



## Research Article

# Employment Type and Organizational Role Stress- A Relational Study in Agricultural Extension

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**Abstract** | The previous literature on both public sector performance and organizational role stress is silent on various stressors associated with the role of government agricultural extension officials, which is one of the most important components of the entire agricultural system. The purpose of this exploratory study is to fill this gap with the identification of potential work stressors for this profession. The paper also aims to investigate whether employment type (permanent or temporary) affects the level of role stress among agricultural extension officials. The role of gender, age and marital status on stress levels has also been examined further. For this purpose, the data was collected in the year 2020 from 68 Agricultural Extension officials, which comprised 38 temporary and 30 permanent officials. The results investigated that temporary extension officials face more role stress as compared to their permanent counterparts. Additionally, Resource Inadequacy (RI<sub>n</sub>) and Self-role Distance (SRD) are reported as prominent stressors among all extension officials irrespective of their employment type, age, gender and marital status. Considering the presence of role stress in the public extension officials, exploring its effect on job satisfaction, job performance and well-being of employees, and testing and implementing coping measures is suggested for future studies.

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## Introduction

Agricultural extension has witnessed long history in developing countries like India. Several studies highlighted the vital role of extension in the overall development of the agriculture sector (Orivel, 1981; Anderson and Feder, 2004; Oladele and Mabe, 2010; Subekti *et al.*, 2019). Jan *et al.* (2008) explored that even the finest agricultural technologies would get failed without the support of an efficient extension system. Whereas, few studies

also highlighted the weak performance of the public extension system (Malik and Khan, 2020; Ferroni and Zhou, 2012). Agriculture is one of the dominant sectors of the Indian economy and public agriculture extension officers hold a very significant place despite of less in number. Previous literature also expressed the need to strengthen the public extension system. Despite this fact, limited studies were carried out to explore hindrance factors, including role stress among these extension officials. Hence, the present study attempted to measure the organizational role stress

level of permanent and temporary extension officials working in the public sector of Punjab, India.

#### *Role stress and agricultural extension*

Rohit *et al.* (2019) discovered that agriculture extension is one of the highly stressful occupations as it involves dealing with the most underprivileged group of clientele i.e., farmers. Anderson and Feder (2004) argued that agriculture research generally remains the priority for investigators and policymakers compared to agriculture extension, which further affects budget allocation. This may account for the most significant stressor among the extension workforce, which exerts adverse effects on research-extension linkages.

Furthermore, Anderson and Feder (2004) reported that there exist few weaknesses in the public extension system worldwide that hamper the efficiency of extension delivery. This recommends a need to discover such inadequacies, which may include role stress among extension functionaries that needs to be explored yet, especially in developing countries like India (including Punjab).

Hypothesis 1: There is role stress among public agricultural extension officials

#### *Role stress and type of employment*

There is much evidence on antecedents and consequences of role stress; its relationship with performance, satisfaction and well-being of individual employees, clients served as well as the organization as a whole. Among all the studies conducted, maximum focused on temporary employees, only a few studies have considered the concept in the context of the permanent workforce.

A study conducted by Rigotti *et al.* (2009) explored that temporary workers face more job insecurity and fewer prospects than their permanent counterparts. Similarly, De Cuyper *et al.* (2008) investigated that temporary employees face more work stress due to attached job insecurity, more dependence, poor working conditions and lack of support from permanent colleagues. As per previous studies, employees with more job insecurity reported a diversity of negative consequences including job dissatisfaction, poor health issues and lower well-being (De Cuyper *et al.*, 2010; Cheng *et al.*, 2012; Richter and Naswall, 2019). Whereas, Falco *et al.* (2008) contended that lower job satisfaction and well-being of temporary workers rely

upon the motive of voluntary or involuntary accepting the type of contract.

Therefore, previous researches indicated a direct link between temporary employment and role stress; and its further negative impacts. However, contrary to all such studies, Beckmann *et al.* (2007) discovered that employees on temporary jobs are more satisfied due to the fact of at least having a job during this era of increasing unemployment, which acts as a high intrinsic motivation of performing better. Similarly, Falco *et al.* (2008) investigated that the temporary workforce reported more commitment, more cooperation at the workplace and more satisfaction with their professional growth. Slattery *et al.* (2008) also explored that temporary workers report more belongingness and loyalty to the organization when treated with equality to their permanent counterparts.

Therefore, the exact depiction of the effect of employment type on role stress remains unclear and the same is accurate in the agriculture segment also.

Hypothesis 2: There is a difference in role stress level among temporary and permanent agricultural extension officials

Few studies also considered the role stress in relation to demographic factors of employees. Selvarajan *et al.* (2015) explored that among all temporary workers, females younger in age and with a higher level of education are more satisfied in term of their jobs and shows higher commitment. Whereas, male temporary employees show negative attitudes due to the low status attached to their jobs. But there is no such study in the agriculture sector yet.

Hypothesis 3: There is an effect of Gender, Age and Marital status on the role stress level of public agricultural extension officials

## **Materials and Methods**

The study was conducted in Punjab, India, to assess Organizational Role Stress among permanent and temporary Public Extension Officials. The public extension system in India is dominated by the Department of Agriculture and Farmers' Welfare (DoA and FW), under which extension officials are appointed on permanent basis. Considering the importance of the public extension system, the

central government with the support of the World Bank, initiated a scheme named “*Support to State Extension Programmes for Extension Reforms*”, which is popularly known as ATMA (Agriculture Technology Management Agency). This scheme was pilot tested in 28 districts of 7 states from 1998-2005, which was later on scaled up in all districts of the country (GoI, 2010). In Punjab, this scheme is being run in collaboration with the state Department of Agriculture and Farmers’ Welfare (DoA&FW). The extension officials under this scheme are appointed temporarily but until the scheme’s termination. In total, 2212 extension officials are working in DoA&FW and ATMA in Punjab as per government records (2019-20).

The data was collected from permanent and temporary public extension officials working with the Department of Agriculture and Farmers’ Welfare, Punjab, India. The Characteristics of the sample are shown in Table 1.

**Table 1:** Characteristics of sample.

	Employment type		Total (68)
	Permanent (30)	Temporary (38)	
<b>Gender</b>			
Male officials	17	32	49
Female officials	13	6	19
<b>Age</b>			
Below 30 years	18	27	45
30-35 years	8	6	14
36-40 years	1	3	4
41-45 years	2	1	3
Above 45 years	1	1	2
<b>Marital status</b>			
Married	18	20	38
Unmarried	12	18	30

The questionnaire was distributed to 80 agriculture extension officials (40 from each group), out of which responses were received from 68 functionaries. The sample was comprised of 44% of permanent and 56% of temporary officials. Extension personnel having more than two years of experience in the department and less than 56 years of age were only considered for this study.

A 50-item Organization Role Stress Scale (ORSS) developed by Pareek (1983) was distributed among officials to assess the role stress among extension officials. This standardized scale measures the self-perceived role stress experienced by individuals at the workplace on ten dimensions: Inter-role Distance

(IRD), Role Stagnation (RS), Role Expectation Conflicts (REC), Role Erosion (RE), Role Overload (RO), Role Isolation (RI), Personal Inadequacy (PI), Self-role Distance (SRD), Role Ambiguity (RA) and Resource Inadequacy (RIn). The items were assessed using a 5-point Likert scale ranging from ‘never feel this way’ to ‘always feel this way’. R version 3.6.3 was further used to analyze data. The mean and maximum value was calculated from the base package to determine role stress levels among extension officials.

## Results and Discussion

Table 2 presents descriptive statistics for organizational role stress among public extension officials (both permanent and temporary) working in Punjab, India.

Among all the ten stressors, the inadequacy of resources (RIn) and self-role distance (SRD) are the prominent factors contributing most to the role stress of extension officials. Out of all the statements under RIn, ‘availability and access to required resources’ and ‘lack of financial resources’ are notable ones, which clearly indicates that government is unable to provide sufficient resources whether information, physical, financial or human resources required for efficiently performing extension services. Similar to this, Bacharach and Bamberger (1995) explained resource inadequacy as a major situational constraint, which not only limits the performance level rather has adverse effect on the effort and ability of an individual employee. The continuous presence of this factor creates stress among the workforce and in long-run public employees start ignoring this constraint as well as their requisite job duties. Therefore, it becomes the major hindrance factor in the quality of public services, which needs to be considered and tackled appropriately.

Additionally, as per previous studies, there are two factors, namely accessibility and quality of the resources, which organizations need to consider under resource adequacy Bacharach and Bamberger, (1995). Accessibility of resources refers to how quickly a requisite resource may be made available to an individual employee to complete the specific task, which further covers location and timeliness. Whereas, the quality of the resource is further accessed by three factors appropriateness, steadiness and relative advantage. Appropriateness means

the resource provided should exactly fit the use for which it is required (Bacharach and Bamberger, 1995). For example, to control the stubble burning at farmers' fields, organizing trainings through ICT tools might be accessible and timely, while personal interactions with farmers would be more appropriate for convincing them. Therefore, authorities must think about resources for conducting smooth personal visits to the farmers' fields. Steadiness refers to the degree to which a resource meets the set standards every time (Bacharach and Bamberger, 1995). Finally, the relative advantage is the convenience and ease of any resource (Kuehne *et al.*, 2017), which means the provided resource should be easily understandable to the extension officials.

The second major role stressor reported by government agriculture extension officials is self-role distance (SRD). Srivastav (2016) explained self-role distance as "Lack of integration between the role and its occupant". Further analysis revealed that factors such as- 'Underutilization of own judgement, knowledge and expertise' and 'lack of freedom in doing extension activities' contribute more to their stress levels. This is a clear indication that restructuring the extension role is required to provide more flexibility for making it feasible to use the judgement and expertise of an individual extension worker.

Therefore, this study establishes that public agriculture extension officials, both permanent and temporary, are experiencing organizational role stress, but with a varying degree in different role stressors and temporary officials reported higher role stress than permanent ones. Thus, it supports this study's first and second hypothesis and is consistent with most of the previous studies (De Cuyper *et al.*, 2008; Rigotti *et al.*, 2009).

This study pointed out that the first two prominent role stressors between both categories are the same; however, temporary employees reported more stress even in RIn and SRD (Table 3). This implies that feeling regarding the unavailability of required resources and self-role distance is higher in temporary workers. Further, the feeling of role stagnation and erosion is also higher in temporary employees. Under role stagnation, maximum temporary workers reported stress in the statement- "There is very little room for personal growth in my role", which clearly indicates the need for growth in precarious employment. Senior authorities must consider assigning few such

duties with more responsibility and empowerment of decision making. Statements marked stressful by temporary officials under role erosion (next major role stressor) give clear and loud justification to this, such as "I would like to take more responsibility than I have at present" and "I can do much more than what I have been assigned". Policymakers should consider these factors, as this type of role stress leads to a devastating impact on the creativity and well-being of employees. Temporary employees in any work setting are not supposed to perform the same routine functions, as this becomes a significant problem in the long-run (Tankha, 2006).

Opposite to temporary employees, permanent officials are being assigned with such roles or responsibilities for which they are feeling to acquire more knowledge, skills and training i.e., feeling of personal inadequacy. Induction training should be mandatory before assigning such roles. Despite assigning independent roles, each new officer should be joined under a supervisor who acts as a mentor and keeps explaining the minute details involved in their role. Apart from this, job rotation should make an essential aspect to keep on learning all different aspects related to agricultural extension work. All these interventions will help an extension official to take higher order responsibilities individually and with more confidence.

Among all the extension officials (including permanent and temporary), officers above 45 years of age, female functionaries and married employees reported a higher level of role stress, which supports the third hypothesis of this study (Table 4). In developing countries like India, every organization keeps on changing old work practices, and the public sector is not an exception here. Under the digital India movement, all government departments have started implementing ICT tools such as e-office, Public Financial Management System (PFMS), Government electronic Marketplace (GeM) etc. to bring efficiency and transparency in public work. This may lead to stress in older officials to learn and implement such practices effectively at this age. Temporary officials above the age of 45 years reported a significantly higher level of role stress. This may be due to the end of the hope to join any permanent job, as 37 years is the maximum age requirement to apply for any permanent government post in India. Increasing responsibilities of a family may be felt hard to meet with less salary and more insecurity attached with job.

**Table 2:** Status of Role Stressors among extension officials.

ORS among all public extension officials										
Item	RIn	SRD	RS	RE	RI	PI	REC	RO	IRD	RA
Mean	2.62	2.31	1.84	1.84	1.68	1.65	1.63	1.57	1.46	1.44
Resource inadequacy followed by self-role distance is the prominent role stressor among all the employees.										
Employee type	Permanent		Temporary							
Mean	1.87		2.12							
Temporary employees have more stress in their job profile.										

**Table 3:** Status of role stress among permanent and temporary employees.

Permanent extension officials										
Item	RIn	SRD	PI	RS	RE	RI	IRD	RO	REC	RA
Mean	2.43	2.07	1.70	1.43	1.67	1.57	1.43	1.30	1.17	1
Resource inadequacy followed by self-role distance and personal inadequacy is the prominent role stressor among all the permanent officials.										
Temporary extension officials										
Mean	2.82	2.50	1.61	2.37	2.08	2.03	1.66	1.79	2.00	1.84
Resource inadequacy followed by self-role distance and role stagnation is the prominent role stressor among all the temporary officials.										

**Table 4:** Effect of gender, age and marital status on ORS level of permanent and temporary officials.

	Permanent officials (mean values)	Temporary officials (mean values)
<b>Gender</b>		
Male	1.81	2.10
Female	1.95	2.26
<b>Age</b>		
Below 30 years	1.74	2.04
30-35 years	2.05	1.76
36-40 years	2.60	2.86
41-45 years	1.4	3.20
Above 45 years	3.2	4
<b>Marital status</b>		
Married	1.88	2.16
Unmarried	1.85	2.08

In both the categories of employment type, female officials reported more stress than male functionaries, which may be due to dual responsibility, i.e., taking care of a family and office work, attached with the female role. Considering this, the department must implement some policies such as flexible work timings and work from home for female staff. Similar to this, married extension officials are feeling more stress in their work setting. Therefore, results make it clear that age, gender and marital status affect the role stress level of public extension officials, although the results are not different in the permanent and temporary

work setting.

### Conclusions and Recommendations

Organizational Role Stress, these days, is emerging as an arising trouble in all the organizations including the public sector (Di Virgilio *et al.*, 2014). Researchers exploring role stress have noticed that it leads to various dysfunctional outcomes, including physiological and psychological, which further have devastating effects on the functioning of an organization and individual employees. Thus, this study was undertaken as an eye-opener for the policymakers with the primary objective to explore role stress level and prominent stressors among public extension officials working in Punjab state, India.

The research study established that resource inadequacy and self-role distance are the major role stressors among all extension functionaries. This stress among temporary officials is on a higher side than their permanent counterparts. Employees above the age of 45 years, female and married extension functionaries reported higher stress in extension work. The detailed analysis further explored that temporary officials feel more stagnation and erosion in their roles. Opposite to this, permanent officials reported a desire to have more skills and training for performing the role they

are being assigned.

Considering this, the government must develop such policies that may ensure an adequate supply of resources at an appropriate time and acceptable quality for efficient extension services. It is also recommended to consider the provision of flexibility in the public extension system while implementing the various development programmes developed at the national level, taking into account the requirements of a particular location and time. This flexibility will help in bringing more quality to the extension services.

The authorities must assign more challenging tasks with more responsibility and authority to precarious workers considering their knowledge, skills and capability. Assignment of routine monotonous duties, less responsibility and lack of participation in decision-making should not be developed as a permanent feature of any precarious work setting in any department. On the contrary, the inclusion of practices such as induction training programmes (Khan, 2017), job rotation and joining under the supervision of any particular senior official is suggested to make mandatory for permanent officials in the department. This will help in boosting confidence in accepting independent assignments with more responsibility.

Similarly, considering the effect of age, gender and marital status on the role stress levels of employees, the government must design special training programmes to help them in relieving some stress levels. Also, there is a need to introduce some policies such as flexible working hours or work from home, specifically for female officials. The government must take effective measures so that the level of stress should not reach the worst conditions and affect extension officials' personal and professional lives. It is further suggested to study the effect of role stress on extension officials' job performance and satisfaction level. Additionally, testing and implementing coping measures for lowering stress levels and ensuring well-being is also suggested for future studies.

### Novelty Statemet

The current study highlighted the role stressors among temporary and permanent public extension officials in Punjab, India.

### Author's Contribution

**Rupinder Kaur:** Principal author and Ph.D scholar, who collected the data, conducted the research and write the paper.

**Pretty Bhalla:** Supervisor who helped in finalizing the idea of research, helped in writing and editing of the manuscript.

**Jubin Kumar Saini:** Conducted the data analysis and reviewed the paper.

**Sayeduzzafar Qazi:** Reviewed and approved the final draft.

### Conflict of interest

The authors have declared no conflict of interest.

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