

Interpersonal Skills for Sales Force Effectiveness- A Survey on Indian Pharmaceutical Industry

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Abstract

Sales people of an organization tend to exhibit different skills to complete the sales pitch, which sometimes may prove to be more effective. Their effectiveness is difficult to measure, unless a thorough primary survey is conducted on the field. The present competitive situation demands a successful effective tool in closing down a sale. In this scenario, a traditional and much debated communicative skill along with a high caliber interpersonal skill is found to be lacking among the sales persons due to the penetration of online resources. The present study had made an attempt to find out the relevance of the interpersonal skills in one industry where still the salespeople are considered as bread winners.

Keywords: Sales Force Effectiveness; Interpersonal Skills; Buyer/Seller Relationships; Perceptive observation

Introduction

Measuring the sales force effectiveness has remained highly interesting topic of the researchers. As the marketing and sales environment is highly dynamic and the organizations are under pressure to sustain their positions in the market. In this situation, the role of sales persons is highly important for effective sales and distribution management. The organizations are continues to adopt different strategies to improve their sales force efficiency by the way of focusing sales plans and conducting vigorous sales training programs. The term 'effectiveness' is measured through different factors, which influence the sales persons' field performance. These factors comprises like namely, specific objective based outcomes, skill sets controlling the sales persons' behaviour, performance results in terms of sales units/volume, revenue generated, profitability, new accounts created, etc. These patterns are categorized as interpersonal skills, salesmanship skills and technical skills. The continuous measurement of sales force effectiveness provide better clarity about the sales persons' efficiency level in the dynamic business environment. In addition, it facilitates in identifying and training the right sales person for the job. To meet the sales targets, address the competition and ensure the sustainability for long term, the measurement of sales person's effectiveness is inevitable features of business.

The causes for individual performance at the levels of sales persons were touched upon by different research work. These includes factor like, technical knowledge, communication skills that include making presentations, influence strategies adopted, adaptive selling by way of using different selling techniques, team work in selling, and sales support and even questioning ability in a sales person. Situational factors include Sales territory design, Information needs of the buyer and buyer-salesperson similarity.

Sales force Effectiveness

Sales effectiveness has been scrutinized by various academic researchers as a group and individual sales person's actual performance in the field [1,2]. The internal (sales individuals) and external factors (working environment) has been influencing the level of effectiveness of a sales person. Thus, the sales person's effectiveness is the result which is influenced by factors which are not subject to his/her control, called as non-personal factors or organizational variables [2,3-7]. In 1994, Sujana et al. [8], suggested that the rapid changes influenced the salespeople towards their sales strategy and lead to higher customer satisfaction and sales effectiveness. Keller's study measured the

relationship based characteristics and individual performance of a sales person by three scales such as selling orientation and customer orientation (SOCO), adaptability and SERVE scale. Kelly mentioned the customer orientation to be the important attribute for the high performers.

The sales performance has been measured as a straight outcome of sales persons' attitude, aptitude, role clarity, skills sets and environmental factors [6]. In addition, the mentioned factors are identified as important for the sales process and the time spent on each activity may vary with different degree of weight being placed on each activities. Cravens et al. [9] found that there existed a relationship between sales persons' behavioural performance and sales organization effectiveness. A positive correlation has been identified between behaviour performance and outcome performance in US sales person study conducted by Oliver and Anderson [10]. The study conducted by Babakus et al. [11], looked at the behaviour performance which includes the adaptive selling behaviour, technical knowledge of the sales person, sales presentations, sales plan and sales support from the organization. In the same way, Cravens et al. [9] conducted a research on chief sales executives and examined the technical skills, sales presentations, control over the expenses and providing information for organizations' sales effectiveness. Technical Knowledge refers to sales people providing maximum information about the design and its specifications, its functions and application of the products and services. Similarly, the study conducted by Piercy et al., [12] and Babakus et al. [11] found a positive relationship between the technical knowledge of the sales people and their outcome performance for an organization effectiveness. Weitz [13] defined the adaptive selling as the sales person's ability to alter his/her sales behaviour when interacting with customers.

Statement of the Problem

During the recent economic downturn, organizations struggle

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to improve their productivity to remain competitive, among rising industrial sales calls costs and declining consumer interest in taking buying decisions. According to Ryans and Weinberg [14], the rising costs of maintaining a sales force has been a concern for most of the sales managers in today's increasingly competitive markets. In many industrial firms, direct selling costs account for almost half of all marketing expenses. Therefore, sales managers have the crucial responsibility to make sure that their sales force contributes to the organization's objectives effectively and efficiently. By defining these attributes, sales organizations can identify what is needed for the new levels of sales performance. The regular pharma sales job includes the syndicated services, customized services, face-to-face meeting with customers, request for prescription of drugs, delivering the samples, maintain the relationships with various selling points and track the delivery of prescription of drugs to the physicians or the other purchasers, etc. Since the pharma sales people were engaged the above listed various activities, the role of the manager and the organization has to take steps to choose the suitable persons and focus to retain them for a longer period. The ultimate outcome of this activity is to improve the effectiveness of the organization and its performance in the competitive environment. The study focus to identify the interpersonal sales factors influencing the pharmaceutical sales persons. The characteristics and sales effectiveness of a salesperson is being identified in highly important to sustain in the competitive scenario. The important research issue is, whether proper guidance is given to the sales person in question? If so, is it giving the required output in the form performance? If performance is exposed, is it possible to identify the important factors which might have improved or enhanced his performance? The other pertinent situation is performance of a sales person also involves how far he suites himself to the current style and requirement of the buyer, i.e., whether he is making himself adaptive to the prevailing situation in the market. Does this get exposed in his performance is another issue.

Objectives of the Study

By considering the need of the study, the Objective of this study is designed as:

To scrutinize the perceived attributes considered as essential interpersonal skill set factors for the sales force effectiveness in pharmaceutical industry and to suggest research outcomes as solutions to increase the level of sales force effectiveness. To achieve the mentioned objectives, the front line sales forces are defined as individuals are the targeted segments who are meeting the end users of their products and ultimately responsible for all sales (i.e. revenue) related to their respective assigned territory. In this study, the sales force having direct and regular interface with the customers. Based on the objective the following hypothesis has been framed for this study.

Hypothesis: H1: Higher the interpersonal skills, greater the level of sales force effectiveness

H2: Higher the interpersonal skills, higher the field experience

Limitations: The gathered data represents the experience and expertise of the specific set of respondents for a specific time period. As the market and selling strategies are dynamic in nature, the accuracy of the data may not remain the same for the current market status. The researcher could meet only one third of the respondents directly, and had no direct interaction with the remaining respondents. Since the researcher could not know the justification of the responses, it might affect the interpretation of the results. This study represented the

pharmaceuticals industry exclusively. The respondents were dealing purely with branded pharmaceutical products. Generalization of the results may be limited to industries with similar professional sales encounters.

Review of Literature

Research discussions have sought to describe the various factors that constitute a salesperson's performance, understand the attributes that influences their performance, identify and control a salesperson's performance. As the salespersons are directly representing an organization to meet customers, the role of sales personnel is of highly potential. Behaviour-based measures of salespersons' performance are impactful in the long term. Typical sales behaviours include prospecting, fact finding, selling, closing and servicing customers. In a revelatory study only 10% of work time of a salesperson is spent in active selling, while travel and other sales behaviours occupy the remaining major portion of time.

In 2008, Kuster et al. [15], identified determinants of sales force effectiveness. It referred to seven blocks including sales control in the form of follow-up, evaluation and rewards, professionalism in attitude and competencies, sales people's behaviour performance in the form of adaptive selling behaviour, sales interviews, and sales people's outcome performance. Sales people's behaviour based control, their outcome performance, professionalism and sales people's behaviour performance were associated with higher sales force effectiveness. It was observed that the least effective teams were especially concerned about clinching deals rather than maintenance of long-term relationships with customers. The findings of the study underscored the need for giving relatively greater importance to behavioural aspects, to an extent greater than result based systems to control. The most effective team managers were having a long term vision, thereby placing more emphasis on work quality than amount of work. An earlier study by Greenberg and Greenberg, [16] had also brought out similar results indicating 80: 20 or Pareto rule in sales and sales persons, and had added that 25 percent salespeople with sales ability but were selling the wrong product or services. They further found that three attributes differentiated the best performers from that of the average, which included empathy, ego drive, and ego strength, even though the mere possession of these did not guarantee success at work. The similar aspects have been mentioned by Greenberg and Mayer [17]. Wasuja et al. [18] have attempted to examine the effects of salespersons 'cognitive bias' or the tendency to draw incorrect conclusions based on cognitive factors such as personal beliefs, social influence and information-processing shortcuts such as heuristics rather than evidence. Toytari et al. [19] focused on value based selling in contrast to product based selling. Describing Value as the perceived or real difference between giving and getting and value-based selling as the understanding and improving the customer's business in a proactive manner, the researchers found that offering is most attractive for value-based sales when the real value of the offering is either underestimated or unknown. The study also suggested that value-based sales is characterized by a customer-centric, explorative process, characterized by value quantification and customer validation, aiming at creating value for the buyer and the seller. Rajan [20] delved into sales force effectiveness in pharmaceutical industry and found that the most measurable features in sales person's performance were interpersonal skills, salesmanship skills, technical skills and sales techniques. According to the study, the non-verbal communication plays a vital role in interpersonal skills sets. Rajan and Srinivasan [20] in their study on sales force effectiveness in automobile industry interpersonal skills like ability to manipulate

others to control the situation, ability of effective communication and control over the situation were found to be important attributes in automobile sales. Piercy et al. [21] required Sales managers to rank order factors to improve sales persons' effectiveness and found that encouraging sales force to build long-term relationship with customers and improving product/service quality formed the top two factors, followed by decreasing response time between order and delivery. The study concluded that there was close relationship between sales force behaviour performance and sales force outcome performance and thus they need not be at a tangent with each other.

Basir [22] focused on the impact of four dimensions of sales skills namely interpersonal skills, salesmanship skills, technical skills and marketing skills as independent variables on the dependent variable namely salesperson performance. The results of the study indicated that salespersons' interpersonal skills can significantly boost sales performance. The study also showed that salesperson performance was not particularly impacted by salesmanship skills. Thus, there was no support to the proposition that a firm can increase salesperson performance by procuring or retaining salespersons with high salesmanship skills.

Research Methodology

The main purpose of the study is to identify and bring out the influencing variables in sales force effectiveness related to the interpersonal skill sets of a sales person. To work out this identification process, a descriptive and analytical design was framed. The sources of data, statistical methods and models used to analyse the collected data are given in the following paragraphs.

Sampling design

In the study, the front line sales persons (i.e. the executives meeting their end users in branded pharmaceutical companies) were participated to find out the importance of interpersonal skill for the pharmaceutical industry. To collect the required data, a field survey method was adopted in getting the information. A structured questionnaire was used in the survey to collect the data. Only 2nd and 3rd line managers were selected as sample respondents. Non-probability sampling method was used in finalizing the sample respondents. A method called as accidental-quota sampling was adopted in narrowing down the sample size. With the help of 35 executives and 5 distributors representing 21 pharmaceutical organizations the necessary information was collected. A total of 32 pharmaceutical company front line sales executives participated in this survey to give their opinions. The state of Tamil Nadu and Karnataka were selected based on availability of these front line sales people during the study period from March 2012 to January 2013. A sample of 352 respondents was chosen randomly for this survey.

Sample size

Pharmaceutical sales executives as members of Federal Medical Representatives Association of India come to around 85,000. In Tamilnadu and Karnataka, the registered number was 12,000 and 6,000 respectively. Of these total 18,000 pharmaceutical executives, 450 samples were collected. Due to lack of information and other errors in the questionnaire, the present study considered only 352 respondents for the current research. No equal distribution of sample was considered between these two States due to personal difficulty faced by the respondents in the survey. Hence, out of these 352 samples, 114 responses came from Karnataka and the remaining 238 sample were drawn from Tamil Nadu. Analysis of data for the present research was

done after categorizing the important variables that emerged from the survey. To extract the required constructs and other variables, the simple percentage analysis, chi-square and factor analysis were applied.

Analysis of the survey

The present chapter tries to analyse the sales force effectiveness of selected respondents from the area chosen for the study. To understand the behaviour, an attempt has been made to understand the composition of socio economic aspects and then moved towards the skill sets pattern among the respondents. The second set of analysis includes the factor analysis which brings out the most important factor behind the respondents skill sets exposed, which then is followed by multiple regression to find the validity of factor analysis and again tested for chi-square to narrow down the result to its precision (Table 1). A total of 352 male respondents participated in the study to evaluate the effectiveness of the front line pharmaceutical sales persons. It means 100 percentile of the respondents are from the male segment. This is because of the nature of job which includes continuous and extensive travelling to cover the territory, work pressure in terms of meeting the customers and achieving the sales targets, etc. In India, the sales profession is highly dominated by the male category. Moreover, the researcher could not find any women pharmaceutical sales persons during his visit to meet the respondents for data collection. The 352 respondents who participated in this study to measure the sales force effectiveness study, 52.4 percent of the respondents (184 numbers) were between 25-30 years of age category, 108 participants (30.8 percentile) from 31-36 category, 47 respondents (13.4 percent) were under 25 years and about 3.4 percent (12 numbers) of the respondents were above 36 years of age. In sum, it is inferred that about 83.2 percent of respondents are in the category of 25-36 years. The educational qualification indicates that there are 272 respondents (77.3 percent) who hold Under Graduate (UG Degree) and 14.8 percent (52 respondents) were Post Graduates (PG Degree). The study also found that eight percent of the respondents were Diploma holders. In India, most of the leading Pharmaceutical Organizations offering the entry level sales job to the young person were holding only UG degree. Under marital status, 52.8 percent of the survey respondents (186 numbers) are unmarried and 46 percent are categorised as married (162 respondents). Summarizing the above, it is found that all the respondents are male sales persons. Most of the respondents are under the age between 25-36 years. There are 77.3 percent respondents who have completed their Under Graduation and 52.8 percent are unmarried (Table 2). The respondents expressed their professional

Category	Classification	No. of respondents	Percent
Gender	Male	352	100
	Total	352	100
Age	<25	47	13.4
	25-30	184	52.4
	31-36	108	30.8
	>36	12	3.4
	Total	351	100
Educational qualification	Diploma	28	8.0
	Undergraduate	272	77.3
	Postgraduate	52	14.8
	Total	352	100
Marital status	Married	162	46.0
	Unmarried	186	52.8
	Total	348	

Table 1: Social-Economic Composition.

Category	Classification	No. of respondents	Percent
Work Experience In Present Company	< 5	285	81.2
	5-10	56	16.0
	>10	10	2.8
	Total	351	100
Work Experience in Pharmaceutical Industry	< 5	169	48.1
	5-10	128	36.5
	>10	54	15.4
	Total	351	100
Number of Organizations Worked till date	<1	47	13.5
	1-3	250	71.6
	>3	52	14.9
	Total	349	100

Table 2: Career Composition.

Category	Classification	No. of respondents	Percent
Training in 2009	<1	292	89.0
	1-3	32	9.8
	>3	4	1.2
	Total	328	100
Training in 2010	<1	266	82.1
	1-3	54	16.7
	>3	4	1.2
	Total	328	100
Training in 2011	<1	270	83.1
	1-3	52	16.0
	>3	3	0.9
	Total	325	100

Table 3: Composition of Training Obtained.

experience under the category of present organization experience, number of organizations worked till date and total experience in the pharmaceutical industry. In the category of Present organization experience in terms of years, out of 352 respondents 285 are having less than five years association with their organization. 56 respondents (16 percent) hold more than five years of experience but not exceeding ten years. Ten percent of the respondents have been with the present organization for more than 10 years. In the Total work experience in the pharmaceutical industry category, 48.1 percent of the respondents are having less than five years of experience whereas 36.5 percent have completed five to ten years' experience. It is also observed that 54 respondents (15.4 percent) are having more than ten years of pharmaceutical industry experience in their professional career. In the third category of number of organizations worked till date, 250 respondents (71.6 percent) have minimum one and maximum of three organization experience, 52 respondents have worked in more than three organizations and 47 respondents (13.5 percent) hold only one organization exposure. To consolidate the findings, only 18.8 percent of the respondents are continuing their job with the same organization for five years. Most of the sales persons (81.2 percent) switched their jobs within the span of five years duration, 86.5 percent of respondents are having minimum one year experience and 52 respondents are having experience in more than 3 organizations. This can be interpreted as the industry has high sales force turnover and the sales persons keep looking for the better opportunities. This may be a great challenge for the organizations to retain the smart sales persons (Table 3).

To evaluate the effectiveness of the front line pharma sales force, the respondents are asked to provide three years (2009, 2010 and 2011) details of the sales training programs they have attended in

their organizations. In the year 2009, 89 percent of respondents have attended a minimum of one sales training program. Likewise in year 2010 and 2011, about 82.1 percent and 83.1 percent of respondents attended the sales training programs respectively. This indicates that pharma organizations conduct training programs for the purpose of enriching the knowledge of their own sales force. In 2010 and 2011, more than one training program has been attended by 16.7 percent and 16 percent respectively. This may be interpreted as the industry is growing in terms of products and competition, and they wanted to ensure their sustainability in the market in terms of improving their market share (Table 4). In this table, recognitions received by the respondents are recorded. The recognitions in terms of both monetary and non-monetary benefits included awards, promotions, incentives, cash prizes, etc. Most of the respondents received minimum recognition from their organization in all the three years. Compared with the year 2009 and 2010, they received minimum of one and maximum of two recognitions from their companies in 2011 (Table 5).

The achievement of individual sales targets is an important measurement of sales force effectiveness which is tabulated in Table 5. Classification is categorized to less one, one to 100, and more than 100. Less than one represents the respondents who had not given their response. The same classification is followed in Table 6, where net accounts added during the years were recorded. Here again, the treatment of nil response has been categorised as less than one. In the years 2010 and 2011, 97.9 to 98.5 percent of the respondents achieved 100 to more than 100 percent sales target. This may be safely interpreted that most of the field sales persons achieved their targets in terms of value. The non-achievers of 100 percentages have drastically fallen down in year 2010 and 2011 compare with the year 2009 (18.7 percent). This may be because of consistent growth of the

Category	Classification	No. of respondents	Percent
Recognition in 2009	<1	303	96.8
	1-2	10	3.2
	>2	0	0
	Total	313	100
Recognition in 2010	<1	312	96.9
	1-2	10	3.1
	>2	0	0
	Total	322	100
Recognition in 2011	<1	306	92.7
	1-2	24	7.3
	>2	0	0
	Total	330	100

Table 4: Composition of Recognition Received.

Category	Classification	No. of respondents	Percent
Sales Target in 2009	<1	63	18.7
	1-100	188	55.8
	>100	86	25.5
	Total	337	100
Sales Target in 2010	<1	7	2.0
	1-100	185	53.6
	>100	153	44.3
	Total	345	100
Sales Target in 2011	<1	5	1.4
	1-100	115	33.1
	>100	227	65.4
	Total	347	100

Table 5: Composition of Sales Target Achieved.

Category	Classification	No. of respondents	Percent
New Accounts Added in 2009	<1	116	37.3
	1-5	172	55.3
	6-10	16	5.1
	>10	7	2.3
	Total	311	100
New Accounts Added in 2010	<1	48	15.3
	1-5	242	77.1
	6-10	22	7.0
	>10	2	0.6
	Total	314	100
New Accounts Added in 2011	<1	55	17.4
	1-5	238	75.1
	6-10	18	5.7
	>10	6	1.9
	Total	317	100

Table 6: Composition of New Accounts Added.

Factors	Cronbach's Alpha	KMO	Barlett'ssphericity
1 Inter personal skills	0.762	0.686	1473.791

Table 7: Sampling Adequacy.

market, reasonable targets, effective input to the field sales force, etc., Since, most of the respondents have achieved their targets, the factors projected by them, in view of sales force effectiveness, may hold value (Table 6). Considering the measurement of sales force effectiveness, the total number of new accounts generated by the sales persons during a specific year has been one of the indicators for their effectiveness. Here, the respondents projected their 2009, 2010 and 2011 performances in new accounts development. In the year 2010 and 2011, among the 352 respondents 77.1 percent and 75.1 percent created minimum of one and maximum of five new accounts respectively in their territories. On account of creating new business and achieving the fixed targets, the sales persons qualify themselves for recognitions from their organizations.

Cronbach's alpha

Interpersonal skill set had 24 components for testing the consistency of response from the sample respondents. When all the 24 components were moved to measure this test, the resultant output showed a low alpha value which was inferred as inconsistent response. A low alpha value might not extract enough loading in factor extraction; hence to improve this value, eight components were removed one by one till a high score was attained. A final count of 16 components was able to give an alpha value of 0.762, which is higher than the stipulated value of 0.60 (Table 7). The results found in the Table displays four important aspects that had to be interpreted, namely, Eigen value, factor loadings, communalities and variance explained. The first step is to meaningfully interpret 'communalities'. Communality is the proportion of variance accounted for by the common factors of a variable. It was observed that communalities were high enough for the three variables accounted for the first factor. Sixteen items were extracted to explain the variance. Of these 16 items, five factors were extracted for explaining the high variance with Eigen value of >1. The first factor had an eigen value=3.737. Since this was found to be greater than 1.0, it explained more variance than a single variable, that is, 3.737 times as much. The percent of variance explained is: (3.737/16 units of variance) (100)=23.359%. All the three variables have a high factor loading on factor 1, which could be named as 'Listening skills'. The

second factor received an eigen value=2.067, which was greater than 1.0, and explained more variance than a single variable, that is, 2.067 times as much (Table 8). Communalities were also observed to be high enough for the three variables accounted for the second factor. The percent of variance explained was: (2.067/16 units of variance) (100)=12.918%. The three variables have a high factor loading on factor 2, which was named as 'Optimism'.

The third factor with an eigen value=1.642, was greater than 1.0 and explained 1.642 times as much than a single variable. Communalities were also observed to high exhibiting that the proportion of variance in each variable accounted for this factor was not the same. The percent of variance explained was found to be 10.263% [(1.642/16 units of variance) (100)]. Three variables were observed to have a high factor loading on factor 3, which was named as 'Empathy'. With an eigen value of 1.399, which was greater than 1.0 and explaining 1.399 times than a single variable, factor 3 was extracted. A reasonably high communality observed between this variable added strength to its accountability for this factor. The total variance explained by factor 3 was (1.399/16 units of variance) (100)=8.741%. It was renamed as 'Buyer/Seller relationship'. The last factor was found to have an eigen value of 1.088 and explained that much more than a single variable. Reasonably high communalities were observed within the selected variables which extracted this fifth factor. The percent of variance explained was (1.088/16 units of variance) (100)=6.80%. The three variables have high factor loadings on factor 5, which was named as 'Perceptive Observation'.

Descriptive Statistics of the extracted Factors

The second stage of the analysis is presenting a descriptive statistics of the factors extracted from factor analysis. This is pertinent here as it describes the nature and pattern of the resultant output. Once, the pattern is understood further analysis of multiple regressions will be error free. Descriptive statistics were used separately for all the three skill sets. Statistics like Mean, Standard Deviation, Skewness, Kurtosis and, Cronbach's alpha were tested for the components that were extracted from the factor analysis. Before using these tests, composite scores were created for each of the factors extracted for all the skill sets. These scores were then used for getting the descriptive pattern (Table 9). The first factor in the interpersonal skill formed from factor loading was 'listening skills', which had a mean score of $M=3.31(SD= 0.78)$. It can be inferred that mean of the rating scale adopted was centred with less deviation. The remaining factors also exhibited similar results. Optimism ($M=3.53; SD=0.53$), Empathy ($M=3.34; SD=0.64$), Buyer/Seller relationship ($M=3.47; SD=0.49$) and perceptive observation ($M=3.42; SD=0.43$) respectively brought out a mean score with less deviation. The skewness value is $-0.489(SE=.130)$ and kurtosis value is $0.023(SE=.259)$ for 'listening skills'. Skewness and kurtosis values within the range of $\pm 2(SE)$ are generally considered normal. Another rule of thumb is that the skewness and kurtosis values should fall within an absolute value of 2.0 to be considered normal. Given our values, skewness was within the range of -0.26 and $+0.26$ and kurtosis was within the range of -0.52 and $+0.52$ were within a tolerable range for assuming a normal distribution. A similar kind of result was observed for all the other remaining factors. Optimism had a skewness value of $-0.883 (SE=.130)$ and kurtosis value of $2.93 (SE=.259)$, Empathy had $0.219 (SE=.130)$ and $0.20 (SE=.259)$, buyer/seller relationship had $0.074 (SE=.130)$ and $0.49 (SE=.259)$ and, perceptive observation had $0.825 (SE=.130)$ and $1.54 (SE=.259)$ respectively. Examination of the histograms suggested that the distribution looked approximately normal. This further strengthens the application of parametric test for

Interpersonal Skills Factors	Items		Eigen Value	Factor Loadings	Communalities	Variance Explained
Listening skills	1	Ability to identify the prospects	3.737	.836	.751	23.359
	2	My active listening to all my customers		.822	.703	
	3	I take notes when listening in order to remember information or better understanding a complex idea		.647	.533	
Optimism	1	Ability to service the account	2.067	.766	.630	12.918
	2	Ability to qualify prospects		.747	.695	
	3	Extent of bi-directional communication with my customer		.621	.455	
Empathy	1	Level of freedom I enjoy in satisfying my customer's needs	1.642	.781	.697	10.263
	2	I try to help customers achieve their goals		.718	.735	
	3	Seeing things from my customer's view		.606	.450	
Buyer/Seller Relationship	1	Success in getting Further sales from existing customers	1.399	.678	.771	8.741
	2	My ability in caring about my customer's feelings		.641	.608	
	3	I am able to extract key ideas from other's comments even if their remarks are disorganized		.562	.503	
	4	Imagination in supplying the products and services that meet and services that meet the customer's needs.		.559	.570	
Perceptive Observation	1	I make other people feel comfortable and at ease when they are talking	1.088	-.726	.652	6.799

Table 8: Factor Analysis: Interpersonal Skills.

Interpersonal skills Constructs	No. of items	Mean(SD)	Skewness(SE)	Kurtosis(SE)	Cronbach's Alpha
1 Listening skills	3	3.31 (0.78)	-0.489 (.130)	0.023 (.259)	0.74
2 Optimism	3	3.53 (0.53)	-0.883 (.130)	2.93 (.259)	0.63
3 Empathy	3	3.34 (0.64)	0.219 (.130)	0.20 (.259)	0.59
4 Buyer/seller relationship	4	3.47 (0.49)	0.074 (.130)	0.49 (.259)	0.57
5 Perceptive observation	3	3.42 (0.43)	0.825 (.130)	1.54 (.259)	0.06

Table 9: Descriptive Statistics-Interpersonal skills.

Dependent Variable	Independent Variable					R ²	F
	Listening skills	Optimism	Empathy	Buyer-Seller Relationship	Perceptive Observation		
Sales Target 2009	.026 (.481)	-.025 (-.462)	-.038 (-.689)	.118* (2.168)	-0.104** (-1.906)	0.028	1.855
Sales Target 2010	0.155* (2.90)	-0.111* (-2.07)	0.021 (0.395)	-0.017 (-0.312)	-0.069 (1.29)	0.042	2.922**
Sales Target 2011	0.136* (2.53)	-0.012 (-0.22)	-0.070 (-1.29)	0.027 (0.500)	0.012 (0.232)	0.024	1.678

*- Significant at the Five percent level **- Significant at the Ten percent level

Table 10: Multiple Regressions, Ordinary Least Square Estimation of Interpersonal skills with Sales Target.

the study. Except for the fifth factor 'Perceptive Observation' which scored very low in terms of reliability as measured through Cronbach's Alpha, all the other four factors had a substantial and significant high reliability, which further strengthens the process of factor interpretation and the scores could be utilized for other parametric tests.

To estimate the influence of the Interpersonal skills on the sales target to be met by the sales people for a pharmaceutical company, OLS method was adopted. The results from Table 4 shows that the overall fit of the selected model is weak as observed from the calculated F Value. For all the three regression equation, only one equation turned out to have a goodness of fit with a significant F value (2.92). But still the value is less leading to the conclusion that the fit is not good enough to be interpreted. The explanatory power represented by the R² value also turned out to be below five percent for all the three equations. Hence it can be inferred that the interpersonal skills were able to explain five percent of the changes that had happened in the independent variable (sales target). The beta coefficient of the selected independent variable for the first equation was found to be significant in the case of Buyer/Seller relationship (b=0.12, t=2.17) and Perceptive observation (b= -0.10, t= -1.90) (Table 10). The remaining

three attributes of interpersonal skills were not significant enough to explain the changes. For every one unit of change in the buyer/seller relationship, the sales target in 2009 increased by 12 percent. In the fifth variable, for every one unit of change in the perceptive observation, there was a ten percent decline in the sales target of 2009. In the second equation, for the sales target of 2010 as a dependent variable, it can be observed from (Table 9), that listening skills (b=0.15, t=2.90) and Optimism (b=-0.11, t=-2.07) turned out significant in explaining the variations of the exogenous variable (Sales Target 2010). When the Listening skills increased by one per cent, the sales target in 2010 increased by 15 percent and when optimism shown decreased by one unit, the sales target of 2010 dropped by 11 per cent. The third ordinary least square estimation observed from Table 1, disclosed that out of five interpersonal skills sets, only one was having a significant influence over the regressand (Sales target 2011). For every one unit increase in listening skills (b=0.14, t=2.53) the coefficient has the power to exhibit a 14 percent increase in sales. From this it can be inferred that the empathy as an interpersonal skill did not have any influence on the sales target for a pharmaceutical company. On the other hand listening skills, optimism, buyer/seller relationship and perceptive observation were found to have significant influence on the explanatory power.

Dependent Variable	Independent Variable			R ²	F
	Industry working Experience	Number of organization worked	Present organization experience		
Listening skills	.125 (1.591)	.074 (1.188)	.038 (.526)	.036	4.257*
Optimism	.70 (1.117)	-.058 (-.798)	.027 (.336)	.008	.958
Empathy	.075 (.940)	-.103 (1.644)	-.27 (-.369)	.008	.936
Buyer-Seller Relationship	.026 (.330)	.000 (.004)	.144* (1.999)	.026	3.012
Perceptive Observation	-.024 (-.305)	.104 (1.655)	.052 (.714)	.011	1.228

Table 11: Ordinary Least Square Estimation for professional working experience with interpersonal skills.

Dependent Variable	Independent Variable					R ²	F
	Listening Skills	Optimism	Empathy	Buyer-Seller Relationship	Perceptive Observation		
Net Account Added 2009	-.089 (-1.562)	.074 (1.281)	-.050 (-.866)	.032 (.599)	-.054 (-.942)	.020	1.243
Net Account Added 2010	-.068 (-1.191)	.001 (.015)	-.081 (-1.406)	-.045 (-.788)	-.060 (-1.056)	.014	.881
Net Account Added 2011	.040 (.705)	-.107 (-1.886)	-.068 (-1.194)	-.021 (-.362)	-.095 (-1.681)	.026	1.620

Table 12: Ordinary Least Square estimation of Interpersonal skills with net account added.

Dependent Variable	Independent Variable			R ²	F
	Training 2009	Training 2010	Training 2011		
Listening Skills	-.041 (-.641)	-.076 (-.694)	.149 (1.355)	.008	.786
Optimism	.028 (.434)	.002 (.018)	-.173 (-1.586)	.026	2.678
Empathy	-.040 (-.619)	.107 (.973)	-.078 (-.710)	.004	.405
Buyer-Seller Relationship	-.062 (-.962)	-.084 (-1.767)	.121 (1.095)	.006	.620
Perceptive Observation	.035 (.552)	.180 (1.643)	-.130 (-1.185)	.012	1.229

Table 13: Estimation of influence of Training with Interpersonal skills.

To meet the sales target, a sales person has to have this skill set which improves their effectiveness. Table 11 estimates the level of influence of interpersonal skills with the professional experience of pharmaceutical sales executives. It indicates that among the five regression equations, only two equations namely, listening skills (4.26) and buyer/seller relationship (3.01) has the goodness of fit with a significant F value. However, the remaining three skills set namely optimism, empathy and perceptive observation does not have the goodness of fit. In addition, it is inferred that the explanatory power R² value is also shown to be less than five percent in all five equations. This can be interpreted that the professional skill were able to explain five percent of the changes that had happened in the interpersonal skills (dependent variable). In the third OLS estimation column only one interpersonal skills variable, that is buyer seller relationship is significantly influenced by 'present organisational experience' (b=-.14, t=1.99). For every one unit of change in the current work experience increases the buyer-seller relationship by fourteen percent. From Table 11, it can be inferred that the buyer seller relationship has the influence related to present organization experience. On the other hand listening skills, optimism, empathy, buyer-seller relationship and perceptive observation were found to have no significant explanatory power. Therefore, it can be inferred that the interpersonal skills set has influence on a sales persons' professional experience (Table 12). To evaluate the level of influence of Interpersonal skills with the net accounts added by the pharmaceutical sales persons, ordinary least square method has been adopted. From the table,

regression table for the year 2009, 2010 and 2011, it can be shown that there is no significant F value. As it has not shown a goodness to fit, the value is leading to a conclusion that the result is not good enough to be interpreted. With respect to the R² value, the explanatory power of the table value also identified by below five percent with all three equations. This can be understood as the interpersonal skills were able to explain the five percent of changes that had with the net account added in three years (dependent variable). Changes in the number of new accounts added are not explained by the selected independent variables (Table 13). According to Table 4, the selected model does not show a greater significance on F value. The goodness of fit has been identified only in equation 'Optimism' (2.68). As the other interpersonal skill variables have not shown the significance, the selected model is weak as observed from the calculated F value. As per the table the explanatory power (R²) of the interpersonal skills variable is able to explain five percent of the changes in the dependent variables. All the Interpersonal skills regression equations have come out insignificant with the selected independent variables. Hence the whole set of equations are not eligible for proper interpretation (Table 14). To estimate the influence level between the recognition received by the pharmaceutical sales persons and the interpersonal skills, the OLS method was adopted. From the Table 14, it can be inferred that the overall fitness of the model is feeble by considering the calculated F value. From the entire five regression equations, only one equation had turned out as goodness to fit with the

Dependent Variable	Independent Variable			R ²	F
	Recognition 2009	Recognition 2010	Recognition 2011		
Listening Skills	.127 (1.668)	-.043 (-.750)	-.188 (-2.471)	.021	2.179
Optimism	-.036 (-.467)	.031 (.544)	-.026 (-.337)	.004	.434
Empathy	.174 (2.289)	-.051 (-.888)	-.129 (-1.695)	.020	2.023
Buyer-Seller Relationship	.091 (1.195)	.031 (.541)	-.142 (-1.863)	.013	1.284
Perceptive Observation	.002 (.027)	-.051 (-.891)	.051 (.671)	.006	.574

Table 14: Estimation of influence level on recognition with interpersonal skills.

significant F value (2.18). Since, the remaining four interpersonal skills variable value is less and not good enough to infer the data.

The explanatory power identified by R² value is also shown to be below the five percent level in all equations of interpersonal skills with the recognition received by the sales persons. Hence, it can be assumed that the recognition received were able to elucidate the changes that had happened in the dependent variable (interpersonal skills). As identified from the table the beta coefficient of the selected independent variable for the first equation were found to be significant in the case of listening skills (b=-.188, t=-2.47) and Empathy (b=.174, t=2.29). This can be assumed from the 2011 recognition that by one unit of increase in recognition, the listening skills declined by eighteen percent. A unit increase in recognition given in 2009 has a 17 per cent increase in the empathy shown by sales persons. The inference about the listening skills and empathy has greater influence with the recognition. The other interpersonal skill optimism, buyer-seller relationship and perceptive observation were found to be having insignificant values which cannot be interpreted.

Summary of conclusion

Percentage Analysis: Summarizing the results of percentage analysis, it is found that all the sales persons who participated as respondents for the study are men; no women sales persons are involved in this study. Most of the respondents are between 25 to 36 years. There are 77.3 percent Under Graduates and 52.8 percent unmarried men. Out of the total respondents, 18.8 percent of the respondents are continuing their job with the same organization for five years. It was also identified that 81.2 percent sales people switched their jobs within the span of five years duration, 86.5 percent of respondents are having minimum one year experience and 52 respondents are having experience in more than 3 organizations. This can be interpreted as the industry has high sales force turnover and the sales persons keep looking for better opportunities. This may be a great challenge for the organizations to retain the smart sales persons.

Multiple regressions: To estimate the influence of the selected skills sets for Interpersonal skills on sales force effectiveness, the OLS method was adopted. The listening skills (b=0.15, t=2.90) in 2010 and sales target (b=0.14, t=2.53) in 2011; Optimism (b=-0.11, t=-2.07), buyer-seller relationship (b=0.12, t=2.17) and perceptive observations (b= -0.10, t= -1.90) were the most influencing components of interpersonal skill sets. The respondents indicated such skill sets contributed as a part in their success career. The ‘empathy’ as an interpersonal skill set did not had any influence on the sales target of 2009, 2010 and 2011. The study also identified the above-mentioned interpersonal skill set has no influence with a sales person’s professional experience. The listening skill (b=-

.188, t=-2.471) in year 2011 and empathy (b=.174, t=2.289) in year 2009 were shown as the most influencing factors of a pharmaceutical person’s recognition in their own organization. Therefore, the listening and empathy skills have a greater influence on a pharmaceutical front line sales person’s recognition from this organization.

Factor analysis: The Interpersonal skill set had 24 components for testing the consistency of the respondents. A final 16 components were able to give an alpha value of 0.762, which is higher than the set value of 0.60. Of these 16 items, five variables have a high factor loading on factor one, named as ‘Listening Skills’. The second factor consisted of three variables, which were named as ‘Optimism’. The third factor ‘Empathy’ got support from three factors and the fourth factor was renamed as ‘Buyer/Seller relationship’. Lastly the study extracted the fifth factor and was named as ‘Perceptive Observation’.

Hypothesis: Higher the interpersonal skills, greater the level of sales force effectiveness:

The ordinary least square estimation on interpersonal skills with the sales force effectiveness found that the skill sets such as listening skills, optimism, buyer seller relationship and perceptive observation were significant influence on their explanatory power in relation with achievement of sales targets. The identified skill sets proved this hypothesis as higher the interpersonal skills greater the level of sales force effectiveness.

Higher the interpersonal skills, higher the field experience: The skill sets ‘listening’ and ‘buyer and seller relationship’ has a greater association with the total industry experience. The professional experience of a sales person influenced with higher level of interpersonal skill. This hypothesis also proved as higher the level of field experience leads for greater interpersonal skills.

Proving of objectives: From the study, the attributes such as listening skills, optimism, buyer seller relationship and perceptive observation were identified as significant from the perspective interpersonal skill sets required for the pharmaceutical sales person. In addition, higher the field experience reflected the high level of interpersonal skill set for front line pharmaceutical sales people.

Conclusion

Sales force effectiveness of a company depends on the efficiency of the sales people involved in meeting the customers. This efficiency is not inherited by these people, but are gained and sharpened by the amount of effort put by these executives. This effort again is a cause of some skills which may be inherited or gained. Various studies had found that some specified skill sets are prerequisite for the sales people to perform well in the market. These skills are also found among the

executives of a pharmaceutical company. The study also indicates that higher the field experience leads to greater level of interpersonal skill set of a pharmaceutical sales person. The present study had traced the important of interpersonal skill sets for better performance. Through a simple statistical analysis, the study found that "Listening" and "Buyer/Seller relationship" are significant interpersonal skills that influence the sales performance. The study, hence suggests that a pharmaceutical company has to impart and look for this skill sets to improve their sales. Training and proper recognition for those sales executives who possess these skills are imminent for Sales force effectiveness in Indian conditions.

Scope for Future Research

There are greater scopes for this study which further can be expanded with different motives. The scope of this study can be identified by extending the same to the other segments of the pharmaceutical industry. For example, purely on multinational organizations, Indian based multinationals, surgical markets, diagnostic segment, medical equipment's, etc. Similarly, comparison of the two different pharmaceutical segments' sales force effectiveness level can be measured. To suit the pharmaceutical sales persons jobs' requirements, the study conducted by focusing on interpersonal skill sets, salesmanship skills and technical skills. Furthermore, depth of the sales force skills can be measured by adding additional dimensions of the sales skill sets. Another dimension of this study can be conducted in the areas like key accounts management (KAM) and Institutional business. The scope of the study can be conducted by extending exclusively for Tier I, II and III cities as these markets are completely different nature in consumptions and exposure of the pharmaceutical products.

References

1. Churchill G, Ford N, Walker O (1993) *Dirección de ventas, Promociones* Jumerca, Valencia.
2. Churchill G, Ford N, Walker O, Johnson MW, Tanner JF (2000) *Sales Force Management*, 6th ed., McGraw-Hill, Boston, MA.
3. Grant K, Cravens D (1999) Examining the antecedents of sales organization effectiveness: an Australian study, *European Journal of Marketing* pp: 945-57.
4. Piercy N, Cravens D, Lane N (2001) Sales manager behavior control strategy and its consequences: the impact of gender differences, *Journal of Personal Selling and Sales Management* pp. 39-49.
5. Roman S, Ruiz S, Munuera JL (2002) The effects of sales training on sales force activity, *European Journal of Marketing* pp: 1344-66.
6. Churchill G, Ford NM, Hartley SW, Walker OC (1985) The determinants of sales person performance: a meta-analysis, *Journal of Marketing Research* 103-118.
7. Baldauf A, Cravens D, Piercy N (2001) Examining the consequences of sales management control strategies in European field sales organizations, *International Marketing Review* pp 474-508.
8. Sujan H, Weitz BA, Kumar N (1994) Learning orientation, working smart, and effective selling, *Journal of Marketing* 58: 39-52.
9. Cravens D, Ingram T, Laforge R, Young C (1993) Behavior-based and outcome-based sales force control systems, *Journal of Marketing* 47-59.
10. Oliver, Richard, Anderson E (1994) An Empirical Test of Consequences of Behavior and Outcome Based Sales Control Systems, *Journal of Marketing* 53-67.
11. Babakus E, Cravens D, Grant K, Ingram TN, Laforge RW (1996) Investigating the Relationship among Sales Management Controls, Sales Territory Design, Salesperson Performance, and Sales Organization Effectiveness, *International Journal of Research in Marketing* 345-363.
12. Piercy N, Cravens D, Morgan N (1997) Sources of effectiveness in the business to business sales organization, *Journal of Marketing Practice: applied Marketing Science* pp: 43-69.
13. Weitz B (1981) Effectiveness in sales interactions: a contingency framework, *Journal of Marketing* 45: 85-103.
14. Ryans AB, Weinberg CB (1981) *Sales force Management: Integrating Research Advances* pp: 75-89.
15. Kuster I, Canales P (2008) Some Determinants of Sales force Effectiveness, *Team Performance Management* pp: 296-326.
16. Greenberg J, Greenberg H (1983) The personality of top salesperson, *Nation's Business* pp: 30-32.
17. Greenberg H, Mayer D (1964) A New Approach to the Scientific Selection of Successful Salesmen, *Journal of Psychology* 113-123.
18. Wasuja S, Sushil MS (2012) Cognitive bias in Sales persons in specialty drug selling of Pharmaceutical Industry, *International Journal of Pharmaceutical and Healthcare Marketing* 6: 4.
19. Töytäri P, Alejandro TB, Parvinen P, Ilmari Ollila, Rosendahl N (2011). Bridging the theory to application gap in value-based selling, *Journal of Business and Industrial Marketing* pp: 493-502.
20. Sundara Rajan CR, Sakthi Srinivasan K (2012) Sales Force Effectiveness of Pharmaceutical Industry, *International Journal of Business Management, Economics and Information Technology* pp: 97-103.
21. Piercy N, Cravens D, Morgan N (1998) Sales Performance and behavior based management processes in business to business sales organizations, *European Journal of Marketing* pp: 79-100.
22. Basir MS, Ahmed SZ, Philip J, Kitchen (2010) The Relationship between Sales Skills and Salesperson Performance, *International Journal of Management and Marketing Research* pp: 51-70.