

CREATIVE PROBLEM SOLVING IN SELECT ORGANISATIONS IN INDIAN ENVIRONMENT

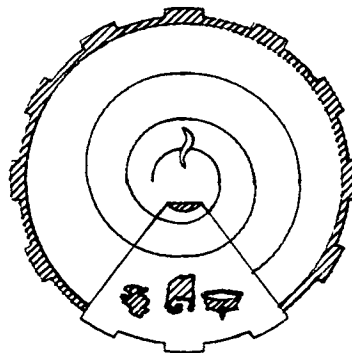
(A STUDY OF RELATIONSHIPS OF PUBLIC SECTOR MANAGERS' OVERALL CREATIVITY TO THEIR PROBLEM-SOLVING STYLE, JOB PERFORMANCE AND ON-THE-JOB CREATIVITY)

BY

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THESIS SUBMITTED TO THE INDIAN INSTITUTE OF TECHNOLOGY, DELHI IN FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF

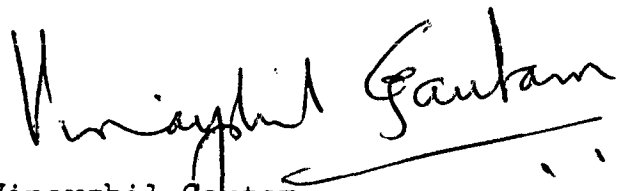
DOCTOR OF PHILOSOPHY



CENTRE FOR MANAGEMENT STUDIES
INDIAN INSTITUTE OF TECHNOLOGY, DELHI

CERTIFICATE

This is to certify that the thesis "Creative Problem Solving in Select Organisations in Indian Environment" with sub-title "A Study of Relationships of Public Sector Managers' Overall Creativity to their Problem-Solving Style, Job Performance and On-The-Job Creativity" being submitted by Mr. Ramesh Kapur for the award of Doctor of Philosophy by the Indian Institute of Technology, New Delhi, is a bonafide record of research work done under my guidance and supervision. The results obtained in this thesis have not been submitted to any other University for award of any degree or diploma.



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A C K N O W L E D G E M E N T S

My efforts in the research work were aided at various stages by many people. I owe my sincere gratitude to all of them.

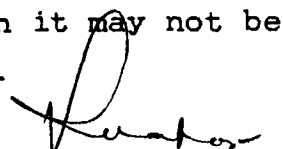
I wish to express my deep and sincere indebtedness to Prof. Vinayshil Gautam, my Supervisor, for his unfailing generosity, advice and help throughout the course of study.

My profound thanks to Prof. P. Khandwalla, Professor of Indian Institute of Management of Ahmedabad, Dr. J.K. Mitra, Reader at Faculty of Management Studies, Delhi University and Dr. N.K. Chadha, Department of Psychology, Delhi University, for their interest in my work and help rendered.

I am also grateful to Mr. S. Mohan and Savdesh, my brother, for the assistance provided. Mr. H.C. Arora and Mrs. Peter Howard deserve my special thanks for their effortless and meticulous typing.

Finally, a word of appreciation for my wife Madhuri and sons, Manu and Anuj for their extreme patience, support and freedom during the long spells of professional work. Regards to my mother, Mrs. Brijbala Kapur, Dr. S.R. Sehgal and Mr. Lloyd B. Tisdale for their continued encouragement in completion of the study.

Last but not the least, I am grateful to all those in the organisations who participated in my research work and spared their valuable time, though it may not be possible to acknowledge them individually.


(Ramesh Kapur)

ABSTRACT

Ever since the emergence of the public sector on the industrial scene of India, there have been various studies revolving around a single objective; how to improve the performance of such enterprises. This work, however, is a modest attempt to study the creativity of the managers in the selected organisations in their endeavour to sustain the organisations and make them grow.

This study tries to examine the relationship of the overall creativity of managers in public sector organisations with demographic variable on one hand and with their creative performance, problem-solving style, and on-the-job creativity, on the other hand.

The data for this study were derived from four (4) public sector organisations and compiled from usable responses received from 150 core-subjects (managers) in top, middle and operational levels using the purposive sampling technique. Two instruments (Biographical Information schedule and Torrance Test of Creative Thinking) were used on the core-subjects. A questionnaire developed for the purpose of studying the problem-solving style was also administered to the core-subjects' subordinates. Further, a Supervisor Rating Form was used to rate the core-subjects' creative performance and on-the-job creativity as perceived by their supervisors. The data set was processed using various univariate, bivariate, multivariate statistical techniques to test 12 suitably formulated research hypotheses by analysing 31 variables.

Results have revealed that (1) education, (2) income, (3) functional role and (4) work experience are significant correlates of creativity. The study has led to the conclusion that (1) creativity as demonstrated by man's work, (2) curiosity, (3) knowledge of work and (4) initiative in addition to (5) persistence, (6) enthusiasm, (7) ability to perceive unusual, (8) activity level and (9) non-conformity are significantly related to manager's overall creativity. Further, the study has established significant relationship between creativity and other variables of problem-solving style i.e. (1) risk-taking, (2) flexibility, (3) innovation and (4) participation. However, no significant relationship was found between age, hierarchical position, socio-economic status and creativity. Relationship between overall creativity and creativity performance variables like independence, fluency and flexibility in work habits, were also not found to hold much significance. Coercion and technocracy, as variables of problem-solving style, were also not found to be significant correlates of creativity.

The study also examined the significant predictors of creativity which were found to be (1) curiosity, (2) creativity as demonstrated by man's work. (3) activity level and (4) knowledge of work among the variables of creative performance. Among those of problem solving style, the significant predictors of creativity were observed as (1) risk-taking and (2) participation. Further, important predictors of creativity among

demographic variables of the core-subjects were found to be (1) education, (2) income and (3) work experience.

The study also examined certain predictors of problem solving style. The variables contributing towards risk-taking as problem solving style were observed to be (1) ability to perceive unusual, (2) curiosity, (3) initiative and (4) flexibility in work habits. Further, certain other variables contributing towards flexibility as part of a man's problem-solving style, were found as (1) flexibility in work habits and procedures, (2) initiative, (3) fluency of ideas, (4) non-conformity and (5) age. The contributors towards the innovation part of the problem-solving style were found to be (1) creativity as demonstrated by man's work, (2) on-the-job creativity, (3) knowledge of work and (4) initiative. Further, (1) persistence, (2) hierarchical position, (3) curiosity and (4) knowledge of work were observed as significant predictors of participation which is yet another component of a man's problem-solving style. The predictors of coercion, as part of the problem-solving style, were found to be (1) creativity as demonstrated by man's work and (2) work experience. No significant predictor was found for technocracy. The finding reveals significant relationships of certain variables as described above on 12 hypotheses developed to explain "why" and "how" individuals differ in problem-solving styles and how these differences influence the variables pertaining to creative performance and factors related to overall creativity.

Curiosity, which embodies the constituents of "why" and "how", emerged as a variable significantly related with creativity and problem-solving style. A theory of Inquisitiveness has thus been suggested. However, this needs further development.

This study, based exclusively on data collected in the Indian environment, is a modest attempt in making a humble contribution to the growing international literature on creative problem-solving which, it is hoped, would provide an opportunity to the professionals involved in the decision-making and problem-solving processes in the organisations to solve complex problems through the creative techniques.

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