

# Employee Involvement & Flexible Role Orientation: A Moderated Mediated Model

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*The rising uncertainty and growing competitiveness among modern organizations call for concerted efforts from all stakeholders. It is desirable that employees shun job myopia and adopt generous outlook (flexible role orientation or FRO) while defining their job scope. Present study empirically examines the role of participative decision making (PDM) and job autonomy in developing FRO in a moderated mediation model. A questionnaire survey (N=338) was conducted in a large Indian IT company and it was found that both PDM and job autonomy were positively related to FRO through psychological ownership. This mediated relationship was further moderated by role breadth self-efficacy. Theoretical and practical implications of these findings were discussed and future research possibilities are suggested.*

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## Introduction

Due to its dynamism, modern work organizations expect their employees to contribute more intensively and in a wider span of activities (Mohrman & Cohen, 1995) and abandon the restrictive notion of job myopia (Davis & Wacker, 1987). The idea of 'concerted efforts by all' has been variously promoted by scholars and finds support by practitioners as well (Stayer, 1990). Today, organizations are willing to allow their educated and technologically oriented workforce to involve (Connell, 1998) by means of different participatory work practices (Wright & Boswell, 2002). Among others, High Involvement Work Processes or HIWP (Lawler, 1996) is one of the conceptualizations suggested in the extant literature for these practices. HIWP is expected to promote a sense of control and empowerment and result in many favorable workplace outcomes (Butts et al., 2009), including 'generous' outlook towards one's role in the organization (Parker et al., 1997; Parker, 2007). Present work is focused on the relationship between HIWPs (particularly participative decision making or PDM and job autonomy) in the Indian context. This is the main objective of this study.

Implementation of involvement practices constitutes only the necessary condition for purported organizational benefits (Bowen & Lawler, 1992). The favorable outcomes are manifested when these practices trigger a psychological process leading to a sense of participation (Butts et al., 2009; Pierce et al., 1991). Thus, as our second objective, we tested the influence of a couple of variables in shaping the aforementioned relationships. Specifically, the roles of psychological ownership and role breadth self-efficacy (RBSE) were tested in a moderated mediation model. Results provided some key insights for academics and practitioners.

## Literature Review

The idea of employee participation has gained widespread recognition and attracted attention during the last two decades. Modern management theorists argue against the traditional Tayloristic vision of employees where they are seen as mere passive cost centers and call for a humanistic vision that breeds empowerment and allows for active participation from employees (Aktouf, 1992). Though different conceptualizations related to employee participation have been offered, like HIWP (Lawler, 1992), employee empowerment (Thomas & Velthouse, 1990), psychological empowerment (Spreitzer, 1995), perceived control (Spector, 1986), yet employee participation and sharing of responsibilities remained the common theme. These concepts describe the way in which power and authority are shared in an organization between those with and without for-

mal authority. All these concepts are linked to tangible and intangible outcomes at different levels. For example, HIWP has sanguine impact on organizational level variables like turnover, productivity and financial performance as well as on individual level variables such as better skill utilization and higher morale (Vandenberg et al., 1999). The present study focuses on two forms of HIWP: participative decision making (PDM) and job autonomy at workplace (Lawler, 1992). PDM (Bowen & Lawler, 1992) and job autonomy (Liu et al., 2011) are also suggested as determinants of employee empowerment.

PDM is defined as the “process of involving employees in decisions typically made by managers and usually involves the cascade of control and decision-making responsibility from managers to employees” (Russ, 2011). This way, PDM is a collaborative decision making process and has many positive workplace outcomes, such as job satisfaction (Kim, 2002), and performance (Wagner, 1994). Cotton et al. (1988) asserted that informal participation and employee ownership (forms of participation) were more effective in improving productivity and job satisfaction whereas short term participation was not effective at all. Glew et al. (1995) posited that PDM also results in favorable employee behavior (as productivity, turnover, and absenteeism) by affecting their attitude (e.g. commitment, job satisfaction).

Apart from PDM, management scholars also advocated alteration in job dimensions to create sense of control

(Spector, 1986). Emergence of job characteristic model by Hackman and Oldham (1976) was one of the successful outcomes in this direction. As described by these scholars, job autonomy is “the degree to which the job provides substantial freedom, independence, and discretion to the individual in scheduling the work and determining the procedures to be used in carrying it out” (Hackman & Oldham, 1980:162). Job autonomy is considered to be the most important characteristic of job design (Breaugh & Becker, 1987), especially for knowledge workers (Janz et al., 1997) as in our case. The freedom to choose elements of job is associated with perceived sense of control (Rudmin & Berry, 1987; Pierce et al., 2001). Autonomy also cultivates sense of self-determination that intrinsically motivates employee and encourages self-initiation (Gagne, 2003). Job autonomy is also related to employees’ organizational commitment (Bono & Judge, 2003) and ‘experienced responsibility’ (Parker et al., 2001) that may be related to greater ‘concern’ for the organization.

The concept of psychological ownership belongs to the stable of positive OB (Avey et al., 2009) and is defined as “a state of mind in which individuals feel as though the target of ownership (material or immaterial in nature) or a piece of it is theirs” (Pierce et al., 2001). Literature suggests that psychological ownership is one of the three main employee-organizational linkages (Sparrow & Cooper, 2003). It is a malleable entity and can be developed through three routes (Pierce et al., 2001) namely, (i) by controlling the target (ii) by knowing the tar-

get well, and (iii) by investing into the target i.e. by directing one’s physical, cognitive and psychic energies.

**In today’s era, performance of a fixed set of prescribed roles is insufficient to gain competitive advantage and flexible role orientation becomes a key requisite.**

Flexible role orientation (FRO) is described as the mindset of employees wherein they feel ownership of output and take initiatives in solving a broad range of problems (Parker et al., 1997; Parker, 2000). The concept is linked to employee’s engagement in broad open-ended and interdependent roles which are not restricted by “that’s not my job” attitude. While highlighting its importance, Parker (2000) suggests that in today’s era, performance of a fixed set of prescribed roles is insufficient to gain competitive advantage and flexible role orientation becomes a key requisite. Parker et al. (1997) suggested that the competitiveness can best be achieved by increased responsiveness to the customer demands (strategic orientation). But the strategic orientation towards the organization is hardly more than an endorsed set of beliefs and employee needs to develop FRO for converting these beliefs into action. As far as outcomes are concerned, FRO was found to be better predictor of performance in comparison to other job attitudes, like job satisfaction (Parker, 2007).

Role breadth self-efficacy (RBSE) refers to self-perceived ability to suc-

cessfully perform proactive behavior under a wide range of organizational contexts. In terms of Parker (1998:835), “RBSE concerns the extent to which people feel confident that they are able to carry out a broader and more proactive role, beyond traditional prescribed technical requirements”. RBSE can be differentiated with self-efficacy as the former is a judgment about capability across a particular set of proactive interpersonal and integrative tasks whereas the latter is a judgment about specific task capability (Parker, 2000). RBSE is associated with proactive behavior and literature shows that it positively relates to and moderates the relationship with employee’s initiative taking tendency (Hartog & Belschak, 2012).

### **Theoretical Framework & Hypotheses**

Literature suggests relationship of HIWP and ownership. According to Sashkin (1976), participation influences organizational outcomes through sense of ownership (similar to psychological ownership). Pierce et al. (1991) also suggested that various employee ownership schemes produced benefits if mediated by psychologically sensed ownership. The linkage has been empirically validated as well (O’Driscoll et al., 2006). Scholars (e.g. Pierce & Rodgers, 2004:599) also emphasized the importance of perceived control in job (particularly job autonomy and participation) in developing ownership feelings and provided support as well (Mayhew et al., 2007).

Hence, we expect similar results in the present settings and propose the following hypotheses:

H1(a): PDM will be positively related to psychological ownership.

H1(b): Job autonomy will be positively related to psychological ownership.

Next, psychological ownership inculcates feeling of ownership for workplace problems (Parker et al., 1997) that leads to development of role orientation (Parker et al., 2007). Moreover, it is known that psychological ownership develops through suggested routes of ‘gaining control’ and ‘knowing the target’ (characteristics of job autonomy and PDM), and perception of control and knowledge about work are key precursors to FRO (Zammuto & O’Connor, 1992; Parker et al., 1997).

Hence, we propose the following hypotheses:

H2(a): The relationship between PDM and FRO is mediated by psychological ownership.

H2(b): The relationship between job autonomy and FRO is mediated by psychological ownership.

Finally, we contend that sense of ownership may not lead to development of FRO if employees do not feel capable of performing related and integrative tasks. On the contrary, employees high on role breadth self efficacy (RBSE) would require lesser encouragement to take initiatives (Speier & Frese, 1997) in ‘going an extra mile’ while defining their

role. Moreover, literature suggests that RBSE leads to 'pro-activity' (denoted by FRO) when one is willing to fulfill one's responsibilities (Frese et al., 2007).

On the basis of these arguments, we propose following hypotheses:

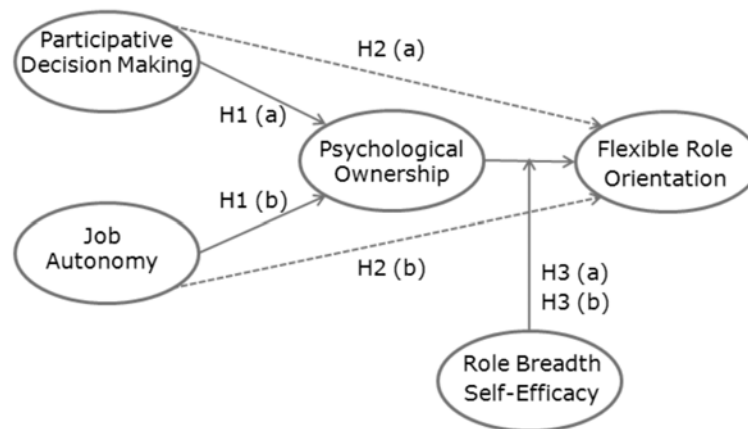
H3(a): The mediated relationship mentioned in H2(a) is further moderated by RBSE such that the relationship

gets strengthened when RBSE is high.

H3(b): The mediated relationship mentioned in H2(b) is further moderated by RBSE such that the relationship gets strengthened when RBSE is high.

The model depicting the theoretical framework is presented below in Fig 1.

**Fig 1: Proposed Theoretical Framework**



## Sample

Data for the present study were collected using online questionnaire survey method from a large Indian IT MNC. As per the suggestion of HR department, the online questionnaire (Google forms) was circulated to some of the mid-level managers who, in turn, circulated it to their peers and subordinates. This snowball sampling method ensured requisite confidentiality and anonymity of respondents. The exercise yielded 384 responses

within a period of two months of which 338 complete forms were obtained upon scrutinizing for missing data and considered for further analysis.

## Measurements

Following measures were used in this study. Corresponding Cronbach's alpha values are indicated within parentheses.

*Job Autonomy* ( $\alpha = .877$ ) was measured by 3-item scale developed by

Hackman and Oldham (1980). A sample item is “I can decide on my own how to go about doing my work”.

*Participative Decision Making* ( $\alpha = .897$ ) was measured with 5-item scale developed by Siegel and Ruh (1973). A sample item is “In this organization, I can participate in setting new company policies”.

*Psychological Ownership* ( $\alpha = .917$ ) Organization based psychological ownership was measured using van Dyne and Pierce’s (2004) 7-item scale. A sample item is “I sense that this is company”.

*Role Breadth Self-Efficacy* ( $\alpha = .857$ ) (RBSE) was measured with 7-item scale developed by Parker et al. (2006) with sample item as “I feel confident in representing my work area in meetings with senior management”.

*Flexible Role Orientation* ( $\alpha = .926$ ) was developed for Indian context by the

first author. Items were adapted from literature (Parker et al., 1997) and purified in a pilot study (N=234) using item-to-total correlations and factor analysis to obtain an 8-item scale. Sample items are “I understand how the work flows in my workplace” and “I am concerned if other members are not pulling their weight”.

All the alpha values were above the suggested cut-off of .7 (Nunnally, 1978). The items were rated on a 7-point Likert scale. A few demographic control variables (viz. age, gender, designation and tenure in the company) were also included in the questionnaire for their possible confounding effect. Designations were classified into hierarchical positions as ‘Junior’ and ‘Mid’ level as per HR guidelines.

### Preliminary Analyses

The demographic profile of sample is presented in Table 1.

**Table 1 Demographic Details of the Sample (N = 338)**

| Variable         | Levels    | No. of Observations | %    |
|------------------|-----------|---------------------|------|
| <i>Gender</i>    | Male      | 217                 | 64.2 |
|                  | Female    | 121                 | 35.8 |
| <i>Age Group</i> | < 25      | 32                  | 9.5  |
|                  | 25-30     | 143                 | 42.3 |
|                  | 30-35     | 112                 | 33.1 |
|                  | 35-40     | 43                  | 12.7 |
|                  | > 40      | 8                   | 2.4  |
| <i>Hierarchy</i> | Junior    | 181                 | 53.5 |
|                  | Middle    | 157                 | 46.5 |
| <i>Tenure</i>    | < 1 year  | 24                  | 7.1  |
|                  | 1-2 years | 53                  | 15.7 |
|                  | 2-5 years | 162                 | 47.9 |
|                  | > 5 years | 99                  | 29.3 |

The sample is balanced in representing junior and mid-level hierarchies. About half of the sample fell into the age bracket of 25-30 years

and tenure class of 2-5 years.

Descriptive statistics and zero order correlations are shown in Table 2.

**Table 2 Descriptive Statistics and Zero Order Correlations**

|      | Mean  | SD   | Gen   | Age    | Hier   | Ten   | PDM    | Auto   | PO     | FRO    |
|------|-------|------|-------|--------|--------|-------|--------|--------|--------|--------|
| Gen  | 1.36  | —    | —     |        |        |       |        |        |        |        |
| Age  | 29.78 | 4.45 | .071  |        |        |       |        |        |        |        |
| Hier | 1.46  | .49  | .015  | .317** |        |       |        |        |        |        |
| Ten  | 3.49  | 2.26 | .071  | .840** | .326** |       |        |        |        |        |
| PDM  | 4.04  | .85  | -.008 | -.061  | -.023  | -.030 |        |        |        |        |
| Auto | 4.06  | .89  | -.075 | -.104  | -.021  | -.069 | .499** |        |        |        |
| PO   | 4.38  | .79  | .022  | -.128* | -.008  | -.094 | .493** | .490** |        |        |
| FRO  | 4.32  | .83  | .063  | -.059  | -.083  | .019  | .256** | .156** | .400** |        |
| RBSE | 4.56  | .64  | .121* | .015   | .060   | .044  | .168** | .118*  | .244** | .223** |

Note: \* $p < .05$ , \*\* $p < .01$ ; Gen: Gender (1=Male, 2=Female), Age: Age (years), Hier: Hierarchy (1=Junior, 2=Mid), Ten: Tenure (years), PDM: Participative Decision Making, Auto: Job Autonomy, PO: Psychological Ownership, FRO: Flexible Role Orientation, RBSE: Role Breadth Self Efficacy

Mean age of the participants is 29.78 years (SD=4.45) whereas mean tenure is 3.49 years (SD=2.26). Age is significantly and positively correlated to hierarchy and tenure. Correlation with hierarchy ( $r = .317$ ;  $p < .01$ ) indicates time-bound promotion policy of the company, especially at lower rungs. Rest of the control variables does not show significant correlation with other variables. Both PDM and job autonomy have moderate correlations (respectively  $r = .493$  and  $r = .490$ ;  $p < .01$ ) with psychological ownership and provide support to H1(a) and H1(b). Finally, psychological ownership is strongly correlated ( $r = .400$ ;  $p < .01$ ) with FRO.

### Common Method Variance (CMV)

To ascertain the severity of CMV, we conducted factor analysis using principal

component method without rotation (Harman's test). It resulted in a clear five factor structure (Eigen value greater than 1.0), comprising PDM, autonomy, ownership, FRO and RBSE, that explained 66.42 % variance. First factor accounted for 29.58 % variance which is less than 50 % of total variance explained and hence meets the requirement as suggested by Podsakoff et al. (2003). Thus CMV was not a serious problem. It was re-confirmed using confirmatory factor analysis (CFA) and result is shown in Table 3.

It is clear from fit indices (Byrne, 1998) that single factor model is a poor fit which again confirms absence of any extraneous factor. Also a good fit five-factor model provides preliminary support for construct validity of the included measures.



**Table 3 Results of CFA (Single and Five-factor Structure)**

| Models                       | Indices       |       |     |     |      |      |      |
|------------------------------|---------------|-------|-----|-----|------|------|------|
|                              | $\chi^2 / df$ | RMSEA | CFI | TLI | AGFI | SRMR | PGFI |
| 1-Factor                     | 21.03         | .244  | .68 | .65 | .30  | .16  | .34  |
| 5-Factor (Null)              | 1.45          | .037  | .99 | .99 | .90  | .039 | .75  |
| Med Only (Direct)            | 1.49          | .039  | .99 | .98 | .89  | .061 | .76  |
| Med Only (Direct + Indirect) | 1.49          | .038  | .99 | .98 | .89  | .059 | .75  |
| Med + Mod                    | 2.46          | .066  | .91 | .90 | .87  | .061 | .72  |

Note: Med (Mediation), Mod (Moderation)

### Mediation & Moderation Analyses

These analyses were conducted using Structural Equation Modeling (SEM) technique with LISREL 8.72. The complete hypothesized model was tested in four steps by testing intermediary models which were formed by introducing new variables and/ or paths. A summary of various fit indices for the discussed

models is provided in Table 3. We began with testing of a null measurement model that indicated no paths among variables. It had all five latent variables and their respective indicators. In our next model, we added the direct mediated relationship among job autonomy, PDM, psychological ownership and FRO. This model is shown in Fig 2. Respective indicators are not shown for sake of clarity.

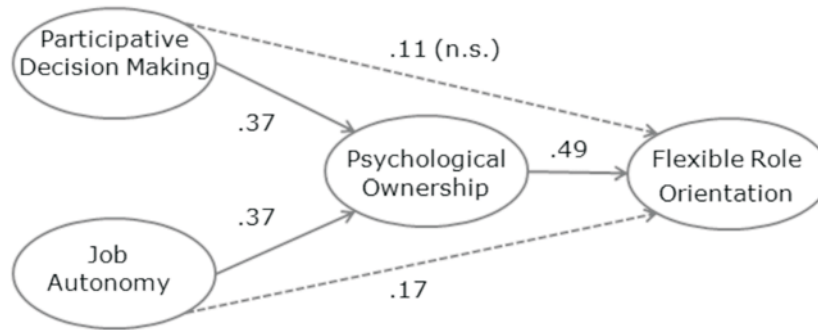
**Fig. 2 Mediated Model (Indirect Paths)**

Both, job autonomy ( $\beta=.38$ ) and PDM ( $\beta=.36$ ) are positively and significantly related to psychological ownership. Similar relationship ( $\beta=.45$ ) exists between psychological ownership and FRO. All the fit indices (Table 3) indicate an excellent fit (Byrne, 1998).

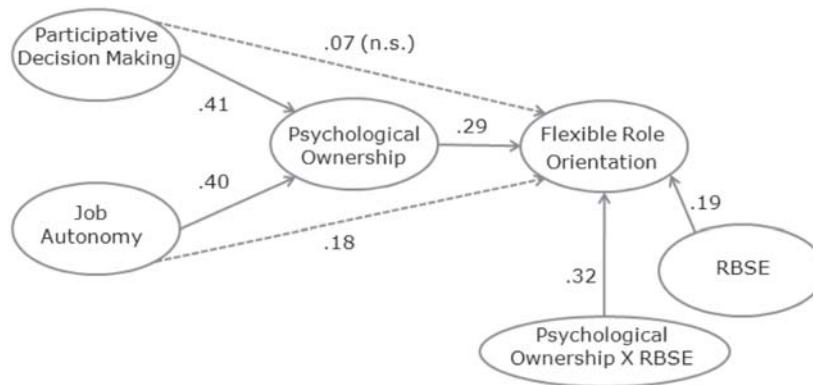
Indirect relationships (job autonomy and PDM to FRO) were incorporated in the next model (Fig 3). These models assessed the mediation hypotheses.

It is clear from Table 3 that this model is also an excellent fit (Byrne, 1998).



**Fig. 3 Mediated Model (Direct & Indirect Paths)**

However, the direct path coefficients (Fig 3) from job autonomy ( $\beta=.18$ ) and PDM ( $\beta=.07$ ; n.s.) are weak, indicating full mediation. It was further confirmed using Sobel's test. The values of z statistic [4.32 ( $p=.000$ ) and 4.47 ( $p=.000$ ) for cases of job autonomy and PDM respectively] indicated full mediation in both cases. Hence, our hypotheses H2(a) and H2(b) are fully supported.

**Fig. 4 Moderated Mediation Model**

(Note: RBSE – Role Breadth Self Efficacy; n.s. – Non significant)

Moving further, paths from role breadth self efficacy (RBSE) and its interaction with psychological ownership to FRO were introduced for testing moderation. All the scores were entered after standardization to check the problem of multicollinearity. The model is depicted in Fig 4.

RBSE ( $\beta=.19$ ) is weak but the interaction term ( $\beta=.32$ ) is moderately re-

lated to FRO. Model fit indices (Table 3) indicate reduced fit, probably due to increased complexity and associated loss of parsimony (Hu & Bentler, 1999). Though there exist no definite criteria that suggest variation in fit indices vis-à-vis model complexity (Marsh & Hau, 1996), an estimation of model fit can be made by considering indices in combination (Hooper et al., 2008). Accordingly, our mediated moderation model may be considered fairly fit on the basis of CFI (.91), RMSEA (.066), TLI (.90), AGFI (.87) and PGFI (.72). Hence, H3(a) and H3(b) are supported.

## Discussion

The study aimed to investigate relationships between two forms of participatory practices (PDM and job autonomy) and FRO through psychological ownership under different levels of RBSE. Organizational participatory practices are also termed as High Involvement Work Processes or HIWP. Results showed that there was significant positive association between PDM/job autonomy and psychological ownership which, in turn, was related to FRO. Besides, we observed full mediation by psychological ownership for both forms of HIWP. The strength of this mediation varied with the level of RBSE.

At least two inferences can be drawn from this study. The finding of full mediation by psychological ownership can address issues raised by scholars about employee participation policies and its associated benefits. We did not find significant direct relationship of PDM and

autonomy with FRO. This finding may be particular to this sample but finds support in literature. For example, Bowen and Lawler (1992) observed that presence of participatory practices may not always result desired benefits. By juxtaposing this observation against our research findings, it can be asserted that participatory practices are more likely to bear fruits when there is a simultaneous development of psychological ownership.

**Participatory practices are more likely to bear fruits when there is a simultaneous development of psychological ownership.**

Next, self-confidence of successfully carrying out related job tasks (RBSE) may play constructive role in further strengthening the aforementioned meditational relationships between organizational inputs (opportunities for participation) and attitudinal outcomes (FRO). So, RBSE in conjunction with strong feeling of ownership for the organization is likely to act as a catalyst in converting participatory initiatives to employees' FRO. Fortunately, psychological ownership (Pierce et al., 2001) and RBSE (Parker, 1998) are suggested to be dynamic in nature and are open to change and development.

## Managerial Implications

HIWPs are important within organizational context but mere notional presence won't help much unless supplemented by employees' ownership feelings and RBSE. As mentioned earlier,

psychological ownership can be developed by traversing through three routes (Pierce et al., 2001) of knowing the target better, controlling the target and investing into the target. It can be practically achieved by providing requisite training (know), according process ownership (control) and acknowledging one's contribution (invest). To strengthen RBSE, management should endeavor to inculcate a culture of learning by expanding horizontal (job enlargement) and vertical (job enrichment) scope of job. Moreover, peripheral knowledge about various job facets can be acquired by adopting policy of job rotation. Another way to improve RBSE is to redesign work so as to provide more opportunities for self-efficacy enhancing experiences, like introduction of quality circles (Parker, 1998).

## Conclusion

The study is first of its kind where HIWPs are linked with flexible role orientation through psychological ownership. Additionally the moderating role of RBSE was investigated. The findings are expected to pave way towards more successful implementation of HIWP.

A few alterations would be desirable in follow up studies. Though CMV was not a serious problem, future studies may be conducted using different data collection methods (interviews, paper based) and distribution of predictor and criterion questionnaires with sufficient time gap in between. Follow up studies may test the model using longitudinal design for making strong causal interpretations. Finally,

the impact of other forms of HIWP and empowerment (e.g. openness of communication, job enrichment) may also be analyzed to generate new insights.

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