

A STUDY ON PROBLEMS ON-BOARD AND ITS RELATIONSHIP WITH WORKFORCE DIVERSITY WITH SPECIAL REFERENCE TO INDIAN SHIP OFFICERS.

Dr M RAMESHKUMAR
ASSOCIATE PROFESSOR,

INTERNATIONAL SCHOOL OF MANAGEMENT EXCELLENC

Abstract: Working at sea may look exciting for people on land but, it demands for unique sets of technical, physical and mental ability to carry out operations at sea. Moving ship is always an isolated workplace, workers has to encounter extreme conditions. Unlike shore based jobs they don't get time to socialize and to exhibit a normal behaviour. Psychologically their state of mind is different from land based employee. According to Seafarers' International Research Centre at Cardiff University, USA global seafarers' database over 65% of world seafarers work in a diversified environment where more than one nationality people are employed. India has been one of the major contributor to world merchant navy since pre-trade era. The last four years saw an unprecedented growth of 42.3% ship board jobs for Indian Seafarers. Indian seafarers' contribution towards international shipping industry population is about 9.35% of the total seafarers' community and about 70% of the Indian seafarers working on-board are with foreign flag ships which makes their work place highly diversified. Diversity in merchant navy cannot be addressed the same way as it used to be dealt on land based jobs. The ill effects of poor diversity management may cause some severe problems in seaman life on-board the ship. This study aims on identifying problems faced by Indian seafarers on-board, their opinion about problems and its relationship with work place diversity factors. Some of the notable issues they encounter were problems in communicating with others, problems which arises due to inter-culture issues and sense of isolation. Indian seaman's contribution in future maritime industry is also highlighted as a part of this study through secondary data.

Key Words: Seafarers, Diversity, Employee Experience, Communication, Inter-Culture, Sense of Isolation etc.,

I.INTRODUCTION:

Over 90% of the world trade is being carried over by international shipping industry. The world fleet is registered in over 160 nations, and manned by over a million of seafarers virtually every nationality. There are around 70,000 merchant ships trading internationally, transporting every kind of cargo. Until 1970's shipping companies were recruiting seaman only from traditional shipping nations, severe shortage aroused during late 1970's for seamen because of increased trade operations, shipping companies started hiring people from different countries. Ever since 1970's India along with few other countries has been contributing seamen to shipping industry in good numbers. India, being a labour intensive country, has always provided quality seafarers for national and international shipping. India is recognized globally, as a reliable and important source of marine manpower. Indian seafarers, both officers and the rating are much

sought after by the Maritime Nation of the World. The above credentials earned by the Indian seafarers are due to their technical competence, positive attitude, dedication to the work and skills. At present Indian seafarers represent approximately, 9.35 % of the World Seafarers comprising of roughly 62,000 officers and 83,000 ratings.

Sourcing of seafarers from multiple nations has solved the problem of shortage of seamen, but it has given rise to a very peculiar issue of coping with diversity on-board the ship. Employment conditions for seafarers have gradually become multi-national, multi-cultural, and multi-lingual. Because of the diversity, seafarers were exposed to problems like communication to boss and co-workers, problems in managing inter-cultural disparity, sense of isolation and the problem of socializing with co-workers.

I.2 DEMAND AND SUPPLY OF SEAFARERS:

Baltic and International Maritime Council (BIMCO), the world's largest international shipping association, with around 1,900 members in more than 120 countries comprising ship-owners, operators, managers, brokers and agents releases a report every five years about happenings of maritime industry. The following tables highlights the shortages of officers and contribution from Indians in future.

I.2.1 Current estimated global supply and demand of seafarers

	OFFICERS	RATINGS	TOTAL
Supply	774,000	873,500	1,647,500
Demand	790,500	754,500	1,545,000
Shortage/Surplus	-16,500	119,000	102,500
	2.1%	15.8%	6.6%

Source: BIMCO Report 2015

I.2.2 Basic forecast for the future supply-demand balance for officers

	2015	2020	2025
Supply	774,000	789,500	805,000
Demand	790,500	881,500	952,500
Shortage/Surplus	-16,500	-92,000	-147,500
	2.1%	11.7%	18.3%

Source: BIMCO Report 2015

I.2.3 Estimated five largest seafarer supply countries

RANK	FOR ALL SEAFARERS	FOR OFFICERS	FOR RATINGS
1	China	China	Philippines
2	Philippines	Philippines	China
3	Indonesia	India	Indonesia
4	Russian Federation	Indonesia	Russian Federation
5	Ukraine	Russian Federation	Ukraine

Source: BIMCO Report 2015

The supply and demand estimates of seafarers suggests the importance of finding a better insight about the opinion of Indian seafarers. Since there is already an excess of supply with ratings, this study is aimed only at gathering and analysing the opinion of Indian ship officers.

II. STATEMENT OF THE PROBLEM:

Considering the contribution of Indian seafarers in the present and future maritime industry, it becomes a mandate to understand their state of mind and their opinion about the problems faced by them on-board. Shipping companies has to understand the fact that, they now are in a situation where they have to concentrate on both retaining and attaining officers to deal with the shortages. Increasing employment opportunities on land is making seafaring no more a lucrative job. Diversity on-board naturally will give rise to problems like communication, isolation, food and inter-cultural conflict etc., it becomes important for the shipping companies to understand the opinion of their employees about the usual problems faced by them and the magnitude of relation it has with the diversity factors at working conditions.

III. 1 RESEARCH METHODOLOGY:

This study is carried out based on an exploratory research result carried out in identifying the problems which Indian ship officers encounter on-board a ship as a resultant of multi nationality work force. There were several effects identified from respondents due to diversity, some of the major problems were listed below.

- Problem in communication
- Inter-Cultural Problem
- Sense of Isolation
- Problems in Socializing
- Problems with food.
- Acquisition of Bad Habits

Based on the above result from exploratory analysis, empirical research has been carried out to find out the relationship between working circumstances of Indian Ship officers towards their opinion towards problems faced on-board. Descriptive research design has been chosen for the study and the respondents were selected from the post sea training centres. This study could lend significantly help to academicians and researchers to develop new ideas for future research work. This would also enable Ship Owners, and Shipping Companies employing Indians to understand employee experience better. Indian Shipping Ministry and International Shipping companies can make use of this study to take decisions and strengthen their intrinsic and extrinsic value through understanding the link between diversity factors and work related factors.

III.2 OBJECTIVES AND METHODS OF THE STUDY

This prospective study was carried out on Indian Ship Officers to find the following objectives:

- To identify the problems encountered by Indian Ship Officers on-board the ship.
- To analyze the relationship between workplace diversity and respondents opinion towards problems encountered on board the ship

III.3 SAMPLE DESIGN:

The researcher used interview schedule to collect data from the respondents. Non probability purposive sampling method was adopted and the researcher has collected data from 413 respondents for this study from post sea training centres in Tamilnadu. The study was confined to Indian Ship Officers only. The study was conducted during the month of April and May 2019.

III.4 STATISTICAL TOOLS USED:

The collected data have been analysed with the help of Simple Percentage analysis and. One way Anova, regression analysis has been used in the study to find out the relationship between work place diversity and problems faced by respondents due to diversity on-board the ship.

IV. DATA ANALYSIS AND INTERPRETATION

Table No 1: Showing relationship between respondents' opinions on on-board perceived experience and designation

		Sum of Squares	df	Mean Square	F	Sig.
Communication Problem	Between Groups	12.865	2	6.432	3.917	.021
	Within Groups	673.271	410	1.642		
Inter-Cultural Problem	Between Groups	.637	2	.319	.172	.842
	Within Groups	759.726	410	1.853		
Problem in Food	Between Groups	7.568	2	3.784	2.213	.111
	Within Groups	701.003	410	1.710		
Isolation	Between Groups	8.911	2	4.455	2.078	.127
	Within Groups	879.123	410	2.144		
Socializing	Between Groups	.100	2	.050	.063	.939
	Within Groups	327.135	410	.798		
Acquisition of Bad Habits	Between Groups	9.218	2	4.609	3.324	.037
	Within Groups	568.434	410	1.386		

Table No 2: Showing Mean Values

Designation		Communication	Bad Habits
2nd Officers	Mean	3.3908	3.3908
Chief Officers	Mean	2.9027	3.1062
Engine Officers	Mean	3.2207	3.0047

From table no: 1, it could be inferred that opinion of respondents about problem in communication and acquisition of bad habits has got significant difference among the respondents working in different designations. As the analysis of variance has computed p value less than 0.05 the difference among respondents belonging to different designations are significant at 95% confidence level. Table No: 2 Indicates that 2nd officers were facing lot of problems in communication followed by engine officers, 2nd officers acquires bad habits followed by chief officers.

Table no 3: Showing relationship between respondents' opinion on on-board perceived experience and type of ship they work.

		Sum of Squares	df	Mean Square	F	Sig.
Communication Problem	Between Groups	14.320	4	3.580	2.174	.071
	Within Groups	671.816	408	1.647		
Inter Cultural Problem	Between Groups	25.033	4	6.258	3.472	.008
	Within Groups	735.331	408	1.802		
Problem in Food	Between Groups	16.144	4	4.036	2.378	.051
	Within Groups	692.428	408	1.697		
Isolation	Between Groups	10.513	4	2.628	1.222	.301
	Within Groups	877.521	408	2.151		
Socializing	Between Groups	8.795	4	2.199	2.817	.025
	Within Groups	318.440	408	.780		
Acquisition of Bad Habits	Between Groups	5.680	4	1.420	1.013	.400
	Within Groups	571.972	408	1.402		

From table no 3, it could be inferred that opinion of respondents about problem in communication, inter-cultural problem, food and socializing difficulty has got significant difference among the respondents working in different types of ships. As the analysis of variance has computed p value less than 0.05 for inter-cultural and social problems, the difference among respondents belonging to different ships are significant at 95% confidence level whereas p values 0.71 & 0.51 for problems in communication and food are significantly different at 90%.

Table No 4: Showing Mean Values

Ship Type		Communication	Inter-cultural	Food	Socializing
Bulk Carrier	Mean	3.0721	2.7207	2.9550	3.8198
Containers	Mean	3.2913	3.2330	3.3204	3.8155
Car Carriers	Mean	2.9500	3.3625	3.2500	3.9375
Oil Carriers/Tankers	Mean	3.5000	2.9242	2.8636	4.2121
LPG Carriers	Mean	3.0566	3.1698	3.3774	4.0566

Table No 4 Indicates that people working in oil carriers are facing lot of communication problem followed by people from containers. Respondents from car carriers face a lot of inter-cultural issues followed by respondents from container vessels. Respondents from LPG and container vessels face a lot of food related issues and almost people from all types of ships were facing problem in socializing.

Table No 5: Showing relationship between respondents' opinion on perceived unique experience and tenure

		Sum of Squares	df	Mean Square	F	Sig.
Communication Problem	Between Groups	2.339	2	1.170	.701	.497
	Within Groups	683.796	410	1.668		
Inter-Cultural Problem	Between Groups	1.111	2	.556	.300	.741
	Within Groups	759.252	410	1.852		
Problem in Food	Between Groups	2.623	2	1.311	.762	.468
	Within Groups	705.949	410	1.722		
Isolation	Between Groups	8.559	2	4.279	1.995	.137
	Within Groups	879.475	410	2.145		
Socializing	Between Groups	1.756	2	.878	1.106	.332
	Within Groups	325.479	410	.794		
Acquisition of Bad Habits	Between Groups	4.634	2	2.317	1.658	.192
	Within Groups	573.018	410	1.398		

P values of analysis of variances displayed in table no: 5 were all more than 0.05 which indicates that, there is no significant difference in respondents' opinion about perceived experience among respondents of different experience. Mean values of experience across respondents' opinion about perceived experience through analysis indicated that, people with lesser experience has expressed a greater magnitude of problems in communication, food inter-cultural, Isolation, Socialization and acquisition of bad habits.

Table no 6: Showing relationship between respondents' opinion on perceived unique experience and reporting officer nationality

t-test for Equality of Means								
	Reporting officer Nationality	N	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. p (2-tailed)
Communication Problem	Indian	274	2.8869	1.24255	.07507	-6.560	411	.000
	Foreigner	139	3.7266	1.20269	.10201			
Inter- Cultural Problem	Indian	274	2.8321	1.35911	.08211	-4.987	411	.000
	Foreigner	139	3.5180	1.24151	.10530			
	Indian	274	3.0109	1.32732	.08019	-2.896	411	.004

Problem in Food	Foreigner	139	3.4029	1.24365	.10548			
Isolation	Indian	274	2.6606	1.45435	.08786	-5.097	411	.000
	Foreigner	139	3.4173	1.36679	.11593			
Socializing	Indian	274	3.8504	.92357	.05580	-2.718	411	.007
	Foreigner	139	4.1007	.80122	.06796			
Acquisition of Bad Habits	Indian	274	2.9781	1.14813	.06936	-3.309	411	.001
	Foreigner	139	3.3813	1.21223	.10282			

From table no: 6, it could be inferred that, there is a significant difference among the respondents' reporting to Indian and foreign nationality reporting officer in their opinion towards perceived unique experiences on-board. P values 0.000 indicates the significance at 99% and the values $> 0.000 < 0.005$ indicates that they are significantly different at 95% confidence level.

Table no 7: Showing relationship between respondents' opinion on perceived unique experience and captain's nationality

t-test for Equality of Means								
	Captain's Nationality	N	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. p (2-tailed)
Communication Problem	Indian	231	2.9654	1.28490	.08454	-3.676	411	.000
	Foreigner	182	3.4286	1.25388	.09294			
Inter- Cultural Problem	Indian	231	2.9654	1.37954	.09077	-1.648	411	.100
	Foreigner	182	3.1868	1.32475	.09820			
Food	Indian	231	3.1861	1.27005	.08356	.755	411	.450
	Foreigner	182	3.0879	1.36368	.10108			
Isolation	Indian	231	2.9307	1.49331	.09825	.241	411	.810
	Foreigner	182	2.8956	1.43941	.10670			
Socializing	Indian	231	3.5455	.88777	.05841	-11.474	411	.000
	Foreigner	182	4.4286	.60646	.04495			

Acquisition of Bad Habits	Indian	231	2.8571	1.16896	.07691	-5.112	411	.000
	Foreigner	182	3.4396	1.12440	.08335			

Table no: 7 indicates that, it could be inferred that, there is a significant difference among the respondents' reporting to Indian and foreign nationality captain in their opinion towards problems in communication, socializing and acquisition of bad habits. Mean values indicates that the magnitude of problems are more with people having foreigner as a captain.

IV. DISCUSSION

- Sub groups of designation differ in their opinion only regarding communication problem and acquisition of bad habits.
- Sub groups of types of ships differ in their opinion about problem in communication, inter-cultural disparity, problem with food and difficulty in socializing.
- Sub groups of experience has got no difference in their opinion about the problems encountered on-board the ship.
- Respondents reporting to foreign officers were facing highest magnitude of problems related to communication, culture, food, isolation, socializing and acquisition of bad habits.
- Subgroups of captains' nationality has shown significant difference in opinion only with communication problem, socializing problem and acquisition of bad habits.

LIMITATIONS:

- The study is confine only to 413 respondents from Tamilnadu post-sea training centres.
- This study only estimates the influence of workplace variables towards respondents' opinion. Further study can be explored using other diversity factors.
- This study deploys only limited statistical analysis.

REFERENCES:

- BIMCO/ISF 2015, The Worldwide Demand for and Supply of Seafarers: BIMCO/ISF Manpower 2015 Update, Institute for Employment Research, University of Warwick, Coventry, United Kingdom, published by BIMCO/ISF.

- Omankhanlen Alex Ehimare, Joshua O. Ogaga-Oghene (2011) - The Impact of Workforce diversity on Organizational Effectiveness: A study of a Nigerian bank, *Annals of the University of Petrosani, Economics*, 11(3), 2011, 93-110.
- Gopalan Balachandran (November 2008) – Cultures of Protest in Transnational Contexts: Indian Seamen Abroad, 1886-1945, *Transforming Cultures e-Journal*, Vol. 3 No 2. P. 46-76.
- Guo, J.L., Yuan, C.C. and Lin, M.C. (2004) - An analysis toward the current manpower supply of ship officers in Taiwan, *Marine Technology*, No. 114, 1-8.
- Thomas, M., Sampson, H. and Zhao, M. (2003) - Finding a balance: companies, seafarers and family life, *Maritime Policy and Management*, Vol. 30, No. 1, 59-76.
- Tsui, A.S., Egan, T.D. and O'Reilly III, C.A. (1992) - Being different: Relational demography and organizational attachment, *Administrative Science Quarterly*, Vol. 37, 549-579.
- Tajfel, H. and Turner, J.C. (1986) - The social identity theory of intergroup behaviour. In S.Worchel and W.G. Austin (eds.), *Psychology of Intergroup Relations*. Nelson-Hall, Chicago.

WEBLIOGRAPHY

- http://www.sevensesnavigation.in/what_navy.asp
- <http://www.tmcshipping.in/merchant-navy.php>
- <http://www.seaskillsmaritime.com/>
- <https://www.himtmarine.com/>
- <https://www.imo.org/>
- <http://www.dgshipping.gov.in/>
- <https://www.bimco.org/>