearity it has been seen that
TOL value is also close to 1 which means there is absence of multicollinearity in the current study.

7.9 HYPOTHESIS TESTING

After arriving at all parameters of the model, it is necessary to conduct hypothesis testing of all variables, which are given below one by one.

7.9.1 HYPOTHESIS ON TRUST AND BENEFITS

Table 7.3 shows that Null Hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted. This means calculated ‘t’ value (2.963) is greater than tabulated ‘t’ (2.325) with 99 percent confidence interval. On the basis of ascertained statistical result, it can be substantiated that TRU encourages the BEN reaped in BSR.

7.9.2 HYPOTHESIS ON GOVERNANCE AND BENEFITS

Table 7.3 shows that Null Hypothesis ($H_0$) is accepted and alternative hypothesis ($H_1$) is rejected. Since calculated value of ‘t’ (-0.284) is less than tabulated ‘t’ (2.325) value with 99 percent confidence interval and it is concluded on the basis of this statistical result that GOV do not positively affect BSR BEN.

7.9.3 HYPOTHESIS ON INFORMATION SHARING AND BENEFITS

Table 7.3 shows that Null Hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted. This means calculated value ‘t’ (3.052) is greater than tabulated ‘t’ (2.325) with 99 percent confidence interval. On the basis of ascertained statistical result, it can be substantiated that INFO encourages BEN reaped in relationship.
7.9.4 HYPOTHESIS ON COOPERATION AND COORDINATION AND BENEFITS

Table 7.3 shows that Null Hypothesis (H₀) is rejected and alternative hypothesis (H₁) is accepted. Since calculated value of ‘t’ (6.790) is greater than tabulated ‘t’ (2.325) value with 99 percent confidence interval and it is concluded on the basis of this statistical result that CoCo enhance BEN procured.

7.9.5 HYPOTHESIS ON LONG TERM ORIENTATION AND BENEFITS

Table 7.3 shows that Null Hypothesis (H₀) is rejected and alternative hypothesis (H₁) is accepted. Since calculated value of ‘t’ (3.590) is greater than tabulated ‘t’ (2.325) value with 99 percent confidence interval and it is concluded on the basis of this statistical result that elements of LTO help in procuring BEN.

7.9.6 HYPOTHESIS ON DEVELOPMENT AND BENEFITS

Table 7.3 shows that Null Hypothesis (H₀) is accepted and alternative hypothesis (H₁) is rejected. Since calculated value of ‘t’ (-0.131) is less than tabulated ‘t’ (2.325) value with 99 percent confidence interval and it is concluded on the basis of this statistical result that DEV does not increase BSR BEN.

7.9.7 HYPOTHESIS ON YEARS OF ASSOCIATION AND BENEFITS

Table 7.3 shows that Null Hypothesis (H₀) is accepted and alternative hypothesis (H₁) is rejected. Since calculated value of ‘t’ (0.091) is less than tabulated ‘t’ (2.325) value with 99 percent confidence interval and it is concluded on the basis of this statistical result that long YOA does not give more benefits in BSR.
Hence, out of seven aspects of BSR, four are assisting to reap benefits by the buyer. Other three aspects association with the benefit part is statistically insignificant in regression model. Hence, supplementary model has also been tried using path analysis method to explore the associations and connections among these aspects to find direct or indirect impact on benefits.

7.10 PATH ANALYSIS OF ASPECTS OF BSR

This section provides a comprehensive analysis into the phenomenon of BSR. The results may constitute a significant step towards managing the BSR for more benefits. The literature on BSR indicates that the various aspects of BSR like trust, years of association, long term orientation, governance mechanisms, information sharing, cooperation and coordination may lead, directly or indirectly, to the attainment of benefits by the buyer organization. There is a need to see the association among the aspects so as to determine its importance in encouraging or discouraging the growth of other aspects of BSR so as to generate benefits for the buyer.

A Structural Equation Modeling (SEM) technique was used to test the model. AMOS version 21 was employed for this purpose. A recursive path analysis has been used to estimate the relationship between the various aspects. In order to evaluate the fit of the model, multiple indices of fit were examined (Table 7.6). Both unstandardized and standardized path coefficients are presented (Figure 7.1), with unstandardized coefficients in parentheses. All path coefficients were statistically significant (p < 0.01).

The model (Figure 7.1) suggests that the years of association between the buyer and key- input supplier influence information sharing, cooperation and coordination and trust. The trust between the two organizations contributes to long term orientation
which further enhances the level of cooperation and coordination which lead to benefits reaped by the buyer. GOV influence the information shared between the two organizations which further stimulate the benefits reaped. Although GOV may impact the length of association in years between the two organizations but it may hamper the level of coordination and cooperation. The buyer may be ready to develop the supplier if higher levels of information sharing, cooperation and coordination and long term orientation are seen between the buyer and the concerned supplier.

Thus, this comprehensive model of buyer-supplier may provide an important direction for understanding the relationship dynamics and designing the relationship management practices accordingly.

Table 7.6: Summary Statistics of Model Fit of BSR Aspects

<table>
<thead>
<tr>
<th>Fit Index</th>
<th>Recommended Values*</th>
<th>Observed Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square/ degrees of freedom</td>
<td>$\leq 3.00$</td>
<td>2.59</td>
</tr>
<tr>
<td>GFI</td>
<td>$\geq 0.90$</td>
<td>0.94</td>
</tr>
<tr>
<td>AGFI</td>
<td>$\geq 0.80$</td>
<td>0.86</td>
</tr>
<tr>
<td>NNFI</td>
<td>$\geq 0.90$</td>
<td>0.92</td>
</tr>
<tr>
<td>CFI</td>
<td>$\geq 0.90$</td>
<td>0.95</td>
</tr>
<tr>
<td>RMSR</td>
<td>$\leq 0.10$</td>
<td>0.05</td>
</tr>
</tbody>
</table>

GFI = goodness-of-fit index; AGFI = adjusted goodness-of-fit; NNFI = non-normed fit index; CFI = comparative fit index; RMSR = root mean square residual.
Figure 7.1: Path Model of BSR Aspects

The associations observed among the various aspects of BSR are also supported by the available literature.

7.10.1 YEARS OF ASSOCIATION  \(\rightarrow\) INFORMATION SHARING

With the growing years of association between the buyer and the supplier, the propensity to share information increases. Ellram and Hendrick (1995) also demarcated that over an extended time period, the mutual sharing of information increases in partnership.
7.10.2 YEARS OF ASSOCIATION → COORDINATION AND COOPERATION

Long years of association also enhance the closeness between two organizations (MacKenzie and Hardy, 1996). With time the supplier shows more active readiness to help the buyer to perform.

7.10.3 YEARS OF ASSOCIATION → TRUST

Goffin et al. (2006) have also found that duration of past relationships promotes trust. Interacting for longer period because of the association between two organizations crafts the vital possibility of nurturing trust. As the relationship matures in terms of years of association between the buyer and the supplier, in-depth understanding for each other increases.

7.10.4 TRUST → LONG TERM ORIENTATION

Successful relationships are built on trust (Shah, 2009). The relationship bond becomes stronger with the credence of trust. Ryu et al. (2007) also identified trust as a needed precursor of a buyer’s LTO. To achieve long term goals the buyer expects the level of trust to be built with the supplier.

7.10.5 LONG TERM ORIENTATION → COORDINATION AND COOPERATION

A cooperative long term BSR is characterized by joint management of value creation for superior productivity through cooperative, synergistic problem-solving activities between the exchange parties based on their mutual respect and long-term perspectives (Sako, 1992). Having a long term orientation is a key factor in forming, developing, and maintaining value-enhancing relational exchanges (Ganesan, 1994).
7.10.6 COORDINATION AND COOPERATION ➔ BENEFITS

Cooperation and coordination between buyer and supplier affect short-term performance by smoothing deliveries and reducing tactical coordination costs, and also long-term performance by helping firms develop new capabilities (Dyer and Nobeoka, 2000; Novak and Eppinger, 2001). Also the configuration of internal and external coordination practices concerns to the appropriate level of supplier integration leading to maximum performance (Das et al., 2006). Cooperation and coordination influence the move from adversarial relationship to a close relationship.

7.10.7 INFORMATION SHARING ➔ BENEFITS

In a cooperative relationship, companies interact frequently and share meaningful information (Balakrishnan and Geunes, 2004). Use of information technology tools is also considered a strong driver of supply chain agility (Yusuf et al., 2004). Thus, more involvement in information dissemination between the buyer and the supplier may lead to more benefits to the buyer.

7.10.8 INFORMATION SHARING ➔ DEVELOPMENT

Information exchange has been considered as a critical factor in supplier development practice (Krause, 1997; Krause et al., 1998, 2000). The study by Carr and Kaynak (2007) also identified information sharing between firms as an important antecedent to supplier development support activities.

7.10.9 LONG TERM ORIENTATION ➔ DEVELOPMENT

Watts and Hahn (1993) note that supplier development involves a long term cooperative effort between the buying firm and its suppliers to upgrade the suppliers’ technical, quality, delivery and cost capabilities, and to foster ongoing improvements.
Modi and Mabert (2007) also found that organizations invest substantial effort to develop suppliers’ capabilities with whom they have an ongoing long-term relationship.

7.10.10 COORDINATION AND COOPERATION ➔ DEVELOPMENT

According to Krause et al. (2000), the buyer may indulge in directly developing the supplier by supporting, advising and training. Cooperating with the supplier and coordinating to support the supplier can open the gateway of developing the supplier in future. Cooperation with suppliers also helps them in developing new capabilities (Novak and Eppinger, 2001).

7.10.11 GOVERNANCE MECHANISMS ➔ COORDINATION AND COOPERATION

The negative association is seen in between these two aspects. Ring and Van de Ven (1994) argued that there is a substitutive relationship between formal contracts and trust in situations of inter-firm cooperation. Squire et al. (2009) also suggested that formal structures do not necessarily lead to relational capital, formal structures in and of themselves may not be sufficient to derive the expected outcomes.

7.10.12 GOVERNANCE MECHANISMS ➔ INFORMATION SHARING

When norms are developed, partners are more effective in sharing information (Hult et al., 2004). The use of network governance might foster collaborative communication among supply chain partners (Mohr et al., 1996).
7.10.13 GOVERNANCE MECHANISMS ➔ YEARS OF ASSOCIATION

At the early stage of relationship the economic bond is important to enable both the parties to have faith which leads to future associations (Choo et al., 2009). Tate et al. (2010) have also emphasized on the requirement of legal mechanisms or contracts for the conviction to have longer duration of association with the supplier.

The representation of linkages of these aspects to each other leads to the direction to the practice of concentrating on the critical aspects according to their proclivity to influence the other aspect ultimately leading to the benefits to be reaped in a particular buyer-supplier relationship. Therefore, this model can act as reference for managing a close relationship by the buyer with the supplier.