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## Combat Role for Women in the Indian Armed Forces

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# Combat Role for Women in the Indian Armed Forces

Wg Cdr Jasbir Singh Minhas (Retd.)<sup>α</sup> & Dr. Nilesh Arora<sup>σ</sup>

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## I. INTRODUCTION

The women are performing really well in all the fields starting from house hold management to space shuttle.. Three top private banks have women as their CEOs namely Shikha Sharma as CEO & MD of Axis bank, Chanda Kochhar CEO & MD of ICICI bank and Naina Lal Kidwai as India country head of HSBC. In politics also the women are powerful and performing as Chief Ministers of states like West Bengal and Tamil Nadu and in the recent past the Chief Minister of UP was also women. Not only the fields of politics and banks but all the fields like Medicine, Engineering, Pharmaceuticals, Management, Defense and Para-Military forces have attracted women and they performed very well and in some cases they have outnumbered and performed better than their male counterpart.

The Indian Armed Forces consists of three professional uniformed services: the Indian Army, Indian Navy, and Indian Air Force. Additionally, the Indian Armed Forces are supported by three paramilitary organizations (Assam Rifles, Indian Coast Guard and Special Frontier Force) and various inter-service institutions such as the Strategic Forces Command. The

President of India is the Supreme Commander of the Indian Armed Forces.

The Indian Armed Forces, which for long was considered a male dominated workplace, now has confident, bold women, molding into every role and setting examples for future generations. Lieutenant General Puneeta Arora, a lady officer from the Army Medical Corps, heads the prestigious defense institution, the Armed Forces Medical College (AFMC), in Pune. Padmavathy Bandopadhyay was the first woman Air Marshal of the Indian Air Force. The role of women in the armed forces for a long time, was limited to the medical profession i.e. doctors and nurses. In 1992, the doors were thrown open for women entry as regular officers in aviation, logistics, law, engineering and executive cadres. Three wings of armed forces have women officers ranging between appx 3.3 % to 10.4 % of the total present strength of the officers. Women officers in the armed forces are performing very well and exhibiting their responsibility and duties shoulder to shoulder with their male counter parts. Even though 20 years have passed there is no policy and scheme made by Indian Government to induct women in combat role and as PBOs in their three fleets of armed forces.

Bright, young and energetic men and women make up the bulk of manpower in the armed forces. Recruitment is voluntary, which implies that every citizen of India is eligible to be a part of it, provided he/she fulfils the specified criteria for selection. Caste, region or religion, do not come in the way of the selection process, thereby making it a heterogeneous work place. The current study will evaluate the possibility for women as combat fighter in the armed forces of India. The also investigate the perception of the army officials (i.e., Officers, Women officers, Physiologists) about the same.

The study will be divided into six parts. The first part discusses the overview of the study. The second part reveals the literature. The third section reveals the objectives of the study. The fourth section depicts the methodology used for the purpose of the study. The sixth part shows the analysis of the data and the last part uncovers the conclusion for the study.

## II. REVIEW OF LITERATURE

A number of scholars evaluated the participation of women in the armed forces at the both levels (i.e., technical and operations). Cook (2006)

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stated that Women have played many roles in the military for over 3,000 years in a large number of cultures and nations. Despite various, though limited, roles in the armies of past societies, the role of women in the military, particularly in combat was very limited and it is only recently that women have begun to be given a more prominent role in contemporary armed forces. The debate is on as numbers of countries begin to expand the role of women in their armed forces. The status of women in the armed forces of the important countries of the world is as follows in the subsequent paragraphs. The other scholars also supported the fact and discusses the past condition and future possibility of women in the armed forces. Sowers (2003) argued that the current tally of woman in the Russian Army is standing at around 115,000 to 160,000, representing 10% of Russia's military strength. The only nation to deploy female combat troops in substantial numbers was Russia. British took the lead in 1938 worldwide in establishing uniformed services for women. By August, 1941, women were operating the fire-control instruments; they were never allowed to pull the trigger, as killing the enemy was considered to be too masculine. More than 500,000 women were volunteer uniformed auxiliaries in the German armed forces in 1944-45. In the Luftwaffe they served in combat roles helping to operate the anti — aircraft systems that shot down Allied bombers. The reports of the different armed research organizations also evaluated the position of the women in the armed forces. *WSIDF (2010)* reveals that Israel is currently the only country in the world with a mandatory military service requirement for women Roles for women beyond technical and secretarial support started to open up in the late 1970s and early 1980s. In 2000, Equality amendment to the Military Service law granting equal opportunities in the military to women found physically and personally suitable for a job in 2000. Women started to enter combat support and light combat roles in a few areas, including the Artillery Corps, infantry units and armored divisions. In his study *Campbell (1993)* depicts that the United States is considered a pioneer and a trend-setter as regards to induction of women in the services. There are approximately 200,000 American women on active duty in the US armed forces. They constitute nearly 20 percent of its strength. Women are also participating in Iraq operations in large numbers. 15% women are the part of French armed forces The role of women in the French military grew in 1914 with the recruitment of women as personnel in the combined branches of the French military. They are 11% of the Army forces, 13% for the Navy, 21% of the Air Force and 50% of the Medical Corps. This is the highest proportion of female personnel in Europe. It has been reported in the (*Girls in the army: Norway passes bill on mandatory military service for women, 2014*) that women in Norway have been in defense since 1938, and during the Second

World War both enlisted women and female officers served in all branches of the military. Between 1977 and 1984, the Norwegian Parliament passed laws expanding the role of women in the Norwegian Armed Forces. In 1995, Norway allowed women to serve on its military submarines, The Parliament of Norway plans conscription for women on equal terms with men in 2015. Singapore also allows women to serve in combat roles. Sri Lanka Air Force (SLAF) was the first service of the Sri Lankan military to allow women to serve followed by Army in 1979 with the establishment of the Sri Lanka Army Women's Corps (SLAWC). Not only in the western countries but in the asian countries also participation of women in the armed forces has been discussed in the research. Pakistan is the only country in the Islamic world to have women appointed in the high ranking assignments and the general officer ranks, as well as performing their military duties in the hostile and combat military operations. *Staff editorial report (2006)* reveals that women have been taking part in Pakistan military since 1947 after the establishment of Pakistan. In 2006, the first women fighter pilots batch joined the combat aerial mission command of PAF and women in Pakistan Army have been trained in combat missions, particularly in sniper, airborne and infantry warfare. Currently 12.8% of women are serving in the Australian Defense Force (with 15.1% in the Royal Australian Air Force, 14.6% in the Royal Australian Navy and 10.5% in the Australian Army) and 17.5% of the reserves. In 1998, Australia became the fourth nation in the world to allow women to serve on its submarines. In the report (*Categories of Entry, 2011*) it has been reported that Indian Armed Forces consists of three professional uniformed services: the Indian Army, Indian Navy, and Indian Air Force. Additionally, the Indian Armed Forces are supported by three paramilitary organizations namely Assam Rifles, Indian Coast Guard and Special Frontier Force and various inter-service institutions such as the Strategic Forces Command. The strength of Indian Armed Forces is over 1.3 million active personnel. It is world's 3rd largest military force and has the world's largest volunteer army. Indian Army consists of 1,129,900 active personnel and 990960 as reserve. Indian Navy has a strength of 58,350 active and 55,000 as reserve personnel. Indian Air Force has a strength of 1,27,200 as active and 1,40,000 as reserve. In the article of (*Deccan Herald, 22 Aug, 2012*) it has been reported that women officers in the Indian Army, Navy and Air Force constitute only 3.3, 3.9 and 10.4 percent of the officer cadre respectively and these figures were achieved within 20 years from when they were first recruited. The role of women in the armed forces for a long time, was limited to the medical profession i.e. doctors and nurses. In 1992, the doors were thrown open for women entry as regular officers in aviation, logistics, law, engineering and executive cadres. Thousands of spirited young women applied against

advertisements and it was a turning point in the history of time. These women chose a new field where they had to painstakingly pave a path for the others to follow. Following are the branches where women are permitted to work in the Indian Armed Forces.

Though the scholars have discussed the role of women in the armed forces in the different parts of the world, the study on the role of women in the Indian armed forces as combat fighters is highly called for. The present study will evaluate the same topic.

### III. OBJECTIVES OF THE STUDY

- To evaluate the role of women in the Indian Armed Forces
- To find out the perception of the army officials about the role of women in combat
- To evaluate the physical and mental strength of women in a combat role

### IV. RESEARCH METHODOLOGY

The study is primary in the nature. A sample size of 108 has been selected for the study. Systematic random sampling has used for the selection of the sample. For the analysis following tools have been used. Following tools are used for data analysis.

The *mean* is a particularly informative measure of the "central tendency" of the variable if it is reported along with its confidence intervals.

$$\text{Mean} = \frac{\sum X_i}{n}$$

Usually we are interested in statistics (such as the mean) from our sample only to the extent to which they can infer information about the population. The confidence intervals for the mean give us a range of values around the mean where we expect the "true" (population) mean is located (with a given level of certainty).

$$s = \sqrt{\frac{\sum (x_i - \mu)^2}{N}}$$

where

$\mu$  is the population mean and N is the population size

$$s = [S (x_i - m)^2 / N]^{1/2}$$

The sample estimate of the population *standard deviation* is computed as:

$$s = \sqrt{\frac{\sum (x_i - \bar{x})^2}{(n-1)}}$$

where

$\bar{x}$  is the sample mean and n is the sample size

The *variance* of a population of values is the square of standard deviation.

*Skewness* measures the deviation of the distribution from symmetry. If the skewness is clearly different from 0, then that distribution is asymmetrical, while normal distributions are perfectly symmetrical.

$$\text{Skewness} = \frac{nM_3}{(n-1)(n-2)s^3}$$

where

$$M_3 \text{ is equal to: } \sum_{i=1}^m (x_i - \bar{x})^3$$

$s^3$  is the sample standard deviation raised to the third power

n is the valid number of cases.

*Kurtosis* measures the "peakedness" of a distribution. If the *kurtosis* is clearly different than 0, then the distribution is either flatter or more peaked than normal; the *kurtosis* of the normal distribution is 0. *Kurtosis* is computed as:

$$\text{Kurtosis} = \frac{n(n+1)M_4 - 3M_2^2(n-1)}{(n-1)(n-2)(n-3)s^4}$$

where:

$$M_2 = \sum_{i=1}^m (y_i - \bar{y})^2$$

$$M_4 = \sum_{i=1}^m (y_i - \bar{y})^4$$

n is the valid number of cases

A line in a two-dimensional or two-variable space is defined by the equation  $Y=a+bX$ ; in full text, the Y variable can be expressed in terms of a constant (a) and a slope (b) times the X variable. The constant is also referred to as the intercept, and the slope as the regression coefficient or B coefficient. Multiple regression procedures will estimate a linear equation of the form:

$$Y=a+b_1X_1+b_2X_2+\dots+b_pX_p$$

The regression line expresses the best prediction of the dependent variable (Y), given the independent variables (X). However, nature is rarely (if ever) perfectly predictable, and usually there is substantial variation of the observed points around the fitted regression line. The deviation of a particular point from Pearson's chi-square is used to assess two types of comparison: tests of goodness of fit and tests of

independence. A test of goodness of fit establishes whether or not an observed frequency distribution differs from a theoretical distribution. A test of independence assesses whether paired observations on two variables, expressed in a contingency table, are independent of each other – for example, whether people from different regions differ in the frequency with which they report that they support a political candidate.

The  $t$ -test can be used to compare a sample mean to an accepted value (a population mean), or it can be used to compare the means of two sample sets.

$$t = \frac{\bar{x} - \mu_0}{s/\sqrt{n}}$$

where  $s$  is the standard deviation of the sample, not the population standard deviation.



V. DATA ANALYSIS AND FINDINGS

The current chapter will discuss the findings of the data analyzed with the help of statistical tools

Table 1 : Descriptive Statistics

	Var1	Var2	Var3	Var4	Var5	Var6	Var7	Var8	Var9	Var10	Var11	Var12	Var13	Var14	Var15	Var16	Var17	Var18	Var19	Var20	Var21	Var22	Var23	Var24	Var25
Mean	1.82	2.21	2.35	2.14	2.44	2.15	1.94	2.09	2.04	2.34	2.03	2.41	1.98	1.97	2.14	2.03	1.64	1.65	2.56	2.22	1.75	2.64	2.83	2.35	1.79
Std. Deviation	.955	1.077	1.163	1.219	1.113	1.066	.988	1.081	.916	.978	1.045	.967	.773	.891	.880	.848	.803	.765	.868	.960	.887	1.131	.952	1.163	1.169
Variance	.913	1.160	1.352	1.485	1.240	1.137	.977	1.169	.840	.956	1.093	.935	.598	.794	.775	.719	.644	.585	.753	.922	.787	1.280	.907	1.352	1.365
Skewness	1.410	.889	.658	.739	.287	.830	.901	.898	.965	.484	.894	.741	.650	1.025	.979	1.259	1.193	.953	.453	.441	1.089	.279	.673	.476	1.106
Std. Error of	.233	.233	.233	.233	.233	.233	.233	.233	.233	.233	.233	.233	.233	.233	.233	.233	.233	.233	.233	.233	.233	.233	.233	.233	.233
Kurtosis	2.107	.144	-.143	-.646	-.215	.382	-.166	.064	1.031	-.488	.263	.131	.405	1.011	1.266	2.341	.935	.921	.048	-.412	1.233	-.579	-.290	-.498	1.457
Std. Error of	.461	.461	.461	.461	.461	.461	.461	.461	.461	.461	.461	.461	.461	.461	.461	.461	.461	.461	.461	.461	.461	.461	.461	.461	.461
Range	4	4	5	4	5	5	3	4	4	4	4	4	3	4	4	4	3	4	4	4	5	5	4	5	5



Table.1 shows that the mean value is lying between 1 and 3 ie strongly agree, agrees and neutral. It shows that most of the people agree with the study. All the people are in support that women can work in army in combat role and in PBOR's. The result of the standard deviation shows that there is very negligible deviation in

the data which shows that the data is normal in the nature. The result of the skewness and the kurtosis also supports the same fact. After descriptive statistics correlation has been used to check the relationship among the variables. Next table will reveal the result of correlation.

Table 2 : Correlations

	Var1	Var2	Var3	Var4	Var5	Var6	Var7	Var8	Var9	Var10	Var11	Var12	Var13	Var14	Var15	Var16	Var17	Var18	Var19	Var20	Var21	Var22	Var23	Var24	Var25
Var1	1	.754	.670	.447	.575	.723	.572	.640	.552	.505	.641	.544	.223	.587	.496	.560	.477	.426	.414	.573	.543	.442	.450	.603	.376
Var2	.754	1	.776	.540	.653	.770	.672	.505	.589	.578	.692	.634	.297	.610	.501	.515	.598	.375	.460	.614	.565	.562	.573	.649	.289
Var3	.670	.776	1	.499	.600	.712	.557	.531	.567	.542	.615	.536	.246	.533	.436	.445	.498	.319	.422	.524	.494	.581	.577	.544	.324
Var4	.447	.540	.499	1	.347	.394	.543	.394	.472	.548	.628	.388	.221	.598	.461	.394	.558	.464	.181	.548	.490	.491	.342	.460	.238
Var5	.575	.653	.600	.347	1	.660	.425	.532	.552	.503	.567	.559	.335	.446	.356	.541	.568	.328	.386	.466	.492	.492	.441	.499	.231
Var6	.723	.770	.712	.394	.660	1	.648	.531	.587	.569	.676	.621	.355	.506	.466	.626	.478	.443	.444	.524	.524	.572	.559	.659	.281
Var7	.572	.672	.557	.543	.425	.648	1	.443	.498	.594	.662	.546	.439	.656	.633	.471	.595	.538	.414	.577	.631	.514	.445	.516	.320
Var8	.640	.505	.531	.394	.532	.531	.443	1	.676	.509	.527	.464	.483	.478	.379	.558	.567	.469	.352	.565	.511	.433	.424	.546	.326
Var9	.552	.589	.567	.472	.552	.587	.498	.676	1	.664	.594	.531	.397	.448	.353	.612	.578	.432	.432	.596	.448	.464	.403	.523	.191
Var10	.505	.578	.542	.548	.503	.569	.594	.509	.664	1	.658	.651	.429	.547	.368	.563	.635	.437	.343	.595	.595	.544	.443	.501	.195
Var11	.641	.692	.615	.628	.567	.676	.662	.527	.594	.658	1	.580	.359	.633	.595	.590	.536	.421	.395	.683	.622	.459	.418	.569	.403
Var12	.544	.634	.536	.388	.559	.621	.546	.464	.531	.651	.580	1	.398	.491	.460	.431	.565	.297	.358	.536	.523	.546	.511	.603	.293
Var13	.223	.297	.246	.221	.335	.355	.439	.483	.397	.429	.359	.398	1	.393	.361	.400	.426	.400	.294	.471	.470	.281	.237	.330	.192
Var14	.587	.610	.533	.598	.446	.506	.656	.478	.448	.547	.633	.491	.393	1	.660	.508	.496	.411	.383	.597	.559	.426	.369	.596	.443
Var15	.496	.501	.436	.461	.356	.466	.633	.379	.353	.368	.595	.460	.361	.660	1	.333	.389	.420	.447	.571	.547	.407	.429	.564	.356
Var16	.560	.515	.445	.394	.541	.626	.471	.558	.612	.563	.590	.431	.400	.508	.333	1	.468	.476	.398	.589	.469	.488	.365	.559	.317
Var17	.477	.598	.498	.558	.568	.478	.595	.567	.578	.635	.536	.565	.426	.496	.389	.468	1	.491	.269	.590	.515	.504	.434	.538	.166
Var18	.426	.375	.319	.464	.328	.443	.538	.469	.432	.437	.421	.297	.400	.411	.420	.476	.491	1	.246	.502	.447	.316	.201	.340	.072
Var19	.414	.460	.422	.181	.386	.444	.414	.352	.432	.343	.395	.358	.294	.383	.447	.398	.269	.246	1	.420	.282	.276	.364	.320	.193
Var20	.573	.614	.524	.548	.466	.524	.577	.565	.596	.595	.683	.536	.471	.597	.571	.589	.590	.502	.420	1	.691	.479	.450	.691	.326
Var21	.543	.565	.494	.490	.492	.524	.631	.511	.448	.595	.622	.523	.470	.559	.547	.469	.515	.447	.282	.691	1	.477	.382	.521	.246
Var22	.442	.562	.581	.491	.492	.572	.514	.433	.464	.544	.459	.546	.281	.426	.407	.488	.504	.316	.276	.479	.477	1	.699	.552	.224
Var23	.450	.573	.577	.342	.441	.559	.445	.424	.403	.443	.418	.511	.237	.369	.429	.365	.434	.201	.364	.450	.382	.699	1	.535	.228
Var24	.603	.649	.544	.460	.499	.659	.516	.546	.523	.501	.569	.603	.330	.596	.564	.559	.538	.340	.320	.691	.521	.552	.535	1	.296
Var25	.376	.289	.324	.238	.231	.281	.320	.326	.191	.195	.403	.293	.192	.443	.356	.317	.166	.072	.193	.326	.246	.224	.228	.296	1

Table 2 reveals that there is a high degree of correlation among all the variables. This signifies that all the variables taken in the study is interlinked with each

other. The next table shows the result of the regression analysis.

Table 3 : Regression

R	R Square	Adjusted R Square	Std. Error of the
.842	.709	.625	.599

Table 4 : Anova

		Sum of Squares	df	Mean Square	F	Sig.
	Regression	72.593	24	3.025	8.444	.000 <sup>a</sup>
	Residual	29.731	83	.358		

Table 5 : Coefficients

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.122	.261		.467	.642
	Var1	.008	.121	.008	.067	.947
	Var2	-.153	.124	-.169	-1.240	.218
	Var3	.048	.092	.057	.526	.600
	Var4	.033	.078	.041	.426	.671
	Var5	-.082	.085	-.094	-.971	.334
	Var6	-.003	.126	-.003	-.021	.983
	Var7	.032	.114	.032	.279	.781
	Var8	-.104	.097	-.115	-1.072	.287
	Var9	.284	.107	.266	2.644	.010
	Var11	.235	.110	.252	2.136	.036
	Var12	.277	.093	.274	2.974	.004
	Var13	.053	.104	.042	.512	.610
	Var14	.202	.115	.184	1.763	.082
	Var15	-.264	.112	-.237	-2.349	.021
	Var16	.081	.115	.070	.703	.484
	Var17	.207	.123	.170	1.686	.095
	Var18	.043	.112	.033	.379	.706
	Var19	.036	.088	.032	.414	.680
	Var20	-.029	.121	-.029	-.241	.810
	Var21	.198	.108	.179	1.824	.072
	Var22	.070	.086	.081	.812	.419
	Var23	.064	.096	.062	.661	.510
	Var24	-.056	.094	-.066	-.589	.557
	Var25	-.068	.062	-.082	-1.107	.271

Table 3-5 shows the result of the regression where variable 10 (Performance of women in the paramilitary forces). Is the dependent variable. The result shows that there is 84% impact of the independent variable on the dependent variable. Anova table also supports the finding of the regression where

the significance of the f test is less than 0.05. Further result of the coefficient table shows that variables 9,11,12,15 are the variables which are impacting the depending variable (10) heavily. Fig 1 reveals the result of the regression in the graphical form.



Normal P-P Plot of Regression Standardized Residual

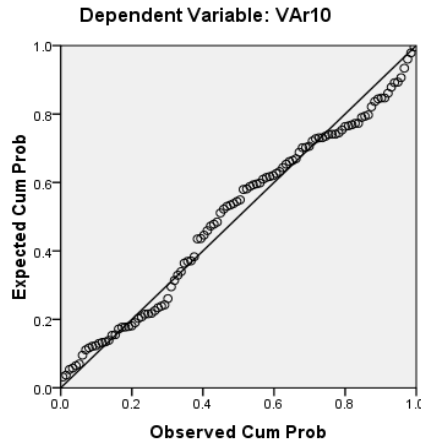


Fig. 1

The P-P plot is the graphical representation of regression. The result of the figure validates the findings shows in the regression table as all the variables are close to the regression line.

VI. FACTOR ANALYSIS

Table 6 : KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.925
Bartlett's Test of Sphericity	Approx. Chi-Square	1.941E3
	df	300
	Sig.	.000

Table 7 : Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared			Rotation Sums of Squared		
	Total	% of	Cumulative	Total	% of Variance	Cumulative %	Total	% of	Cumulative %
1	12.797	51.187	51.187	12.797	51.187	51.187	5.880	23.520	23.520
2	1.404	5.616	56.803	1.404	5.616	56.803	4.151	16.604	40.125
3	1.260	5.039	61.842	1.260	5.039	61.842	3.974	15.897	56.021
4	1.070	4.280	66.122	1.070	4.280	66.122	2.525	10.101	66.122
5	.920	3.679	69.802						
6	.862	3.449	73.251						
7	.703	2.812	76.063						
8	.661	2.645	78.708						
9	.608	2.434	81.142						
10	.577	2.309	83.451						
11	.495	1.982	85.433						
12	.471	1.885	87.318						
13	.418	1.670	88.988						
14	.377	1.510	90.498						
15	.364	1.456	91.954						
16	.323	1.292	93.245						
17	.283	1.134	94.379						
18	.266	1.064	95.443						



19	.221	.882	96.326						
20	.203	.811	97.136						
21	.183	.730	97.867						
22	.177	.709	98.575						
23	.134	.535	99.111						
24	.124	.494	99.605						
25	.099	.395	100.000						

KMO bartlett's test signifies that the data can be used for factor analysis. After the factor analysis the variables are regrouped in four factors. Following are the distribution of variables under different factors. Further table 7 shows the result of variance explained where the

factor weight has been shown. It can be observed from the table that 4 factors have the eigen value of more than 1. The next table shows variables under the different factors.

Table 8 : Rotated Component Matrix

	Component			
	1	2	3	4
Var1	.573	.215	.344	.441
Var2	.726	.328	.246	.302
Var3	.742	.230	.193	.282
Var4	.324	.758	.101	.074
Var5	.635	.082	.454	.150
Var6	.701	.177	.381	.295
Var7	.362	.615	.284	.325
Var8	.375	.181	.663	.211
Var9	.488	.207	.645	.059
Var10	.482	.483	.466	-.017
Var11	.442	.491	.342	.392
Var12	.604	.315	.298	.170
Var13	-.013	.300	.676	.135
Var14	.272	.580	.233	.522
Var15	.213	.563	.122	.573
Var16	.378	.177	.629	.236
Var17	.445	.527	.447	-.089
Var18	.053	.533	.555	.006
Var19	.316	-.062	.410	.470
Var20	.328	.530	.464	.300
Var21	.299	.588	.371	.219
Var22	.718	.380	.101	-.003
Var23	.759	.204	.028	.125
Var24	.555	.372	.267	.302
Var25	.118	.114	.046	.749

On the basis of eigen value four factors have been made and the following variables come under the different factors.

F1 Includes the var no (1,2,3,5,6,22,23,24)

F2 Includes the var no (4,7,14,15,17,18,20,21)

F3 Includes the var no (8,9,13,16,18)

F4 Includes the var no (15,25)

Table 9 : One-Sample Test

One-Sample Test						
Test Value = 0						
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the	
					Lower	Upper
Var1	19.842	107	.000	1.824	1.64	2.01
Var2	21.354	107	.000	2.213	2.01	2.42
Var3	21.023	107	.000	2.352	2.13	2.57
Var4	18.239	107	.000	2.139	1.91	2.37
Var5	22.814	107	.000	2.444	2.23	2.66
Var6	20.939	107	.000	2.148	1.94	2.35
Var7	20.346	107	.000	1.935	1.75	2.12
Var8	20.114	107	.000	2.093	1.89	2.30
Var9	23.101	107	.000	2.037	1.86	2.21
Var10	24.895	107	.000	2.343	2.16	2.53
Var11	20.160	107	.000	2.028	1.83	2.23
Var12	25.870	107	.000	2.407	2.22	2.59
Var13	26.634	107	.000	1.981	1.83	2.13
Var14	23.007	107	.000	1.972	1.80	2.14
Var15	25.251	107	.000	2.139	1.97	2.31
Var16	24.855	107	.000	2.028	1.87	2.19
Var17	21.222	107	.000	1.639	1.49	1.79
Var18	22.388	107	.000	1.648	1.50	1.79
Var19	30.721	107	.000	2.565	2.40	2.73
Var20	24.049	107	.000	2.222	2.04	2.41
Var21	20.495	107	.000	1.750	1.58	1.92
Var22	24.244	107	.000	2.639	2.42	2.85
Var23	30.925	107	.000	2.833	2.65	3.01
Var24	21.023	107	.000	2.352	2.13	2.57
Var25	15.893	107	.000	1.787	1.56	2.01

Table 9 shows the results of the T test. In all the cases the significance value vale is less than 0.05 which signifies that the findings of the study can be generalized in case of the universe of the study.

## VII. CONCLUSION

The present study revolves around the possibilities of combat role for the women in the Indian armed Forces.. The views of the people are overwhelming towards the combat role for the women in the Armed Forces. The responses of the people through questionnaire were hinting strongly to involve women in the armed forces. The statistical tools results are also

indicating the provision of combat role for the women in the forces without any ambiguity. . India had also started inducting women in to armed forces since 1992 but only in the officer cadre and without the role of combat Operation. The changing environment, security perception and the capabilities of the women's made them eligible to work in the paramilitary forces in combat roles. The Indian Air Force has also made it public on its also 73rd Air forces day that women will fly the fighter

aircraft from next year onward ITBP is also planning to induct women on the China border for the next year. This is the beginning of the combat operations role for women in the Indian Armed forces. The review paper is based on the feedback of 100 plus respondents. The respondents were chosen from three wings of the Armed forces of India ie Army, Air force & Navy. The respondents were chosen from serving & retired, officers & Men, Men and Women and of all available age groups. The above findings shows the possibility of deployment of women soldiers in combat role same as Sowers (2003) and Cook (2006) reveals in their study about the Russian army and other forces in the world. The results of the paper are inclining towards further increment of women in combat operation roles and their induction in the lower ranks of the forces.

The study also recommends that the further research required elaborating the possibility about the deployment of women soldiers in combat role. The further research may address the questions that on which battles and in which role the women may perform better as a combat warrior.

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## APPENDIX

### Questionnaire

1. Women are courageous enough to work in the armed forces.
2. Women are physically capable to work in the armed forces.
3. Women are emotionally strong enough to work in the armed forces.
4. Women can manage home & office effectively.
5. Women can perform exceptionally well in the critical situations
6. Women are mentally fit to perform in the armed forces.
7. The performance of women in the Indian armed forces is encouraging & motivating for others to join armed forces.
8. Women in Modern age are as advance as males.
9. The awareness has made the women more temperamental and achiever in life.
10. Women's performance in the paramilitary forces like BSF, ITBP, CISF and CRPF is at par with their male counterparts.
11. BSF women performance on border patrolling is making them equally significant as men.
12. The Strength of women is more in the modern era in comparison to traditional women's.
13. The present environment is soothing the women to work in the armed force along with men.
14. The present condition in the armed forces has been created in such a way that the entry of women will be smooth & steady.
15. The competitive world has made the women stronger to stand beside men in all the fields.
16. The education and experience in the society has made women to create their own niche in fields of their occupation.
17. Women have proved herself by excelling in the most dangerous field like space mission's, sports and mountaineering.
18. 23 years of women's induction as officers into the Indian armed forces has made the services as competitive.
19. Working of women in rebel groups proves that a woman can fight as in militant organizations like Maoists, LTTE, NSCN, etc.
20. Women abilities have been much democratic and diplomatic which forms the part and parcel of military organizations of the world.
21. Women are as disciplined as men which have been the prime attribute of the armed forces.
22. Women are psychologically stronger then male.
23. Women can serve as commandos in armed operation.
24. Women have the ability to perform at all level of military hierarchy.
25. Women can perform equally well if recruited as PBOR's(personal below officer Rank.)

*Please mark the answers in SA, A, N, D, SD*