# An Empirical Study on the Influence of Employment **Policies on Gender Inclusion in Indian Military**

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#### **Abstract**

Inclusion is to value every individual, provide similar access and opportunities to all, eliminate discrimination and other obstacles in involvement. Pearpoint and Forest (n.d.) described inclusion as an inevitable change. With this underlying idea, the present paper sought to understand the impact of employment policies on gender inclusion in the Indian military and derive meaningful insights for the policy makers in this area. The paper analyzed the influence of employment policies on gender inclusion on the basis of data collected from the survey of officers belonging to the different Corps of the Indian Army by using factor analysis and one way MANOVA. Factor analysis gave a three factor solution comprising of Job Content, Inclusive Climate, and Equal Treatment. The findings indicated that the employment policies do have an influence on the inclusion of women in military. This study seems to be the first in analyzing the effect of employment policies of the military with respect to gender inclusion in the Indian context.

Keywords: employment, inclusion, India, military, policy, women

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omen have played diverse roles in the military from ancient warrior women to women in supporting roles and of course, women as doctors and nurses. However, historical records have shown that it has been very convenient for the military to employ women whenever there is an emergency and eventually dismiss them when their services are not required, forget them again and again, and deny their presence ever (Segal, 1993). The subject of converting the temporary and emergency employment of women into a permanent and regular force was always confronted with biological impairments, physical strength, emotional strength, taking on masculine characteristics, and damage to culture (Fenner, 1998). However, militaries across the globe have undergone significant technological and organizational transformations, which has changed the way they organize and fight. Since most military missions are no longer fought on linear battlefields as in the past, and with rise in global war on terrorism, involvement of women in military operations across the globe has compelled armies to rethink about the role of women in military and assign them enhanced employment roles, be it technologically hi-tech desk jobs or in the field.

According to the Defence Manpower Data Center (2015), approximately 16.7% women officers and 13.4% women enlisted served in the U.S. Army. In the British Army, over 80% of jobs across the armed forces are open to women, and women make up over 10% of the military's manpower ("Women to serve in close combat roles in the British military," 2016). Norway made military service mandatory for women since 2014 because the need for qualified military personnel is growing as the level of conflict in the neighbouring countries is on rise (Berglund, 2014). Women make up a significant proportion of the soldiers in the Russian armed forces and this trend is likely

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to continue as the military is facing difficulties in recruiting and retaining young men (Mathers, 2000). In the Australian defence force, the percentage of women increased from 10% in 2012 to 12% in 2016 in the army (Defence People Group, Department of Defence, Australia, 2016). In China, women comprise about 4.5% of The Chinese People's Liberation Army. In South Korea, women have been recruited in different Corps of the Army with the present percentage being 4%. They feel it is advantageous to have women in the armed forces with respect to social representation, cultural integration, and the acquisition of quality human resources. North Korea has made military service mandatory for women between 17-20 years of age till 23 years of age with effective from 2015 to make up for shortfall of troops. Women comprise of 22% of the total military force of the country, including most of the artillery units along the North Korean coast (Obradovic, 2015). However, the Self-Defence Forces (SDF) of Japan comprise of only 5.4% women despite wide reforms and almost complete integration, and they have a limited role.

In the Israeli Defence Force (IDF), women are drafted as part of their country's mandatory military service requirement. Women make up 33% of IDF and eight times as many women are serving in military reserves. At present, 92% positions are available for women soldiers and women can be found on 69% of all positions of mandatory service. The percentage of female Lieutenant Colonels in IDF increased from 7.3% to 12.5% in the last 10 years (Sasson - Levy, 2003). Women comprise approximately 7% of the total force in Bulgaria and have same training standards and professional rights as men.

The Indian Army comprises of only about 3% of women in services and supporting arms, which is quite less in comparison to other armies of the world. In view of progressive policies of most modern global armies, the existing policies for women officers in the Indian army seem outdated in the context of modern warfare as their role and employment are still limited. Davar (2017) felt that there is a need to address all peculiar problems which lady officers in Indian Army may have to face in this traditional male bastion of armed forces so that their services contribute to organizational effectiveness, and they are not considered a liability. Khare (2017) also felt that there is a need to revamp our strategy and policy related to women's participation in the Indian armed forces. Suman (2017) reflected that two and a half decades is a long enough period for the Indian Army to carry out an objective appraisal, for that it is essential to obtain a feedback from the environment. Choudhary, Kumar, and Philip (2016) highlighted that a significant relationship existed between transformational leadership and organizational citizenship behaviour. Thus, a need was felt to explore the various employment policies of the Indian Army and analyze their impact on inclusion of women.

#### **Literature Review**

(1) Inclusion: Inclusion depicts the experience of diverse individuals possessing the capability to be optimistic on getting a sense of belongingness and feel respected for their unique characteristics (Shore, Randel, Chung, Dean, Ehrhart, & Singh, 2011). Barak (2000) stated that understanding the inclusion - exclusion principle by an employee is a progression of the values till the time the individual feels that he/she is a part of vital processes of the organization. These procedures include approachability to information and facilities, level of connectivity to fellow-workers and overseers, and capability to participate in and having an impact on taking decisions. Inclusion can be measured by various factors like insider status, having a voice in decision making, and sharing of information. Avery, McKay, Wilson, and Volpone (2008) highlighted that perception of inclusion has a positive relation with the intention to remain, and the employees who have a feeling of higher social integration are liable to have greater levels of attachment and recognition with the organization, and hence, have less chances of leaving. Nishii (2013) proved that within inclusive climates, interpersonal bias is reduced in such a way that gender diversity is associated with lower levels of conflict. As a result, the negative effect of group conflict on unit-level satisfaction disappears.

Gender inclusion is the need of the hour as it has a positive impact on organizations as well as individuals. However, gender inclusion has been more successful in some areas than others, indicating the need to share and adopt best practices in less successful areas. Social activism and legislation in Canada have been the primary contributors to gender inclusion in the army (Davis, 2007). Integration needs to be at a universal level in order to achieve an inclusive end state. Carreiras (1999) and Carreiras (2004) stated that effective gender inclusion in armed forces will not happen on its own, but with formulation of new and specific policies, and also the controlling presence of women in society will decide policy orientations and decision making processes within the armed forces.

- (2) Employment of Women in Army A Global Overview: The expansion of utilizing the services of women in the military is becoming a global trend. Across nations, the participation of women in armed forces is dependent on various factors that are external as well as internal to the military. The employment of women in military is affected by various aspects of organizational structure of the military, security situation of a nation, the outcome of changes in technology, and the macro-level variables within the military; whereas, the structure of force and military accession policies of an army comprise the organizational processes (Carreiras, 2004). Segal and Segal (2004) also reflected that all-volunteer military brought in more women and minorities. However, more often than not, the dichotomy continues to exist in most countries between the stated policies on women in military and the actual situation on ground as preferred by military commanders. In comparison to men, the military career of many women ends much before it should because of the higher dissatisfaction with their service. Many military women quit military service prematurely because of the gender-based experiences, interpersonal violence, harassment dissatisfaction with their service, and care giving needs (Dichter & True, 2015). Research has also shown that women try to adapt to the military culture by distancing themselves from traditional feminists and conforming to male standards for increased acceptance.
- (3) Combat Inclusion: As per the data released by Pentagon in 2013, enlisted women (soldiers) made up 2.7 % of the military's front-line units. Among officers, women represented 5.4% of those involved in tactical operations. Women also made up 67 of the nearly 3,500 Americans lost to hostile fire in Iraq and 33 of the 1,700 plus killed in combat in Afghanistan; more than 600 others in Iraq and 300 in Afghanistan were wounded. United States of America allowed the entry of women in infantry and tank roles, which were the last ones only open to men in 2016 ("By the numbers: Women in the U.S. military," 2013). In the United Kingdom, with effect from July 2016, the units of The Royal Lancers, The Kings Royal Hussars, The Royal Tank Regiments, and All Army Reserve Royal Armoured Corps regiments of Royal Armoured Corps were opened to women ("Women to serve in close combat roles in the British military," 2016). In the Canadian military, women have been allowed in combat since 1989. There are approximately 15% women in the Canadian fighting force, its regular force, and primary reserves (Davis, 2007). Women are employed in combat positions in the volunteer force of Romania and represent approximately 7% of those serving in combat jobs. They sent approximately 60 women to Iraq in close combat. In France, women can serve in combat and 1.7% of women are combat infantry soldiers.

In Germany, women started to join combat units with effect from 2001 after the European Court of Justice ruled that preventing women from such jobs was against the gender equality principles. As a result, the number of women in the German armed forces increased threefold between 2001 and 2014, with about 800 women in combat units. Women have been allowed in all ranks in the Danish military since 1998. In The Netherlands, women are not allowed in the Marine Corps or Submarine Service, but they can apply for other combat ready positions. Women have been allowed in the armed forces of New Zealand in every job, including the infantry since 2001. In the Swedish military, there have been no gender restrictions since 1989. As per a study done in the United Kingdom, the Swedish army is of the opinion that having women in combat roles, particularly those who have served in

Afghanistan, has been positive for operations. Australia opened combat positions to women in September 2011 by allowing them to join special operations units in Afghanistan and the general infantry and armoured units.

(4) Combat Exclusion: The term combat exclusion implies not being allowed (not included) to join in fighting (combat) arms. Tetreault (1988) stated that combat is supposedly the last bastion of male supremacy in military and thus, the combat exclusion of women is the key means of reducing career competition between men and women. Except for about 16 nations, most of the armies of the world restrict entry of women in combat arms ("By the numbers: Women in the U.S. military," 2013). In most of the countries, the combat exclusion of women has persisted mainly because of myths that women are physically unfit for the demands of war, that the public cannot tolerate the casualties of women, female soldiers affect unit cohesion and male bonding of troops in combat, stereotypes linked with male and female capabilities, and the "band of brothers" culture of military (MacKenzie, 2015). In the Russian Army too, women do not serve in combat roles, though they have women soldiers in good strength, but both the women and Defense Ministry view the service of women as a marriage of convenience (Mathers, 2000).

The Indian society is also not ready to face the prospect of women in combat as prisoners of war or with terrorists (Dheeraj, 2017). Additionally, the field areas do not have adequate infrastructure and separate facilities for women in terms of cabins or washrooms (Bhattacharya, 2012; Davar, 2017). However, the Indian Army Chief recently gave a press statement that the Army is all set to open up positions of combat and other ranks for women, and it will commence with recruitment of women in military police ("Women to be allowed in combat role in Army, says Gen Bipin Rawat," 2017).

(5) Women in Indian Army: In the Indian Army, women have served in Military Nursing Service since 1927 as nurses and in Army Medical Corps since 1943 as medical officers. In 1993, the first batch of 25 women officers (non-medical officers) were commissioned from Officers Training Academy, Chennai. They were inducted as Short Service Commissioned Officers, initially for a period of 5 years in Army Service Corps (ASC), Army Ordinance Corps (AOC), Army Education Corps (AEC), and Judge Advocate Generals Branch (JAG), which was extendable by another 5 years. After that, gradual amendments were done, women officers were commissioned in corps of Electronic & Mechanical Engineers (EME), Intelligence Corps (Int.), Supporting Arms like Corps of Engineers (Engrs), Corps of Signals (Sigs), and Army Air Defence (AAD). Their service was extended up to 14 years in 2006. Though women officers have been in the Indian Army for more than two decades now, their entry is restricted to combat arms like infantry, armoured, and artillery units like most of the militaries in the world, but they are inducted in other supporting arms and services. However, according to a study conducted by Munshi and Pandey (2017), the majority of the Indian soldiers felt that women officers performed the role of good leaders in the Indian Army.

The case for grant of permanent commission to women officers is subjudice in the Honourable Supreme Court of India; hence, there is a court stay on the release of women officers who want to serve beyond 14 years (SLP(C) 1752-1754). Those who want to quit on completion of 14 years can go on release as per the existing terms and conditions of service. The women officers of Army Education Corps (AEC) and Judge Advocates Branch (JAG branch) were granted Permanent Commission in 2011. Permanent Commission implies that they can serve for a minimum period of 20 years and have the same terms and conditions of service for promotions, field postings, courses, pensionary benefits as the Permanent Commission male officers. Dutta (2017) highlighted that there is a need for flexible occupational system, deployments, elimination of hidden barriers to women's progression, and women need to be provided with experiences needed to go up in rank in the Indian Army.

Hence, I have outlined the following gap, which will guide the present research:

There is an urgent need for the effective employment policies leading to greater inclusion of women in the Indian Army.

10 Prabandhan: Indian Journal of Management • September 2018

There is no literature available that has empirically investigated the impact of employment policies on gender inclusion in the army in the Indian context.

# **Hypothesis Development**

The foundation of this study is based on the optimal distinctiveness theory (ODT) given by Marilynn Brewer that has been mainly used in research studies examining stereotypes, intergroup perception, self-esteem, prejudice, and self - stereotyping (Brewer, 1991, 2007), and is widely used in the research on inclusion currently. The genesis of optimal distinctiveness theory is related to evolutionary theory which stated that development of human beings has evolved in a manner which necessitates them to be an element of bigger groups to live on. Developed on the basis of this theory, the optimal distinctiveness theory states that there is a continuum scale with uniqueness at one end and homogeneity at the other end. Hence, to keep a flourishing and satisfying relationship in an organization, individuals need to find optimal balance between the two opposite ends. Thus, optimal identity satisfies the necessity for inclusion within the group and also the necessity for uniqueness between the in-groups and outgroups in order to differentiate one group from the other (Sheldon & Bettencourt, 2002). The theory has been implied over diverse population types in different organizations. In the present study, I argue that employment policies will have an impact on inclusion of women in the army.

- (1) Job Content: Job content entails the nature of job of women, and various types of duties/jobs that women do in the army. Are they independently commanding units like male officers of their service bracket? Is their employment affected by their gender, that is, are they given only stereotype jobs conventionally earmarked for women? (Bhattacharyya, 2012; Nishii, 2013).
- (2) Inclusive Climate: In recent years, inclusive climate has attracted burgeoning interest amongst scholars studying inclusion and diversity. Nishii (2013) stated that an inclusive climate involves elimination of relational sources of bias by ensuring that identity group status is unrelated to access to resources. Within inclusive climates, interpersonal bias is reduced in such a way that gender diversity is associated with lower levels of conflict. This, in turn, removes the negative effect that group conflict normally has on unit-level satisfaction. It has important implications, as unit-level satisfaction is negatively associated with turnover in groups.
- (3) Equal Treatment: Nishii (2013) showed that equal treatment entails creating expectations and opportunities for heterogeneous individuals to establish personalized cross-cutting ties, and integrating ideas across boundaries in joint problem solving. Nair and Vohra (2015) highlighted that a first level of inclusion is contingent on equality and participation, where employees look at other reference groups (for example, male vs. female) to see if the organization treats them fairly in terms of duties, pay, rewards, etc. Being valued and feeling a sense of belongingness is the uniqueness element of inclusion. Furthermore, depending on the structure of an organization, there are different cultures within an organization (Dash & Mohapatra, 2016).

In most of the countries, inspite of women being a vital source of willing workforce for the army, their acceptance and inclusion remains a challenge. The issue of role and inclusion of women in military comes forth as a controversial and problematic issue in the Indian Army as well as other armies worldwide. There has been no real consensus on position of women in the military across various nations. The outcome has always been changeable (Kuloglu, 2005). One of the important factors, which is a challenge to the employment of women in the army, is the acceptance by military men. Research suggests that the acceptance of women in military remains limited.

On the basis of the optimal distinctiveness theory and substantial evidence from literature review, I propose the following hypothesis:

 $\forall$  **H**<sub>0</sub>: Employment policies do not have an influence on the inclusion of women in the army.

To study the impact of employment policies on inclusion of women in army, I include 10 dependent variables derived from the literature review, the optimum distinctiveness theory, and frameworks of inclusion given by Carreiras (2004), Shore et al. (2011), and Nishii (2013) that characterize the unit of analysis.

These variables with respect to women officers are: (a) provided opportunities for betterment of their unit; (b) they are recognized for their uniqueness and professional competence; (c) troops are comfortable in working with women officers; (d) troops of combat arms are ready to accept women officers; (e) women officers are comfortable working with troops; (f) attitude and behaviour of male officers towards women officers is positive; (g) women officers have a sense of belongingness in the army; (h) women officers have a voice in decision making; (i) there is equal encouragement of male and women officers by the leaders; and (j) there is equal sharing of information among women and male officers by the leaders.

### **Research Design**

(1) Measures: A survey method has been used to test the hypothesis. A survey instrument was developed by identifying appropriate measurements from comprehensive literature review. Measures were adopted or modified from scales identified from extant literature to avoid scale proliferation. I used multi-factor measures of construct for testing the hypothesis in order to improve reliability, reduce measurement error, ensure greater validity among survey respondents, and improve validity. A structured data instrument was formulated to collect the data for the study. It was divided into two parts. The first part attempted to collect the information of the respondents, and the second part attempted to know the perception of the respondents about the effects of the employment policies on inclusion of women at different levels in military. The items in the questionnaire were adapted from the studies done by Segal (1995), Davis (2003), Carreiras (2004), Barak (2016), Shore et al. (2011), and Nishii (2013).

All items included in the survey were pretested to ensure precise operationalization of the defined variables in the survey instrument. A pretest was conducted with six experts from defence and academics having more than 20 years of service. The defence professionals associated with policy making and policy implementation were also consulted. Academics consisted of individuals at Professor level in the field of defence studies, who had published research papers in reputed journals. It was ensured that all pretest candidates had the knowledge required to improve the quality of the measurement. Based on the discussion, the survey questions were adjusted accordingly, to make sure that they were understandable, not ambiguous, and specific enough to convey clear meaning to the survey respondents (Dillman, 2007).

(2) Data Collection: This study was done using data collected through a survey using a structured questionnaire with the experts from defence and academic professionals followed by personal discussions on proposed survey questions. Academics consisted of individuals having more than 20 years of service; 200 questionnaires were given out, out of which 183 were received, and 152 were found to be usable. The respondents were only male officers from different corps of Indian army with a service bracket ranging from 2 to 20 years. They had women officers reporting to them, women officers as seniors, and women officers as colleagues. The time period of the study is from 2016 to 2017.

# **Data Analysis and Results**

In this section, I discuss the psychometric properties of measuring items and the research hypothesis is tested. The collected data was analyzed by using IBM SPSS Software version 21.0. The reliability of the research instrument

was tested using Cronbach's alpha coefficient, and it is greater than 0.6 (Hair, Anderson, Tatham, & Black, 1998). Therefore, it was concluded that the research instrument is reliable.

(1) Factor Analysis: Factor analysis was conducted to reduce the number of items into manageable number of factors without much loss of information. The employment policy was studied using a 14 - item inventory. Exploratory factor analysis along with varimax rotation from extraction method was carried out to reduce the 13 variables into a manageable number of factors. Three factors from the list of variables did not fit into the factor framework. The excluded items involved one related to job content and two related to equal treatment. The principal supporting the application of factor analysis is that the initial set of variables should be highly correlated (Chawla & Sondhi, 2011). Factor analysis may not be an appropriate method if the correlation coefficients between all the variables are small. There are two statistical methods recommended to find if it is appropriate to conduct factor analysis. One is Bartlett's test of sphericity for the presence of correlations among the variables. The Bartlett's test checks the null hypothesis for no correlation between the variables. The Bartlett's test is significant at the 5% level of significance. The Kaiser-Meyer-Olkin (KMO) value for employment is 0.704 (Table 1), which is greater than 0.5, indicating that correlation between the variables is adequate for a stable factor solution and sampling adequacy is adequate.

The Bartlett's test tests the null hypothesis of no correlation between the variables. The Bartlett's test is significant at the 5% level of significance.

$$[\lambda^2 (55) = 524.541, p=0.000]$$

Since the value is less than 0.05, the Bartlett's test of sphericity is significant, suggesting sufficient correlation between the variables. The rotated component matrix reveals that the 13 variables of employment policy have

Table 1. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.704
Bartlett's Test of Sphericity	Approx. Chi-Square	524.541
	Df	55
	Sig.	0.000

**Table 2. Factor Loadings and Naming** 

Component	ltems I	actor Loading	
Factor 1:	Preferred appointment for women officers is a combination of desk job and leadership roles.		
Job Content	Women officers are given independent command as OCs of a unit/coy.		
Wome	n officers are mostly employed on posts that require team work, thinking, and professional knowled	ge. 0.691	
Factor 2:	The organization has ensured that all the amenities required for women officers are provided.	0.710	
<b>Inclusive Climate</b>	Women officers face no difficulty in getting maternity leave.	0.654	
Co	-location of women officers with spouse takes place on its own without any difficulty or follow-up.	0.500	
	The present policy of combat exclusion hurts opportunities of promotion for women in army.	0.424	
Factor 3:	Army policy/regulations that exclude women from combat roles are right.	0.681	
<b>Equal Treatment</b>	Women officers should be posted to all the places and appointments where male officers are posted, including field.	0.576	
	Women officers are detailed more frequently for AWWA duties, ushering, LO duties, ladies club, & station welfare activities than male officers.	0.509	

Table 3. KMO and Bartlett's Test - Gender Inclusion

Kaiser-Meyer-Olkin Measure of	0.559	
Bartlett's Test of Sphericity	Approx Chi-Square	406.104
	Df	45
	Sig.	0.000

 $[\lambda^2 (45) = 406.104, p = 0.000]$ 

Table 4. Factor Loadings and Naming - Gender Inclusion

Component	Items	Factor Loading	
Factor 1:	Troops are comfortable in taking orders from women officers.	0.832	
Comfort Level	Women officers are comfortable while working with troops.	0.772	
Factor 2 : Uniqueness	Women officers are being provided the opportunities to put their knowledge and expertise for betterment of the organization.	0.854	
	Women officers are recognized for their professional competence and uniqueness.	0.634	
	Attitude and behaviour of male officers towards women officers is positive and friendly.	0.595	
Factor 3:	Women officers have a voice in the decision-making in the unit level.	0.677	
<b>Decision Making</b>	The information is shared equally among male and women officers in the unit.	0.632	
Factor 4:	Leaders encourage both male and female officers equally.	0.807	
Encouragement	Troops of infantry, armoured, and artillery are ready to accept women officers in combat arms	0.480	

been reduced to three factors namely, Job Content, Inclusive Climate, and Equal Treatment. Ten variables of gender inclusion have been reduced to four factors: Comfort Level, Uniqueness, Acceptance, and Decision Making.

Each one of the above-mentioned factors have an Eigen value of more than 1, suggesting a three factor solution that explains a total variance of 62.13%. As seen from the Table 2, all the factor loadings exceed the value of 0.6 except four factor loadings, which are also close to 0.6. Hence, the suitable factors were extracted.

Gender inclusion was studied using a 10 - item inventory. Factor analysis along with varimax rotation from extraction method was carried out to reduce the 10 factors into a manageable number of factors. One factor from the list of items which did not fit and was excluded for gender inclusion related to acceptance namely, the acceptance of women as equal members of the army, which threatens its core identity of being a male bastion.

Since the value is less than 0.05, the Bartlett's test of sphericity is significant, suggesting sufficient correlation between the variables. The value of KMO for gender inclusion is 0.559, which is greater than 0.5, indicating that correlation between the variables is adequate for a stable factor solution, and sampling adequacy is adequate (Table 3).

As seen from the Table 4, four factors have an Eigen value of more than 1, thereby suggesting a four-factor solution. Cumulatively, the total variance explained by the four factors out of 10 factors is 60.82%.

(2) Hypothesis Test: I tested our research hypothesis using multivariate analysis of variance (MANOVA). This technique is considered most appropriate as it allows us to test the hypothesis regarding the effect of one or more independent variables on two or more dependent variables followed by significance tests involving individual dependent variables separately and robustness of the technique (Grice & Iwasaki, 2007). In the present study, there is one independent variable and many continuous dependent variables. As seen from the analysis, the response variables are correlated. Hence, MANOVA was carried out for the study with the aim of determining if the dependent variable is altered by the independent variable. Grice and Iwasaki (2007) confirmed that the

14 Prabandhan: Indian Journal of Management • September 2018

possible results are multivariate in nature as they take into account the quantitative measures simultaneously and recognize their probable interrelationship. In the present study, this test was executed to analyze the influence of the independent variable, employment policy on the aggregate dependent variable: gender inclusion in Indian Army.

One - Way MANOVA: Variables and Measurement.

Independent Variable: Employment Policy (1 = Improved, 2 = Not improved).

Aggregate Dependent Variable: Gender Inclusion.

Employment policy was originally measured using 13 items. The 13 items were combined to create summated scale of employment policy with five response options ( $1=strongly\ disagree$ , 2=disagree, 3=neutral, 4=agree,  $5=strongly\ agree$ ). The 5 - point scale was then converted to a 2 - point scale using collapsing option in SPSS. Hence, the newly created variable (employment policy) is a nominal variable with two response options (1=Improved,  $2=Not\ improved$ ).

Level of significance :  $\alpha = 0.05$ .

Sig.

A two group between subject MANOVA was conducted on 10 dependent variables: Opportunities for betterment of unit, recognition for uniqueness and competence, troops comfortable, combat arms, women officers comfortable, positive attitude and behaviour, sense of belongingness, decision making, equal encouragement, and information sharing.

The Table 5 shows that Bartlett's test of sphericity is statistically significant; p - value is less than 0.001, indicating sufficient correlation between dependent variables to proceed with the analysis.

Box's test of equality of variance is statistically insignificant, indicating that the observed covariances matrices of the dependent variables are equal across independent variables; hence, Wilk's lamda was employed to evaluate all the multivariate effects. The Wilk's Lamda is significant at the 5% level of significance (Table 6).

Since the p - value is less than the level of significance (0.05) (Table 7), the null hypothesis ( $H_0$ ) is rejected. Hence, it is concluded that employment policies have an influence on gender inclusion in the army. Since Wilk's Lambda is significant, univariate ANOVA was conducted on each dependent variable separately to determine the locus of statistically significant multivariate effect. Since the influence of employment policy is examined on each

lable 5. Bartlett's lest o	T Spnericity		
Likelihood Ratio	0.000		
Approximate Chi-Square	526.793		
Df	54		

Box's M	96.993
F	1.684
df1	55
df2	71006.351

0.001

Table 6. Box's Test of Equality of Variance

**Table 7. Multivariate Tests** 

Sig.

0.000

	Effect	Value	F	Hypothesis <i>df</i>	Error df	Sig.
Employment Policy	Pillai's Trace	0.167	8.777	10.000	438.000	0.000
	Wilks' Lambda	0.833	8.777	10.000	438.000	0.000
	Hotelling's Trace	0.200	8.777	10.000	438.000	0.000
	Roy's Largest Root	0.200	8.777	10.000	438.000	0.000

Wilk's Lambda = 0.833, F(10, 134) = 8.777, p = 0.000

Table 8. Tests of Between - Subjects Effect

Source	Dependent variable	Type III Sum of Squares	Df	Mean Square	F	Sig.
Employment Policy	Provided opportunities for betterment of organization.	0.417	1	76.035	0.417	0.528
	Recognition for competence and uniqueness.	0.078	1	0.078	0.091	0.763
	Troops comfortable.	76.030	1	76.030	65.871	0.000
	Accept women in combat arms.	3.701	1	3.701	3.238	0.73
	Women officers comfortable.	36.035	1	36.035	40.434	0.000
Attitude and behaviour of male officers.	15.979	1	15.979	12.352	0.000	
	Sense of belongingness.	3.400	1	3.400	6.959	0.005
	Voice in decision making.	0.038	1	0.038		0.802
	Encourage equally.	1.822	1	1.822	1.819	0.178
	Equal sharing of information.	1.262	1	1.262	1.335	0.248

dependent variable separately, I use the Bonferroni corrected alpha level to avoid alpha inflation. I, therefore, divide alpha by number of dependent variables. Hence, the new alpha is 0.05/10 = 0.005.

(3) Results: It can be seen that the employment policy (Table 8) has a significant influence on troops being comfortable in taking orders from women officers [F(1,447) = 35.45, p = 0.000], women officers being comfortable in working with troops [F(1,447) = 36.035, p = 0.000], attitude and behaviour of male officers towards women officers [F(1,447) = 15.979, p = 0.000], and sense of belongingness of women officers [F(1,447) = 3.400, p = 0.005].

However, employment policy does not influence women officers being provided opportunity to put their knowledge and expertise for betterment of the organization [F(1,447) = 76.035, p = 0.528], women officers being recognized for their professional competence and uniqueness [F(1,447) = 0.078, p = 0.763], acceptance of women officers by troops in combat arms [F(1,447) = 3.701, p = 0.73], women officers having a voice in decision making [F(1,447) = 0.038, p = 0.802], equal encouragement of men and women officers [F(1,447) = 1.822, p = 0.178], and information being shared equally among male and female officers [F(1,447) = 1.262, p = 0.248].

#### **Discussion**

My interest in investigating the role of employment policies on gender inclusion was triggered by two factors. First, the need for effective employment policies leading to greater inclusion of women in Indian Army and second, the lack of an empirical evidence of the impact of employment policies on gender inclusion in the Indian Army. More than a decade after women officers were inducted in services (other than the medical branch) and supporting arms, it is observed that change in the employment policies would lead to greater inclusion of women in the army. Gender inclusion has become the need of the hour because of which over a period of time, organizations have embraced gender inclusion in their policies. By testing the hypothesis, it can be seen that employment policies are important for achieving effective gender inclusion in the Indian Army. The results are consistent with the findings of Carreiras (1999, 2004), who found that there is a clear relationship between the organizational format of the armed forces and the representation of women. Barrak (2016) highlighted that for improving the climate of inclusion in an organization, examination of the connection between specific management policies and practices is required.

#### Conclusion

The primary aim of the present study is to examine whether the employment policies have an impact on gender inclusion in Indian military from the selected seminal works and empirical study. The paper proposes that gender inclusion in military is influenced by Job Content, Inclusive Climate, and Equal Treatment. Employment policies are found to significantly influence troops being comfortable in taking orders from women officers; women officers being comfortable in working with troops; attitude and behaviour of male officers towards women officers; and sense of belongingness of women officers. Women officers being provided an opportunity to put their knowledge and expertise for betterment of organization; women officers being recognized for their professional competence and uniqueness; acceptance of women officers by troops in combat arms; women officers having a voice in decision making; equal encouragement of male and female officers; and information being shared equally among male and female officers are not significantly influenced by the employment policy.

### **Managerial Implications**

The research outcome of this paper offers significant information to the groups of key stakeholders, that is, the army, its policy makers, and policy executors to focus on restructuring of comprehensive, concrete, and relevant employment policies for women officers and to make the leadership more accountable for implementation. The current study provides an input of immense importance for the court case going on since 2010 in the Honourable Supreme Court of India regarding grant of permanent commission and associated employment policies to women officers in the army. From the policy perspective, the results from the empirical evidence can help HR managers of the Indian Army to maximize the benefits from implementing gender inclusive employment policies by ensuring dedicated commitment from the leaders to achieve effective gender inclusion.

# Limitations of the Study

The present research study has certain limitations. This study focuses on Indian military which is a specialized, diverse, and large organization. Secondly, it is based on data collected at one point of time. This leads to one of the limitations of the study, as casual analysis cannot be ascertained without longitudinal data. Thirdly, data for the study was collected from Eastern sector of the military; hence, generalization of the conclusions drawn for the other sectors of military needs to be qualified and evaluated.

# **Scope for Further Research**

Further research directions may be outlined as:

- Use It is important to further investigate the impact of recruitment and training policies of Indian military on gender inclusion.
- Future studies can use longitudinal data to establish the causal relationship amongst antecedents and dependent variables.
- The scope of the present research is restricted to the Indian military. Similar kind of research can be extended to the other two services, that is, Indian Airforce and Indian Navy also. It would help in deriving a comparative analysis of the results and identify common issues to be addressed at the Ministry of Defence level leading to the formulation of relevant policies.

#### References

- Avery, D. R., McKay, P. F., Wilson, D. C., & Volpone, S. (2008). Attenuating the effect of seniority on intent to remain: The role of perceived inclusiveness. Paper presented at the meeting of the Academy of Management, Anaheim, CA.
- Barak, M. E. M. (2000). Beyond affirmative action: Toward a model of diversity and organizational inclusion. *Administration in Social Work, 23* (3 4), 47-68.
- Barak, M. E. M. (2016). *Managing diversity: Toward a globally inclusive workplace* (4th ed.). Thousand Oaks, CA: Sage Publications.
- Berglund, N. (2014, October 14). Women now subject to military service. *News in English no*. Retrieved from http://www.newsinenglish.no/2014/10/14/women-now-subject-to-military-draft/
- Bhattacharyya, A. (2012). Women in military in India: The cry for parity. *Mediterranean Journal of Social Sciences*, 3(2), 317-325.
- Brewer, M. B. (1991). The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin*, 17(5), 475 482.
- Brewer, M. B. (2007). The importance of being we: Human nature and intergroup relations. *American Psychologist*, 62(8), 726-738.
- By the numbers : Women in the U.S. military. (2013, January24). *CNN.com*. Retrieved from https://edition.cnn.com/2013/01/24/us/military-women-glance/index.html
- Carreiras, H. (1999). The role of women in the armed forces of NATO countries: Military constraints and professional identities. *Minerva*, 17 (3&4), 46.
- Carreiras, H. (2004). Gender and the military: A comparative study of the participation of women in the Armed Forces of Western democracies (Thesis). European University Institute, Italy.
- Chawla, D., & Sondhi, N. (2011). *Research methodology concepts and cases*. New Delhi: Vikas Publishing House Pvt. Ltd.
- Choudhary, N., Kumar, R., & Philip, P.J. (2016). Effects of transformational leadership on follower's organizational behaviour: The moderating role of culture. *Prabandhan: Indian Journal of Management*, 9 (7), 23-35. doi:10.17010/pijom/2016/v9i7/97785
- Dash, S., & Mohapatra, J. (2016). Employee perception on the role of HR for creating and managing employer branding towards its brand: An explorative study. *Prabandhan: Indian Journal of Management, 9* (2), 41-54. doi:10.17010/pijom/2016/v9i2/87242
- Davar, K. (2017). Storming the male bastion. Defence and Security Alert, 8(6), 9-11.
- Davis, K. D. (ed.). (2007). *Women and leadership in the Canadian forces: Perspectives and experience*. Canada: Canadian Defence Academy Press.
- Davis, P. (2003). Staff induction, The HR management manual. Noida: Penguin Books.
- 18 Prabandhan: Indian Journal of Management September 2018

- Defence People Group, Department of Defence, Australia. (2016). *Women in the ADF Report 2015-16*. Retrieved from http://www.defence.gov.au/AnnualReports/15-16/Downloads/Women-in-ADF-Report-2015-16-online-only.pdf
- Dheeraj, P. C. (2017). Making of a female combatant: A three stage model. *Defence and Security Alert*, 8 (6), 36 39.
- Dichter, M. E., & True, G. (2015). "This is the story of why my military career ended before it should have". Premature separation from military service among U.S. women veterans. *Affilia*, 30 (2), 187-199.
- Dillman, D. A. (2007). Mail and Internet surveys: The tailored design [2007 Update]. Hoboken: John Wiley & Sons.
- Dutta, M. (2017). Short service, permanent commission conundrum. *Defence and Security Alert*, 8 (6), 24 26.
- Fenner, L. M. (1998). Either you need these women or you do not: Informing the debate on military service and citizenship. *Gender Issues*, 16(3), 5-32.
- Grice, J. W., & Iwasaki, M. (2007). A truly multivariate approach to MANOVA. *Applied Multivariate Research*, 12(3), 199 226.
- Hair, J.F., Anderson, R.E., Tatham, R.L., & Black, W.C. (1998). *Multivariate data analysis* (5th ed.). USA: Prentice-Hall Inc.
- Khare, V. (2017). Women's participation in the Indian defence forces. *Defence and Security Alert*, 8 (6),12-15.
- Kuloglu, C. (2005). The Turkish military academy from a gender perspective. In G. Caforio & G. Kümmel (eds.), Military missions and their implications reconsidered: The aftermath of September 11th (Contributions to conflict management, peace economics and development, Volume 2) (pp.575 - 582). Emerald Group Publishing Limited.
- MacKenzie, M. (2015). *Beyond the band of brothers : The U.S. military and the myth that women can't fight.* United Kingdom: Cambridge University Press.
- Mathers, J. G. (2000). Women in the Russian armed forces: A marriage of Convenience? *Minerva*, 18 (3 4), 129 143.
- Munshi, A., & Pandey, S. (2017). Inclusion in Army: A study of acceptance of women leaders by men in uniform. *Prabandhan: Indian Journal of Management, 10* (8), 25-41. doi:10.17010/pijom/2017/v10i8/117426
- Nair, N., & Vohra, N. (2015). *Diversity and inclusion at the workplace: A review of research and perspectives* (W.P. No. 2015-03-34). Ahmedabad, India: IIM Ahmedabad.
- Nishii, L. H. (2013). The benefits of climate for inclusion for gender- diverse groups. *Academy of Management Journal*, 50 (6), 1754 1774.
- Obradovic, L. (2015). Comparative analysis of women's military participation in East Asia. *Res Militaris, ERGOMAS* is sue n°I, Women in the Military, Part One. Retrieved from http://resmilitaris.net/ressources/10217/89/res\_militaris\_article\_obradovic\_comparative\_analysis\_of\_female\_military\_participation\_in\_east\_asia.pdf
- Pearpoint, J., & Forest, M. (n.d.). *Inclusion : It's about change !* Inclusion Network. Retrieved from http://www.inclusion.com/inclusion.html#change
- Sasson Levy, O. (2003). Feminism and military gender practices: Israeli women soldiers in "masculine" roles. Sociological Inquiry, 73(3), 440 - 465. doi: https://doi.org/10.1111/1475-682X.00064

- Segal, D. R., & Segal, M. W. (2004). America's military population (Vol.59, No.4). Washington, DC: Population Reference Bureau.
- Segal, M. (1993). Women in the armed forces. In R. H. Howes & M. R. Stevenson (eds.), Women and the use of *military force* (pp. 81 - 93). Boulder: Lynne Rienner Publishers.
- Segal, M. W. (1995). Women's military roles cross-nationally: Past, present, and future. Gender & Society, 9 (6), 757 - 775. doi: https://doi.org/10.1177/089124395009006008
- Sheldon, K. M., & Bettencourt, B.(2002). Psychological need satisfaction and subjective well being within social groups. British Journal of Social Psychology, 41(1), 25-38.
- Shore, L. M., Randel, A. E., Chung, B. G., Dean, M. A., Ehrhart, K. H., & Singh, G. (2011). Inclusion and diversity in work groups: A review and model for future research. Journal of Management, 37(4), 1262 - 1289. doi: 10.1177/0149206310385943
- Suman, M. (2017). Feedback on women in the Army: Asset or liability? Defence and Security Alert, 8 (6), 20 22.
- Tetreault, M. A. (1988). Gender belief systems and the integration of women in the US military. *Minerva*, 6(1), 44 71.
- Women to be allowed in combat role in Army, says Gen Bipin Rawat. (2017, June 4). The Times of India. Retrieved from https://timesofindia.indiatimes.com/india/women-to-be-allowed-in-combat-role-in-army-saysgen-bipin-rawat/articleshow/58985412.cms
- Women to serve in close combat roles in the British military. (2016, July 8). BBC. Retrieved from https://www.bbc.com/news/uk-36746917

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