

## **Moderating Effect of Trust in Interpersonal Relationship and Supply Chain Integration in the Pharmaceutical Firms in Nigeria**

---

Felix Nyema Chinuru

Department of Marketing, Rivers State University

---

### **Abstract**

The study examined the moderating effect of trust on interpersonal relationship and supply chain integration in the pharmaceutical firms in Nigeria. The study adopted the cross sectional research design the population for the study were the ten quoted pharmaceutical firms listed in the floor of the Nigeria stock exchange as at December 2019. the study found that trust does have a very strong positive and significant moderating effect on interpersonal relationship and supply chain integration.

### **Introduction**

Trust is the degree to which an organization or individual believes its exchange partner is honest and benevolent. When people trust each other, they perceive their relationship as safe which encourages the motivation to participate in the team (Edmonson, 2003) and exchange relevant information and mutual benefits. Gilson (2003) opined that it is “a relational notion which lies between people, people and organizations, people and events”. He further explained that trust may also be viewed as “self-trust”. Supply chain integration has been recognized as a prerequisite of competitive capability by both business practitioners and scholars (Tarn, David & Beaumont, 2002). The growth in information and communication technologies, electronic supply chain management has made it possible for firms to utilize their supply chain networks as a competitive arsenal. Interpersonal relationship is relations formed due to the interaction that occurs when individuals treat each other as humans (Adler, Rosenfeld, and Proctor, 2011). Ejifugha, (2011) submitted that an interpersonal relationship is the social association and a link between two or more people with common goals and objectives that keep them connected in the context of the relationship.

### **Statement of the Problem**

interpersonal relationships (IPRs) play an important role in achieving and sustaining supply chain integration and supply chain relationships at the inter-organizational level (Gligor & Holcomb, 2013). However, in spite of the importance of interpersonal relationships in supply chain integration (SCI), only very few scholarly investigations have been undertaken to enhance firms' performance. But for this relationship to be effective there must be the element of trust. This study therefore is designed to see the effect of trust on the relationship between interpersonal relationship and supply chain collaboration in the pharmaceutical's firms in Nigeria.

### The Purpose of the Study

The purpose of the study is to examine the moderating effect of trust on interpersonal relationship on supply chain integration in the pharmaceutical firms in Nigeria.

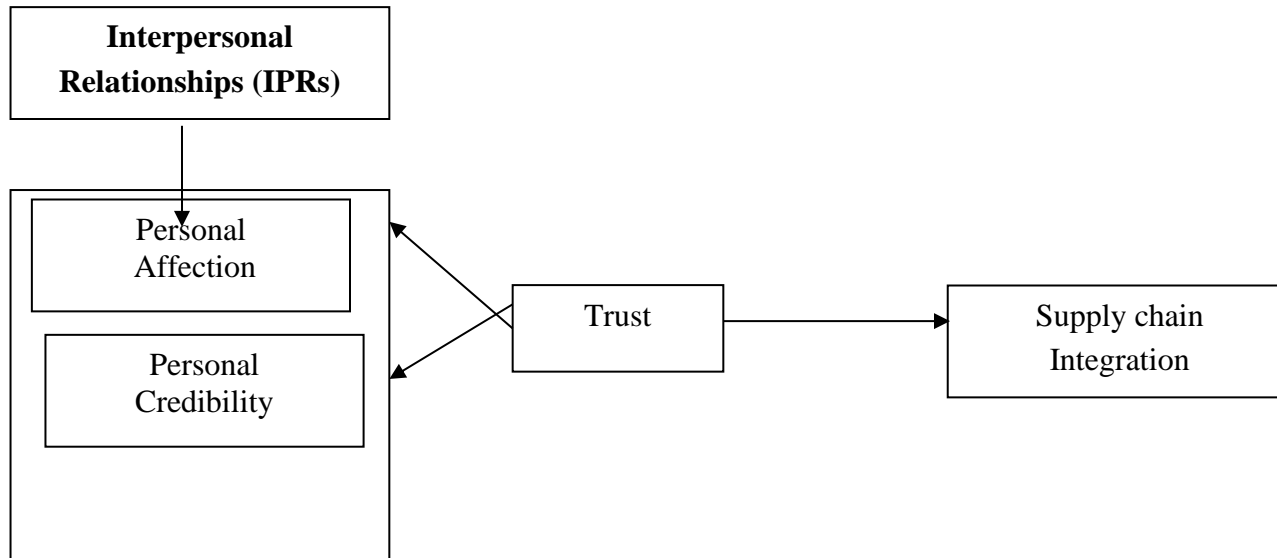


Fig 1 conceptual framework on the moderating role of trust on interpersonal relationship and supply chain integration

### Study proposition

**H01:** Trust does significantly moderate between personal affection and supply chain integration

**H02:** Trust does not significant moderates between personal credibility and supply chain integration.

### Literature review

#### The Trust Concept

Literature on the concept of trust is “riven across a variety of disciplines” Swift (2001). Most research on the trust concept was mainly evident in the field of social psychology in the form of the examination of personal relationship (Delgado-Ballester & Munuera-Aleman, 2001). They submitted that these studies have ensued in the use of “diverse and sometimes confusing terminology” to explain the trust

concept. Martins (2002) on the other hand, indicated that several researchers have proposed diverse aspects and indicators of trust to develop a theory of it. He further submitted that researchers have mainly studied trust at three different levels of analysis, namely, individual, interpersonal/intergroup, and institutional/cultural level. In all trust is recognized as an inherent attribute of valuable social relationship. Trust has to do with partners' willingness to adapt to the behaviors and actions of others (Korsgaard, Brower & Lester, 2015). Trust is the degree to which an organization or individual believes its exchange partner is honest and benevolent (Yeung *et al.* 2009). Mayer, Davis and Schoorman (1995) opined that trust is the tendency for being vulnerable to the actions of partners, it is vital in teamwork that involves risk taking, mutual dependence, and consistent adaptation. Trust is also considered a means of interaction between parties who do not expect others to act opportunistically or violate standards of the relationship (Lyles *et al.*, 2008). Swift (2001) argued that trust "is the confidence in another's goodwill, based upon character, dialogue and experience". When people trust each other, they perceive their relationship as safe which encourages the motivation to participate in the team (Edmonson, 2003) and exchange relevant information and mutual benefits. Gilson (2003) opined that it is "a relational notion which lies between people, people and organizations, people and events". He further explained that trust may also be viewed as "self-trust". Bowersox *et al.* (2007) divided trust into reliability and character-based trust. They insisted that with reliability-based trust, a supplier or a buyer is willing to participate and is capable of accomplishing supply chain integration. Character-based trust is dependent on the honest culture and philosophy of a supplier or a buyer.

Trust is regarded as a vital ingredient in facilitating supply chain activities (Bachmann, 2001), and is positively related to manufacturer – SI/CI (Zhang & Huo, 2013), because it facilitates all three SCI dimensions of strategic alliances, information integration, and process integration. Trust-building has become a key approach to upholding long-term cooperative relationship in strategic alliance (Zhang & Huo, 2013), because trust can maintain cooperation and significantly contribute to the long-term stability of a supply chain (Chen & Paulraj, 2004). Trust is considered an essential component of the successful "matrimony" of strategic alliances (Sambasivan *et al.* 2011). Empirical indications show that trust positively impacts information sharing in the supply chain, because trust enhances adequate information sharing and increase information quality (Wu *et al.* 2014). Trust is a major enabler of process integration between suppliers and buyers, because trust means a willingness to get involved and take calculated risks (Mayer *et al.*, 1995) as cited in Barnes, *et al.* (2015) and to be more confident in exchange partners (Kwon & Suh, 2005). Trust in itself can initiate coordination and cooperation among business partners (Swink *et al.*, 2007; Zhao *et al.* 2008), because it enables the investment of resources to achieve project goals (Yeung *et al.* 2009).

### **Methodology**

This study adopted the cross-sectional survey research design because it is an empirical examination. Self-structured copies of the questionnaire will be distributed to retrieve important and relevant data on the parameters of interpersonal relationship and supply chain

integration in the Nigerian pharmaceutical firms. Ikoni *et al.* (2014) studied “pharmaceutical firm’s capacity utilization in Nigeria” and adopted the cross-sectional survey research design. To solve the research problems, some academic scholars, propose that the researcher must indicate clearly the following modalities: the study population, sample if any, data collection technique, and methods of data analysis (Okwandu, 2002). The target population of this study includes all the ten (10) quoted pharmaceutical firms in Nigeria registered in the Nigeria stock exchange which include; GlaxoSmithKline Nigeria, May & Baker Nigeria PLC, Fidson Healthcare PLC, Nigerian-German Chemicals PLC, Evans Medical PLC, Neimeth International Pharmaceuticals PLC, Pharma-Deko PLC, Morison Industries PLC, Uniondac PLC, Ekocorp PLC. Due to the small size of the population, there was no need for sampling. But to guarantee proper coverage, five copies of the questionnaire were given to five respondents in each of the ten pharmaceutical firms under review. Thus fifty (50) copies of the questionnaire were distributed to key respondents who are involved in the production and distribution of the pharmaceutical products and services, comprising of Pharmacists, Chemist, Macro biologists, Sales managers, and Supply chain managers. Stepwise Regression analysis was used to examine the study objectives to establish the degree of relationship that exist between the variables.

### **Discussion of findings**

#### **The moderating effects of trust on the relationship between interpersonal relationship and Supply Chain Integration.**

Table 4.15a reports the stepwise regression analysis of the influence of trust on the relationship between interpersonal relations and supply chain integration of the Pharmaceutical firms in Nigeria. As previously stated in chapter 1, trust does not have any influence on the interaction between the criterion and predictor variables. The interaction variable (IR\*T\*SCI) is the product of the three Variables (IR, T and SCH).

**Table 1: Stepwise Regression results showing the effect of Trust on Interpersonal Relations and Supply Chain Integration (n=50)**

Variable (Model)	Beta Coefficient	P-Value
Constant (Trust)	0.358	0.00
Interpersonal Relations	0.248	0.00
Supply Chain Integration	0.166	0.00
R- 997 <sup>a</sup>	R-Square 0.993	Adjusted R-square 0.993
		Std. Error of the Estimate (F-Statistics) 0.697

Source: SPSS version 22 outputs

From table 1, the F-statistic is associated with almost zero probability, indicating that overall, the estimated supply chain integration is highly significant. The Adjusted R-squared is 0.993, indicating that the estimated model has a moderate fit; the joint influence of IR\*T and T explains approximately 99% of the changes in the dependent and independent variables. Thus, factors not considered in the model jointly account for the remaining 1%. As Table 1 further shows, the estimated coefficients have uniform signs, with IR (=0.248) and SCI (= 0.166) and interaction term associated with positive coefficients T (=0.358). All variables are associated with zero probabilities. This shows that both the main effects of interpersonal relations and supply chain integration are both significant at 5% level. The effects of trust and the interaction variable are also significant at 5% level, suggesting that trust moderates the influence between interpersonal relations and supply chain integration. Our empirical results suggest that trust plays a positive moderating role in the influence of interpersonal relationship on supply chain integration. This is evidenced by the result in table.1 which indicates that trust interaction with both interpersonal relationship and supply chain integration are highly significant. The associated *p*-value of the t-statistic corresponding to the interaction term (IR\*SCI) is 0.0000 which is very much lower higher than 0.05. This implies that there is positive moderating role of trust on the influence of interpersonal relationship and supply chain integration of the pharmaceutical firms in Nigeria. Our a priori expectation is that trust should moderate the influence of interpersonal relationship on supply chain integration. This position is based on the view by Luken & Rompaey (2008) that trust adds value to customer satisfaction. Our finding is consistent with this view and suggests that the interaction between trust and both variables, particularly in this era of globalization, has positive and significant effect on supply chain integration of the Pharmaceutical firms in Nigeria. This finding is also consistent with the results obtained by Katsikeas, Leonidou & Zeriti, (2016).

## Conclusion

The study concludes by declaring that trust does moderate between interpersonal relationship and supply chain integration in the pharmaceutical firms in Nigeria.

## References

- Bachmann, R. (2001). Trust, power and control in trans-organization relations. *Organization Studies*, 22(2),337-366.
- Bowersox, D.J., Closs, D.J., Stank, T.P., (1999). *21st Century Logistics: Making Supply Chain integration a Reality*. Council of Logistics Management, Oak Brook, IL.
- Ejifugha, A.U. (2011). *Teaching and Learning of Social Skills in Schools: Implications to Social Health*. Proceedings of the 2011 International Conference on Teaching, Learning and Change (c) International Association for Teaching and Learning (IATEL). [Online] <http://hrmars.com/admin/pics/369.pdf>, Accessed on 26<sup>th</sup> July, 2019.
- Gligor, D. M., & Holcomb, M. (2013). The role of personal relationship in supply chains: An exploration of buyers and suppliers of logistics services. *The International Journal of Logistics Management*, 24(3), 328-355.
- Lyles, M. A., Flynn, B. B., & Frohlich, M. T. (2008). All supply chains don't flow through: Understanding supply chain issues in product recalls. *Management and Organization Review*, 4 (2), 167-182.
- Okwandu, G.A.(2002). *Marketing Research*. Port Harcourt, Gabok Consults and Services.
- Sift, (2019). *What is Resource Dependence Theory (RDT)?* [online] <https://www.hrzone.com/hr-glossary/what-is-resource-dependence-theory-rdt> Accessed 4th August,2019.
- Tarn, K.C., Kannan, V.R., & Handfield, R.B. (1998). Supply chain management: supplier performance and firm performance. *International Journal of Purchasing and Materials Management*, 34(3) 2-9.
- Yeung, H.Y., Selen, W., Zhang, M. & Huo, B. (2009). The effects of trust and coercive power on supplier integration. *International Journal Production Economics*, 120 (1) 66-78