

Chapter 9

Role Efficacy and People Flexibility: Examining Moderating Functions of Demographic Factors

Umesh Kumar Bamel, Renu Rastogi, Santosh Rangnekar
and Shyam Narayan

9.1 Introduction

In recent years, there have been extensive academic endeavors to understand the concept of flexibility and its interplay with organizational outcomes. Flexibility has been a recurring theme in contemporary scholarly writings (*strategy* in Sushil 2005, 2010; *product development* in Sanchez and Perez 2003; *marketing* in Singh 2011; *operations* in Dalpati et al. 2010; *people/people flexibility* in Bamel et al. 2011, 2013; Piansoongnern 2013; *creativity and innovation* in Prasad and Prasad 2013). Publication of a journal (*Global Journal of Flexible Systems Management*) and organization of an annual international academic conference (*GLOGIFT*) on flexibility and related concepts have substantially held the meaningfulness of the construct. As evident in literature it is a diverse, multidimensional, and multilevel construct.

.....the term flexibility is used at various levels. It is used at the level of products, processes, people, management, organizations, strategy, systems, structure, nation culture and frame of mind.
Sushil 2010

In the present chapter flexibility has been studied from people's perspective, i.e., people flexibility and it may be referred to as an extension of the author(s) previous

U. K. Bamel (✉)
Indian Institute of Management Raipur, 492001 Raipur, India
e-mail: umeshbamel@gmail.com

R. Rastogi
Department of Humanities and Social Science, Indian Institute of Technology Roorkee,
Roorkee, India

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

S. Narayan
National Institute of Technology, Kurukshetra, India

efforts. In a similar study conducted previously, we (*see in* Bamel et al. 2013) addressed the three main questions, i.e., what is people flexibility? What is its significance? And how to improve/impart people flexibility? We have defined people flexibility by considering the generic assumption of flexibility (Sushil 2001) and by synchronizing it with the views about flexibility given by different scholars (Mott 1971; Drazin and van de Ven 1985; Volberda 1996). According to the definition “...people flexibility simply may be viewed as the ability to take advantage of the pragmatic and opportunistic changes by freely selecting the best suitable options” (Bamel et al. 2013). To answer the second question we have drawn evidence from the available literature and correlated flexibility with people effectiveness. While addressing the concern about how to impart (predictors of) flexibility, organizational processes have been examined as its predictors. In continuation, the present study is an attempt to widen the inventory of people flexibility predictors. At this juncture, a possible question might arise, i.e., what is the rationale for doing so? If we propose and conceptualize people flexibility theoretically and urge about its importance, subsequently, we must be able to answer the practical question: how to improve people flexibility? And then only the presence of this construct would become more valuable. We aim to explore the possible ways of improving people flexibility, and therefore, in the present case role-efficacy perception of managers and its dimensions have been proposed and tested as predictors of their flexibility. In the next section theoretical framework is presented. Theoretical framework is followed by methodology, analysis, and discussion. Conclusion and suggestions for implication are also given.

9.1.1 Role Efficacy and People Flexibility

Research on role efficacy has reported its beneficial consequences on many workplace constructs (individual as well as organizational), e.g., the internal locus of control (Sayeed 1989), coping with stress, job satisfaction, motivation, managerial effectiveness (Bamel et al. 2013; Sayeed and Jain 2001), and so on. The term first appeared in the early writings of Pareek (1980, 1987, 1993) who proposed role efficacy as the potential effectiveness of the role occupant. Subsequently, the association of role efficacy with other variables has been explored. According to Pareek, it has two attributes, i.e., role perception and role expectation. Role efficacy is found to be directly proportional to the degree of alignment between these two said attributes. Another assumption about role efficacy is that it is considered as a cognitive element and is believed to affect the role occupant’s belief in his/her knowledge, skills, and abilities. In other words it may be understood as the perception of the role occupant about “...*the extent to which she believes that role has the potential to be effective depends upon whether they feel themselves capable of executing the role effectively*” (Pethe and Choudhary 2000). It is the role occupant’s perceived confidence in his/her abilities to perform. Our presumption that role efficacy would predict people flexibility is founded on the scholarly claim that it is a cognitive element and it augments the role occupant’s confidence in the given role.

Ever-changing workplace environment continually changes managerial roles. A manager who adjusts, adapts, and responds to the dynamic factors is more likely to enhance organizational value (Tsui 2004). A manager's ability to be responsive to changes is nothing but people flexibility. It is an employee's ability to make alignment of his actions with continuous changes. The role occupant's perception of his/her abilities leads to the formation of self-schema or self-concept (Marsh et al. 1991; Skaalvik 1997) and it is through this that role efficacy is believed to boost people flexibility. On the basis of this presumption, we propose that role efficacy would predict people flexibility positively and significantly. To be more specific, following hypotheses were framed on the basis of this presumption.

Hypothesis 1: Role-making perception of Indian managers would predict their flexibility.

Hypothesis 2: Role-centering perception would lead to people flexibility of Indian managers.

Hypothesis 3: Role-linkage perception would lead to people flexibility of Indian managers.

9.1.2 Moderating Effect of Demographic Variables

Since the proposition of Cohen (1978), the role of demographic variables (such as age, gender, ethnic belongingness, education, expertise, social class, geographical locations, etc.) have been studied by organizational researches. These variables are assumed to influence the relationship between predictor and criterion variables in terms of strength (weak and strong) and direction (positive and negative) (Barron and Kenny 1986; Frazier et al. 2004; Wu and Zumbo 2008). Studies have reported the existence of moderation effect due to gender, hierarchy, and type of organization (Booyesen and Nkomo 2010; Gbolahan and Catharine 2012; Riquelme and Rios 2010; Kaiser and Craig 2011; Rastogi et al. 2012). Following this, we also intend to test the moderating effect of gender, hierarchy, and type of organization on the role efficacy–people flexibility relationship. Hypothesis 4 of the study has been developed to examine the said effect.

Hypothesis 4: Demographic characteristics (gender, hierarchy, and type of organization) of managers would moderate the relationship between role-efficacy perception and people flexibility.

9.2 Methodology

9.2.1 Participants and Procedure

The present study is a cross-sectional survey that has used structured questionnaires to obtain data from a sample of 348 managers in India. Questionnaires were administered directly to respondents. The instrument used was a structured questionnaire

Table 9.1 Demographic characteristics of participants

Variables		Private sector		Public sector	
		Number	% of total	Number	% of total
Age (years)	(Number, %)				
	> 30 (155, 44.5)	108	31	47	13.5
	30–40 (102, 29.3)	73	21	29	8.3
	40 < (91, 26.1)	29	8.3	62	17.8
Gender					
	Male (308, 88.5)	188	54	120	34.5
	Female (40, 11.5)	22	6.3	18	5.2
Education					
	Diploma (28, 8)	22	6.3	6	1.7
	Graduate (145, 41.7)	71	20.4	74	21.3
	Postgraduate (155, 44.5)	101	29	54	15.5
	Doctorate (20, 5.8)	16	4.6	4	1.1
Managerial level					
	Junior (154, 44.3)	108	31	46	13.2
	Middle (95, 27.3)	67	19.3	28	8
	Senior (99, 28.4)	35	10.1	64	18.4
Total	(N 348, 100)	210	60.3	138	39.7

Note: source primary data

with closed-response options. Table 9.1 reports the demographic characteristics of respondents.

9.2.2 Measures

The scale used to measure role-efcacy perception was taken from the work of Pa-reek (1987). This scale contains 20 questions and intends to assess the participants' perception of role making (8 questions); role centering (6 questions), and role linkage (6 questions). In order to ascertain the reliability of the scale and of its factors, Cronbach's alpha (reliability coefficient) was calculated and the obtained values

were found to be satisfactory (i.e., 0.76 for the role-efficacy scale, and 0.62, 0.60, 0.59 for role making, role centering, and role linkage, respectively).

The measure of people flexibility is composed of five items and originally is a part of Mott (1971) work. The single-factor scale has been validated in the Indian context (Bamel et al. 2013, 2014). A five-point likert scale was used to record the responses. These items cover behavioral aspects such as making adjustment to changes, responding to emergencies, and so on. The Cronbach’s alpha value of people-flexibility scale was 0.67.

9.3 Analysis and Results

Data analysis has been done in three steps. Appropriateness of the data (Table 9.2) (normality, multicollinearity and reliability) and descriptive statistics (Table 9.3) were calculated in the first step. The values for skewness, kurtosis, and VIF held the appropriateness of the data for quantitative analysis.

Results for descriptive statistics, i.e., mean score, standard deviation, and correlation coefficient are listed in the Table 9.3. The correlation matrix reveals an existence of significant relationships between role-efficacy dimensions and people flexibility. These results correspond to what we proposed in H1, H2, and H3. Though, in order to test the predictive function, hierarchical regression was employed subsequently.

In the second step, hierarchical multiple regression was employed using SPSS 17 to test the research hypotheses. Gender, managerial level, and type of organization were treated as control variables. The predictor variables were entered as follows: step one control variables (gender, managerial level, and type of organization); step two: step one+role making; step three: step two+role centering; and step four: step three+role linkage. Table 9.4 presented the results of hierarchical multiple regression analysis.

Table 9.2 Normality, reliability, multicollinearity statistics

N 348	Skewness		Kurtosis		Croanbach’s alpha	VIF
	Statistic	SE	Statistic	SE		
RE	0.197	0.131	0.524	0.261	0.76	1.041
RM	-0.125	0.131	-0.617	0.261	0.62	1.530
RC	-0.361	0.131	-0.018	0.261	0.60	1.472
RL	-0.502	0.131	-0.172	0.261	0.59	1.377
PF	-0.113	0.131	0.277	0.261	0.67	

Source: primary data, *N* total no. of participants, significance level <0.05; *RE* role efficacy, *RM* role making, *RC* role centering, *RL* role linkage, *PF* people flexibility, *SE* standard error, *VIF* variance inflation factor

Table 9.3 Descriptive statistics

	Man.	Org	RE	RM	RC	RL	PF
Gen.	0.10	-0.03	0.02	0.01	0.029	0.01	0.10
Man.		0.28**	0.10	0.09	0.11*	0.05	0.12*
Org			-0.06	-0.11*	-0.08	0.01	-0.08
RE				0.83**	0.76**	0.76**	0.33**
RM					0.51**	0.46**	0.28**
RC						0.44**	0.27**
RL							0.27**
Mean			2.26	2.29	2.13	2.34	3.33
SD			0.37	0.39	0.36	0.38	0.63

Note: source primary data, significant at * $p < 0.05$, ** $p < 0.01$, *Gen.* gender, *Man.* managerial level, *Org* type of organization, *RE* role efficacy, *RM* role making, *RC* role centering, *RL* role linkage, *RE* role efficacy, *PF* people flexibility

Demographic variables such as gender, managerial level, and type of organization explains only 2.7% ($R^2.027$; $F(1, 346) 4.726, p > .05$) variance in the dependent variable. In the second model, role making was added and this increased the variance significantly by 6.3% ($R^2.09$; $F(2, 345) 11.344, p > .000$). The third model adds role centering, and it significantly increased the R^2 by 1.8% ($R^2.109$; $F(3, 344) 10.438, p > .000$). In the fourth model role linkage has been inserted and it improves the R^2 by 1.7% ($R^2.126$; $F(4, 343) 9.826, p > .000$). The retained model

Table 9.4 Hierarchical regression analysis results (PV role-efficacy factors, DV people flexibility)

	Predictors	Step 1b	Step 2b	Step 3b	Step 4b
1	Constants	16.484	11.774	10.258	9.059
	Gender	0.052	0.059	0.062	0.055
	Managerial level	0.148**	0.113*	0.102*	0.107*
	Type of organization	-0.121*	-0.084	-0.076	-0.087
2	1 + role making		0.256***	0.176**	0.124*
3	2 + role centering			0.159**	0.177*
4	3 + role linkage				0.153**
	F change	4.793	23.952	7.115	6.686
	Sig. F	0.05*	0.01**	01**	01**
	R^2	0.027	0.09	0.109	0.126
	Adj. R^2	0.021	0.082	0.10	0.113
	R^2	0.014	0.063	0.018	0.017

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; *PV* predictor variable, dependent variable, $N = 348$, *b* standardized beta score

(fourth model) has significantly explained approximately 12.6% variance in people flexibility (R2 12.6%, adjusted R2 11.3%). Further, regression results also withheld role making (standardized beta value .124, $t(1.98) p < 0.05$), role centering (standardized beta value .177, $t(1.94) p < 0.05$), and role linkage (standardized beta value .153, $t(2.568), p < 0.01$) as significant predictors of people flexibility.

Thereafter, bootstrapping was employed by using the structural equation modeling to ascertain the moderating effect of demographic variables. The moderation effect means that the value of a moderator variable affects the strength or direction of the relationship (Barron and Kenny 1986). To achieve this objective, three sub-hypotheses were developed: hypothesis 4a for moderation effect of gender, hypothesis 4b for moderation effect of managerial level, and hypothesis 4c for moderation effect of the type of organization and critical ratios (CR) were calculated.

Hypothesis 4a postulates that the role efficacy–people flexibility relationship would differ for male and female groups. The results show that the total effect for male and female managers are .17 and .13 respectively (Fig. 9.1). However, the critical ratio difference between these two groups is not found significant ($a1/a2 - .346$ lies within the range of z score (± 1.96) at 95% significant level). Hence, the assumption that gender would cause a difference in the relationship of role efficacy and people flexibility stands rejected.

Similarly, the moderated function of managerial level was tested. The results show that the total effects for junior, middle, and senior managers are .12 (SE .047, significant at .001), .14 (SE .043, significant at .01), and .24 (SE .043, significant at .001), respectively (Fig. 9.2). The critical ratio difference between junior managers and middle managers was found insignificant (critical ratio difference score $a1/a2 - .446$ and was within the range of z score (± 1.96) at 95% significant level). A significant moderation effect was found between the pairs of junior and senior

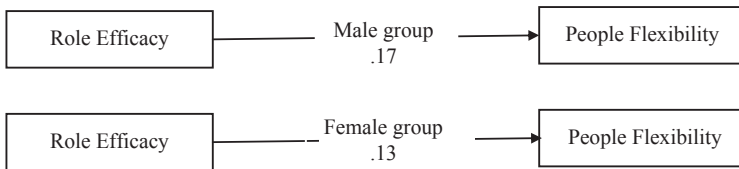


Fig. 9.1 Moderated path for male and female managers

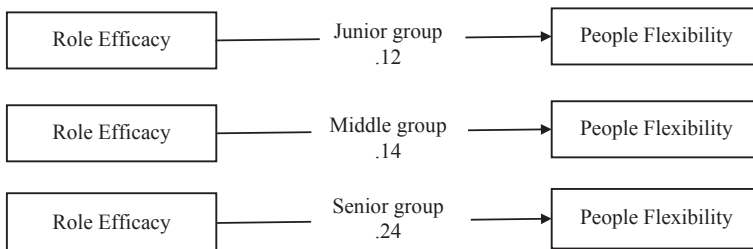


Fig. 9.2 Moderated paths for junior, middle, and senior managers

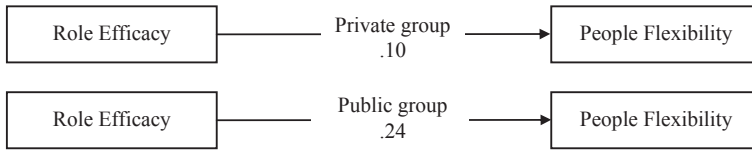


Fig. 9.3 Moderated path for private and public managers

managers (critical ratio difference (1.98) was found beyond the range of z score at 95% significant level), and the middle and senior managers (critical ratio difference (2.007) was found beyond the range of z score at 95% significant level). The critical ratio differences between these three groups confirmed the partial moderation effect of managerial level.

Likewise, the critical ratio difference was calculated for public and private managers (type of organization). The results show that the total effects for private and public managers are .10 (SE .033, significant at .001), .24 (SE .038, significant at .001), (Fig. 9.3). The critical ratio difference ($a1/a2$ 2.987 and was beyond the range of z score (± 1.96) at 95% significant level) between junior managers and middle managers was found significant and thus proved the moderation function of the type of organization on role efficacy and people flexibility relationship.

9.4 Discussion

The purpose of the present study was to measure role-efficacy perception as predictor of people flexibility. In addition, efforts were made to examine the moderating effect of demographic variables. Role-efficacy perception and its factors (role making, role centering, and role linkage) were proposed and subsequently tested as predictors of people flexibility. The findings of the study supported our hypotheses. Bandura (1977, 1999, 2007) also apprehended the notion and purported that efficacy belief of role occupant leads to desired behavioral outcomes. In the present study, we also addressed people flexibility as a behavioral aspect. Therefore, Bandura's argument augments the findings of the present study. Role-efficacy perception fosters the process of introspection in terms of judging internal strengths and capabilities, and this internal assessment improves the concept of the self in relation to surroundings. In addition, understanding of the self in terms of possessed resources (knowledge, skills, and abilities) accelerates the probabilities of individual responsiveness towards changes. In other words, the awareness of the self in occupied role develops people flexibility. For example, if there is a change in technology, the manager who lies within the scope of this change has to acquire a specific skill set to imbibe this technical change. Here, the self-awareness would tell the manager about the availability of the requisite skill set. And, in case if it is not available, it prompts the manager to obtain it. Acquiring a new skill set to manage the change may be termed as a manager's responsiveness towards change.

Moving ahead, the moderating function of demographic variables was ascertained. The results revealed that gender does not interact with the said causal path. In other words, no significant change exists for male and female managers. Both categories of managers seem to recognize the importance of self-belief and self-awareness in managing changes around them. Next, exploration was done to see the moderation effect of managerial level. And the results seemingly support the assumption of Pareek (2008) that role-efficacy perception increases gradually with experience. The strength of the relationship between role efficacy and people flexibility increases from junior to senior level, and a significant difference was observed among junior and senior, and middle and senior categories. However, the difference between junior- and middle-level managers was not significant. A huge and significant difference was observed among private and public category managers. Public category managers outperformed private managers. A possible explanation for this outcome lies within the data set itself; in the private category, the majority of respondents (30%, in Table 9.1) are from the junior-level position whereas in the public category, senior-level managers constitute the largest portion of the data set (17.8%, in Table 9.1). Therefore, in a way this finding too generalizes the effect of the managerial level; however, the moderating effect of the organization type is still inconclusive. This may be taken as a potential limitation of the present study.

9.5 Conclusion

The present study examined the functions of role efficacy and its dimensions (role making, role centering and role linkage) as predictors of people flexibility. In addition, the moderating functions of demographic variables were studied on the said causal path. Following are the conclusions from the study:

- Role making is a significant and positive predictor of people flexibility.
- Role centering is a significant and positive predictor of people flexibility.
- Role linkage predicts people flexibility positively and significantly.
- No moderating effect of gender was observed on the said causal path.
- Managerial-level wise, the quantum of relationship index increases from junior to senior level.
- Moderating role of type of organization is not apparent because of the nature of the data set because variable “managerial level” seemed to appear as confounding variable.

Despite the audacious claims which the present study has made about predictors of people flexibility, it is not free from some inherited limitations. The nature of the data itself has appeared to be as a noteworthy limitation. Second, for achieving research objectives, a positivistic approach by using a cross-section methodology was used. Generalization of the results could not be made as triangulation of methodologies was not used. Another limitation is related to belief of what is people flexibility; the concept is still in its nebulous stage and needs more scholarly endeavors to

mature. However, the presence of these limitations does not paralyze the potential contribution of the present study:—in terms of its application and contribution in the existing knowledge base of people flexibility. Implication wise, the knowledge of how role-efficacy factor contributes towards people flexibility could be used to shape people flexibility. Some role-related interventions such as involvement of the role holder in role development and expanding the interaction among different roles in organization may be developed “more particularly” for shaping people flexibility.

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