

A RESEARCH ON VARIABLES OF ROLE EFFICACY INFLUENCING OPINION OF PRODUCTION ENGINEERS BASED ON EXPERIENCE

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ABSTRACT--Role efficacy being a psychological concept deals with the effectiveness of an individual why may be positioned in any specific role in an organisation. In order to be able to make an employee contribute his or her fullest level of competence, it becomes important for the role to provide that motivation if the role occupied by the employee fails to be motivating it could ultimately result in frustration with work which in turn is bound to reduce the employee's productivity drastically thereby leading to reduction in employee's effectiveness. This study has been undertaken to identify the different variables of self-efficacy and to identify the relationship between the variables of role efficacy and experience of production engineers in Chennai. The results of the study have shown that there is significant difference between experience of production executives and all the variables influencing role efficacy.

Keywords-- Role Efficacy, Self-role integration, Inter-role Linkage, Nursing, etc.

I. INTRODUCTION

Role efficacy which refers to the potential effectiveness of an individual occupying a particular role in an organisation as a concept really needs attention. Role efficacy is viewed as the psychological factor underlying role effectiveness.

The performance of an individual in a particular job depends to a great extent on his own potential effectiveness, his technical competency, his managerial experiences besides other factors. It would also depend to a great extent on the role that the individual is assigned in the organisation. Thus, to evaluate an individual's effectiveness it would be very necessary to have an integration of the above mentioned two aspects the individual and the role occupied by the individual.

Without possessing the requisite knowledge, technical competency and skills required to perform the role, the individual cannot be expected to be effective at work. It would also depend on how the role he occupies has been designed. If the role does not allow the individual to use his full level of competence, it could lead to the individual becoming frustrated at work which in turn could reduce his effectiveness.

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II. REVIEW OF LITERATURE

Malik et.al. (2016) made an attempt to study the influence of role efficacy on motivating employees. Their results have shown that there is a positive relation between role efficacy on one hand and level of employee motivation on the other.

Das & Padhy (2015) who attempted to analyse the correlation between role efficacy and stimulating trust with respect to the various variables of performance have highlighted that a positive relationship exists between role efficacy and organisational effectiveness.

On the other hand Diddi & Gujri (2014) who attempted to study the influence of organisational role efficacy with respect to women employees in BPO industry in India has revealed that as there tends to be an increase in the level of organisational role stress, it is accompanied by an increase in the stress dimensions of role overload and role ambiguity which in turn makes employees less role efficient.

The study conducted by Chaudhary & Jain (2014) has shown that with respect to the constructs of role efficacy, people occupying middle level management positions in the various universities functioning in Rajasthan exhibited a much better performance on constructs such as inter-role linkage, helping relationship, whereas on the construct coordination people occupying lower management positions fared better.

In an interesting study conducted by Jyothi & Jyothi (2012) it has been established there is a positive correlation between role efficacy on one hand and emotional intelligence on the other. It also has proved that women who pursue careers have a higher level of emotional intelligence and role-efficacy. It also proved that the relationship that exists between role efficacy on one hand and emotional intelligence on the other tends to increase the emotional intelligence of such women who in turn tend to become more potential effectiveness in the roles they occupy.

In the empirical study conducted by Kaur & Kazi (2012) using multiple regression analysis it was found that the influence of role efficacy of nursing community in improving the organisational effectiveness was rather high. The study also heightened the fact that the constructs of role efficacy which include creativity and helping relationships played a very vital role over the other constructs of role efficacy in improving overall organisational effectiveness.

III. NEED FOR THE STUDY

By undertaking the role of integrating individual employee along with the role the employee performs at work helps the organisations in fulfilling the needs of the individual and when the individual in turn is able to contribute in an effective way in the role. Thus, the effectiveness of an individual role in an organisation would depend upon his own potential effectiveness, the potential effectiveness of the role and the organisational climate. The potential effectiveness could be termed as efficacy.

On the other hand, individual efficacy is the potential effectiveness of an individual in individual and interpersonal situations. Role efficacy is the potential effectiveness of an individual occupying a particular in an organisation. Role efficacy can be seen as the psychological factor underling role effectiveness. Since ultimate success of an organisation and well-being of an individual depends upon role efficacy, this study is being undertaken.

IV. OBJECTIVES OF THE STUDY

- i. To identify the variables which could influence role efficacy of production engineering with respect to their work.
- ii. To identify the relationship between the variables of role efficacy with respect to experience of production engineers in Chennai.

V. RESEARCH METHODOLOGY

The study is descriptive in nature and has been undertaken in Chennai among the production engineers working in the various manufacturing firms in Chennai. Questionnaires were distributed to 142 production engineers however, only 123 copies of the research tool were found to be complete in all respect and hence were useable. The questionnaire consisted of two important parts which include the demographic details about the production engineers and the other part dealt with the variables influencing role-efficacy. The Likert five-point scale on role-efficacy authored by Pareek & Purohit (2011) containing 20 statements was used for the study.

VI. DATA ANALYSIS

The data was analysed using comparison of means and one-way ANOVA. The analysis was done by using SPSS version 17.

Demographic Details

The sample include both male and female production engineers employed in the various manufacturing units operating in Chennai. The sample was 123 and 85.5% belonged to age group of less than 30 years, 10.6% respondent were from the age group of 30 – 40 years and only 3.9% belonged to the group of more than 40 years.

Hypotheses

The various hypotheses framed for the study were tested using ANOVA with the help of SPSS..

H₀1 : There is no significant difference in self-role integration of production engineers based on experience

Table 1: ANOVA for significant difference in the mean of self-role integration of production engineers with respect to experience

		Sum of Squares	Mean Square	F Value	P Value
Self-Role Integration Versus Experience	Between Groups (Combined)	2.754	2.753	0.985	<0.001**
	Within Groups	978.204	3.144		

Since P value is less than 0.01, it shows that there is statistically significant difference between experience and self-ole integration of production engineers.

H₀2 : There is no significant difference in influence of production engineers based on experience

TABLE 2: ANOVA for significant difference in the mean of influence of production engineers with respect to experience

		Sum of Squares	Mean Square	F Value	P Value
Influence Versus Experience	Between Groups (Combined)	2.114	2.655	0.789	<0.001**
	Within Groups	899.243	3.088		

Since P value is less than 0.01, it shows that there is statistically significant difference between experience and influence of production engineers at work.

H₀3 : There is no significant difference in proactivity of production engineers based on experience

Table 3: ANOVA for significant difference in the mean of proactivity of production engineers with respect to experience

		Sum of Squares	Mean Square	F Value	P Value
Proactivity Versus Experience	Between Groups (Combined)	2.147	2.623	0.674	<0.001**
	Within Groups	792.241	3.029		

Since P value is less than 0.01, it shows that there is statistically significant difference between experience and proactivity of production engineers at work.

H₀4 : There is no significant difference in creativity of production engineers based on experience

Table 4: ANOVA for significant difference in the mean of creativity of production engineers with respect to experience

		Sum of Squares	Mean Square	F Value	P Value
Creativity Versus Experience	Between Groups (Combined)	2.094	2.471	0.674	<0.001**
	Within Groups	783.223	3.148		

Since P value is less than 0.01, it shows that there is statistically significant difference between experience and creativity applied by production engineers..

H₀5 : There is no significant difference in confrontation of production engineers based on experience

Table 5: ANOVA for significant difference in the mean of confrontation of production engineers with respect to experience

		Sum of Squares	Mean Square	F Value	P Value
Confrontation Versus Experience	Between Groups (Combined)	2.433	1.699	0.843	<0.001**
	Within Groups	673.247	2.787		

Since P value is less than 0.01, it shows that there is statistically significant difference between experience and confrontation of production engineers.

H₀6 : There is no significant difference in centrality of production engineers based on experience

Table 6: ANOVA for significant difference in the mean of centrality of production engineers with respect to experience

		Sum of Squares	Mean Square	F Value	P Value
Centrality Versus Experience	Between Groups (Combined)	2.243	2.194	0.476	<0.001**
	Within Groups	984.54	3.142		

Since P value is less than 0.01, it shows that there is statistically significant difference between experience and centrality of production engineers.

H₀7: There is no significant difference in individual growth of production engineers based on experience

Table 7: ANOVA for significant difference in the mean of individual growth of production engineers with respect to experience

		Sum of Squares	Mean Square	F Value	P Value
Individual Growth Versus Experience	Between Groups (Combined)	2.034	2.521	0.899	<0.001**
	Within Groups	699.431	3.411		

Since P value is less than 0.01, it shows that there is statistically significant difference between experience and individual growth of production engineers.

H₀8 : There is no significant difference in inter-role linkage of production engineers based on experience

Table 8: ANOVA for significant difference in the mean of inter-role linkage of production engineers with respect to experience

		Sum of Squares	Mean Square	F Value	P Value
Inter-Role Linkage Versus Experience	Between Groups (Combined)	3.001	2.431	0.896	<0.001**
	Within Groups	982.111	3.123		

Since P value is less than 0.01, it shows that there is statistically significant difference between experience and inter-role linkage of production engineers.

H₀9 : There is no significant difference in helping relations of production engineers based on experience

Table 9: ANOVA for significant difference in the mean of helping relationships of production engineers with respect to experience

		Sum of Squares	Mean Square	F Value	P Value
Helping Relationships Versus Experience	Between Groups (Combined)	2.432	2.444	0.891	<0.001**
	Within Groups	855.251	3.144		

Since P value is less than 0.01, it shows that there is statistically significant difference between experience and helping relationships among production engineers.

H₀10 : There is no significant difference in super ordination of production engineers based on experience

Table 10: ANOVA for significant difference in the mean of super-ordination of production engineers with respect to experience

		Sum of Squares	Mean Square	F Value	P Value
Super Ordination Versus Experience	Between Groups (Combined)	2.113	2.655	0.983	<0.001**
	Within Groups	865.242	3.022		

Since P value is less than 0.01, it shows that there is statistically significant difference between experience and superordinate of production engineers.

H₀11 : There is no significant difference in overall role efficacy of production engineers based on experience.

Table 11: ANOVA for significant difference in the mean of overall role efficacy of production engineers with respect to experience

		Sum of Squares	Mean Square	F Value	P Value
Overall Role Efficacy Versus Experience	Between Groups (Combined)	2.498	2.492	0.981	<0.001**
	Within Groups	872.345	3.225		

Since P value is less than 0.01, it shows that there is statistically significant difference between experience and overall role efficacy of production engineers.

VII. FINDINGS & CONCLUSION

The study which has been conducted to know the construct of role efficacy influencing opinion of production engineers based on their experience has brought about interesting insights. This research has proved that there is significant difference between experience of production engineers and all the constructs influencing role efficacy. This is in conformance with the results of the study conducted by Bamel, et al., (2015). Thus, it can be concluded that there are difference between role efficacy of production engineers which can be attributed to the experience of the production engineers.

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