Psychological Empowerment and Role Satisfaction as Determinants of Creativity

Ruby Sangar Santosh Rangnekar

Asia-Pacific Journal of Management Research and Innovation 10(2) 119–127 © 2014 Asia-Pacific Institute of Management SAGE Publications Los Angeles, London, New Delhi, Singapore, Washington DC DOI: 10.1177/2319510X14536110 http://apjmri.sagepub.com

Abstract

Organisations nowadays want to grow creatively and make the most out of creativity in the long run. The main aim of this article was to empirically check the relationship of psychological empowerment and role satisfaction with creativity in Indian organisations. The sample had responses from 333 business executives and managers. On performing correlation analysis, it was found that all the variables in the study were having significant relationship. The backward stepwise regression analysis was performed in order to delete those dimensions that do not contribute towards creativity. The findings revealed that meaning, self-determination and impact significantly predict creativity. Interestingly, achievement, influence and extension were also observed to be the determinants of creativity. Thus, creativity requires the workforce that is high on psychological empowerment and role satisfaction. This study identified two essential variables that affect creativity. It is an innovative attempt to utilise psychological empowerment and role satisfaction independently to improve creativity in an Indian framework.

Keywords

Psychological empowerment, role satisfaction, creativity, meaning, achievement, India

Introduction

Conventionally, creativity has been brought into being as an interesting subject in numerous fields (George, 2007). In the present scenario, competition has reached new heights which persuade the employees to become more creative. Substantial facts have been ascertained, which illustrates that individual's creativity lends a hand in improving the firm's effectiveness; over and above, it helps the organisation to survive (Amabile, 1996; Madjar, Oldham & Pratt, 2002; Shalley, Zhou & Oldham, 2004). For the successful upcoming future, individual's creativity has been identified as a stimulus that leads to change in the organisation (Ahmed, 1998; Gumusluoglu & Ilsev, 2009; Martin & Terblanche, 2003; Pitta, 2009). Max (2001) did a survey nationwide and explored that creativity was considered of immense importance and majority of the high officials (89 per cent) assumed that it was encouraged proactively among the staff members when judged against five years back. Not only creative organisations but almost all departments universally consider creativity as an essential competency (Florida & Goodnight, 2005).

Creativity as defined by Amabile (1996) and Oldham and Cummings (1996) refers to the development of ideas that are both novel and useful, either in the short or the long term. In addition, McKenna (2000) described it as a process that enables a person to think outside the preassumed scope of what would be expected. Creativity has been divided by Amabile (1988) into three elements, namely motivation, creative thinking skills and expertise. Achievement of motivation is somewhat more complicated and takes a lot of time as far as creative thinking skills and expertise are concerned. Also, intrinsic motivation has been considered to stimulate creativity in the organisation (Amabile, 1988). Creative individuals are an asset to any organisation as creativity positively affects organisational performance (Phipps, 2011).

Ample research had been undertaken by the practitioners and researchers that supports the fact that the creativity-relevant processes, domain-relevant skills and task motivation (Amabile, 1983, 1996), job complexity, deadlines, relationship with supervisors and peers (Shalley, Zhou & Oldham, 2004), diversity (Bassett-Jones, 2005) and empowerment (Amabile, 1983, 1996; Spreitzer, 1995) are few antecedents that improve employees' creativity. Although creativity has been found to be driven by a number of variables, yet a small number of those variables were empirically investigated. In India, the culture is quite different from that of Western countries; so for that reason, the creativity drivers that have been recognised in those

 Ruby Sangar, Department of Management Studies, Indian Institute of Technology, Roorkee, India. E-mail: rubysengar@gmail.com

 Santosh Rangnekar, Department of Management Studies, Indian Institute of Technology, Roorkee, India.

 E-mail: srangnekar I@gmail.com

 Downloaded from abr.sagepub.com at PENNSYLVANIA STATE UNIV on May 12, 2016

countries may not be applicable in our country. Therefore, there is ample encouragement to bring the creativity study in India. Therefore, this article would investigate whether psychological empowerment and role satisfaction will act as determinants of creativity and promote it in Indian organisations or not.

Review of Literature

Psychological Empowerment

The concept of psychological empowerment, as defined by Pieterse, van Knippenberg, Schippers and Stam (2010), is 'a motivational construct originating in an employee's perception of having choice in initiating and regulating actions, having the ability to perform the job well (i.e., selfefficacy), being able to have an impact on the environment, and the meaningfulness of the job'. Meaning is the part of the job characteristics model which concerns a sense of individual's work goal is important (Thomas & Velthouse, 1990). Competence is described as an individual's belief in his/her capability to perform task activities skilfully (Gist, 1987). Self-determination is an individual's perception of having choice in initiating and deciding on the work methods used to carry out tasks (Deci, Connell & Ryan, 1989; Spreitzer, 1995). Impact is defined as the perception of the degree to which an individual can influence strategic, administrative or operating outcomes at work (Ashforth, 1989).

Nearly every organisation admits that they need employees who are psychologically empowered, who have authority to take decisions immediately without having to take permission from supervisors and who consider their job as a personal job and as a consequence turn up with creative ways of solving the issues. When individuals believe that they are empowered to take decisions and also they have risk associated with project they are involved in, they will generate such creative ideas that would not only improve the effectiveness of their department but also of the organisation as a whole (Max, 2001). Empowered employees, no matter to which level they belong to, can enhance the efficiency of the firm by applying their creative skills and abilities at all times (Karakoc & Yilmaz, 2009). Fernandez and Moldogaziev (2013) conducted an empirical study in public sector and explored that empowerment on the whole helped in promoting employees towards creativity. Furthermore, Simons (1995) cited that efficient supervisors should empower the organisation all together, because they consider that this would help employees to become more creative and innovative. Also, Ayob (2011) did a survey on medium manufacturing firms in Malaysia. He explored that in order to smoothen the enhancement of creativity employee empowerment is an

important strategy. Relationship of psychological empowerment and creativity has been avowed conceptually and practically in many countries. On the other hand, this relationship is not investigated in an Indian framework. On the basis of the existing literature and a number of interrelationships of psychological empowerment and creativity, it is assumed that:

H1. Psychological empowerment will be positively related to and predict creativity.

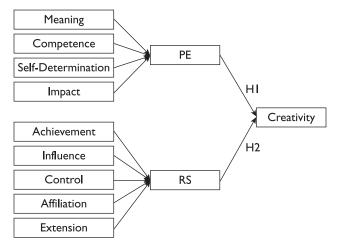
Role Satisfaction

The concept of role satisfaction as defined by Krishnaveni and Ramkumar (2006) is 'the degree of satisfaction of psychological needs in one's role in an organization'. Pareek and Purohit (2009) had conceptualised role satisfaction under five factors of human needs, namely achievement, influence, control, extension and affiliation. Achievement is characterised by a commitment to strive for success and a desire to show standards of excellence, as well as a need to achieve esteem, status and feelings of personal accomplishment (McClelland, 1985). Influence is a concern to make an impact on others; a desire to make people do what one thinks is right (Pareek & Purohit, 2009). Control refers to the desire to power and to use strong action to influence the behaviour of others. Extension is described by concern for others, interest in subordinate goals and an urge to be relevant and useful to larger groups, including society (Pareek & Purohit, 2009). Affiliation refers to the desire to establish warm and cooperative relationships with others (McClelland, 1985).

A study on human needs was performed and it was discovered that achievement, affiliation and control needs or motives were significantly and positively related to creativity in those organisations where creativity is a behavioural norm (Koberg & Chusmir, 1987). In contrast, individuals who were high on achievement need or motive and were important for the growth of the organisation were not found to make extreme creative modifications for their firm (Veroff, 1982). Conversely, Street and Bishop (1991) explored that employees who were high on control motive were behind the remarkable creativity in the organisations. Again, O'Reilly, Chatman and Caldwell (1991) cited that one of the individual needs, that is, control need or motive was found to be significantly related to creativity. Importantly, Amabile (1983, 1996) discovered that affiliation need or motive has a positive impact on employees' creativity. Hence, based on the above arguments and previous literature review, we hypothesise:

H2. Role satisfaction will be positively related to and predict creativity.





Source: Developed by the author based on the data available.

In this article, psychological empowerment and role satisfaction are taken as independent variables which we hypothesise to be positively related to creativity and will act as the determinants of creativity. The conceptual model for the present study is shown in Figure 1.

Research Methodology

Samples

The samples for the present study consisted of 333 employees from selected public sector organisations in India. The data were collected during the period of October 2012–June 2013 using an online questionnaire and by personally visiting the industries. The sample had 280 men (84.09 per cent) and 53 women (15.91 per cent). The sample had their age varying between 22 years and 60 years (mean = 36.08, SD = 9.95). Also, the sample had 200 undergraduates (60.06 per cent) and 133 postgraduates (39.94 per cent) as far as their education levels were concerned. Of the samples, 42.94 per cent were managers while the rest 57.06 per cent were non-managers. The work experience of the samples was also mixed: below 5 years (30.03 per cent), in between 5 and 10 years (20.12 per cent) and more than 10 years (49.85 per cent).

Measures

Standardised instruments were used for collecting the data. A 55-item Talent Management Instrument developed by Tayal and Rangnekar (2009) was used for measuring creativity. Creativity was one of the dimensions in this scale and was measured using five items (e.g., 'I am able to deploy full creativity and intelligence at work place'). The employees

responded on a 5-point Likert scale (1 means strongly disagree, 5 means strongly agree). The sum of scores of all the items is the creativity score. Therefore, the scale has illustrated high consistency (Cronbach's alpha = 0.736).

Psychological empowerment was assessed using 12-item psychological empowerment scale developed by Spreitzer (1995). The scale consists of four dimensions; meaning (four items, e.g., 'My job activities are personally meaningful to me'), competence (four items, e.g., 'I've mastered the skills necessary for my job'), self-determination (four items, e.g., 'I've considerable opportunity for independence and freedom in how I do my job') and impact (four items, e.g., 'I've significant influence over what happens in my department'). The respondents answered on a 5-point Likert scale (1 means strongly disagree, 5 means strongly agree). The sum of scores of all the 12 items is respondents' psychological empowerment score. In this case also, scale's reliability was found to be 0.873, which is again very high.

Role satisfaction was measured by adapting the 25-item Motivational Analysis of Organisations-Role (MAO-R) Scale developed by Pareek and Purohit (2009). The scale consists of five subscales; achievement (five items, e.g., 'Get immediate feedback on your performance'), influence (five items, e.g., 'Have autonomy and work independently'), control (five items, e.g., 'Control the people below you'), affiliation (five items, e.g., 'Develop close personal relations') and extension (five items, e.g., 'Develop your junior colleagues or subordinates'). Here, also employees gave their responses on a 5-point Likert scale (1 means no opportunity, 5 means great deal of opportunity). The sum of all the 25 items is respondent's role satisfaction score. The co-efficient of reliability for this scale was found to be 0.920, which was also too high.

Data Analysis and Results

SPSS 17.0 was used for doing data analysis. Initially, normality check was applied on the data and it appeared to be normally distributed. Later on, standard deviations as well as means were calculated to check the variability of data and averages of scores as shown in Table 1. The mean and standard deviation of psychological empowerment was (M = 85.10, SD = 12.04) and of role satisfaction was (M = 89.35, SD = 16.10). The descriptive score of creativity was (M = 20.11, SD = 3.01). Further, to test the hypotheses correlation was performed. Table 1 demonstrates that both psychological empowerment and role satisfaction were found to correlate positively and significantly with creativity. The co-efficient of correlation between psychological empowerment and creativity was 0.383, and role satisfaction and creativity was 0.488. All the factors of

	-	7	n	4-	ი	9	7	ω	٢	2	=	12
2.15	_											
2.69	0.319**	_										
2.15	0.447**	0.287**	_									
2.46	0.441**	0.257**	0.543**	_								
4.82	0.227**	0.059	0.200**	0.176**	_							
3.49	0.288**	0.077	0.416**	0.403**	0.634**	_						
4.36	0.190**	0.056	0.245**	0.302**	0.390**	0.566**	_					
3.95	0.136*	0.000	0.230**	0.213**	0.397**	0.569**	0.506**	_				
3.65	0.271**	0.041	0.317**	0.260**	0.495**	0.721**	0.547**	0.654**	_			
12.04	0.752**	0.718**	0.758**	0.672**	0.215**	0.369**	0.242**	0.175**	0.283**	_		
16.10	0.277**	0.059	0.345**	0.333**	0.753**	0.864**	0.759**	0.774**	0.841**	0.317**	_	
3.01	0.318**	0.215**	0.303**	0.313**	0.368**	0.462**	0.354**	0.325**	0.446**	0.383**	0.488**	_
chor based on icant at 0.01	the data avail level (2-tailed	able. I); *Correlat	on is signifi	cant at 0.05	level (2-tail	led). Self-de	. = Self-det	ermination,	Achiev. = A	chievement	, PE = Psych	nological
11.49 10.36 17.99 17.47 16.66 16.66 18.34 18.36 18.86 18.86 85.10 85.10 89.35 20.11 the aut	2.15 2.46 2.46 4.82 3.49 4.36 3.65 3.65 3.65 12.04 16.10 3.01 16.10 3.01 ficant at 0.01	3. Self-de. 11.49 2.15 0.447** 4. Impact 10.36 2.46 0.441** 5. Achiev. 17.99 4.82 0.227** 6. Influence 17.47 3.49 0.288** 7. Control 16.66 4.36 0.190** 8. Affiliation 18.34 3.95 0.136* 9. Extension 18.86 3.65 0.271** 10. PE 85.10 12.04 0.752** 11. RS 89.35 16.10 0.277** 12. Creativity 20.11 3.01 0.318** Source: Developed by the author based on the data avail Ennonment R. Satisficiant at 0.01 level (2-tailed Ennoment R. Satisficiant at 0.01 level (2-tailed R.	3. Self-de. 11.49 2.15 0.447*** 0.287*** 4. Impact 10.36 2.46 0.441*** 0.257*** 5. Achiev. 17.99 4.82 0.227*** 0.059 6. Influence 17.47 3.49 0.288** 0.077 7. Control 16.66 4.36 0.190** 0.056 8. Affiliation 18.34 3.95 0.190** 0.060 9. Extension 18.86 3.65 0.271** 0.041 10. PE 85.10 12.04 0.752** 0.718** 10. PE 85.10 12.04 0.777** 0.059 11. RS 89.35 16.10 0.277** 0.059 12. Creativity 20.11 3.01 0.318** 0.215** Source: Developed by the author based on the data available. 0.056 *Correlation Motes: **Correlation is significant at 0.01 level (2-tailed); *Correlation *Correlation	2.15 0.447** 0.287** 1 2.46 0.441** 0.257** 0.543** 4.82 0.227** 0.543** 3.49 0.288** 0.077 0.416** 3.49 0.288** 0.077 0.416** 3.55 0.190** 0.056 0.245** 3.95 0.136* 0.000 0.230** 3.65 0.271** 0.041 0.317** 12.04 0.772** 0.718** 0.758** 16.10 0.277** 0.059 0.345** 16.10 0.277** 0.059 0.345** Abor based on the data available. 0.018** 0.215** 0.303**	2.15 0.447** 0.287** 1 2.46 0.441** 0.257** 0.543** 1 2.46 0.441** 0.257** 0.543** 1 4.82 0.227** 0.059 0.200** 0.176** 3.49 0.288** 0.077 0.416** 0.403** 4.82 0.190** 0.056 0.245** 0.302** 3.55 0.136* 0.000 0.230** 0.213** 3.65 0.271** 0.041 0.317** 0.260** 12.04 0.752** 0.718** 0.260** 0.533** 16.10 0.277** 0.059 0.345** 0.333** 16.10 0.215** 0.303** 0.313** Anot based on the data available. 0.303** 0.313** Anot based on the data available. 0.303** 0.313**	2.15 0.447** 0.287** 1 2.46 0.441** 0.257** 0.543** 1 2.46 0.441** 0.257** 0.543** 1 4.82 0.227** 0.059 0.200** 0.176** 1 3.49 0.288** 0.077 0.416** 0.403** 0.634** 3.49 0.288** 0.077 0.416** 0.302** 0.390** 3.55 0.190** 0.056 0.245** 0.302** 0.390** 3.55 0.136* 0.000 0.230** 0.397** 0.397** 3.65 0.271** 0.041 0.317** 0.260** 0.495** 12.04 0.778** 0.317** 0.260** 0.715** 16.10 0.277** 0.059 0.345** 0.333** 0.753** Ator based on the data available. 1.018** 0.303** 0.313** 0.368**	2.15 0.447** 0.287** 1 2.46 0.441** 0.257** 0.543** 1 2.46 0.441** 0.257** 0.543** 1 4.82 0.227** 0.059 0.200** 0.176** 1 3.49 0.288** 0.077 0.416** 0.403** 0.634** 1 3.49 0.288** 0.077 0.416** 0.302** 0.566** 0.566** 3.55 0.190** 0.056 0.245** 0.302** 0.390** 0.566** 3.65 0.190** 0.060 0.230** 0.302** 0.390** 0.566** 12.04 0.718** 0.011 0.317** 0.260** 0.713** 0.751** 12.04 0.771** 0.041 0.317** 0.215** 0.369** 16.10 0.277** 0.059 0.345** 0.753** 0.369** 16.10 0.215** 0.303** 0.313** 0.753** 0.464** 3.01 0.318** 0.215** 0.303** 0.753** 0.462** Abor based on the data avaitalel	2.15 0.447** 0.287** 1 2.46 0.441** 0.257** 0.543** 1 2.46 0.441** 0.257** 0.543** 1 4.82 0.227** 0.543** 1 4.82 0.227** 0.077 0.416** 0.176** 1 3.49 0.288** 0.077 0.416** 0.302** 0.566** 1 3.55 0.190** 0.056 0.245** 0.302** 0.397** 0.566** 1 3.55 0.136* 0.000 0.230** 0.213** 0.397** 0.569** 0.506** 3.65 0.271** 0.001 0.317** 0.260** 0.721** 0.506** 12.04 0.775** 0.718** 0.758** 0.753** 0.721** 0.242** 16.10 0.277** 0.059 0.345** 0.333** 0.753** 0.364** 0.759** 16.10 0.215** 0.303** 0.313** 0.368** 0.364** 0.759** 16.10 0.215** 0.303** 0.313** 0.368** 0.462**	2.15 0.447** 0.287** 1 2.46 0.441** 0.257** 0.543** 1 4.82 0.241** 0.257** 0.543** 1 4.82 0.227** 0.543** 1 1 3.49 0.288** 0.077 0.416** 0.403** 0.634** 1 3.55 0.190** 0.056 0.245** 0.302** 0.397** 0.566** 1 3.95 0.136* 0.000 0.230** 0.213** 0.397** 0.566** 1 3.65 0.136* 0.000 0.230** 0.213** 0.397** 0.566** 1 3.05 0.136* 0.000 0.230** 0.213** 0.397** 0.564** 1 3.06 0.136** 0.000 0.213** 0.397** 0.369** 0.547** 0.564** 12.04 0.772** 0.714** 0.752** 0.749** 0.774** 0.754** 0.774** 12.04 0.215** 0.303** 0.313** 0.368** 0.364** 0.7759** 0.774** 12.04 <td>2.15 0.447** 0.287** 1 2.46 0.441** 0.257** 0.543** 1 4.82 0.227** 0.5343** 1 3.49 0.288** 0.077 0.416** 0.403** 0.634** 1 3.49 0.288** 0.077 0.416** 0.403** 0.566** 1 3.55 0.190** 0.056 0.245** 0.390** 0.566** 1 3.95 0.136* 0.000 0.230** 0.213** 0.397** 0.569** 1 3.65 0.136* 0.000 0.230** 0.213** 0.397** 0.564** 1 3.65 0.136* 0.000 0.233** 0.213** 0.397** 0.564** 1 3.65 0.271** 0.041 0.317** 0.267** 0.369** 0.547** 0.564** 1 12.04 0.752** 0.718** 0.769** 0.721** 0.547** 0.534** 0.746*** 3.01 0.318** 0.318** 0.368** 0.368** 0.366*** 0.746*** 0.746***</td> <td>2.15 0.447** 0.287** 1 2.46 0.441** 0.257** 0.543** 1 4.82 0.227** 0.543** 1 4.82 0.227** 0.543** 1 3.49 0.288** 0.077 0.416** 0.403** 0.634** 1 3.45 0.190** 0.056 0.245** 0.300** 0.309** 0.566** 1 3.55 0.136* 0.000 0.230** 0.213** 0.337** 0.569** 1 3.65 0.136* 0.000 0.230** 0.213** 0.356** 1 3.65 0.136** 0.000 0.230** 0.213** 0.397** 0.566** 1 3.65 0.136** 0.01 0.217** 0.267** 0.566** 1 3.65 0.271** 0.6495** 0.721** 0.566** 1 12.04 0.752** 0.718** 0.654** 1 12.04 0.775** 0.747** 0.744** 0.317** 12.04 0.217** 0.368** 0.774** 0.775*</td> <td>87** 1 .57** 0.543** 1 .57 0.543** 1 77 0.416** 0.176** 1 76 0.246** 0.634** 1 166 0.230** 0.634** 1 177 0.416** 0.403** 0.566** 1 166 0.230** 0.397** 0.566** 1 170 0.317** 0.397** 0.566** 1 18** 0.317** 0.397** 0.566** 1 100 0.230** 0.213** 0.397** 0.566** 1 118** 0.317** 0.302** 0.366** 1 1 118** 0.317** 0.260** 0.721** 0.547** 0.583** 1 118** 0.317** 0.315** 0.366** 0.317** 0.317** 0.317** 118** 0.315** 0.366** 0.356** 0.317** 0.317** 0.317** 118** 0.313** 0.368** 0.366** 0.356** 0.364** 0.317** 118**<!--</td--></td>	2.15 0.447** 0.287** 1 2.46 0.441** 0.257** 0.543** 1 4.82 0.227** 0.5343** 1 3.49 0.288** 0.077 0.416** 0.403** 0.634** 1 3.49 0.288** 0.077 0.416** 0.403** 0.566** 1 3.55 0.190** 0.056 0.245** 0.390** 0.566** 1 3.95 0.136* 0.000 0.230** 0.213** 0.397** 0.569** 1 3.65 0.136* 0.000 0.230** 0.213** 0.397** 0.564** 1 3.65 0.136* 0.000 0.233** 0.213** 0.397** 0.564** 1 3.65 0.271** 0.041 0.317** 0.267** 0.369** 0.547** 0.564** 1 12.04 0.752** 0.718** 0.769** 0.721** 0.547** 0.534** 0.746*** 3.01 0.318** 0.318** 0.368** 0.368** 0.366*** 0.746*** 0.746***	2.15 0.447** 0.287** 1 2.46 0.441** 0.257** 0.543** 1 4.82 0.227** 0.543** 1 4.82 0.227** 0.543** 1 3.49 0.288** 0.077 0.416** 0.403** 0.634** 1 3.45 0.190** 0.056 0.245** 0.300** 0.309** 0.566** 1 3.55 0.136* 0.000 0.230** 0.213** 0.337** 0.569** 1 3.65 0.136* 0.000 0.230** 0.213** 0.356** 1 3.65 0.136** 0.000 0.230** 0.213** 0.397** 0.566** 1 3.65 0.136** 0.01 0.217** 0.267** 0.566** 1 3.65 0.271** 0.6495** 0.721** 0.566** 1 12.04 0.752** 0.718** 0.654** 1 12.04 0.775** 0.747** 0.744** 0.317** 12.04 0.217** 0.368** 0.774** 0.775*	87** 1 .57** 0.543** 1 .57 0.543** 1 77 0.416** 0.176** 1 76 0.246** 0.634** 1 166 0.230** 0.634** 1 177 0.416** 0.403** 0.566** 1 166 0.230** 0.397** 0.566** 1 170 0.317** 0.397** 0.566** 1 18** 0.317** 0.397** 0.566** 1 100 0.230** 0.213** 0.397** 0.566** 1 118** 0.317** 0.302** 0.366** 1 1 118** 0.317** 0.260** 0.721** 0.547** 0.583** 1 118** 0.317** 0.315** 0.366** 0.317** 0.317** 0.317** 118** 0.315** 0.366** 0.356** 0.317** 0.317** 0.317** 118** 0.313** 0.368** 0.366** 0.356** 0.364** 0.317** 118** </td

Table 1. Means, Standard Deviations and Inter-correlations of Study Variables

Empowerment, RS = Role Satisfaction.

psychological empowerment were found to have significant correlation with creativity. Similarly, all the five factors of role satisfaction were also found to have significant correlation with creativity. Thus, it has been observed that on performing correlation analysis significant interrelationships between psychological empowerment and creativity and role satisfaction and creativity were found. As a result, the hypotheses H1 and H2 were accepted to some extent here. Hence, in order to completely accept the hypotheses, predictive relationship between the above mentioned variables has to be diagnosed first.

Further, regression analysis was performed to find the determining ability of psychological empowerment and role satisfaction and their dimensions towards creativity. Since the determining ability of the independent variables was somewhat uncertain, the backward stepwise regression analysis was considered the most suitable method (Ho, 2006). This method deletes those factors or variables that do not significantly predict the dependent variable (Ho, 2006). The significance level was kept at 95 and

99 per cent, respectively. The determining ability of two variables, that is, psychological empowerment and role satisfaction and their dimensions on creativity, is illustrated in Tables 2 and 3.

As illustrated in Table 2, psychological empowerment and its all four factors, that is, meaning, competence, selfdetermination and impact collectively caused 14.6 per cent of variance in creativity. Also, the F-value was found to be 15.19. This too supported H1 that psychological empowerment determines creativity. It can also be seen that competence was having an insignificant standardised beta value in the model 1; so it was eliminated in the model 2 for achieving a more realistic model. The moment competence was removed in the model 2, the determining capability of the independent variable amplified from 14.6 per cent to 15.7 per cent with F-value as 19.30. Therefore, it can be said that psychological empowerment and its dimensions, that is, meaning, self-determination and impact were investigated as being the important determinants of creativity in Indian organisations.

 Table 2. Backward Stepwise Regression Analysis with Psychological Empowerment Factors as Independent Variables and Creativity

 as Dependent Variable

Model	Independent Variables	R-Square	Adjusted R-Square	F-value	Standardised Beta Value
I	Meaning Competence Self-determination Impact	0.156	0.146	15.19	0.170** 0.088 0.121* 0.150*
2	Meaning Self-determination Impact	0.165	0.157	19.30	0.189** 0.134* 0.157*

Source: Developed by the author based on the data available.

Notes: **p-value is significant at 0.01 level; *p-value is significant at 0.05 level.

Model	Independent Variables	R-Square	Adjusted R-Square	F-value	Standardised Beta Value
I	Achievement	0.253	0.241	22.12	0.108**
	Influence				0.199**
	Control				0.093
	Affiliation				0.013
	Extension				0.207**
2	Achievement	0.253	0.244	27.72	0.108**
	Influence				0.197**
	Control				0.090
	Extension				0.201**
3	Achievement			36.069	0.111**
	Influence	0.257	0.246		0.228**
	Extension				0.227**

 Table 3. Backward Stepwise Regression Analysis with Role Satisfaction Factors as Independent Variables and Creativity as

 Dependent Variable

Source: Developed by the author based on the data available.

Note: *** p-value is significant at 0.01 level.

Similarly, Table 3 shows that role satisfaction and its all five factors, that is, achievement, influence, control, affiliation and extension jointly caused significant variance in creativity (adj. $R^2 = 24.1$ per cent) in the model 1. This finding thus lends support to H2, which predicted positive significant relationship with creativity. In model 2, out of the five dimensions of role satisfaction, achievement, influence and extension had significant prediction towards creativity where the amount of change caused was adj. $R^2 = 24.4$ per cent. Further, in model 3, only achievement, influence and extension were found to cause 24.6 per cent of variation in creativity. Hence according to the results, role satisfaction and its constituting factors, namely 'achievement', 'influence' and 'extension' were found to be the significant predictors of creativity in Indian organisations. These findings are discussed subsequently.

Discussion

The major aim of the present study was to see that whether psychological empowerment and role satisfaction act as determinants of creativity in the Indian organisations and the results confirmed the proposed relationship. As hypothesised, in an Indian context psychological empowerment was found to be an important determinant of creativity. These results corroborate the findings of Alge, Ballinger, Tangirala and Oakley (2006), Ayob (2011) and Ghorbani and Ahmadi (2011) who observed that dimensions of psychological empowerment, that is, meaning, competence, impact and self-determination had positive relationships with creativity of individuals. They proposed that supervisors can encourage creativity in the organisations by removing the restrictions which limit creativity. Importantly, the relationship between psychological empowerment and creativity has been considered a complementary one (Velthouse, 1990). In addition, Amabile, Conti, Coon, Lazenby and Herron (1996) and Spreitzer (1995) recommended that psychological empowerment can contribute towards individual's creativity, if it positively affects individual's intrinsic motivation. Their findings were in congruence with the theory given by Amabile (1996) and Shalley, Zhou and Oldham (2004) which explored that intrinsic motivation has been found to predict creativity. A study on employees of US federal government discovered that a variety of empowerment techniques can help in propelling creativity among them (Fernandez & Moldogaziev, 2013). Creativity can be enhanced when employees believe that they have the ability to deploy full creativity and intelligence at work place, receptive to new ideas, giving adaptive and creative responses to setbacks and obstacles, expressing ideas freely and encouraging creative ways to get new projects. This is possible when individuals have free access to information, choice of making decisions, etc., which are associated with psychological empowerment of the employees, which will lead to creativity in the organisation (Ghorbani & Ahmadi, 2011).

The competence dimension was found to have a low score which shows that the employees in organisations under study might be somewhere lacking in the confidence to do the job, self-assurance about the capabilities to do work activities and not mastered the skills required to do the job well. Competencies such as critical thinking, authority in decision-making, self-manageability, etc., should be focused and taken care of for the purpose of enhancing creativity (Ghorbani & Ahmadi, 2011). Moreover, meaning was found to boost creativity in our sample. Here, results are according to Karakoc and Yilmaz (2009), who asserted that employees feel satisfied when they find their jobs important and meaningful and that is why meaning is considered to be an important element to stimulate creativity in the organisations. This finding is also supported by Sun, Zhang, Qi and Chen (2012) who cited that when employees recognise that their job tasks are meaningful, they can enhance their creativity in their organisations. Once the employees feel that their jobs are meaningful, they can help in preventing wastage of their capabilities. Again, significant scores for selfdetermination corroborate with the findings of Amabile and Gitomer (1984) which stated that self-determination helps in generating creativity. Psychologically empowered employees think that they can work independently, have an impact on others and have less control over them. Now, since these employees have freedom, they can develop new thoughts and have a self-belief that their thoughts will be appreciated. Thus, it is quite clear from the above discussion that higher scores on psychological empowerment will lead to enhanced creativity (Sun, Zhang, Oi & Chen, 2012).

Moving ahead, the study findings also accentuate the importance of role satisfaction for boosting creativity. Moreover, out of the five factors of role satisfaction, only achievement, influence and extension were found to enhance creativity in our sample. This is similar to the findings of Wallach (1983) and Koberg and Chusmir (1987) who indicated that individuals high on achievement motive are considered to enhance creativity and innovation in their organisations. This could be possible only when individuals have the ability to achieve difficult goals, receive opinions of seniors on their task performance, perform efficiently to get rewards and broaden his or her skills and abilities. Now, when individual's achievement motive is favourably attained, they have the tendency to do extremely well and take risks and show creative activities. The discussion so far advocates the statement of Hon and Leung (2011) who observed that when employees think that their firm provides them an innovative environment along with empowerment, they are persuaded to design creative methods to solve problems and find resolutions (Hon & Rensvold, 2006; Kristor-Brown, Zimmerman & Johnson, 2005) and finally triggered to be more creative (Kim, Hon & Crant, 2009).

Indian executives' influence was also found to have a significant impact on their creativity. This finding affirms the proposal of Srivastava (2008) who advocated that when education level goes high, more employees are readily available to help others and few are left to get helped in the organisations. However, in this study, approximately 60 per cent of the employees had low education level which implies that fewer employees were available to make an impact on others and more were available to get influenced in the organisation. Thus, it can be said that influence contributes towards creativity in the present sample of Indian organisations. Control dimension did not significantly predict creativity in the present sample. The reason behind it could be the fact that employees might not be having powers to instruct or control their junior colleagues, or punish those who do not perform. For instance, Buelens and den Broeck (2007) observed that control motivates individuals in such a way that they take on the power to make decisions without any kind of restriction from management. Now, when employees find no autonomy, it is difficult for them to be creative and come up with new ideas at their workplace.

The affiliation dimension also did not predict creativity significantly. Nandi (2008) explored that individuals high on affiliation undermine goal orientation and objectivity in decision-making. Being high on affiliation deviates employees from their goal path and also detaches them from decision-making which in the end undermines creativity. Also, extension dimension was found to significantly predict creativity. Srivastava (2008) asserted that highly educated persons have tendency to work alone and not in teams and in this way, extension would grow weaker as education level grows. Since greater portion of the sample were undergraduates, they had low education level, which means that there were less people who were competent to help others and want to work in teams to get the help and this propels their creativity level as they get help readily. Hence, it may be concluded here that extension could be a basis for superior creativity in Indian organisations. Therefore, role satisfaction is essential for better creativity. Moreover both psychological empowerment and role satisfaction seem to remarkably uplift the creativity.

Conclusion

This study demonstrated how psychological empowerment and role satisfaction perceptions influenced creativity among employees in organisation. From the discussion, it can be said that psychological empowerment has an imperative influence on creativity in Indian organisations. When employees sense meaning in their job tasks, they believe that (*i*) they are adding a bit on their part towards the development of their organisation; (*ii*) they have much freedom to decide how to do their job; and (*iii*) they have considerable control over what happens in their department. This leads to the conclusion that when employees are psychologically empowered, they are more likely to show creative actions and activities at their workplace which would definitely lead towards the growth and success of the organisation. This finding thus would further promote the use of psychological empowerment to enhance creativity.

This study could be pioneering in the sense that role satisfaction was found to be a new and perhaps one of the significant predictors of creativity. When the psychological needs or motives of the employees such as achieving difficult goals, having autonomy, using power on people below them, being friendly with others as well as helping others, are satisfied, they would demonstrate better creativity on their part. Overall, it can be concluded that Indian organisations can make most of the gains by using the above findings at all the levels in the organisation. This study made an effort to establish connection between psychological empowerment and role satisfaction with creativity and it quite succeeded in bridging the gap in the past literature in India.

This study does have some practical inferences. These findings would help in fostering psychological empowerment and role satisfaction at the workplace and thus would encourage employee's creativity and cause smoothening of the progress of creative activities. Employees can work upon their skills and master them and thus improve their confidence to improve creativity. Also, item-wise analysis of the role satisfaction scale exposed some chief areas to which organisations must pay attention for improving creativity at the workplace. Employees should be given more power to direct others below them and over and above, adequate encouragement should be given to develop close personal relations and interaction with others on non-task matters so as to help each other in becoming more creative. When these employees turn more creative, they can easily solve the problems quickly and thus will make their job simple and uncomplicated.

Limitations and Scope for Future Research

The present study does have some limitations. First, this study collected data from only Indian industries; so the

results cannot be generalised to other countries, because different culture prevails in different nations. Second, the sample size of the study could be a limitation, because the study is restricted to respondents from few Indian firms and hence these results cannot be applied to all the firms in India. The survey method was used for data collection; therefore, the responses may or may not be free from personal biases. The same study in other countries can also be carried out so as to discover something new about the studied variables and their associations in different cultures. Only two determinants of creativity have been identified in the present study. In future work, many more factors can be incorporated to find their effect on creativity. Therefore, this further allows the academicians to explore new facts in the area of work creativity in industrial psychology.

References

- Ahmed, P.K. (1998). Culture and climate for innovation. European Journal of Innovation Management, 1(1), 30–43.
- Alge, B.J., Ballinger, G.A., Tangirala, S. & Oakley, J.L. (2006). Information privacy in organisations: Empowering creative and extrarole performance. *Journal of Applied Psychology*, 91(1), 221–232.
- Amabile, T.M. (1983). The social psychology of creativity: A componential conceptualization. *Journal of Personality* and Social Psychology, 45(2), 357–376.
- . (1988). A model of creativity and innovation in organisations. In B.M. Stew & L.L. Cummings (Eds), *Research in organizational behavior* (pp. 123–167). Greenwich, CT: JAI.
 . (1996). *Creativity in context*. Boulder, CO: Westview Press.
- Amabile, T.M., Conti, R., Coon, H., Lazenby, J. & Herron, M. (1996). Assessing the work environment for creativity. *Academy of Management Journal*, 39(5), 1154–1184.
- Amabile, T.M. & Gitomer, J. (1984). Children's artistic creativity: Effects of choice in task materials. *Personality and Social Psychology Bulletin*, 10(2), 209–215.
- Ashforth, B.E. (1989). The experience of powerlessness in organisations. Organizational Behavior and Human Decision Processes, 43(2), 207–242.
- Ayob, A. (2011). The role of psychological empowerment on employee's creativity: The development of conceptual framework. Article presented at the 2nd International Conference on Economics, Business and Management, Singapore.
- Bassett-Jones, N. (2005). The paradox of diversity management, creativity and innovation. *Creativity and Innovation Management*, 14(2), 169–175.
- Buelens, M. & den Broeck, H.V. (2007). An analysis of differences in work motivation between public and private sector organisations. *Public Administration Review*, 67(1), 65–74.
- Deci, E.L., Connell, J.P. & Ryan, R.M. (1989). Self-determination in a work organization. *Journal of Applied Psychology*, 74(4), 580–590.

- Fernandez, S. & Moldogaziev, T. (2013). Using employee empowerment to encourage innovative behavior in the public sector. *Journal of Public Administration Research* and Theory, 23(1), 155–187.
- Florida, R. & Goodnight, J. (2005). Managing for creativity. *Harvard Business Review*, 83(7), 124–131.
- George, J.M. (2007). Creativity in organisations. The Academy of Management Annals, 1(1), 439–477.
- Ghorbani, M. & Ahmadi, S. (2011). Relationship between employee's empowerment dimensions and creativity improvement in educational organisations. *Middle-East Journal of Scientific Research*, 10(2), 213–217.
- Gist, M.E. (1987). Self-efficacy: Implications for organizational behavior and human resources management. Academy of Management Review, 12(3), 472–485.
- Gumusluoglu, L. & Ilsev, A. (2009). Transformational leadership, creativity, and organizational innovation. *Journal of Business Research*, 62(4), 461–473.
- Ho, R. (2006). *Handbook of univariate and multivariate data analysis and interpretation with SPSS*. New York: Taylor & Francis.
- Hon, A.H.Y. & Rensvold, R.B. (2006). An interactional perspective on perceived empowerment: The role of personal needs and task context. *International Journal of Human Resource Management*, 17(5), 959–982.
- Hon, A.H.Y. & Leung, A.S.M. (2011). Employee creativity and motivation in the Chinese context: The moderating role of organizational culture. *Cornell Hospitality Quarterly*, 52(2), 125–134.
- Karakoc, N. & Yilmaz, A.K. (2009). Employee empowerment and differentiation in companies: A literature review and research agenda. *Enterprise Risk Management*, 1(2), 1–12.
- Kim, T.Y., Hon, A.H.Y. & Crant, M. (2009). Proactive personality, career satisfaction, and perceived insider status: The mediating roles of employee creativity. *Journal of Business* and Psychology, 24(1), 93–103.
- Koberg, C.S. & Chusmir, L.H. (1987). Organizational culture relationships with creativity and other job-related variables. *Journal of Business Research*, 15(5), 397–409.
- Krishnaveni, R. & Ramkumar, N. (2006). Impact of developmental climate on individual's behavior in the organization. *South Asian Journal of Management*, 13(1), 46–60.
- Kristor-Brown, A.L., Zimmerman, R.D. & Johnson, E.C. (2005). Consequences of individual's fit at work: A meta-analysis of person-job, person-organization, person-group, and personsupervisor fit. *Personnel Psychology*, 58(2), 281–342.
- Madjar, N., Oldham, G.R. & Pratt, M.G. (2002). There's no place like home? The contributions of work and nonwork creativity support to employees' creative performance. Academy of Management Journal, 45(4), 757–767.
- Max, M. (2001). Encouraging employee creativity. *Strategic Finance*, 83(6), 16–18.
- Martin, E.C. & Terblanche, F. (2003). Building organisational culture that stimulates creativity and innovation. *European Journal of Innovation Management*, 6(1), 64–74.
- McClelland, D.C. (1985). *Human motivation*. Glenview, IL: Scott Foresman.

Asia-Pacific Journal of Management Research and Innovation, 10, 2 (2014): 119-127

- McKenna, E.F. (2000). Business psychology and organisational behaviour: A student's handbook. Hove: Psychology Press.
- Nandi, J.K. (2008). Achievement motivation amongst front line managers. *The ICFAI Journal of Organizational Behavior*, 7(3), 58–64.
- Oldham, G.R. & Cummings, A. (1996). Employee creativity: Personal and contextual factors at work. Academy of Management Journal, 39(3), 607–634.
- O'Reilly, C.A., Chatman, J. & Caldwell, D.F. (1991). People and organizational culture: A profile comparison approach to assessing person–organization fit. *Academy of Management Journal*, 34(3), 487–516.
- Pareek, U.N. & Purohit, S. (2009). Training instruments in HRD and OD. New Delhi: Tata McGraw Hills.
- Phipps, S.T. (2011). Knowledge is power? An inquiry into knowledge management, its effects on individual creativity, and the moderating role of an entrepreneurial mindset. Academy of Strategic Management Journal, 11(1), 43–57.
- Pieterse, A.N., van Knippenberg, D., Schippers, M. & Stam, D. (2010). Transformational and transactional leadership and innovative behavior: The moderating role of psychological empowerment. *Journal of Organizational Behavior*, 31(4), 609–623.
- Pitta, D.A. (2009). Creating a culture of innovation at Portugal telecom. *Journal of Product & Brand Management*, 18(6), 448–451.
- Shalley, C.E., Zhou, J. & Oldham, G.R. (2004). The effects of personal and contextual characteristics on creativity: Where

should we go from here? *Journal of Management, 30*(6), 933–958.

- Simons, R. (1995). Control in an age of empowerment: How can managers promote innovation while avoiding unwelcome surprises? *Harvard Business Review*, 73(2), 80–88.
- Spreitzer, G.M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. Academy of Management Journal, 38(5), 1442–1465.
- Srivastava, A.K. (2008). Differential climate in the organization: An empirical study across qualification levels. *The Icfaian Journal of Management Research*, 7(6), 23–33.
- Street, D.L. & Bishop, A.C. (1991). An empirical examination of the need profiles of professional accountants. *Behavioral Research in Accounting*, 3(1), 97–116.
- Sun, L.Y., Zhang, Z., Qi, J. & Chen, Z.X. (2012). Empowerment and creativity: A cross-level investigation. *The Leadership Quarterly*, 23(1), 55–65.
- Tayal, R. & Rangnekar, S. (2009). An empirical study of HR factors as determinants of talent management. *Adarsh Journal* of Management Research, 2(1), 4–20.
- Thomas, K.W. & Velthouse, B.A. (1990). Cognitive elements of empowerment: An interpretive model of intrinsic task motivation. Academy of Management Review, 15(4), 666–681.
- Velthouse, B.A. (1990). Creativity and empowerment: A complementary relationship. *Review of Business*, 12(2), 13–18.
- Veroff, J. (1982). Assertive motivations: Achievement versus power. In A.J. Stewart (Ed.), *Motivation and society* (pp. 99–132). San Francisco: Jossey-Bass.
- Wallach, E.J. (1983). Individuals and organisations: The cultural match. *Training and Development Journal*, 37(2), 29–36.