



Dr. Nazim Farid *et al*, International Journal of Pharmaceutical Sciences and Business Management,

Vol.2 Issue. 2, February- 2014, pg. 11-28

ISSN: 2310-6913

PERSONALITY RELATED FACTORS AND THEIR IMPLICATIONS IN TERRITORY FORMATION FOR PHARMACEUTICAL SALES FORCE: AN EMPIRICAL INVESTIGATION

Dr. NAZIM FARID¹, Dr. MOHAMMED KHALID AZAM²

¹Ex Assistant Professor, Babu Banaras Das Institute of Technology and Management, Mahamaya Technical University, Ghaziabad, E-mail: nazim_786farid@yahoo.co.in

²Professor, Department of Business Administration, FMSR, Aligarh Muslim University, Aligarh, E-mail: mohammedkhalidazam@rediffmail.com

ABSTRACT

Controlling the sales force is one function of management faced by every sales manager, yet a little attention has been paid to the study of personality related factors on sales force control and its implications. The paper is an attempt to study the role played by personality related factors in territory formation and its implications. In this study the sample size is of 500 medical representatives, working in different hospitals in Delhi. The survey was conducted in 2013.

The results of the study shows that sales territory formation does not vary significantly with gender but significant differences exists in the mean value of involvement of medical representatives in territory formation across age groups. It was established that there is a significant relationship in the involvement of sales person in territory formation and their educational level. There also exist significant differences in medical representative high in self efficacy and between their age .It was also established that significant differences exists on stress management training of medical representatives in territory formation.

Controlling the sales force is one fundamental question which is faced by every sales manager in performing its duties of fulfilling the objectives of an enterprise. Control process is a four step process involving (setting performance standards, measuring performance, determining whether performance matches standards and taking corrective actions).Territory formation, Quotas setting and sales analysis helps in sales force control. A sales territory is defined as a grouping of



customers' and prospects assigned to individual sales person. There are various methods of territory formation and many of us are familiar with these methods.(Still,Cundiff and govoni ,2009)

The Ideal goal in territorial design is to have all districts equal in both sales potential and workload. Plan for establishing or revising territories include the following six steps.

1. Select a control unit for territorial boundaries.

While designing territories the first step is to select a geographical control unit as a territorial base. Commonly used units are states, counties, cities, zip code, areas and metropolitan areas etc

2. Determine location and potential of customers.

Management should determine the location and potential of both present and prospective customer within each selected control unit. Prospective customer can be identified with the aid of companies sales representatives plus outside sources such as trade directories, publisher of mailing list ,telephone directories etc.

3. Determine basic territories.

The third step in designing sales districts is to establish a fundamental territory based on statistical measures. This can be accomplished either by using the build up or the break down method .Under Build up method territories are formed by combining small geographical areas based on number of calls a salesperson is expected to make. This method equalizes workload of sales person .The break down method involve division of whole market in to approximately equal segments based on sales potential, thus this method equalises sales potential.

4. Assign salespeople to territories.

Next step is to physically assign salesperson to the tentative territories

5. Set up territorial coverage plans for the sales force.

Now the management should plan how each representative will cover his or her territory. The management of territorial coverage involves two main task-routing salespeople and scheduling their time. (Spiro, Stanton, Rich, management of sales force, 2007)

From the many researches that appeared during the last few decades it was shown beyond doubt that excessive reliance either on behavior based control system or on output based control system



is not good for controlling the activities of salesperson. The Ideal control system should be based on both behavior and output based control system (Anderson and Oliver,1994). In this paper the focus is on behavioral change in personality factors and their implication for territory formation for pharmaceutical sales force. This research examines how personality factors affect the formation and assignment of sales territories.

Personality is defined as those inner characteristics that determine and reflect how a person responds to his or her environment.(Schiffman and Kanuk, 2009) A changed personality may be the result of better training or because of possessing higher personality related factors like self efficacy ,task specific self esteem and stress management training etc .Many of the existing researches focuses on Heuristics models for territory formation, while some other researchers have focused on pre- territory assignment difficulty and most of the studies have left studying the personality related factors and their influence in territory formation. In this study the personality related factors are studied and their influence on territory formation is considered.

In this study I have tried to examine the effect of five personality factors namely, Involvement of medical representative in territory formation, Self efficacy, task specific self esteem, stress management training and willingness to take up large sales territories and their association with demographic factors like gender, age and educational qualifications.

As far as involvement of medical representative in territory formation is considered no studies are available to ascertain whether large sales territories can be formed by involving medical representative in territory formation process. Involving medical representative in territory formation will no doubt be good for the company and the representative but what does this good mean and to what extent this good influences territory formation is the need of the study.

Self efficacy is defined as one's capability to perform a task. Self efficacy affect task effort, persistence (a key determinant of success like other factors), expressed interest and level of goal difficulty selected for performance. Yet very little attention has been given to its organizational effectiveness and its effect on sales performance. Self efficacy has three dimensions. Magnitude applies to the level of task difficulty that a person believes he or she can attain .strength refers to whether conviction regarding magnitude is strong or weak. Generality indicates the degree to which expectations is generalized across situations (Bandura 1977a, p 194). Bandura and Adam(1977) emphasized that behavior must be measured precisely in the analysis of efficacy and that measures should be tailored to the domain being studied .



Modern day organization are very complex in structure and function and every employees including sales person, Medical representative and others like them faces complex situations where stress due to both on job and non job related factors is quite common. Stress management training changes the personality of medical representative and others and help them in countering stress full situations like facing sales resistance or closing a dead sales call .Yet the effect of stress management training in assigning sales territories with respect to demographic variables is not considered properly in existing researches.

Another personality related factor studied in this paper is willingness to take up large sales territories and give the desired results. While forming sales territories if only few sales person or Medical representatives instead of many salespersons are given all the territories it would be a cost saving and easy to manage organizational task. However such willingness should always result in optimum utilization of a company's resources or in other words such large territories should not be produced that covering them entirely by a medical representative will raise cost or loss due to negligence or it may lead to loss of sales effort thus it will not be an optimum allocation of territory and will produce undesirable results like losses to the company and unfulfillment of its goal like building brand loyalty, customer satisfaction etc.

Grant .et. al (2001) found out that higher the salesperson satisfaction with territory design higher will be the intrinsic motivation, salesperson performance and ultimately level of job satisfaction. In this paper the focus is on developing sales territories with higher salesperson satisfaction and it is studied that sales territories formed after consultation with the medical representatives will lead to the formation of higher sales territories .Generally many researchers have presented heuristics models for territory design(Ronen ,1983 and Lodish, 1975while others have provided optimization models for territory Alignment, Zoltner and Sinha (1983) .This paper studies that large and optimum territory formation can be made on the basis of certain personality factors discussed above.

Piercy, cravens and Morgan (1998) found out that more the sales person are satisfied with the territory design higher will be the outcome and behavior based performance. If here in this paper we can form territories with the higher satisfaction than, it will result in higher behavior and outcome based performance by the sales person. Gist, E (1987) found out that there is a high correlation between efficacy perception and subsequent performance. No studies are available to link self efficacy directly with the territory based performance goal a point studied in this paper.



THE INDIAN PHARMACEUTICAL INDUSTRY

The foundation of pharmaceutical industry in India was laid during the colonial period however it soon gained popularity and indigenous production was started. The Indian pharmaceutical industry currently tops the charts among India's science based industries with varied capabilities in the field of drug manufacture and technology. The pharmaceutical industry in India is third largest in terms of volume. According to Department of Pharmaceuticals, Ministry of chemicals and fertilizers, the total turnover of India's pharmaceutical industry between 2008 and September 2009 was US\$21.04 billion. While the domestic market was worth US\$12.26 billion. The pharmaceutical industry in India is a highly organized sector. According to Brand India Equity Foundation, the Indian pharmaceutical market is likely to grow at a compound annual growth rate (CAGR) of 14-17 per cent in between 2012-16. As per Mckinsey report the Indian pharmaceutical industry will be worth 70 billion dollars in 2020. India is now among the top five pharmaceutical emerging markets of the world. The rise in affluence, rise in educational level, a largest aging population (in terms of numbers), privatization, globalization and rising health consciousness all of these have increased the growth of pharmaceutical industry at a tremendous pace and will continue to do so for few more decades.

The Indian pharmaceutical industry India ranks very high among third world countries, in terms of technology, quality and vast range of medicines that are manufactured. It ranges from simple painkillers to advanced antibiotics and complex cardiac compounds almost all medicines are made in Indian pharmaceutical industry. The Indian pharmaceutical industry is highly fragmented with more than 20,000 registered units. There is severe price competition and governmental control. The pharmaceutical industry of India currently meets around 70% of country's demand for bulk drugs, drug intermediaries, formulations, chemicals, tablets, capsules, orals and injectibles. Most of the players in the market are small-to-medium enterprises; 250 of the largest companies control 70% of the Indian market. Thanks to the 1970 Patent Act, multinationals represent only 35% of the market, down from 70% thirty years ago. (http://en.wikipedia.org/wiki/Pharmaceutical_industry_in_India).

In 2013, nearly 345 thousand workers were employed in Indian pharmaceutical industry. A highly skilled workforce and cheap labor, developments in the field of Information technology, the policy of government towards globalization, cost effective chemical synthesis along with strong legal and financial framework has paved the way for the growth of pharmaceutical industry in India. Recently (2005) India granted the patents rights to companies all this had a very favorable impact on the development of the pharmaceutical industry in India.

India has got nearly 120 Food and Drug administration approved plants largest outside U.S.A. in any country and the number of FDA approved plants is increasing day by day. India is very popular destination for the outsourcing of A.I.D.S. Drugs and is supplying it to whole of Africa at a very cheap rate. Europe and America are other popular destinations of Indian pharmaceutical



exports. In terms of the global market, India currently holds a modest 1–2% share, but it has been growing at approximately 10% per year.

Exports of pharmaceuticals products from India increased from US\$6.23 billion in 2006–07 to US\$8.7 billion in 2008–09 a combined annual growth rate of 21.25%. According to Price water house coopers (PWC) in 2010, India joined among the league of top 10 global pharmaceuticals markets in terms of sales by 2020 with value reaching US\$50 billion. India's biopharmaceutical industry clocked a 17 percent growth with revenues of Rs. 137 billion (\$3 billion) in the 2009–10 financial year over the previous fiscal. Bio-pharma was the biggest contributor generating 60 percent of the industry's growth at Rs. 88.29 billion, followed by bio-services at Rs. 26.39 billion and bio-agri at Rs. 19.36 billion. The peculiar characteristics of pharmaceutical marketing are that it does not obey law of demand, since consumer have no knowledge about the prices of substitutes and as such consumers have no control over the price. The pharmaceutical industry in India has a slight degree of industrial concentration and as such there are no small groups of manufacturers or products which dominate the entire market. The Ratio of promotional expenditure to total sales is highest in this industry as compared to other industries .In pharmaceutical industry the advertising is directed mainly towards Doctors and few advertisements are directed towards ultimate consumers or the patients. The potential for exports in India is very high and exports are growing with each passing year .India is a one such cheap destination where pharmaceutical products are manufactured very cheaply and cost effectively.

With the availability of cheap labor and technical expertise, highly qualified doctors and scientists, Large and diverse patient base and prevalence of diseases all of these has made India as a popular destination for contract manufacturing and research. Very favorable and supportive governmental policies are encouraging this growth. In India lot of opportunities exist in contract research and manufacturing. A very large number of patients in India has made India a very popular destination for clinical trials though only those drugs are allowed for carrying out clinical trials which are already been tested elsewhere in the world.

The pharmaceutical industry in India is lacking in investments in R&D, where as only few large companies are investing 5 % of their revenues on R&D, small companies are lacking behind in investment in R&D. Even after the increased investment, market leaders such as Ranbaxy and Dr. Reddy's Laboratories spent only 5–10% of their revenues on R&D, lagging behind Western pharmaceuticals like Pfizer, whose research budget last year was greater than the combined revenues of the entire Indian pharmaceutical industry. This disparity is too great to be explained by cost differentials, and it comes when advances in genomics have made research equipment more expensive than ever. The drug discovery process is further hindered by a dearth of qualified molecular biologists. Due to the disconnection between curriculum and industry, pharmaceutical industry in India also lacks the academic collaboration that is crucial to drug development in the West and so far. (http://en.wikipedia.org/wiki/Pharmaceutical_industry_in_India). Indian companies have adopted various strategies for their R&D efforts. Some have entered into



collaboration and partnership agreements with innovator companies; others have out-licensed their molecules for milestone payments. Hiving off R&D units into separate companies has also become a preferred option for many Indian pharma players. Given that the research pipelines of Big Pharma companies are drying up, they have now begun to dabble in generics. In this regard, these innovator companies are either buying out Indian firms or are forging alliances with them. However the investment in R&D has increased over the years and is expected to further increase in future. In future R&D investments, new molecules and compound will be key drivers of a company's profitability.

RESEARCH METHODOLOGY

The following research methodology has been used in this paper.

OBJECTIVES OF RESEARCH

- 1 To study the personality related factors and their influence in setting sales territories.
- 2 To study whether large sales territories can be formed by those medical representatives possessing high personality factor and to study the influence of demographic variables like gender, age and education level over them.

THE RESEARCH GAP IDENTIFICATION

- 1 Most of the studies on sales force control system have studied territory formation in global context and there is no study on sales force control system in Indian pharmaceutical industry.
- 2 Very few studies have considered only few personality related factors in their studies and have not properly considered behavioral or personality related factors at all.
- 3 Not all dimensions of sales force control by personality factors in territory formation is considered in the existing literature.

RESEARCH PROBLEM

The research problem is to determine large sales territories on the basis of personality factors.

SCOPE OF THE STUDY

The study was carried out in different hospitals of Delhi. A sample size of 500 Medical representatives was considered in this study and their opinion is recorded on a multi item scale.



The sample frame in this study is a list of companies published by ministry of chemicals and fertilizers; the directory is entitled as “pharmaceutical producers in India.

DATA ANALYSIS

HYPOTHESIS

Different null hypotheses have been formed and have been given the name Ho1, Ho2, Ho3etc

H01: There is no significant difference in the mean value of involvement of medical representatives in territory formation between male and female

Table no 1

involvement of medical representatives in territory formation between male and female	Gender	Mean value	Std Deviation	T value	Significant value
	Male	2.35	1.232	-.879	.380
	Female	2.45	1.329		

The above table no 1, shows that the result of independent sample t test used to ascertain the differences, if they exist between male and female in involvement of medical representatives in the formation of sales territory.

It is shown in the table that female score more as compared to male respondents. However the value in both cases is less than 3, which indicate disagreement in the involvement of salesperson in territory formation. Further the result of t- test shows the value of significance equal to .380, which is more than .05, hence no significant differences exists in the views of male and female on the aspect of role played by medical representative in territory formation, therefore hypothesis H0 is accepted.

Ho2: There is no significant difference in the mean value of involvement of medical representatives in territory formation and their age.



Table no2

Involvement of medical representative in territory formation and age	Age	Mean	Std Deviation	F value	Significant value
	<24	2.42	1.244	9.983	.003
	24-26	2.29	1.231		
	26-28	2.55	1.339		

The above table no 2, shows that the result of ANOVA test used to ascertain the differences , if they exist between age of medical representatives and their involvement in territory formation .the mean value in this case is less than 3, which indicates disagreement between age and involvement of medical representatives in territory formation. Further the result of ANOVA shows that value of significance is equal to .003 which is less than .05, hence significant difference exists between age and medical representative’s involvement, therefore hypothesis H2 is rejected.

Ho3: There is no significant difference involvement of sales person in territory formation and their educational level.

Table no3

Involvement of medical representative in territory formation and educational level	Educational level	Mean	Std Deviation	F value	Significant value
	1	2.40	1.256	10.234	.001
	2	2.37	1.296		
	3	2.39	1.129		

The above table no 3, shows that the result of ANOVA test used to ascertain the differences , if they exist between education of medical representatives and their involvement in territory formation. The mean value in this case is less than 3, which indicates disagreement between educational level and involvement of medical representatives in territory formation. Further the result of ANOVA shows that value of significance is equal to .775 which is greater than .05 ,



hence no significant difference exists between age and medical representative's involvement, therefore hypothesis H3 is accepted .

H0 4: There is no significant difference in the mean value of medical representatives high in self efficacy and between male and female.

Table no 4

Medical representatives high in self efficacy and between male and female.	Gender	Mean value	Std Deviation	T value	Significant value
	Male	2.40	1.302	.438	.662
	Female	2.35	1.241		

The above table no 4, shows that the result of independent sample *t* test used to ascertain the differences, if they exist between male and female and medical representatives in the formation of sales territory.

It is shown in the table that female score more as compared to male respondents. However the value in both cases is less than 3, which indicate disagreement in the involvement of salesperson in territory formation. Further the result of *t*- test shows the value of significance equal to .662, which is more than .05, hence no significant differences exists in the views of male and female on the aspect of role played by medical representative in territory formation, therefore hypothesis H04 is accepted.

H05: There is no significant difference in the mean value of medical representatives high in self efficacy and between their ages.

Table no5

Medical representatives high in self efficacy and between their age.	Age	Mean	Std Deviation	F value	Significant value
	<24	2.42	1.244	2.055	.129
	24-26	2.29	1.231		
	26-28	2.55	1.339		
	Total	2.39	1.269		



The above table no 5, shows that the result of ANOVA test used to ascertain the differences , if they exist between age of medical representatives and high self efficacy . The mean value in this case is less than 3, which indicates disagreement between age and assigning large territory to medical representatives high in self efficacy. Further the result of ANOVA shows that value of significance is equal to .129 which is greater than .05 , hence no significant difference exists between age and medical representative's involvement, therefore hypothesis h05 is accepted .

H06: There is no significant difference in the mean value of medical representatives high in self efficacy and between their education levels.

Table no6

Medical representatives high in self efficacy and between their education levels.	Education	Mean	Std Deviation	F value	Significant value
	1	2.40	1.256	10.289	.003
	2	2.37	1.296		
	Total	2.39	1.269		

The above table no 5, shows that the result of ANOVA test used to ascertain the differences , if they exist between age of medical representatives and high self efficacy .the mean value in this case is less than 3, which indicates disagreement between age and assigning large territory to medical representatives high in self efficacy. Further the result of ANOVA shows that value of significance is equal to .003 which is less than .05 , hence significant difference exists between age and medical representative's involvement, therefore hypothesis h05 is rejected.

H0 7: There is no significant difference in the mean value of medical representatives with higher task specific self esteem in territory formation between male and female.



Table no 7

Higher task specific self esteem and male and female	Gender	Mean value	Std Deviation	T value	Significant value
	Male	2.65	1.310	1.107	.269
	Female	2.52	1.137		

The above table no 7, shows that the result of independent sample *t* test used to ascertain the differences, if they exist between male and female in medical representatives high in task specific self esteem.

It is shown in the table that female scoreless as compared to male respondents. However the value in both cases is less than 3, which indicate disagreement in the involvement of salesperson in territory formation. Further the result of *t*- test shows the value of significance equal to .269, which is more than .05, hence no significant differences exists in the views of male and female on the aspect of role played by medical representative in territory formation, therefore hypothesis H07 is accepted.

H08: There is no significant difference in the mean value of medical representatives with higher task specific self esteem in territory formation between their age groups.

Table no8

Medical representatives with higher task specific self esteem in territory formation between their age groups.	Age	Mean	Std Deviation	F value	Significant value
	<24	2.67	1.256	.172	.842
	24-26	2.58	1.296		
	26-28	2.62	1.269		
	Total	2.60	1.248		

The above table no 8, shows that the result of ANOVA test used to ascertain the differences, if they exist between higher task specific self-esteem of medical representatives and their age. The



mean value in this case is less than 3, which indicates disagreement between age and medical representatives with high task specific self esteem in territory formation. Further the result of ANOVA shows that value of significance is equal to .842 which is greater than .05, hence no significant difference exists between age and medical representative's involvement, therefore hypothesis H8 is accepted .

H09: There is no significant difference in the mean value of medical representatives with higher task specific self esteem in territory formation between their education level.

Table no09

Medical representatives with higher task specific self esteem in territory formation between their education level .	Education	Mean	Std Deviation	F value	Significant value
	1	2.60	1.250	.000	.994
	2	2.60	1.248		
	Total	2.60	1.248		

The above table no 9, shows that the result of ANOVA test used to ascertain the differences, if they exist between higher task specific self esteem of medical representatives and their Education. The mean value in this case is less than 3, which indicates disagreement between education and medical representatives with high task specific self esteem in territory formation. Further the result of ANOVA shows that value of significance is equal to .994 which is greater than .05, hence no significant difference exists between age and medical representative's involvement, therefore hypothesis h08 is accepted .

H10: There is no significant difference in the mean value of stress management training of medical representatives in territory formation between male and female.



Table no 10

Stress management training of medical representatives and male and female	Gender	Mean value	Std Deviation	T value	Significant value
	Male	2.45	1.283	.503	.616
	Female	2.39	1.313		

The above table no 1, shows that the result of independent sample *t* test used to ascertain the differences, if they exist between male and female in involvement of medical representatives in the formation of sales territory.

It is shown in the table that female score, less as compared to male respondents. However the value in both cases is less than 3, which indicate disagreement in the involvement of salesperson in territory formation. Further the result of *t*- test shows the value of significance equal to .616 which is more than .05, hence no significant differences exists in the views of male and female on the aspect of role played by medical representative in territory formation, therefore hypothesis H10 is accepted.

H11: There is no significant difference in the mean value of stress management training of medical representatives in territory formation across the age groups.

Table no11

Stress management training of medical representatives in territory formation across the age groups.	Age	Mean	Std Deviation	F value	Significant value
	<24	2.25	1.107	11.46	.0039
	24-26	2.49	1.365		
	26-28	2.41	1.252		
	Total	2.43	1.293		



The above table no 11, shows that the result of ANOVA test used to ascertain the differences, if they exist between stress management training of medical representatives and their age in territory formation. The mean value in this case is less than 3, which indicates disagreement between age and involvement of medical representatives in territory formation. Further the result of ANOVA shows that value of significance is equal to .0039 which is less than .05 , hence significant difference exists between age and medical representative's involvement, therefore hypothesis h11 is accepted .

H12: There is no significant difference in the mean value of stress management training of medical representatives in territory formation and between their education level.

Table no12

Stress management training of medical representatives in territory formation and between their education level.	Education	Mean	Std Deviation	F value	Significant value
	1	2.45	1.302	.220	.639
	2	2.39	1.280		
	Total	2.43	1.293		

The above table no 11, shows that the result of ANOVA test used to ascertain the differences , if they exist between stress management training of medical representatives and their education in territory formation. The mean value in this case is less than 3, which indicates disagreement between age and involvement of medical representatives in territory formation. Further the result of ANOVA shows that value of significance is equal to .639 which is greater than .05 , hence no significant difference exists between age and medical representative's involvement, therefore hypothesis h12 is accepted .

H013: There is no significant relationship between willingness to take up large sales territory and male and female.



Table no 13

Willingness to take up large sales territory by medical representatives and male and female	Gender	Mean value	Std Deviation	T value	Significant value
	Male	2.55	1.351	1.703	.089
	Female	2.35	1.219		

The above table no 13, shows that the result of independent sample *t* test used to ascertain the differences, if they exist between male and female medical representatives and willingness to take up large sales territory.

It is shown in the table that female score, less as compared to male respondents. However the value in both cases is less than 3, which indicate disagreement in the involvement of salesperson in territory formation. Further the result of *t*- test shows the value of significance equal to .269, which is more than .05, hence no significant differences exists in the views of male and female on the aspect of role played by medical representative in territory formation, therefore hypothesis H13 is accepted.

H014: There is no significant relationship between willingness to take up large sales territory and age.

Table no14

Willingness to take up large sales territory and age.	Age	Mean	Std Deviation	F value	Significant value
	<24	2.25	1.107	1.146	.319
	24-26	2.49	1.365		
	26-28	2.41	1.252		
	Total	2.43	1.293		

The above table no 11, shows that the result of ANOVA test used to ascertain the differences, if they exist between stress management training of medical representatives and their education in territory formation. The mean value in this case is less than 3, which indicates disagreement



between age and involvement of medical representatives in territory formation. Further the result of ANOVA shows that value of significance is equal to .639 which is greater than .05 , hence no significant difference exists between age and medical representative's involvement, therefore hypothesis h12 is accepted.

H014: There is no significant relationship between willingness to take up large sales territory and education level.

Table no15

Willingness to take up large sales territory and education level.	education	Mean	Std Deviation	F value	Significant value
	1	2.45	1.297	.266	.606
	2	2.52	1.324		
	Total	2.48	1.306		

The above table no 11, shows that the result of ANOVA test used to ascertain the differences, if they exist between stress management training of medical representatives and their education in territory formation. The mean value in this case is less than 3, which indicates disagreement between age and involvement of medical representatives in territory formation. Further the result of ANOVA shows that value of significance is equal to .639 which is greater than .05 , hence no significant difference exists between age and medical representative's involvement, therefore hypothesis h12 is accepted.

CONCLUSIONS

In this study the factors that impact territory formation for Indian pharmaceutical companies are studied. Demographic as well as organizational characteristics are studied. It has been established that sales territory formation does not vary significantly with gender but significant differences exists in the mean value of involvement of medical representatives in territory formation across age groups. It was established that there is a significant relationship in the involvement of sales person in territory formation and their educational level. There also exist significant differences in medical representative high in self efficacy and between their age .It was also established that significant differences exists on stress management training of medical representatives in territory formation.



REFERENCES

- [1] Anderson, E. & Oliver, L, R (1994) “An Empirical test of the consequences of behavior and outcome based sales control system, Journal of marketing, October pg 53-67
- [2] Bandura, A., & Adams, N.E. (1977). “Analysis of self efficacy theory of behavioral change” Cognitive therapy and research pg 287-310
- [3] Bandura, A(1977) Self Efficacy: Towards a unifying theory of behavioral change. Psychological review, 84, pg 191-215.
- [4] Babukas, E., Cravens, W,D, Grant, K, Ingram, N,T & Laforge, R,W (1996) “investigating the relationship among sales, management control, sales territory design, sales performance and sales organizational effectiveness” international journal of research in marketing, 13, 343-363.
- [5] Gist, E, M. (1987) “Self efficacy: Implication for organizational behavior and human resource management” Academy of management review, 1987, vol 12, no3, 472-485.
- [6] Spiro, Stanton and Rich. (2007) “Management of sales force” ; Tata McGraw Hill, New Delhi, pg 372- 379.
- [7] Still, R; R .Cundiff; W;E and Govoni ;A;P;N: (2009), “Sales management: Decision, strategies and cases”; prentice hall of India, pg 426.
- [8] Schiffman, L,G. and Kanuk, L,L (2010) “consumer Behavior”; Pearson Education; India, pg 120
- [9] Piercy, N,F. Cravens, D,W & Morgan N,A (1998) “sales force performance and behavior based management processes in business to business sales organization” .European journal of marketing, vol 32, no1/279-100.
- [10] http://en.wikipedia.org/wiki/Pharmaceutical_industry_in_India, 20,1,2014