

# ROLE OF SELF-MOTIVATION IN EMOTIONAL INTELLIGENCE OF RESEARCH SCHOLARS: AN EMPIRICAL STUDY

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**ABSTRACT**--*The present study aims to explore the perception of Ph.D. research scholars in University of Madras, Chennai on dimensions and dominant groups of self motivation as a key driver for emotional intelligence. The researcher has adopted survey method to collect responses from 210 Ph.D. Research scholars pursuing their doctoral degree from University of Madras, Chennai. The statistical tools such as, percentage analysis, exploratory factor analysis, test of normality, cluster analysis and discriminant analysis has been applied to draw meaningful solutions to enhancement of emotional intelligence of Ph.D. research scholars. The result proves that Flexibility Factor (FF) Vision Factor (VF), Motivation Factor (MF) and Intrinsic Skills Factor (SIF) are the dominant dimensions of self-motivation variables. Further, Enthusiasm Seekers and Empowerment Seekers are the two cluster groups of self-motivation factors. The research scholars are recommended to maintain enthusiasm and empowerment to keep improve their emotional intelligence.*

**Key Words**-- *Self-Motivation, Emotional Intelligence, Research Scholars, Enthusiasm and Empowerment.*

## I. INTRODUCTION

In the recent years, India is witnessing rapid change and complexion in the management of human resources for the betterment in output and excellence in growth of the country in education and industrial development. Especially, in the role of higher education sector has become more complex to make the students more employable (Andrews, & Higson, 2008). The Government of India and Ministry of Human Resource Development and Ministry of Higher Education of Tamil Nadu is striving very hard to serve the students proper facilities, opportunities and education system to nurture them towards excellence. (National Research Council 1996; Garet, & et al., 2001). Indian higher education system subjected to lot of radical changes and structural reformation as par as policies and standard is concern (Ball, 2017; Muralidharan, 2013; Trowler, 2008; Jayaram, 2004). The Government of India was awarding the status of 'Institute of Eminence' to public and private funded universities in order to cope up with established and high ranked foreign university. These changes will make the higher education more versatile and challenging for the purpose of economic transmission. These changes should ensure the standard in quality of higher education offered in India (Agarwal, 2006; Singh, J. D, 2011; Kumar, S., & Dash, 2011). There are many changes in the policy, strategy, structure, design and infrastructure were simultaneously took place in the country.

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On the other hand, the universities are becoming the manufacturing units to produce a greater number of Ph.D.'s in the recent years and surprisingly, those Ph.D. holders are showing positive intend towards other non-teaching Government jobs in the recent years (Zusman, 2005). The higher education institutions should improve the excellence among different stakeholders such as, administrators and teachers in both quantitative and qualitative aspect of results to improve performance and to attain constant growth (Boud, & Falchikov, 1989; Trigwell, & Prosser, 1991; Biggs, 2001). The present study was focusing on the role of emotional intelligence of students in particularly, self-motivation dimension to improve the academic performance and quality of output among researchers community in India.

## **II. LITERATURE REVIEW**

Annamaria Di Fabio and Maureen Kenny (2012) explored the emotional intelligence perceived social support among Italian high school students. The researchers identified that actual skill in emotional intelligence is completely relevant and related to perceived social and support, self-perception of emotional intelligence skills. Madhavan & Poonsook Kitratporn (2016) explored the relationship between emotional intelligence and academic achievement of management course students and found that majority of the respondents are females and they fall in the age group of 18 to 22 years. Further, regression result supports the relationship of emotional intelligence and academic achievement in a positive manner. Maria S. Poulou (2017) explored the relation of teachers' emotional intelligence students' social skills to students' Emotional and Behavioral Difficulties the authors have explored that emotions are significantly influencing the behavioural difficulties of the students. Charles Olan skipper and Stefanie Brandenburg (2013) indentified the relationship of emotional intelligence and academic performance among students of engineering courses. The researchers identified that there is a higher and positive relationship between GPR and EI. Poulou and Bassett et.al, (2018) studied the perception of the teachers with respect to emotional intelligence and social emotion learning skills in USA and Greek preschool students. The result reveals that emotional intelligence has positive and significant with emotion management practices of preschool students in USA and Greek. Massoumeh Zandi (2012) conducted a study to examine the role of emotional intelligence in French language learning and academic success of the female students. The researchers explored that there is significant correlation between subjects' achievement and stress management, adaptability, reading skill and stress management, general mood and adaptability, speaking skill and emotional intelligence quotient and intrapersonal intelligence and stress management of the respondents. Massoumeh Zandi (2012) made an attempt to study the role of emotional intelligence in French language learning and academic success of the male students. The empirical evidence proves that there is a significant correlation between grand point average and stress management.

## **III. STATEMENT OF THE PROBLEM**

The academic performance of the Ph.D. Research scholars are very important the development of countries economy to solve the basic problems prevailing in the society through different types of researches. The Government of India is spending the considerable amount of national income for the development of higher education in India. The research output of the country should be enrichment and must have quality for the

contribution of betterment of the society. The positive emotional intelligence enables positive development in academic and quality of life of the students. Higher skills acquisition gives added advantage to the scholars in their research contribution. Therefore, this study attempts to identify the Self-Motivation of Ph.D. research scholars registered in the University of Madras, Chennai.

#### **IV. OBJECTIVES OF THE STUDY**

1. To examine the demographic characteristics of the Ph.D. Research Scholars of University of Madras, Chennai
2. To measure and understand underlying dimensions of Self-Motivation (SM) variables.
3. To identify the dominant cluster groups of the research scholars with respect to Self-Motivation Factors.

#### **V. SAMPLING SIZE AND DESIGN:**

Non- Random Convenience Sampling was adopted for collecting primary data and 300 questionnaires were issued and the respondents were given sufficient time for filling the questionnaire. 270 of the issued questionnaires were received back from the respondents. On scrutiny of these 21 of them were found to be incomplete and 29 were not suitable for the study due to extreme values. Finally, the remaining 210 samples were taken for the study.

#### **VI. QUESTIONNAIRE DESIGN**

A structured questionnaire with two Sections was finalized to collect information from the research scholars of Anna University, Chennai. Section one deals with demographic and research profile of the research scholars from University of Madras, Chennai and section two is about eleven variables related to different aspects of self motivation variables among research scholars of University of Madras, Chennai. Self-Motivation variables were measured using appropriate 5-point Likert scale.

#### **VII. PILOT STUDY**

A pilot study was conducted with a sample of 30 samples. The results were subjected to Cronbach alpha test for checking the internal consistency and reliability of the scale. The Cronbach's alpha Co-efficient values for self-motivation variables are 0.826 (nearer to 1). Therefore, the measurement scale is highly consistency and reliable in nature.

#### **VIII. DATA ANALYSIS**

The primary data collected from Ph.D. researchers of Madras University, Chennai were subjected to data analysis through SPSS version 23.0 and statistical tools such as, percentage analysis, descriptive statistics, test of normality, exploratory factor analysis, cluster and discriminant analysis to explore the solutions to the research problem of the study. The demographic characteristics of the respondents were presented in Table 1.

**Table 1: Demographic Characteristics of the Respondents**

Demographic Characteristics	Frequency	Percentage
<b>Marital Status</b>		
Married	50	23.8
Unmarried	160	76.2
<b>Coursework Completion</b>		
Yes	144	68.6
No	66	31.4
<b>Nature of Researcher</b>		
Stipendiary	60	28.6
Non – Stipendiary	150	71.4
<b>Age (Years)</b>		
Mean		26.32
Std. Deviation		2.457
Minimum		22
Maximum		31

Table 1 indicates that majority of the respondents are unmarried (76.2%) and Non-Stipendiary research scholars (71.4%). The maximum number of respondents are completed their course work examination (68.6%) and working on with their identified research areas. The average age of the respondents is 26.32 years (S.D = 2.457 years).

The exploratory factor analysis has been applied to explore the underlying dominant dimensions of Self-Motivation variables among Ph.D. research scholars selected for the present study. The principle component analysis with Varimax Rotation has been applied to reduce eleven self-Motivation variables into meaningful and manageable factors and results are presented in Table 2.

**Table 2: Exploratory Factor Analysis of Self-Motivation Variables**

Self-Motivation – Items	Mean	SD	Communalities	Variance (Eigen Value)	Loadings	Cronbach' Alpha Value
<b>Flexibility Factor</b>						
I have good enterprising skills to mobilize everyone	3.724	1.040	0.740	18.354 (2.019)	0.809	0.663
I go flexible when it is necessary to	3.610	1.002	0.681		0.779	

complete the work.						
I look forward to involve in team activities	4.200	0.750	0.548		0.534	
<b>Vision Factor</b>						
I utilize every opportunity effectively	4.171	0.835	0.788	16.256 (1.788)	0.887	0.666
I have big goals to achieve	4.067	0.867	0.647		0.762	
<b>Mission Factor</b>						
My activities are objective oriented	4.190	0.665	0.598	14.898 (1.639)	0.750	0.551
I have challenging goals to achieve	4.171	0.670	0.575		0.747	
I feel my life is purposeful when I have larger mission to complete	4.086	0.734	0.610		0.617	
<b>Intrinsic Skills Factor</b>						
I always focus on success rather than the fear of failure	4.076	0.766	0.696	14.523 (1.598)	0.802	0.584
I am determined to achieve goals by overcoming the obstacles and setbacks	4.095	0.685	0.569		0.706	
I always think to solve setbacks than as a personal intention	4.038	0.782	0.592		0.577	

Total Variance = 64.031% and Cronbach's Alpha = 0.716
<b>KMO and Bartlett's Test</b> Kaiser-Meyer-Olkin Measure of Sampling Adequacy. = 0.650 Bartlett's Test of Sphericity - Approx. Chi-Square = 500.528; df:55; P-Value = <0.001

Table 2 indicates that KMO measure of Sampling Adequacy Value of 0.650 and Chi-Square value of 500.528 at degrees of freedom of 55 with P-Value of <0.001 in Bartlett's Test of Sphericity proves that factor analysis can be applied for all eleven Self-Motivation variables. Four factors have been extracted out of eleven variables and they explain 64.031% of the variance in Self-Motivation variables. Thus, all the Self-Motivation variables have been reduced to four independent factors and the most dominant factor is Flexibility Factor (FF) followed by, Vision Factor (VF), Motivation Factor (MF) and Intrinsic Skills Factor (SIF) in their order of dominance. Further, in order to test the consistency and reliability of the instrument, Cronbach's Alpha reliability co-efficient was used and result supports that scales are highly reliable and consistent in nature.

**Table 3: Descriptive Statistics and Test of Normality**

	Mean	Std. Deviation	Variance	Skewness	Kurtosis	Kolmogorov-Smirnov <sup>a</sup>		Shapiro-Wilk	
	Statistic	Statistic	Statistic	Statistic (Std Error = 0.168)	Statistic (Std Error = 0.334)	Statistic (df = 210)	Sig.	Statistic (df = 210)	Sig.
Flexibility Factor	3.844	0.726	0.528	-0.810	0.489	0.175	0.000	0.932	0.000
Vision Factor	4.119	0.737	0.543	-1.341	3.246	0.188	0.000	0.863	0.000
Mission Factor	4.149	0.501	0.251	-0.112	-0.510	0.131	0.000	0.948	0.000
Intrinsic Skills Factor	4.070	0.551	0.303	-0.365	0.344	0.179	0.000	0.924	0.000

Table 3 shows that mean values in descriptive statistics of the factors such as, Flexibility Factor (FF) Vision Factor (VF), Motivation Factor (MF) and Intrinsic Skills Factor (SIF) are higher than standard deviation values (S.D is Less than 1/3rd of Mean) and it proves that selected constructs have robustness in the distribution in the study. The Kolmogorvo-Smirnov Test of Normality and Shapiro-Wilk Test of Normality have been applied to examine the normal distribution of the data and p-values of less than 0.05 shows that factors such as Flexibility Factor (FF) followed by, Vision Factor (VF), Motivation Factor (MF) and Intrinsic Skills Factor (SIF) has normal distribution in it

**Table 4: Cluster Groups of the Respondents based on the Self-Motivation Factors**

Factors	Discriminant Coefficient	Discriminant Loadings	Enthusiasm Seekers	Empowerment Seekers	Tests of Equality of Group Means			t-test	
			Mean (SD)	Mean (SD)	Wilks' Lambda	F-Value (df = 1,208)	Sig.	t-value	P-Value
Flexibility Factor	0.688	0.702	4.186 (0.498)	3.216 (0.658)	0.591	143.967	0.000	11.999	0.000
Vision Factor	0.642	0.580	4.426 (0.518)	3.554 (0.747)	0.679	98.469	0.000	9.923	0.000
Mission Factor	0.223	0.377	4.250 (0.498)	3.964 (0.454)	0.925	16.810	0.000	4.100	0.000
Intrinsic Skills Factor	0.242	0.240	4.235 (0.441)	3.766 (0.604)	0.833	41.577		6.448	0.000
(WilksLambda = 0.416; Chi-square = 180.862, df = 4, Sig. = 0.000) Eigen Value = 1.406; Canonical Correlation = 0.764 t-value = 16.065; P-Value = 0.000 @ 5% level of Significant									
<b>Accuracy of Respondents Classification</b>									
		Cluster Number of Case	Predicted Group Membership			Total			
			Enthusiasm Seekers	Empowerment Seekers					
Original	Coount	Enthusiasm Seekers	134	2	136				
		Empowerment Seekers	0	74	74				
	%	Enthusiasm Seekers	98.5	1.5	100.0				
		Empowerment Seekers	0	100	100.0				
Accuracy – 99.0% of Original – Validated Grouped Cases Correctly Classified									

Table 4 indicates that two dominant groups has been formed are significantly differentiated by all the four Self-Motivation Factors. The Discriminant Function shows that Wilks Lambda = 0.416; Chi-square = 180.162, df = 4, and Eigen Value is 1.406, Canonical Correlation of 0.764 with P-Value of 0.000 proves that it is significant at 5% level of Significance. Further, result shows that 210 Ph.D. research scholars are significantly grouped in two clusters namely Enthusiasm Seekers Group and Empowerment Seekers Group. The first cluster of Enthusiasm Seekers Group formed has 136 Ph.D. Research scholars followed by cluster two of Empowerment Seekers Group formed has 74 Ph.D. Research Scholars. In addition, table 4 results of the discriminant analysis has proves that 97.5 % of such cluster classification in correct.

## IX. PRACTICAL IMPLICATIONS

The present empirical study was aimed to explore the factors and clusters of self-motivation among Ph.D. research scholars as a key aspect of emotional intelligence management practices. The present study proves that Flexibility Factor (FF) Vision Factor (VF), Motivation Factor (MF) and Intrinsic Skills Factor (SIF) are the dominant dimensions of self-motivation variables. The result supports that research scholars are classified into two groups namely, enthusiasm seekers and empowerment seekers to improve their level of emotional intelligence. The research scholars are suggested to improve the attitude of enthusiasm to create curiosity to learn and explore new things in research phenomenon. The research scholars are suggested to have empowerment focus in each and every academic activity they perform during the Ph.D. research period. The research supervisors are suggested to monitor and motivate the scholars in an effective way to improve their emotions and self-motivational aspects to complete their research in stipulated period and to enhance the level of emotional intelligence among research scholars.

## **X. LIMITATIONS AND FURTHER RESEARCH DIRECTIONS**

The present study was limited to Ph.D. research scholars of University of Madras, Chennai and pursuing their doctoral degrees in the discipline of arts, science and humanities are alone considered for the study. The present study was limited to sample size of 210 due to time and cost constraint. The present study adopts non-probability convenience sampling method to select the Ph.D. research scholars for the study hence, the limitations associated with non-probability sampling is also applicable for the present study. This study can be further extended to all discipline Ph.D. research scholars and other dimensions of emotional intelligence to explore more valuable insights. The comparative study may be conducted to explore the difference of socio-economic conditions of the Ph.D. research scholars in different parts of the country can be conducted in near future. The comparative study between public funded educational institution scholars and private educational institution scholars may be conducted to explore the difference in emotional intelligence of Ph.D. research scholars.

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