

HR Management Practices and Customer Satisfaction: The Mediating Effect of Effective Supply Chain Management Practices

Kalpina Kumari^{1*}, Sania Usmani¹, and Javed Husain²

¹ *Lecturer and PhD Scholar, Iqra University, Pakistan*

² *Dean, Management Sciences, Iqra University, Pakistan*

**Corresponding author Email: kalpina@iqra.edu.pk*

Abstract

Purpose: This article provides practical rationalization for a framework that recognizes important elements of SCM practices and HRM practices, and explaining their association leading towards satisfaction of customers, which is ultimate goal of every organization. It evaluates following four questions based on this research: (1) Do organizations have high levels of customer satisfaction, which are excelling in HRM practices (2) Do organizations have high levels of SCM practices, which are excelling in HRM practices (3) Do organizations have high levels of customer satisfaction, which are excelling in SCM practices (4) Do organizations have high levels of customer satisfaction, which are excelling in HRM practices; even though when the effects of effective SCM practices are controlled.

Design/methodology/approach: Data for the research were gathered from 6 different organizations and the relationships projected in the hypothesis model were tested by employing structural equation modeling. In order to investigate these relations an already extensive, valid, and consistent developed instrument has been used. Convenience sampling technique from non-probability sampling method has been implemented and survey method was used to gather information from the employees for this study.

Findings: Outcomes exhibited positive correlations for the variables tested; representing that increase in HRM practices and SCM practice can direct towards enhanced satisfaction of customers in an organization and SCM also mediates the association between HR management practices and customer satisfaction.

Originality/value: It is anticipated that finding of this paper will be very useful and practical for even both academicians and practitioners. Not only it would broaden the extent of study at the academic level, but may help active managers to comprehend the significance and role of human resource in gaining SCM effectiveness which in turn help out the managers to gain customer satisfaction which is ultimate and vital goal of every organization

Keywords: HRM Practices, SCM Practice, Customer Satisfaction**Paper Type:** Research paper**Introduction**

Globalization, technological advancements, innovations and altering customer's demands and expectations, creates cut throat competition and increase uncertain environment for organizations. Struggle for flexibility is essential for firms to face more ambiguous and rapidly altering atmosphere. In this era of global village, business world has to deal with intense competition from around the world. Where, a firm's human resource is one of the sources of competitive advantage (Becker & Huselid, 1998).

Present management distinguished the satisfaction of customer as the main item in business and directs towards enhancing management relationships to achieve firm's success. There is a significant difference between the present business settings from the past, where competition plays an exceptional role (Gilaninia & et al, 2011).

Firms should provide immense focus on customer orientation and strengthen relationship with the vendors in order to survive in today's economic competition. (Abbasi, Torkamani, 2010). The satisfaction of customers is the focal point of all marketing and management related practices (Gilaninia & et al, 2011). Leading supervisors acknowledge that through customer satisfaction overall objectives of the firms can be achieved (Seyedi, Moosavi, Heidari, 2009). Due to globalization customer's demanding quality and speedy services have pressurized firms, so that they are unable to administer all functions alone (Heidari Gharehbagh, 2009).

The function of HRM for the successful and valuable execution of marketing related strategies has been extremely highlighted in marketing research and so many evidences have been found in literature review of customer satisfaction. Wernerfelt (1984) emphasized that for the successful implementation of all kinds of strategies and policies need the ownership of such resources that are precious, exceptional and hard to duplicate. Undoubtedly it includes the requirement of HRM practices so that the valuable marketing strategies particularly strategies for satisfaction of customer can be implemented in organizations.

With intense rivalry and opposition in the 1990s and formation of global markets, it has become very difficult job for the organizations to deliver products and services to the desired destination at the accurate time along with lowest cost. Companies started to apprehend that enhancing efficiencies within a firm is not enough, but their entire supply chain such as their distributors, their suppliers even their customers should have to perform efficiently and effectively for the success of on organization. Hence, effective SCM happens to be a potentially important way of achieving sustainable competitive advantage and enhancing profitability of a company as competition has extended from just being between firms to whole supply chain.

Literature Review

In today's service economy, the main and important facet in order to attain organizational success is customer happiness. Present competitive business environment lays emphasis to increase the focus on delivering value to satisfy the customer. The spotlight of most organization's in today's world falls upon providing better products and services in contrast to competitors. Along with focus on customer value, organizational environment is seen as being intricate and uncertain (Christopher, 2000; Goldman *et al.*, 1995). In a service industry, the culture of organizations carries potential to influence the satisfaction and happiness of customer as they are having directly contact and interaction with them. By sustaining the difference between the

customer and company, workforce has the capabilities to improve core competency by influential customer buying behavior and loyalty (Heskett, Sasser, & Schlesinger, 1997). Thus, it is vital to figure out those organizational practices that create the positive service communications amongst customers and employees.

Human Resource Management Practices and Customer Satisfaction

In organizations, there are also so many other functional areas apart from marketing area such as Human Resource management (HRM) which also focus on the customer satisfaction (CS). HRM also executes an extremely important role in order to achieve CS, in different business sectors. It has stressed HRM to generate particular set of strategies to generate customer satisfaction. However, few researches emphasize on assessing the HRM strategies for the satisfaction of customer and calculate their role for CS in organizations

Some researchers acknowledged HRM as one of the fundamentals of firms and they have claimed in their findings that today's organizations can accomplish CS by designing essential composition, processes, showing customer-oriented values and creating customer-oriented employees (Deshpande, Farley and Webster, 1993; Slater and Narver, 1995). The outcome of these researches evidently declares HR as one of the vital factor of a firm in order to achieve CS. However, the question is whether the entire staff in the organization holds equally importance in CS. Kelly (1992) declared that customers create a network with only those employees of an organization with whom they are having direct interactions and communications. So it is apparent from the above statement that the employees' behavior that has direct communication with the customer is of greatly important in this regard.

Some factors were identified by researchers concerning with HR of an organization linked to CS. Rosemary (2002) identified several HR determinants for Customer satisfaction like regular investment in employee training, staff security, high relative compensation and performance evaluation and management system.

Compensation act as a foundation within these HR strategies. It is reported by American quality foundation (1992) that growing number of firms in Japan, U.S., Canada and Germany have incorporated CS model in their top management compensation structure. The implication of compensation on CS has been raised by a few researchers (Phillips et al., 1990; Mercer, 1992). The discussion point is how compensation system brings implication on customer satisfaction. Argued by Hauser et al. (1994), focus of customer oriented compensation is always on the employee's hard work ranging from short term to long term sales, developing high concerns for the satisfaction of customer.

Employee motivation is another important dimension in order to accomplish satisfaction of customers. Deming (1986) acknowledged that it is firm's responsibility to formulate an incentive system which directs to standardization among the firms and employees' objectives, so firm can take so many benefits when employees are acting in their own optimum interest. The motivation of employees should result in their focus on performance as well as customer satisfaction. In an effort to attain customer satisfaction, training and development possess great value for a firm. So in order to achieve higher customer oriented behavior unique consideration has been given here to modify the attitudes and values of employees. It was argued by Siguaw, Brown and Widing (1994) that a considerable facet of implementing customer oriented strategies is workforce motivation specially the sales staff adopt preferred track in their selling efforts. The customer oriented attitude prompt that kind of behavior in the employees which is loved by customers to a large degree creating satisfaction of customer (Badovick and Beatty, 1987).

Employee empowerment is yet another important factor which also aids in improving customer satisfaction. Basically, it is the process of permitting employees to exercise control over job-related circumstances and decisions by delegating authority and power (Conger and Kanungo, 1998). Numerous advantages of employee empowerment were revealed by Bowen and Lawler (1992) for instance quicker reaction to customer issues and demands, more-satisfied employees, excited and affectionate customer dealings, and pioneering ideas. Moreover, empowered workforce displays customer oriented performance as they turn into adoptive and flexible in the face of shifting customer demands (Scott and Bruce, 1994). Hence, based on this discussion there is negligible doubt that empowered employees' may perform their tasks leading to customer satisfaction rather than underpowered workforce in organization.

Another important core job of Human Resource Management is workforce evaluation, which is concerned with workforce behavior; hence grasp implication on the satisfaction of customer (Hartline et al., 2000). Many researchers evaluated the impact of behavior-based employee evaluations, and pointed out many positive aspects associated with workforce like employee competence (Cravens Et al.1993), job satisfaction, (Oliver and Anderson, 1994), confidence (Gist and Mitchell, 1992) and adoptability (Scott and Bruce, 1994). Additionally, as discussed by Berry Zeithmal, and Paraguayan (1988) behavior-based evaluations encourage employees' performance that is consistent with expectation of customer leading to the satisfaction of customer.

Organizational socialization is one more perspective to achieve customer satisfaction. It is the method through which employee can achieve the social knowledge and organizational skills essential to assume an organizational role (Van, Maanen and Schein, 1979) This will surely help out to improve knowledge and skills of the workforce, leading to developed social dealings amongst internal and external organizational members. Apparently generating, sustaining and effectively managing the committed workforce socialization, particularly customer facilitators can bring about customer satisfaction.

Hiltrop (1996) supports the view that HR practices plays a significant role in altering the employees' behavior required to implement the competitive strategies. It is evident from literature that the modification of employees' behavior and attitude directs to satisfaction of customer of firms particularly in service organizations.

Human Resource Management Practices and Effective Supply Chain Management Practices

Less research has assessed the connection between HRM and SCM performance concluding that development of SCM come from the integration of manufacturing process and marketing process. It emphasized performance measurement of SCM largely on problems such as resource efficiency, cost reduction, and customer service. The aspect of enhancing internal HR so as to boost SCM practices is still likely to be studied in a proper way. Although, past researches into the best interest of firms leading have declared that these efforts might likely aid firms in optimizing its SCM performance.

In association with the Council of Logistics Management, Ernst & Whinney (1987) affirmed that logistics excellence can be achieved by effective human resource. It is noted that those organizations which are 'excellent' organizations in context of SCM possess a strong emphasis on training and re-training of the workforce. The authors stated that there is a direct relationship between environmental change rate and need for workforce training and retraining. Human resource developments and training are taken as a strategic necessity in best firms. As declared by this paper, change is becoming a

routine, and therefore, via training best organizations can stay competitive, plan for future opportunities, and to enhance the payback phase rate for changes.

The emphasis on human resource development considered as '*best-in-class*' in context of SCM performance was restated by a different study conducted by Michigan State University (Bowersox et al., 1989). This paper evaluated a large number of firms so as to verify the specific competencies resulting in superior logistics act. This paper reinforced that human resource development directly impacts the success of SCM trends and practices. These core competencies integrated the innovative workforce ability to be flexible in skill sets and roles, augment their productivity, redeployment and boundary-spanning duties.

Later, Ernst & Young (1992) stated the human resource development as an important factor in the advancement of a "total quality organization," by placing stress on participation of employees, their education, and training. Particularly, human resource development in successful organizations is chief concern in attaining the famous Malcolm Baldrige National Quality Honor.

Lastly, researchers from some institutions like Pennsylvania State University aimed to discover themes that expectedly affect future logistics performance (Novack et al., 1995). Employees' would be anticipated to exhibit efficacy in their work and extremely flexibility to a competitive and organizational environment. As the supply chains has been emerged with rising numbers of firms and growing complexities, workforce would be in need to use the scientific administration tools and have to interact effectively across a variety of organizational functions and units. This is visible from the above discussion that an organization's capability to surpass in such environment will require a strong organizational commitment from HRM.

Effective Supply Chain Management Practices and Customer Satisfaction

Satisfying clients absolutely and the globe will beat a path to your door is an attractive proposition. However, the pathway has gaps that split suppliers and customers. A.T. Kearney highlighted how top firms emphasize on logistics excellence, interconnect all stakeholders in the supply chain, and formulate total customer satisfaction into a reality. Customers demand superior service and top quality products modified as per their needs. Suppliers are expected to deliver the essentials perfectly to the customers, and then identify "something extra" that aids in cost cutting or increasing revenues. Sadly, many firms meet the requirements of "average" customer by setting their logistics processes. To compete, these companies will need to redesign their logistics processes to be much more flexible.

The mandate for suppliers is clear: Primarily, product design should be accurate. Secondly, the product performance should be in accordance with "fit and finish" for the price the customer expects. Thirdly, proper and consistent service is required to present appropriate product to the appropriate customer at the appropriate time for the appropriate price.

Management, today, acknowledged satisfaction of customer as the foremost point in industry and indicate that improving management relationships would result in company's success. The present organizational environment is opposite from the environment earlier, incorporating greater competition than the past (Gilaninia & et al, 2011). Modern structural reforms, aggressive competition and exchange practices introduces effective interactions pattern between suppliers and buyers for long-term relationships (Seyedi, Moosavi, Heidari, 2009).

Many different activities that were executed out by firms them own self are now performed by the supply chain. Conversely, in SCM controlling and coordinating all

these practices is a key issue. Supply chain management is a phenomenon providing rapid and consistent service with reduced cost and high quality to customers (Maboodi, Javanshir, Rashidi, Valipour, 2010).

Today, rapid advancements force firms to overcome the competitors by grabbing attention that influences the growth of organization (Shekari, Akhondi, Fatollahi, Sayadmanesh, 2006). Thus, new attitudes and approaches about SCM have been established. Normally, the SC comprise of at least two organizations, which are different yet related to one another by means of information and financial flows (Maboodi, Javanshir, Rashidi, Valipour, 2010). Consequently, SCM definition and examination of the relationships linking suppliers and satisfaction of customer was evaluated. For growth and survival in modern economy, providing significance to customer orientation and creation of strong relationship with the customer is very vital (Abbasi, Torkamani, 2010). Customers are the focus of every marketing activity (Gilaninia & et al, 2011). Senior managers acknowledge the fact that customer satisfaction is the outcome when they succeed in achieving organizational goals (Seyedi, Moosavi, Heidari, 2009). In this global competitive village, different products must be offered as per customer's request. It has become difficult for the management to monitor everything alone as consumer's demand for excellent quality and rapid services puts firms under high pressure (Heidari Gharehbagh, 2009).

The major issue of today's firms is to comprehend the relationship between the four groups in the supply chain management and to optimize it. These groups comprise of: vendors, producers, distributors and customers. In order to deal with the relationship between each group is perhaps important yet tough, as they produce remarkable effect in each phase of SC and its level of task. Numerous organizations supply chain suffers because of lack of communication of behaviors and expectations that arise amongst groups in chain (Dehmore, Shahraki, Lakzaie, 2010). Additionally, managing relationships effectively is essential in supply chain to ensure effective coordination between suppliers and customers, incorporated by means of observing partnership values, communication, information and conversation, to enjoy the benefits. There should have to be mutual trust and same goals between Suppliers and customers (Rajabzadeh, Khadivar, Kazemi, 2007).

Different methods have been employed by organizations to evaluate and amend their strategies and established customer satisfaction as the survival key. For efficient supply chain management, customer and supplier should intermingle, share and communicate information with each other. This speedy communication and sharing of information allows them to establish an effective supply chain, which can enhance the customer satisfaction, directly or indirectly (Shekari, Akhondi, Fathollahi, Sayadmanesh, 2006).

Hypothesized Model of HRM Practices, Effective SCM Practices, and Customer Satisfaction

As the mediating model (see in Appendix B, Figure No: 1), suggests that, effective HR management practices can affect customer satisfaction via two different processes. The first process in Figure No: 1 explains the direct positive relationship between the HR management practices and customer satisfaction that is revealed when effective supply chain management practices are held constant. This direct positive relationship implies that effective HR management practices in an organization can contribute to overall customer satisfaction. On the other hand, the second process in Figure 2 yields again positive but indirect association between HR management practices and customer satisfaction, mediated by effective supply chain management practices, which is revealed when SCM is varied. This relationship explains that if any organization has a

competitive advantage over other competitors in the industry based on the HR management practices, which in turn can enable the organization to produce high productive results through ensuring effectiveness of SCM practices. Afterwards the resulted effective SCM practices will again help out the managers to meet the ultimate goal of the same organization, which is the customer satisfaction. So in this causal model the indirect association between the three variables (HR management Practices, Effective Supply Chain Management Practices and Customer satisfaction) provides the two different indirect connections: HR management practices are positively associated with effective SCM practices and that SCM practices has a positive effect on customer satisfaction. These two hypothesized effects are shown by the solid lines in the mediated model.

Hypotheses

H1: High performance of HR work practices is positively associated with customer satisfaction.

H2: Effective supply chain management practices mediate the relationship between HR management practices and customer satisfaction.

H3: When effective supply chain management practices are held constant, there is also a direct positive effect of HR management practices on customer satisfaction.

Research Methods

Data and Measures

In order to check the explained hypotheses the sample that has been selected consist of six big fast moving consumer goods companies located in Karachi (such as Uniliver, P&G, National Foods, Shan Foods, LU, English Biscuit Manufacturer). The sample size of the present study taken out from the above mentioned different companies consists of 220 cases (total employees were 660 as in each case there were three respondents belonging from three different departments and their distribution is as: 220 from HR departments, 220 from SCM departments, and 220 from customer representative departments as a whole).

Convenience sampling technique from non-probability sampling method has been implemented and survey method was used to gather information from the employees for this study. The questionnaires included items HR practices, effectiveness of supply chain management and customer satisfaction of an organization. The data from completed questionnaires has been transferred to SPSS for further analysis.

HR Practices. The measure of HRM practices was measured with 36 items scale, which was developed by Singh (2004) and Qureshi M Tahir (2006). Participants responded to each item of scale by using a five-point likert scale [1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), 5 (strongly agree)]. Samples of items included "Appraisal system in our organization is growth and development oriented." and "Our organization conducts extensive training programs for its employees in all aspects of quality". As the scale was consists on too many questions, so based on the requirements of this study; the same scale has been modified in to 7 items scale.

Effective SCM Practices. The effectiveness of SCM measure was examined with 25 items scale, which was adopted from Zhang. Basically the scale was based on 5 different dimensions which were (1) Level of Information Quality (2) Level of Information Sharing (3) Customer Relationship (4) Postponement (5) Strategic Supplier Partnership. Participants responded to each item of scale by using a five-point likert scale [1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), 5 (strongly agree)]. Examples of items included "Our trading partners keep us fully informed about issues

that affect our business.” And “We consider quality as our number one criterion in selecting suppliers”. As the scale consists of too many questions, so based on the requirements of this study; the same scale has been modified into an 8-item scale.

Customer Satisfaction. Customer Satisfaction was assessed by already developed 5-item scale, which was based on Zhang et al. (2002b; 2002a; 2003; 2005; 2006). Participants responded to each item of scale by using a five-point Likert scale [1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), 5 (strongly agree)]. Examples of items included “We have high customer retention rate (customers keep doing business with us)” and “Customers perceive their money’s worth when they purchase our products”.

Analysis Procedure

In order to examine the mediating effect of effective supply chain management between HR practices and customer satisfaction of an organization, SEM technique has been implemented. In order to check the research hypothesis, DeVellis (2003) & Long (1983) suggested that two-step examination process should have to be implemented in. This two-step process based on first examining the measurement model of the dimensions that has been used in the research study and then creates the relationship between endogenous and exogenous variables. There are different indices such as RMSEA, CFI, TLI and CMIN/DF, which have been used to test the competency of the structural path and measurement models. Cut-off Criteria for above Fit Indexes are: (RMSEA = < .06 to .08 with confidence interval, CFI = \geq .95 for acceptance, TLI = \geq .95, CMIN/DF = less than 3).

Results

Descriptive Statistics

In this section (see in Appendix A, Table No: 1), correlations between all constructs and descriptive statistics for all variables used in the research study has been reported. The Cronbach alphas for all dimensions demonstrate good levels of consistency, being 0.723 for HR management practices, 0.916 for supply chain management practices and 0.832 for customer satisfaction. The correlations between HR management practices, supply chain management practices and customer satisfaction are all in a positive direction, as forecasted in the research hypotheses no: 1, 2 & 3 and significant as well.

Testing the Measurement Model (CFA)

SEM software has been used to perform CFA (Confirmatory factor Analysis), based on data from 220 respondents. Maximum likelihood estimation has been chosen because it was assumed that data were normally distributed. There wasn’t found any missing values but 15 multivariate outliers have been identified and deleted from the data set by using Mahalanobis Distance Measuring Method. So the final sample size was 205. The theoretical model of CFA is presented, (see in Appendix B, Figure No: 2). Three-factor hypothesized model to be confirmed in the measurement portion of the model. The CFAs results at the first attempt were fairly supporting the theoretical measurement models posed overall. In the three-factor model, the cutoff values of CMIN/DF, CFI, TLI and RMSEA were satisfactory, indicating an excellent fit between the observed data and the model (CMIN/DF = 1.549, RMSEA = 0.052, CFI = 0.951, TLI = 0.944), (see the results of Model No: 1 in Appendix A, Table No: 2). But after examining the values of standardized and unstandardized regression weights, there are two insignificant items (HR_1, HR_2) in the construct of “HRM Practices” which should have to be omitted from the data set. After omitting these two items from data set, the CFA model

has become more significant comparatively (CMIN/DF = 1.360, RMSEA = 0.042, CFI = 0.973, TLI = 0.969), (see the results of Model No: 2 in Appendix A, Table No: 2 & Table No: 3 and see the final theoretical model of CFA in Appendix B, Figure No: 3).

Testing Alternative Measurement Models (CFA)

Although it can be concluded that the hypothesized model showed an excellent fitness on the data practically, but it was recommended by good researchers that different alternative models should have to be measured when implementing SEM, as good fitting models can still suffer from misspecification. So, hypothesized three factor model has been compared with two other different models.

First, it was compared with a null model where no variables are associated with each other or it can say that all items are treating as independent variables. The results of this evaluation describe that the three-factor model is better and fit the data very well comparatively, (see the results of null factor model in Appendix A, Table No: 4). Second, three-factor model was compared with a single-factor model, in which all 20 items stand for a single latent construct. So when the comparison has been made between the three-factor model and the single factor model, the $\Delta\chi^2$ (539.1 (38), $p < .001$), it has been confirmed that three factor model is the superior one, (see the results of single factor model in Appendix A, Table No: 4).

Even though other potential alternative models could be evaluated but the article of P. M. Bentler and Douglas G. Bonett has logically supported only above explained two models. Thus the various permutations of two-, three-, and four-factor models have not been compared with the hypothesized three-factor model. As it's very easy for any researcher to create different models in order to compare with his hypothesized model but it is relatively possible that the consequences obtain from this comparison will be just because of chance. Thus, formulating and creating models which are not supported by theory or background are neither justifiable nor acceptable (Marsh, Hau, and Wen, 2004).

Validity and Reliability

It is extremely essential to build reliability as well as discriminate and convergent validity, when performing a CFA. It has been recommended by many good researchers that moving on to test a structural model will be a waste of time, if constructs do not reveal sufficient reliability and validity. In order to build reliability and validity, some measures and their thresholds have been explained by researchers that are very essential: Composite Reliability (CR), Reliability: CR > 0.7, Average Variance Extracted (AVE), Convergent Validity: CR > (AVE), AVE > 0.5, Maximum Shared Squared Variance (MSV), and Average Shared Squared Variance (ASV) Discriminant Validity: MSV < AVE, ASV < AVE, (see in Appendix A, Table No: 5).

Based on above defined thresholds, it can be concluded that all three constructs are having composite reliability as their values of CR is greater than 0.7 (HRM Practices = 0.835, Effective SCM Practices = 0.917, Customer Satisfaction = 0.838). On the other hand all three constructs are also meeting the threshold criteria of establishing convergent validity: CR > AVE > 0.5 and discriminate validities: AVE > MSV & ASV (HRM Practices = 0.835 > 0.508 > 0.5, Effective SCM Practices = 0.917 > 0.580 > 0.5, Customer Satisfaction = 0.838 > 0.510 > 0.5), (HRM Practices = 0.513 > 0.309 & 0.251, Effective SCM Practices = 0.561 > 0.309 & 0.290, Customer Satisfaction = 0.573 > 0.270 & 0.232).

Testing and controlling for the Effects of Common Method bias

One of the most comprehensively used technique that has been implemented by many researchers in order to deal the problem of common method variance, is to be known as Harman's one-factor (or single-factor). Conventionally, researchers implementing this technique by loading all of the variables available in their research study into an EFA and use the un rotated factor solution to come to a decision about that how many constructs are essential to measure for the variance available in the variables. If a substantial quantity of common method variance exists there are two essential assumptions or possibilities of this technique: (a) factor analysis will produce a single construct which will account for more than 50% alone or (b) one common construct will hold for the maximum variation between the constructs.

The result of Harman's single-factor test demonstrated that the variables in this research did not load onto a single factor and on the other hand when I forced them to load on one factor, that general factor accounted for only 37.44% of the covariance among the measures. Based on results obtained from Harman's one-factor method (or single-factor), it can be concluded that there is no as such threat of common method variance in my data set.

Testing a Mediated Model

Full structural equation modeling (SEM) has been implemented, in order to test for Hypothesis 1, 2 & 3 (the mediated model), as it has been already explained in analysis procedure. The hypothesized model examined the relationship between HRM Practices, effective SCM practices and customer satisfaction. The analysis results showed good to satisfactory fit results (CFI = 0.973; TLI = 0.969; CMIN/DF = 1.360; RMSEA = 0.042). Three different steps has been measured in this study as explained by Baron and Kenny (1986) and Kelloway (1998),: in step no: 1, total effect of HRM Practices on customer satisfaction has been checked, in step no: 2 indirect effect of HRM Practices on Customer satisfaction through effective SCM practices has been assessed and in the last step, only direct relationships between HRM Practices and customer satisfaction has been examined, while controlling the impact of effective SCM practices which is a mediator.

As from the bootstrap results (see the results of total effects in Appendix A, Table No: 6), it is clearly shown that there was strong and positive association between HRM Practices and customer satisfaction ($b = 0.471$, $P < 0.05$) and this positive relationship implied that all those businesses which are concerned for higher prosperity through enhancing customer satisfaction must pay attention on HR management activities such as Training, Selection, Compensation employee participation and thus H1 has been accepted.

Now as concern to findings regarding effective SCM practices that whether it mediates the positive relationship between HRM Practices and CS or not, bootstrap results of indirect effect (see the results of indirect effects in Appendix A, Table No: 6 and see mediating final hypothesized model in Appendix B, Figure No: 4), were showing strong evidences that effective SCM practices mediated the positive relationship between HRM Practices and customer satisfaction ($b = 0.238$, $P < 0.05$). Thus H2 of this study has also been accepted and it indicates that mediation between the HRM Practices and customer satisfaction through effective SCM practices has been established. This relationship explained that if any organization has a competitive advantage over other competitors in the industry based on the HR management activities, which in turn can enable the organization to produce high productive results through ensuring effectiveness of SCM activities. Afterwards the resulted effective SCM activities will

again help out the managers to enhance the customer satisfaction of the same organization, so the overall efficiency and effectiveness of an organization will increase. While the mediator effect of effective SCM practices has been controlled, the direct relationship between HRM Practices and customer satisfaction was significant as well ($b = 0.233$, $P < 0.05$), which indicated that when effective SCM practices is held constant, there is also direct positive effect of HRM Practices on customer satisfaction and thus H3 of this study has been accepted. This analysis suggests that the relationship between HRM Practices and customer satisfaction is partially mediated by effective SCM practices.

Conclusion

The analysis carried out was based on empirical data gathered. It shows that effective HRM activities not only can establish an effective SCM practices but can also enhance the ultimate goal of an organization which is all about achieving customer satisfaction. The goal of this present paper was to discuss the concept of HRM practices in the context of customer satisfaction and this relationship is also mediated by effective SCM practices of an organization. HRM has extremely important affect on the functionality of other departments of a firm. So based on the above discussion, it can be conclude that Human Resource Management can contribute significantly in order to accomplish effective SCM process of an organization which again can help in attaining customer satisfaction.

Human Resource strategies formulate a noteworthy impact on the satisfaction of customer. Successful implementation of HR strategies namely Empowerment, Customer oriented value system, Performance based reward system and Behavior Based employee evaluation can augment performance and behavior in workforce, resulting in satisfaction of customer; on the other hand, the HR strategies such as Work group socialization, Employee welfare and the understanding of the HRM practices in the organization can add to the prolong growth in the management by increasing customer satisfaction. The most important findings of the research is that the association between these two variables (HRM practices and customer satisfaction) is not just because of their direct relationship but there can be many other factors, which are playing their role as a mediator and one of those variables which has been highlighted and proved in this study is SCM practices.

This article provided a past review and assessment of HR and SC descriptions, conception and CS components that enhance product quality, competitiveness, lower costs, services provided, and consequently increasing profitability as an essential in the economic field. Analysis of data gathered confirmed the research hypotheses, exhibiting significant relationship among HRM activities, SCM activities and customer satisfaction.

This paper presents proof for the hypothesis that HR practices affect SCM practices leading to high indication of customer satisfaction. Outcomes direct towards a positive relationship among Human Resource practices and satisfaction of customer. Significantly, the impact of HR practices on satisfaction of customer seems to be arbitrated by effective Supply Chain Management practices. Proof of the effect of mediation proposes that Human Resource process positively play a part in enhancing the satisfaction of customer through effective practices related with SCM in an organization.

Based on the above discussion it can be concluded over here that organizations should capitalize profits by acknowledging that effective SCM is an outcome of employees' performance and other stakeholders leading to ultimate customer satisfaction.

Therefore, HRM strategies may be employed to push supply chain management to generate strong cross-functional relationships and to create high satisfaction amongst customers.

Managerial implications of the research

It is anticipated that finding of this paper will be very useful and practical for even both academicians and practitioners. Not only it would broaden the extent of study at the academic level, but may help active managers to comprehend the significance and role of human resource in gaining SCM effectiveness which in turn help out the managers to gain customer satisfaction which is ultimate and vital goal of every organization.

This research study has numerous implications for the supervisors and leaders working in the FMCG sector of Pakistan that they can achieve their customer satisfaction by investing on their HRM and SCM practices. In today's business scenario two things have become very evident, the first being the replication of technology and systems and the second being the interdependence between functional areas.

Because of the easy replicability of any technology and system it has become very tough to compete in the market. If an organization wants to make its mark in the market it has to come up with certain systems which cannot be replicated easily by the competitors and here comes the area of HR, any system where the main focus is on people cannot be replicated easily. Thus, the present research draws the focus of the practicing managers on an area that can be tapped to boost up the operational outcomes of the HR and on this basis of the evidences there is a big contribution of same HR practices in attaining high levels of SC incorporation, in turn that effective SCM practices will again help out the organization in order to secure sustainable competitive advantage through obtaining the customer satisfaction. With the increased interdependence between functions it becomes essential for organizations to bring in certain HR practices which help the people of the organization to deal with such interdependence.

The study results are also expected to help the managers to identify various HR practices which need to be focused on to improve SC integration and hence attaining the higher customer satisfaction, which is the ultimate goal of every organization.

Limitations of the Study

There are numerous limitations associated with this research study that need to be discussed and reported as well:

The degree of non-response & non probability sampling. In this research study, non probability sampling technique has been implemented and which is always counted as the weakest form of sampling technique. Kerlinger and Lee (2000) suggested avoiding it or using it with extreme circumstance only if there is no other way of getting a sample. One of the dangers of this kind of sampling is the non-response bias. This sampling has to do with a theory that those who respond to surveys might answer questions differently than those who do not respond to surveys. On the other side the degree of non-response could also not ascertain because it was not became possible explicitly to ask team leaders, the number of members on their each group. The possible bias is uneasy to examine and eradicate due to the non-response of some team members (Srivastava, Bartol, & Locke, 2006).

Limited scope of culture and environment. As the instrument of this research study was tested based on sample of six different big organizations and all those organizations were belonging from same FMCG industry, operating at international level and much

pretty bigger in their sizes. Prominent variations have been observed between the cultures and environments of those firms which are bigger in sizes comparatively and operating at national and international both levels (Rainey, 2003). On the other side as the study has been conducted only in one sector and there is a need in future to do similar study in other sectors as well so it may be attractive to contrast and assess variations between industries. Therefore this instrument and results obtained here cannot be automatically supposed to applicable to every type of organizations belonging from different kinds of industries.

Small sample size. A further limitation of this research study is comparatively less respondents, regardless of an adequate minimum respondent's number (200). Although the measurements and structural models showed fit to the data very well, but a sample of small size is predicted to be short of generalizability and statistical power, in spite of obtaining significant and substantial outcomes (Myors, 2006). Moreover, associated to this, as this research study was only carried out, based on the sample taken out from just one particular industry so again cautiousness is required so that conclusions can be generalized to a limit.

Recommendations for Future Research

Despite the contributions, this study does leave scope for further improvement. There are number of recommendations that can be considered and implemented for future research:

1. Sample selection from the targeted population should be distributed more evenly rather than focusing on one particular and specific area or industry and should focus on using a larger sample to increase generalizability of the findings.
2. In this research paper as convenience sampling technique from non probability sampling method has been implemented and this technique is suggested by most of researchers as a weakest form of sampling. Future researchers can select the more appropriate technique from probability sampling technique, implementing on different sizes of organizations and those organizations should belonging from different kinds of industries so that the dangers of the non-response bias can be decreased and thus result will be more even convincing and representative.
3. Other variables can be looked upon as a mediator in order to increase our more understanding regarding the association between HRM Practices and satisfaction of Customer. For example, future research can be done to check the association between HRM Practices and Customer Satisfaction which can be mediated by following different variables:
 - Employee performance
 - Employee motivation
 - Employee loyalty
 - Employee turnover ratio

References

- Abbasi, Mohammadreza and Torkamani, Mohammad.(2010). Theoretical model of customer relationship management. Iranian Journal of Business. 41: 19.
- A.T. Kearney, (1994), "Achieving Customer Satisfaction through Logistics Excellence", Managing Service Quality, 4 (2): 47 – 50.

- Badovisk G.J and Beatty S.E (1987) "Shared Organizational Values: Measurement and Impact Upon Strategic Marketing Implementation", *Journal of Academy of Marketing Science*, 15 (Spring): 19-26.
- Baron, Reuben M. and David A. Kenny (1986), "Moderator- Mediator Variables Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations," *Journal of Personality and Social Psychology*, 51 (6):1173–1182.
- Becker B & Huselid M (1998). 'High Performance Work Systems and firm performance: A synthesis of research and managerial implications'. *Research in Personnel and Human Resource Management*. 16: 53-101.
- Bowen, D.E. & Lawler, E.E. (1992). The empowerment of service workers: What, why, how and when. *Sloan Management Review*, Spring: 31.
- Bowersox, D.J., Daugherty, P.J., Droge, C.L., Rogers, D.S. and Wardlow, D.L. (1989), *Leading Edge Logistics: Competitive Positioning for the 1990s*, Council of Logistics Management, Oak Brook, IL.
- Christopher, M. (2000), "The Agile Supply Chain", *Industrial Marketing Management*, 29(1): 37-44.
- Conger, J.A and Kanungo R.N. (1988) "The Empowerment Process: Integrating Theory and Practice", *Academy of Management Review*, 13 (July): 471-482.
- Cravens, David W., Thomas N. Ingram, Raymond W. LaForge and Clifford A. Young (1993), "Behavior-Based and Outcome-Based Salesforce Control Systems," *Journal of Marketing*, 57 (4): 47-59.
- Dehmonde, Nazar., Shahraki, Alireza and Lakzae, Mahmood(2010). Identify and rank factors that influence the implementation process of customer relationship management. *Iranian Journal of Industrial Management*, Azad University of Sanandaj. 11: 91.
- Deming W.E. (1989) "Out of Crisis", Cambridge, MA:Mit Press.
- Deshpande, R.,Farley U.J., and Webster, F.E. (1993) " Corporate Culture, Customer Orientation, and Innovativeness in Japanese Firms: A quadrad Analysis", *Journal of Marketing*. 57(January): 23-27.
- DeVellis, R.F. (2003). *Scale Development: Theory and Applications*, 2nd ed, Thousand Oaks, CA: Sage Publications.
- Ernst & Whinney (1987), *Corporate Profitability & Logistics*, Council of Logistics Management, Oak Brook, IL.
- Ernst & Young (1992), *International Quality Study*, American Quality Foundation.
- Gist, M.E. and Mitchell, T.R. (1992) "Self-Efficacy: A Theoretical Analysis of Its Determinants and Malleability", *Academy of Management Review*, 17: 183-211.
- Goldman, S., Nagel, R., and Preiss, K. (1995), *Agile Competitors and Virtual organizations: Strategies for Enriching the Customer*, Van Nostrand Reinhold, New York, NY.
- Hartline D.M., Maxham G.J and McKee O.D. (2000) "Corridors of Influence in the Dissemination of Customer Oriented Strategy to Customer Contact Service Employees" *Journal of Marketing*, 64 (April): 35-50.
- Heidari Gharehbaghloo, Hadi, 1388. Identification and fault finding of supply chain management. *Iranian journal of management*, 14: 1.
- Heskett, J., Sasser, W. E., Jr., & Schlesinger, L. (1997). *The Service Profit Chain: How Leading Companies Link Profit and Growth to Loyalty, Satisfaction, and Value*. New York: Free Press.

- Hiltrop, J. (1996), 'The impact of human resource management on organizational performance: Theory and research', *European Management Journal*, Vol.14, pp.628-637.
- Hauser, H., Simester, I.D. and Wernerfelt B. (1994) "Customer Satisfaction Incentives", *Marketing Science*, 14 (4): 327-349.
- Kelloway, E. K. (1998). Using LISREL for structural equation modeling. Thousand Oaks, CA: Sage.
- Kelly, .W. (1992) " Developing Customer Orientation among Service Employees", *Journal of Academy of Marketing Science*, 20: 27-36.
- Kerlinger, F. N., & Lee, H. B. (2000). *Foundations of behavioral research* (4 ed.). Orlando, FL: Harcourt College Publishers.
- Long, J.S. (1983). *Confirmatory Factor Analysis: A Preface to LISREL*, Newbury Park, CA:Sage Publications.
- Maboodi, Mehdi., Javanshir, Hasan, Rashidi, Aboosaeid and Valipour, Peyman. (2010). The effect of applying supply chain management on customer satisfaction in the textile industry, *Iranian Journal of Textile Science and Technology Research*. 1: 13.
- Marsh, H., Hau, K., & Wen, Z. (2004). In search of the golden rules: Comment on hypothesis-testing approaches to setting cutoff values for fit indexes and dangers in overgeneralizing HU and Bentler's (1999) findings. *Structural Equation Modeling*, 11: 320-341.
- Myors, B. (2006). 'Statistical power', in T.L. Leong and J.T. Austin (eds), *The Psychology Research Handbook: A Guide for Graduate Students and Research Assistants*, 2nd edn, Thousand Oaks, CA: Sage Publications.
- Novack, R.A., Langley, C.J. Jr and Rinehart, L.M. (1995), *Creating Logistics Value: Themes for the Future*, Council of Logistics Management, Oak Brook, IL.
- Oliver, Richard L. and Erin Anderson (1994), "An Empirical Test of the Consequences of Behavior- and Outcome-Based Sales Control Systems," *Journal of Marketing*, 58 (4): 53-67.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88: 879-903.
- Qureshi M, Tahir Hijazi T, Syed Ramey I, Mohammad (2007). Impact of Human Resource Management Practices on Pakistani organizations. *J. Bus. Policy. Res.* 3(2): 128-138.
- Rainey, H. G. (2003). *Understanding and Managing Public Organizations*, 3rd edn. San Francisco, CA: Jossey-Bass.
- Rajabzadeh, Ali., Khadivar, Amaneh and Kazemi, Abdolazim.(2007). The effect of supply chain model on improvement of service quality to customers and develop the main components. *Journal of Business*, 43: 185.
- Rosemary B. (2002) "Managing Customer Services: Human Resource Management Practices, Quit Rates, and Sales Growth", *Academy of Management Journal*, 45 (3): 587-597.
- Scott, S.G. and Bruce, R.A. (1994), "Determinants of innovative behavior: a path model of individual innovation in the workplace", *Academy of Management Journal*, 37 (3): 580-607.
- Seyedi, Masoud., Moosavi, Alireza and Heidari, Shahab.(2009). Evaluation of factors affecting the performance of customer relationship management and the new model and measurement (Case study: the electronics industry). *Journal of Educational Management*, 2: 79.

- Siguaw, Judy A., Gene Brown and Robert E. Widing, II (1994), "The Influence of the Market Orientation of the Firm on Sales Force Behavior and Attitudes," *Journal of Marketing Research*, 31 (February): 106-116.
- Singh K (2004). Impact of HR practices on perceived firm performance in India. State Bank of Pakistan, Number of Reporting Scheduled Banks and Their Branches 1976 to 2008 SBP, Karachi, Pakistan. *Asia Pacific J. Hum. Res.* 42(3): 301-317.
- Slater, S.F. and Narver C.J. (1995) "Market Oriented and Learning Organization", *Journal of Marketing*, 59 (July): 63-74.
- Srivastava, A., Bartol, K. M. & Locke, E. A. 2006. Empowering leadership in management teams: effects on knowledge sharing, efficacy, and performance. *Academy of Management Journal*, 49: 1239-1251.
- Van Maanen, J., & Schein, E. H. (1979). Toward a theory of organizational socialization. In B. M. Staw (Ed.), *Research in organizational behavior* (pp. 209-264). Greenwich, CT: JAI.
- Wernerfelt B. (1984) "A Resource Based View of the Firm", *Strategic Management Journal*, Vol.5, No. 2., pp. 171-180.
- Zhang, Q., Vonderembse, M. A. and Lim, J.-S. (2002a), "Product development flexibility: testing relationships among competence, capability and customer satisfaction", (Arkansas State University and The university of Toledo).
- Zhang, Q., Vonderembse, M. A. and Lim, J.-S. (2002b), "Value chain flexibility: a dichotomy of competence and capability", *International Journal of Production Research*, 40 (3): 561 - 583.
- Zhang, Q., Vonderembse, M. A. and Lim, J.-S. (2003), "Manufacturing flexibility: defining and analyzing relationships among competence, capability, and customer satisfaction", *Journal of Operations Management*, 21(2): 173-191.
- Zhang, Q., Vonderembse, M. A. and Lim, J.-S. (2005), "Logistics flexibility and its impact on customer satisfaction", *The International Journal of Logistics Management*, 16 (1): 71-95.
- Zhang, Q., Vonderembse, M. A. and Lim, J.-S. (2006), "Spanning flexibility: supply chain information dissemination drives strategy development and customer satisfaction", *Supply chain management: An International Journal*, 11(5): 390-399.

Appendix A

Table 1: Means, Standard Deviations and Correlations among variable

No	Variables	M	SD	1	2	3	4	5	6	7	8
1	HR_1	3.91	.963	-							
2	HR_2	3.08	1.154	.095	-						
3	HR_3	3.96	.842	.255**	-.077	-					
4	HR_4	3.75	.981	.162*	-.099	.485**	-				
5	HR_5	3.94	.900	.480**	-.042	.715**	.461**	-			
6	HR_6	3.64	.937	.268**	.095	.539**	.421**	.551**	-		
7	HR_7	4.12	.891	.362**	.028	.412**	.388**	.480**	.534**	-	
1	SCM_1	3.66	.829								
2	SCM_2	3.45	1.035	.591**	-						
3	SCM_3	3.57	.913	.550**	.599**	-					
4	SCM_4	3.53	.861	.570**	.597**	.520**	-				
5	SCM_5	3.56	.892	.545**	.660**	.567**	.622**	-			
6	SCM_6	3.39	.893	.525**	.562**	.501**	.573**	.554**	-		
7	SCM_7	3.44	.935	.542**	.585**	.623**	.594**	.567**	.527**	-	
8	SCM_8	3.53	.872	.589**	.644**	.568**	.641**	.626**	.647**	.514**	-
1	CS_1	3.84	.839								

2	CS_2	3.78	.849	425**	-						
3	CS_3	3.94	.701	416**	.471**	-					
4	CS_4	4.08	.710	515**	.468**	.493**	-				
5	CS_5	3.96	.775	569**	.529**	.536**	.612**	-			

N = 215; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table 2: Comparative Summary of Confirmatory Factor Analysis

Models	CMIN/DF	RMSEA	CFI	TLI
Model No:1	1.549	0.052	0.951	0.944
Model No: 2	1.360	0.042	0.973	0.969

Note: N=223, Cutoff Criteria for above Fit Indexes (RMSEA= < .06 to .08 with confidence interval, CFI= $\geq .95$ for acceptance, TLI= $\geq .95$, CMIN/DF=less than 3).

Table 3: Standardized and Unstandardized Coefficients for Hypothesized Model of CFA

Observed variable	Latent construct	b	B	SE
HR_3	HRM Practices	0.806	1.263	0.153
HR_4	HRM Practices	0.587	1.071	0.156
HR_5	HRM Practices	0.832	1.393	0.164
HR_6	HRM Practices	0.701	1.221	0.153
HR_7	HRM Practices	0.603	1	
SCM_1	SCM Practices	0.726	0.866	0.077
SCM_2	SCM Practices	0.799	1.191	0.094
SCM_3	SCM Practices	0.734	0.965	0.086
SCM_4	SCM Practices	0.781	0.967	0.079
SCM_5	SCM Practices	0.792	1.017	0.082
SCM_6	SCM Practices	0.726	0.933	0.083

SCM_7	SCM Practices	0.731	0.984	0.089
SCM_8	SCM Practices	0.797	1	
CS_1	Customer Satisfaction	0.687	0.922	0.094
CS_2	Customer Satisfaction	0.657	0.892	0.097
CS_3	Customer Satisfaction	0.662	0.741	0.079
CS_4	Customer Satisfaction	0.745	0.845	0.079
CS_5	Customer Satisfaction	0.807	1	

Note. CFA = Confirmatory Factor Analysis.

Table 4: Comparative Summary of Confirmatory Factor Analysis (Alternate Models)

Models	χ^2 (df)	CMIN/DF	EA	RMS I	CF LI	T
Null ^a	205 5.2(190)	10.817	9	0.21 00	0.0 000	0.
Single Factor ^b	718. 6(170)	4.227	6	0.12 06	0.7 671	0.
Three Factor (Hypothesized)	179. 5 (132)	1.360	2	0.04 69	0.9 973	0.

NOTE: N=223,* $p < .001$ for all chi-square statistics.

a. Null model in which no variables are related or we can say that all items are treating as independent variables.

b. A single factor was composed of a single latent factor in which all 21 items are loaded together.

Table 5: Composite Reliability, Convergent and Discriminant Validity

Variables	CR	AVE	MSV	ASV
Effective HRM Practices	0.835	0.508	0.309	0.251
Effective SCM Practices	0.917	0.580	0.309	0.290
Customer Satisfaction	0.838	0.510	0.270	0.232

Table 6: Bootstrap Results of Mediation from Structural Equation Modeling

Model	Customer Satisfaction	
	(Mediator = Effective Teamwork)	
	b	Sig value
Direct Effects		
Effective HRM Practices	0.233	0.033
Indirect Effects		
Effective HRM Practices	0.238	0.00
Total Effects		
Effective HRM Practices	0.471	0.00

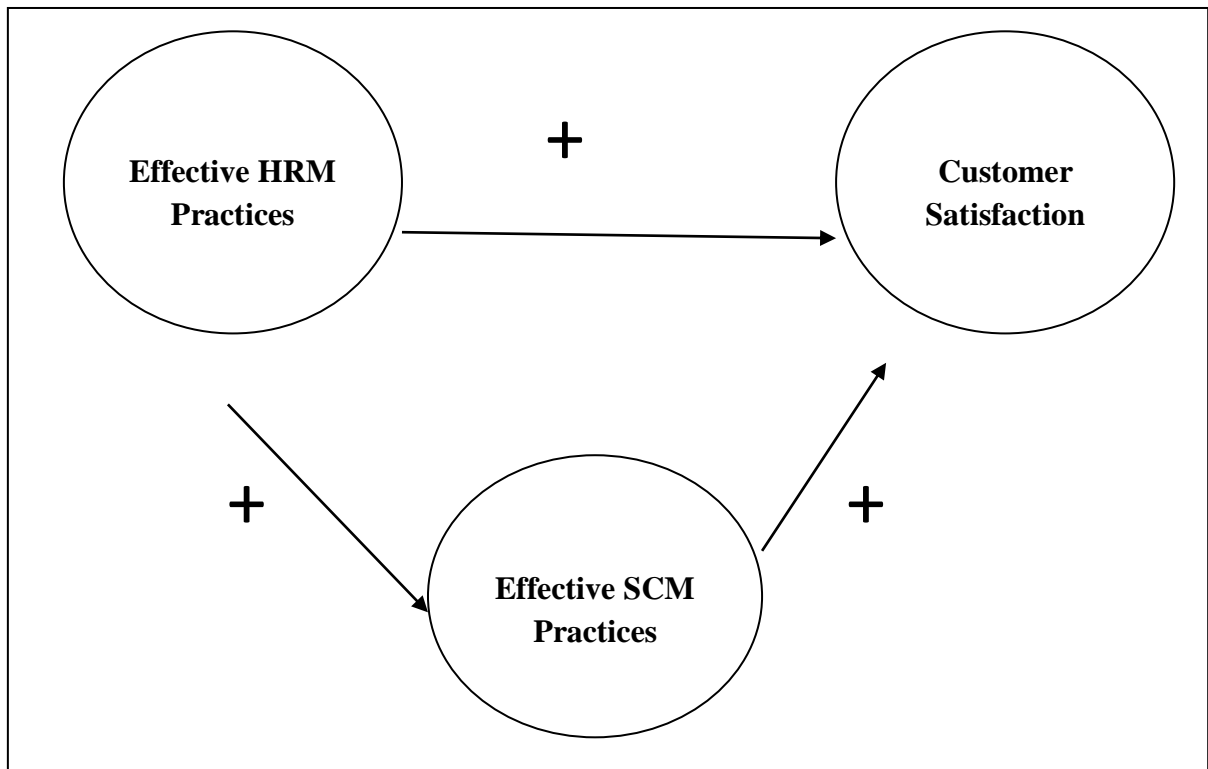
Appendix B

Figure 1: The Hypothesized Model of the Relationships among Effective HRM Practices, Effective SCM Practices, and Customer Satisfaction

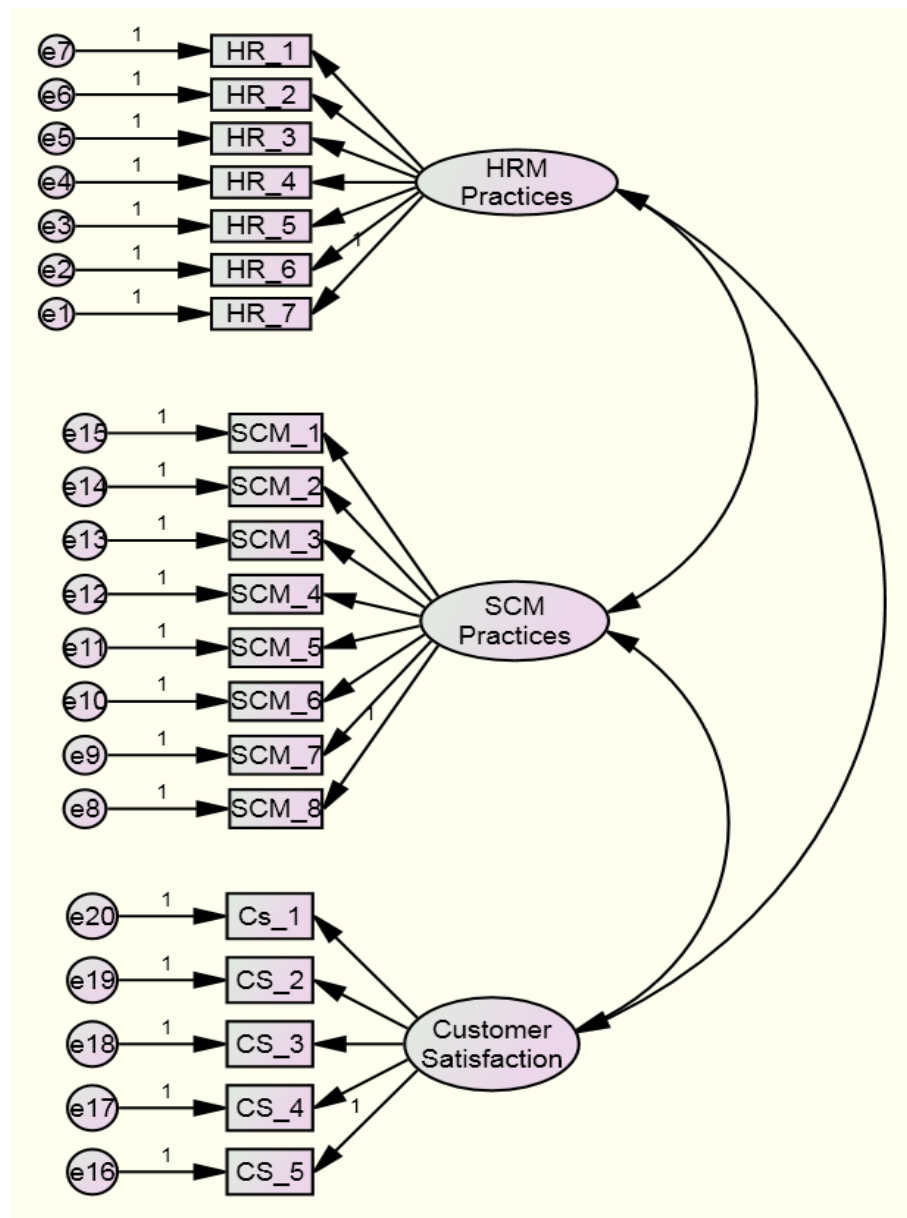


Figure 2

Theoretical Model of Confirmatory Factor Analysis. e = error.

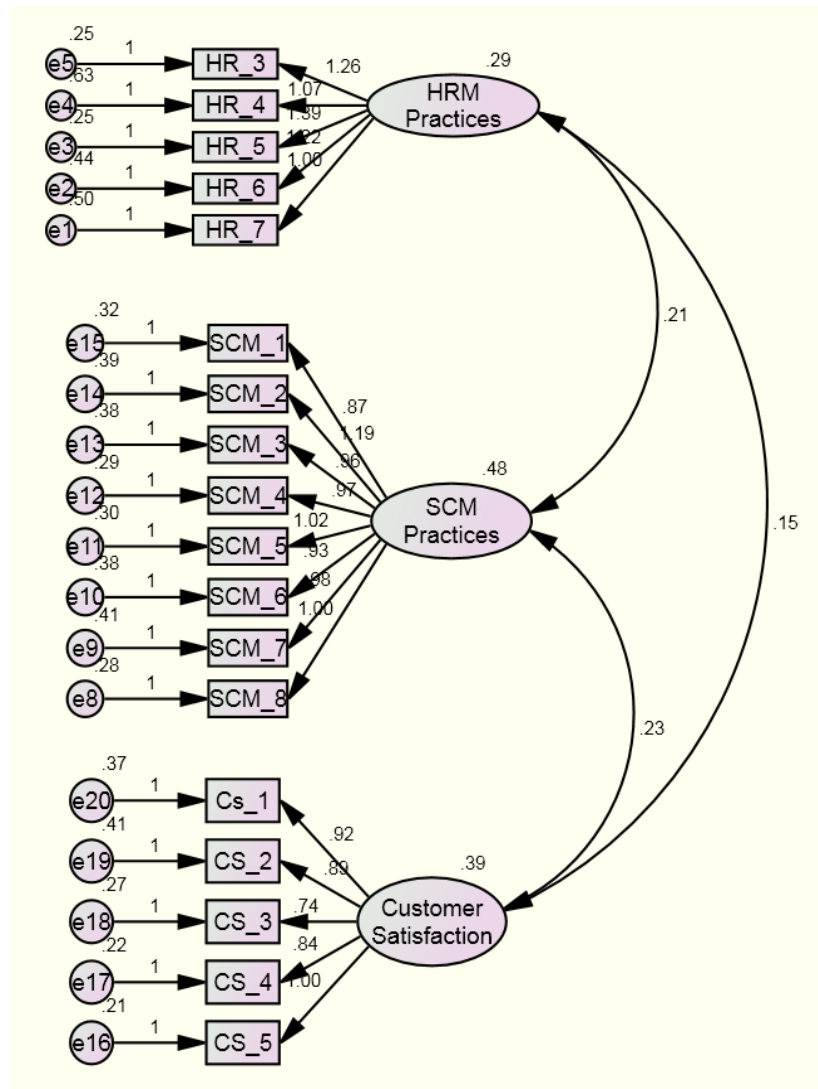


Figure 3

Hypothesized model of a confirmatory analysis. Comparative fit index = . 0.973; Tucker–Lewis index =0.969; Root mean square error of approximation =. 0.042; Chi-square = 179.5; degrees of freedom = 132. e = error.

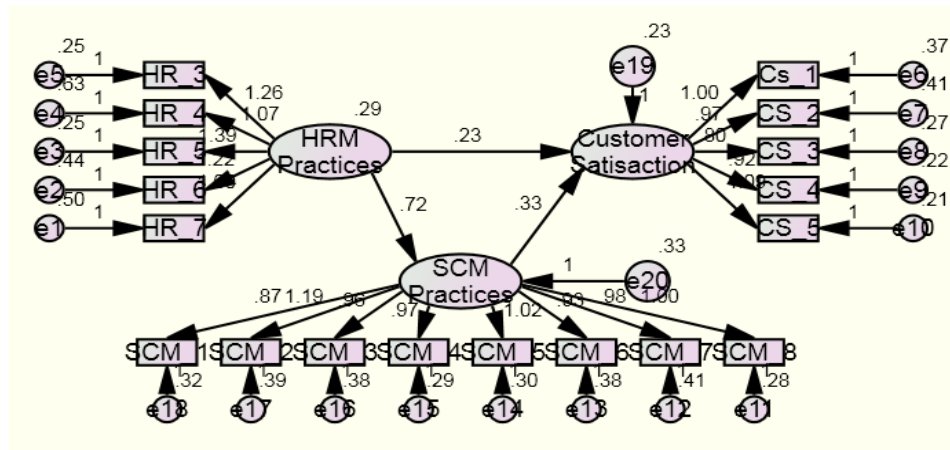


Figure 4

Results of the structural equation model. Comparative fit index = . 0.973; Tucker–Lewis index =0.969; CMIN/DF = 1.360; Root mean square error of approximation = 0.042, e = error.

To cite this article:

Kumari, K., Usmani, S., & Husain, J. (2013). HR Management Practices and Customer Satisfaction: The Mediating Effect of Effective Supply Chain Management Practices. *Global Business and Management Research: An International Journal*, 5(2 & 3), 137-160.