# **Explaining Agricultural Personnel's Intrapreneurial Behavior: The Mediating Effects of Job Satisfaction and Organizational Commitment**

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#### **Abstract**

This study verified perceived organizational support (POS), psychological empowerment (PE), job satisfaction (JS), organizational commitment (OC) and intrapreneurial behavior (IB) as the research framework. Through a literature review, we examined causal relationships among these variables. The subjects of this study were agricultural personnel of Karaj city, Iran. Data was analyzed through descriptive statistics, confirmatory factor analysis, and the structural equation modeling. Results showed that agricultural personnel perceived their intrapreneurial behavior (IB) as moderate level (Mean = 3.27). Perceived organizational support (POS) and Job satisfaction (JS) were strong antecedents of organizational commitment (OC) than that of psychological empowerment (PE). Indirect effect of psychological empowerment on organizational commitment via mediating effect of job satisfaction was partially supported. Findings of this study revealed that perceptions of agricultural personnel about their organizational commitment had positive effects on their intrapreneurial behaviors. Overall, results of this study indicated that job satisfaction and organizational commitment were fully mediated the effects of perceived organizational support and psychological empowerment on intrapreneurial behavior. The overarching implication of this study was that capturing the perceptual antecedents could be implemented to foster intrapreneurial behaviors among agricultural personnel. Finally, a number of managerial implications were proposed.

**Keywords**: Intrapreneurial Behavior (IB); Agricultural Personnel; Perceived Organizational Support (POS); Organizational Commitment (OC)

#### 1. Introduction

Desultory measures for buttressing entrepreneurship and organizational development have been taken in most developing countries such as Iran country and produced multifarious problems and challenges at least for the next decade. In other words, there is a hiatus between the expectations of government concerning corporate entrepreneurship with the actual level of entrepreneurship in the current organizations of Iran country. Personnel are the main components of any organization to adopting and applying intrapreneurial concepts and behaviors in practice. According to Antoncic and Hisrich (2001), letting the personnel adopt and implement innovation and creativity in the organization may be one means of fostering growth in large as well as in small businesses when the enterprise has grown out of the hands of the entrepreneur.

Also, based on Pinchot and Pellman (1999), corporate entrepreneurship (Intrapreneurship) is an incremental and developmental process of renewal of the organizations through the innovation initiatives from their personnel. Overall, the changes that are taking place in today's business work environment have exerted incessantly pressure for different organizations to compete toward intrapreneurship by providing high quality and innovative products or services through innovative and proactive behaviors from their personnel. In order to achieve this, organizations need to emphasize on boosting intrapreneurial spirit and behavior among their personnel to sustain in long run. However, it has been acknowledged that fostering intrapreneurial behavior in existing organizations is imperative; the research on intrapreneurship and its determinants remains uncharted, particularly in the context of agricultural organizations from Iran country. As such, this study aimed to examine the relationships between job satisfaction (JS) and organizational commitment (OC) antecedents influencing intrapreneurial behavior (IB) of agricultural personnel. With catch a glimpse of entrepreneurial literature, one can observe that the prediction of the entrepreneurship process via single modeling of personality or demography characteristics resulted in low explanatory power on analyzing the factors affected intrapreneurial behaviors in the context of organizational environments. In this study work perceptions of agricultural personnel included job satisfaction (JS) and organizational commitment (OC). Moreover, organizational commitment and job satisfaction demands perceived organizational support and psychological empowerment.

We suggest here that perceptions of organizational support and psychological empowerment also should have an effect on job satisfaction and organizational commitment and consequently intrapreneurial behaviors of agricultural personnel. Corporate entrepreneurship or intrapreneurship within current organizations relates to personnel initiatives to start or undertake something new although they are not being asked to do so. For example, according to De Jong and Wennekers (2008), opportunity pursuit, resource acquisition, risk taking, proactiveness and innovativeness are believed to be the key components of intrapreneurial behaviors in different organizations such as agricultural organizations. According to De Jong and Wennekers (2008), there are several important characteristics of intrapreneurs which include: (1) proactive personnel who are self-starters or having initiatives to generate the new ideas, (2) personnel who find a way to pursue opportunities regardless of the resources controlled by them currently in organization, and (3) personnel who undertake something that are considered "innovative" or "new" and their actions and behaviors often deviate from the customary ways of doing things in existing organizations.

In organizational behavior literature, the issue of organizational commitment continues to receive attention from both practitioners and researchers (Avolio *et al*, 2004; Sturges *et al*, 2005; Van Knippenberg and Sleebos, 2006). Colbert and Kwon (2000) mentioned as organizations recognize the competitive advantage that can be gained through human resources, research on organizational commitment has gained its importance. Therefore, for an organization to have sustained performance efficiency in the product and labor market, highly committed employees are required. Allen and Meyer (1996) defined organizational commitment, as the psychological link between the employee and the organization that makes it less likely for an employee to want to leave voluntarily. Bartlett (2002) defined organizational commitment as personnel's attachment to or identification with their organization. Also, organizational commitment is seen as an emotional response to a positive appraisal of the work environment (Testa, 2001). Organizational commitment has been studied in different samples of hospital employees (Welsh and La Van, 1981), corporate employees (Wahn, 1998), manufacturing personnel (Allen and Meyer, 1990), police personnel (Dunham *et al*, 1994), bank employees (Mowday *et al*, 1974), university employees (Wahn, 1998), and so forth. The impact of organizational commitment on individual performance and organizational effectiveness has received much attention from researchers (Allen and Meyer, 1996; Mowday, 1998; Beck and Wilson, 2000).

Therefore, what predicts organizational commitment has been an overarching research concern in the field of human resource development (HRD) and organizational development (OD). Meyer and Allen (1991) explained three components of organizational commitment: Affective commitment, continuance commitment, and normative commitment. Affective commitment refers to a strong belief in and acceptance of an organization's goals and values; continuance commitment refers to the willingness to exert considerable effort on behalf of an organization; and normative commitment refers to a strong desire to maintain membership in an organization (Mowday *et al*, 1982). Based on literature review, antecedents of organizational commitment can be categorized as personal determinants (Age, tenure, educational level, gender, race, and marital status), role-related determinants (Job scope, role conflict, role ambiguity, pay/compensation, and empowerment),

work experience determinants (Organizational dependability, fulfillment of expectation, personal importance to the organization, leadership style, and social involvement), structural determinants (Decentralization, formalization, participation in decision-making, functional dependence, and worker ownership), and organizational determinants (promotion, supervision, support and so forth). Therefore, antecedents of organizational commitment can include personal characteristics and job characteristics (psychological empowerment), as well as organizational characteristics (perceived organizational support) in this study.

A strong positive relationship between job satisfaction and organizational commitment has been found in numerous studies (Mathieu and Zajac, 1990; Lok and Crawford, 2001; McNeese - Smith, 2001). According to Kirkman and Shapiro (2001), job satisfaction and organizational commitment are significant as both have been related to other positive organizational outcomes namely, employees who are more satisfied are less likely to be absent (Hackett and Guion, 1985), and less likely to withdraw (Carsten and Spector, 1987), is more likely to exhibit organizational citizenship behaviour (Organ and Konovsky, 1989) and display overall satisfaction with their lives (Judge and Watanabe, 1993). Job satisfaction is so significant that a lack of it often leads to lethargy and reduced organizational commitment (Tella *et al*, 2007). Studies on job satisfaction have shown that job satisfaction is influenced by organizational commitment (Bateman and Strasser, 1984; Vinya and Rawat, 2009). Therefore, there is inextricable link between job satisfaction and organizational outcomes, such as organizational commitment. Based on entrepreneurship literature, various studies investigated the relationship between job satisfaction and entrepreneurship. However, empirical studies examined concisely the relationship between job satisfaction and intrapreneurial behavior among personnel is unchartered.

For example, Duygulu and Kurgun (2009), showed strong and a positive correlation between the managerial entrepreneurship behavior and employee satisfaction. Also, in a more recent study, Lee *et al* (2011) after examining the entrepreneurial intentions among 4192 IT professionals in Singapore, suggested that an individual's innovation orientation strengthens the work-environment to job satisfaction relationship; self efficacy strengthens the job satisfaction to entrepreneurial intentions relationship. In this study, personnel's work perceptions included psychological empowerment (PE), perceived organizational support (POS), job satisfaction (JS), organizational commitment (OC) and intrapreneurial behavior (IB). Conger and Kanungo (1988) defined psychological empowerment as a process of increasing personnel feelings of self-efficacy (self efficacy can be considered as competence component of psychological empowerment). Also, Konczak et al (2002), defined psychological empowerment as a process of enhancing feelings of self-efficacy among personnel through the identification of conditions that foster powerlessness and through their removal by both organizational practices (such as organizational support), informal techniques and by providing efficacy information.

Based on the related literature, psychological empowerment has been defined as reflecting personal sense of control in the workplace, as manifested in the four beliefs about the person-work environment relationship in the four cognitions: meaning, competence, self-determination and impact. If one of the dimensions is not there, then the experience of empowerment among personnel of one organization will be limited. Therefore, all the cognitions need to be present at the same time in order to maximize the personnel feeling of being empowered. Kanter (1983), in the case studies of entrepreneurial organizations found inextricable link between empowerment and innovative behavior. Thomas and Velthouse (1990), concerning explanation of innovative behavior, suggested the relationship between psychological empowerment and personal flexibility. In addition to perceptions of psychological empowerment, personnel's perceived organizational support, would facilitate or impede their organizational commitment, job satisfaction and intrapreneurial behaviors.

According to Eisenberger *et al* (1986), when personnel feel the organization emphasizes their personal contribution and welfare, they tend to develop a sense of obligation toward the organization (organizational commitment). The personnel' level of perceived organizational support (POS) reflects their innermost feelings about the organization's care and emphasis. Personnel with a sense of POS feel that in circumstances where they need work or life support, the organization is willing to lend a helping hand; personnel personally feel respected, cared for, and recognized, and in turn display increased cooperation, identification, diligent performance, appreciation, and reciprocity among personnel. Based on the principle of reciprocity, personnel with POS not only help coworkers, but also increase their own job satisfaction and organizational commitment, while reducing resignations and absenteeism, thus stimulating personnel job performance (Rhoades and Eisenberger, 2002).

According to Speritzer (1995), psychological empowerment (PE) refers to how personnel view themselves in the work environment (effect of organizational support) and the extent to which they feel competent for shaping their behaviors in the work. Many studies indicated that job satisfaction is one of important outcomes of psychological empowerment among personnel of one organization (For example, Seibert *et al*, 2004; Wang and Lee, 2009). Also, many studies investigated the relationship between psychological empowerment and organizational commitment. For instance, Liden *et al* (2000) argued that empowerment has reciprocal relationship with commitment, and personnel, who are more empowered, are more committed toward their organizational goals and values. Entrepreneurship research literature, suggest that high entrepreneurial orientation managers /personnel are innovative, proactive and risk seeking, and, as a result, they are more likely to exploit opportunities and thus demonstrate a higher level of commitment to their organization (Mostafa *et al*, 2006).

However, relationship between organizational commitment and intrapreneurial behavior among personnel needs to further investigated. Based on entrepreneurship literature, numerous studies investigated the factors affecting organizational entrepreneurship (Intrapreneurship), but examine how psychological empowerment (PE), perceived organizational support (POS), job satisfaction (JS), organizational commitment (OC) and intrapreneurial behavior (IB) among personnel of one organization interact, merits further investigation, especially in the context of agricultural organizations in Iran country (see figure 1). The model tested in this study integrated perceived organizational support (POS) and psychological empowerment (PE) to analyze the mediating role of job satisfaction (JS) and organizational commitment (OC) on agricultural personnel's intrapreneurial behavior (IB). Therefore, the hypotheses of study were as follows: (1) JS partially mediates the relationship between POS and PE with IB; (3) OC partially mediates relationship between JS and IB; (4) JS partially mediates the relationship between PE and OC; and (5) JS partially mediates the relationship between POS and OC.



Figure 1. Conceptual framework of study

# 2. Materials and Methods

Innovative and intrapreneurial behaviors of personnel in an organization, will lead to increasing levels of organizational development and performance in the long term. The positive effects of organizational support and psychological empowerment as organizational and individual factors can pave the way for improving personnel's job satisfaction and organizational commitment and consequently translated to their intrapreneurial behaviors. In this study, correlation analysis (covariance matrix analysis type) and casual relationships methods were used as analytical strategies. Model formulation was based on a random survey of agricultural personnel. Model parameter estimation was supported by structural equation modeling. Analysis unit of this study consisted of all personnel of agricultural Jihad organization of Karaj city from Iran country, which were surveyed from late June to August 2011. Statistical sample based on the Morgan table (Krejcie and Morgan, 1970), included 80 agricultural personnel from the statistical population of 100. In this study, structured questionnaire was used to gather the required data. For analyzing data, descriptive statistics and zero—order Pearson correlation analysis were applied.

Moreover, a two-step structural equation modeling (SEM) procedure was employed to establish construct validity and test the relationships of perceived organizational support (POS), psychological empowerment (PE), job satisfaction (JS), organizational commitment (OC) and intrapreneurial behavior (IB) among agricultural personnel.

SEM is a priori technique, meaning that the researcher must specify a model (conceptual framework), in order to conduct the analysis (Kline, 2005). In SEM, parameters are estimated by minimizing the difference between the observed covariances and those implied by the model. In the present study, Lisrel 8.50 package was used to test the relationships of specified constructs in the study framework. The estimation method employed was maximum likelihood (ML). Items of perceived organizational support (POS) and psychological empowerment (PE) were measured on the Five - Point Likert type scale (From 1, strongly disagree to 5, strongly agree). The 5-item scale for measuring POS adapted from Rhoades *et al* (2001). These items were: POS<sub>1</sub>: My organization cares about my opinions, POS<sub>2</sub>: My organization really cares about my well-being, POS<sub>3</sub>: My organization strongly considers my goals and values, POS<sub>4</sub>: Help is available from my organization when I have a problem, and POS<sub>5</sub>: My organization would forgive an honest mistake on my part. The 12-item scale for measuring psychological empowerment (PE<sub>1</sub>: Competence, PE<sub>2</sub>: Meaning, PE<sub>3</sub>: Self-Determination and PE<sub>4</sub>: Impact) was adopted from Spreitzer (1995). Seven items modified from Yilmaz and Hunt (2001) used to measure organizational commitment. Also, three items adapted from the Michigan Organizational Assessment Questionnaire (Seashore et *al*, 1982) were averaged to create a measure of job satisfaction.

Finally, in accordance to the definitions and measurements of intrapreneurship literature, intrapreneurial behaviors of agricultural personnel were measured using the following five items: IB<sub>1</sub>- To which extent do you contribute to new service development in the organization where you are employed? , IB<sub>2</sub>- To which extent do you contribute to the development of creative ideas in the organization where you are employed? , IB<sub>3</sub>- To which extent do you contribute to development projects in the organization where you are employed? , IB<sub>4</sub>- To which extent do you contribute to the development of new service-market combinations in the organization where you are employed? , and IB<sub>5</sub>- To which extent do you contribute to the development of new markets in the organization where you are employed? These items were averaged in order to become an index of intrapreneurial behavior of agricultural personnel. Also, items of constructs of job satisfaction, organizational commitment and intrapreneurial behavior were measured using 5-point Likert scales, with anchors ranging from "strongly disagree" to "strongly agree."

# 3. Results

According to descriptive statistics results, most agricultural personnel of study had university education and were with 11-15 years tenure in the organization. Table 1 shows mean scores, standard deviations and correlation coefficients among the variables. According to table 1, agricultural personnel perceived their intrapreneurial behavior (IB) as moderate level (Mean = 3.27), suggesting that personnel felt somewhat good about their behaviors as intrapreneur. Perceived organizational support (POS) was correlated positively and significantly with psychological empowerment (PE), job satisfaction (JS), organizational commitment (OC) and intrapreneurial behavior (IB) (P<0.01). However, agricultural personnel perceptions of their organizational support was correlated significantly more with perceptions of their organizational commitment (r=0.75, P<0.01). Psychological empowerment (PE) was correlated significantly with job satisfaction (JS), organizational commitment (OC) and intrapreneurial behavior (IB) (P<0.01). However, agricultural personnel's perceptions of psychological empowerment were correlated significantly more with perceptions of organizational commitment (r=0.54, P<0.01). Moreover, Job satisfaction (JS) (as mediator factor 1) was correlated significantly with organizational commitment (OC) (as mediator factor 2) (r=0.75, P<0.01) and intrapreneurial behavior (IB) (as outcome variable) (r=0.43, P<0.01) among agricultural personnel. Finally, the positive and significant relationship was observed between organizational commitment (OC) and agricultural personnel's intrapreneurial behavior (IB) (r=0.44, P<0.01). Overall, intrapreneurial behavior was correlated significantly more with organizational commitment (r=0.44, P<0.01), Job satisfaction(r=0.43, P<0.01), perceived organizational support (r=0.40, P<0.01) and psychological empowerment (r=0.26, P<0.01), respectively among agricultural personnel. As showed in table 1, the cronbach alpha value derived for all constructs were all above the recommended value (0.7).

Table 1. Means, standard deviations and inter-correlations among constructs of study.

| Constructs | M    | SD   | 1            | 2           | 3      | 4      | 5      |
|------------|------|------|--------------|-------------|--------|--------|--------|
| POS        | 2.85 | 1.41 | $(0.76)^{a}$ |             |        |        | _      |
| PE         | 3.00 | 1.15 | $0.39^{**}$  | (0.81)      |        |        |        |
| JS         | 3.10 | 1.11 | $0.54^{**}$  | 0.39**      | (0.79) |        |        |
| OC         | 3.82 | 0.89 | $0.75^{**}$  | $0.54^{**}$ | 075**  | (0.77) |        |
| IB         | 3.27 | 1.21 | 0.40**       | 0.26**      | 0.43** | 0.44** | (0.80) |

Note: POS:"Perceived Organizational Support"; PE:"Psychological Empowerment"; JS:"Job Satisfaction"; OC:"Organizational Commitment"; IB:"Intrapreneurial Behavior". "a", represents internal consistency of measured constructs. \*\* P< 0.01.

To test the conceptual model of study, path analysis was conducted using structural equation modeling (SEM). Figure 2, shows the standardized path coefficients for the suggested relationships among the variables of the model. Fit indices of GFI (Goodness of Fit Index), AGFI (Adjusted Goodness of Fit Index), CFI (Comparative Fit Index) and RMSEA (Root Mean Square Error of Approximation) were used to evaluate the model. Overall, the hypothesized model of study had a good fit with the sample data ( $\chi 2/df = 2.81$ , RMSEA = 0.069, NFI = 0.98, CFI = 0.99, and AGFI = 0.97).

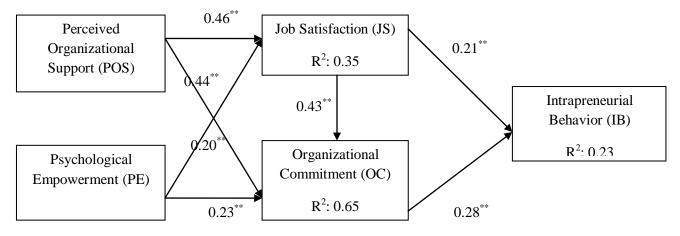


Figure 2. Standardized path coefficients among constructs of study, \*\* P< 0.01

Table 2 showed the standardized direct, indirect, and total effects among antecedents and mediator variables in the final model. Job satisfaction (JS) and organizational commitment (OC) antecedents accounted for 23% of the variance in intrapreneurial behavior (IB) among agricultural personnel. Antecedents predicting organizational commitment (OC) were perceived organizational support (POS), job satisfaction (JS), and psychological empowerment (PE). These antecedents together accounted for 65% of the variance in organizational commitment (OC). However, Job satisfaction (JS) and perceived organizational support (POS) were strong antecedents of organizational commitment (OC) than that of psychological empowerment (PE).

| Table 2. Standardized direct and indirect effects of final hypothesized model. |
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| Path                                   | Direct effect | Indirect effect | Total effect | Variance (%) |
|--|---------------|-----------------|--------------|--------------|
| To intrapreneurial behavior (IB)       |               |                 |              |              |
| Job satisfaction (JS)                  | 21**          | $0.12^{**}$     | 0.33**       | 0.23         |
| Organizational commitment (OC)         | $28^{**}$     | -               | $0.28^{**}$  |              |
| Perceived organizational support (POS) | -             | $0.28^{**}$     | $0.28^{**}$  |              |
| Psychological empowerment (PE)         | -             | 0.13**          | $0.13^{**}$  |              |
| To organizational commitment (OC)      |               |                 |              |              |
| Job satisfaction (JS)                  | $0.43^{**}$   | -               | $0.43^{**}$  |              |
| Perceived organizational support (POS) | $0.44^{**}$   | $0.20^{**}$     | $0.64^{**}$  | 0.65         |
| Psychological empowerment (PE)         | 0.23**        | $0.08^{**}$     | 0.31**       |              |
| To job satisfaction (JS)               |               |                 |              |              |
| Perceived organizational support (POS) | $0.46^{**}$   | -               | $0.46^{**}$  | 0.35         |
| Psychological empowerment (PE)         | 0.20**        | -               | $0.20^{**}$  |              |

<sup>\*\*</sup> P< 0.01.

Finally, job satisfaction (JS) was predicted by both antecedents of perceived organizational support (POS) and psychological empowerment (PE), and 35% of the variance of job satisfaction (JS) was predicted by those antecedents.

In addition, according to the results of hypothesis testing (Table 2 and 3), job satisfaction (JS) and organizational commitment (OC) fully mediated the relationship between perceived organizational support (POS) and psychological empowerment (PE) with intrapreneurial behavior (IB) among agricultural personnel (support for fully mediating effects of job satisfaction and organizational commitment). But, three other hypothesizes of study supported. However, hypothesis 4 (JS partially mediates the relationship between PE and OC) partially supported among agricultural personnel ( $\beta$  = 0.08, p < 0.01). This finding could imply that PE had not indirect effect on OC through JS and JS fully mediated the relationship between PE and OC among agricultural personnel.

Table 3. Summary of hypothesis results.

| Hypothesis 1<br>Hypothesis 2 | JS partially mediates the relationship between POS and PE with IB OC partially mediates the relationship between POS and PE with IB | not supported not supported   |
|------------------------------|---|-------------------------------|
| Hypothesis 3<br>Hypothesis 4 | OC partially mediates relationship between JS and IB JS partially mediates the relationship between PE and OC                       | supported partially supported |
| Hypothesis 5                 | JS partially mediates the relationship between POS and OC   | supported                     |

Note: POS:"Perceived Organizational Support"; PE:"Psychological Empowerment"; JS:"Job Satisfaction"; OC:"Organizational Commitment"; IB:"Intrapreneurial Behavior".

# 4. Discussion

This study verified perceived organizational support (POS), psychological empowerment (PE), job satisfaction (JS), organizational commitment (OC) and intrapreneurial behavior (IB) as the research framework. Results of structural equation modeling (SEM) showed that agricultural personnel's perceptions of psychological empowerment (PE) were positively and significantly affected their job satisfaction (JS) ( $\beta$  = 0.20, p < 0.01). This finding is consistent with prior abundant studies showed that positive relationship between PE and JS (For example, Seibert *et al*, 2004). According to Spreitzer *et al* (1997), when personnel feel high levels of empowerment, they are more motivated toward their jobs and also are more likely to experience positive individual and organizational outcomes. Overall, our results suggest that high levels of psychological empowerment leads to increased levels of job satisfaction among agricultural personnel. Psychological empowerment (PE) also significantly and directly affected perceptions of agricultural personnel about their organizational commitment (OC) ( $\beta$  = 0.23, p < 0.01).

This finding is consistent with studies showed that positive relationship between PE and OC (Liden *et al*, 2000; Liu *et al*, 2007; Vacharakiat, 2008). Moreover, agricultural personnel's perceptions of psychological empowerment were correlated significantly more with their perceptions of organizational commitment. However, indirect effect of psychological empowerment on organizational commitment via mediating effect of job satisfaction was partially supported. Liden *et al* (2000), argued that concurred factor with empowerment is commitment, e.g. personnel who are more empowered, are more loyal to their organization. Also, Patrick and Laschinger (2006) stated that if personnel's perceptions of psychological empowerment to be strengthened in work environment, they will be more committed to aspects of affective and normative. Considering the fact that the most indispensable capital of an organization is its human resources, the qualities and capabilities of such human resources is the most important cause of its survival.

Also, the empowered personnel make the foundation of an empowered organization (Carless, 2004). In this study, agricultural personnel felt moderately good about their perceptions as being empowered. Moreover, perceived organizational support and job satisfaction were strong antecedents of organizational commitment than that of psychological empowerment among agricultural personnel. Therefore, agricultural managers must attempt to facilitating conditions in which personnel feel free, admired, motivated and empowered. This will improve the performance in general, increase agricultural personnel's job satisfaction, organizational commitment and consequently increase their intrapreneurial behavior in particular. On the other hand, our results highlighted the importance of direct effect of perceived organizational support (POS) on explaining job satisfaction among agricultural personnel.

This finding is consistent with the results of studies have supported a positive relationship between perceived organizational support and job satisfaction (for example, Rhoades and Eisenberger, 2002). According to Rhoades and Eisenberger (2002), with considering the principle of reciprocity, personnel with POS not only help coworkers, but also increase their own job satisfaction and organizational commitment, while reducing resignations and absenteeism, thus stimulating personnel job performance. Therefore, personnel with higher job satisfaction believed that the organization would be a place for supporting them in the long run and care about the quality of their work; therefore they were more committed to the organization, have greater maintenance rates and tend to have higher intrapreneurial behaviors. Another finding of the study was that POS was positively and significantly related to organizational commitment in which perceptions of organizational support was correlated significantly more with perceptions of organizational commitment among agricultural personnel. This finding is consistent with Eisenberger *et al* (1986), when personnel feel the organization emphasizes their personal contribution and welfare, they tend to develop a sense of obligation toward the organization (organizational commitment). Those who perceive support in their organization are more likely to feel satisfied with their job and feel less likely to leave and feel more committed to their job. Also, committed agricultural personnel are more likely to perform beyond their responsibility to meet farmer's needs.

In addition, when personnel felt that they were treated fairly by their organization, they are more likely to hold commitment, trust, satisfaction, and control reciprocality than when they perceived that had behaved them with unsupportive. Overall, the higher the level of employee's perception towards their organizational support, the more the personnel's strong belief in and acceptance of their organization's goals and values (Affective commitment); personnel's willingness to exert considerable effort on behalf of their organization (continuance commitment); and personnel's strong desire to maintain membership in their organization (normative commitment). In this study, agricultural personnel's job satisfaction was positively related to their organizational commitment. This finding is consistent with studies showed a strong positive relationship between job satisfaction and organizational commitment (Bateman and Strasser, 1984; Lok and Crawford, 2001; McNeese – Smith, 2001; Vinya and Rawat, 2009). Such relationship may guide agricultural managers to assume the synergistic way to increase personnel's organizational commitment through increasing their perceptions of job satisfaction and organizational support simultaneously.

Findings of this study revealed that organizational commitment's perceptions of agricultural personnel had positive effects on their intrapreneurial behaviors. However, few empirical studies supported this finding. Because organizational commitment links the psychological aspects of personnel with their organization, and recognized indispensable for an organization to have sustained performance efficiency in the product and labor market, it is recommended that agricultural planners and managers provide organizational support to increase personnel's perceptions of psychological empowerment and job satisfaction and consequently increase their organizational commitment and intrapreneurial behaviors in long run. In this study, perceived organizational support, psychological empowerment and job satisfaction affected agricultural personnel's perceptions of their organizational commitment. Therefore, because analyzing the antecedents of organizational commitment has been an overarching research concern in the field of human resource development (HRD), the focal point of training agricultural personnel about increasing their perceptions of organizational commitment should be placed toward improving their perceptions of psychological empowerment ( $\beta = 0.23$ , p < 0.01), job satisfaction ( $\beta = 0.44$ , p < 0.01), respectively. In this study, among four antecedents of explaining agricultural personnel's intrapreneurial behavior, psychological empowerment significantly affected less it than other three antecedents (Total effect: 0.13, p < 0.01).

Overall, it is recommended that agricultural planners and managers provide supportive organizational climate and psychological empowerment in the favor of personnel's job satisfaction and organizational commitment, which in turn motivates the personnel to behave in an intrapreneur manner. If agricultural personnel to be satisfied in their jobs and committed to their organization, they will be able to effort beyond what is expected of them in organization. The overarching implication of this study was that capturing the perceptual antecedents could be implemented to foster intrapreneurial behavior among agricultural personnel. Apart from the traditional measures of personnel performance, it is important for managers to improve personnel's behaviors that go beyond the role description in the organizations through improving perceptions of organizational support, psychological empowerment, job satisfaction and organizational commitment. Behaviors that go beyond in role duties (such as intrapreneurial behaviors) become a deep-seated component for achieving effectiveness in organization.

There are some limitations to this study. Apart from the self-reported nature of the data, small sample size in one organization should be considered when generalizing the results to organizations with different sizes and contexts.

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