

A Study of Association of Gender Parity and Job Satisfaction among Women in the Army and Differences across Rank Levels

Col Vineet Banga ^{1*}, Dr. Monika Khatri ²

¹ Research Scholar Poornima University, Jaipur, RJ

Email ID: vineetbanga@rediffmail.com

² Professor Poornima University, Jaipur, RJ

Email ID: monika.khatri@poornima.edu.in

ABSTRACT

This paper discusses how gender parity is related to job satisfaction with women in the army and whether there are any significant differences in these constructs with varying ranks. The choice of the quantitative, cross-sectional research design provided the primary data collected as 200 women military personnel who were approached with the help of a structured, Likert-scale questionnaire. IBM SPSS Statistics was used to perform Pearson product-moment correlation and one-way analysis of variance (ANOVA) with Bonferroni post-hoc tests. The conclusions showed that there is a statistically significant moderate-to-large positive relationship between gender parity and job satisfaction because $r = .478$, $p < .001$, which means that the better the perceptions of gender equality, the higher the levels of job satisfaction. The outcome of one-way ANOVA also confirmed that the differences in both job satisfaction ($F[2, 197] = 43.17$, $p < .001$) and the perceived gender parity ($F[2, 197] = 50.38$, $p < .001$) between junior, mid-level and senior rank categories were highly significant. Post-hoc comparisons echoed that all differences in constructs between their ranks were statistically significant. The paper was written to add to an expanding body of empirical research to suggest that organisational equity practices correlate with well-being among employees working in hierarchical and traditionally male-dominated organisations. There are practical implications of the human resource policy in the military as well as gender inclusion and talent retention when women personnel are involved, particularly in enhancing job satisfaction and promoting a more equitable work environment that supports their career advancement.

Keywords:: gender parity, job satisfaction, women in the army, rank level, ANOVA, Pearson correlation, organizational justice, military human resources..

INTRODUCTION:

The new position of women in the armed forces is one of the most important institutional changes of the twenty-first century. Military organisations in different countries have increasingly extended the number of roles available to women, allowing them to move beyond administrative and logistical support to include combat, leadership, intelligence, and technical positions. Nonetheless, alongside this increased involvement, the research question relating to whether gender-related treatment is fair; whether women have equal access to the advancement opportunities; and whether women in the military are generally satisfied with their lives is still under-researched in the empirical literature, especially in non-Western military settings (Kaur and Sharma, 2021; Nair and Pillai, 2022).

The concept of gender parity, which is generally considered a non-discriminatory view of people in an organisational setup regardless of their gender, is one of the pillars of modern human resource management. The subjective perception of the equality between the genders is particularly crucial in hierarchical institutions like the armed forces, in which the nearly all-dominating

structures of authority of the ranks determine the character of virtually every operational and social relationship. Women who perceive their surroundings as fair are more likely to demonstrate strong commitment, high performance, and retention behaviours, while those who experience gender-based injustice are more likely to exhibit behaviours that undermine morale, lack engagement, and leave their jobs early (Dempsey and Holtzblatt, 2020; Thomas et al., 2021).

The positive emotional state that follows an evaluation of a job or job experience is known as job satisfaction and is recognised as a multi-dimensional construct produced by both intrinsic (autonomy, achievement, and personal growth) and extrinsic (pay, the quality of supervision, and perceived institutional fairness in policies) factors (Bakker and Demerouti, 2017; Srivastava and Singh, 2020). Equity theory (Adams, 1965) has been strongly used to establish the relationship between perceived fairness (including gender parity as an important element of perceived equity) and job satisfaction. It has been extended in terms of organisational justice theory (Greenberg, 1987), where employees who feel equitably treated say they are much more satisfied and commit more.

Although, on the one hand, many advances have been made in policies aimed at gender integration on a worldwide level, the scholarly literature looking at the exact connection between gender parity and job satisfaction in the military remains limited, especially those that also include quantitative research approaches that can produce generalisable data points (Kaur and Sharma, 2021; Raj and Mehta, 2023). Furthermore, rank level, a key aspect of the military's social system, has not been studied in relation to gender equity perceptions and satisfaction. This is a major disparity because rank plays a crucial role in determining the institutional access of an individual, their exposure to barriers related to gender, and the degree to which they influence the workplace (Anand and Bhatnagar, 2020; Gupta and Verma, 2022).

The current project fills in these gaps through stringent quantitative research on 200 female military personnel. It investigates: (a) how women in the army feel that gender parity exists; (b) how satisfied they are with their jobs; (c) is there any association and directional effect between the two constructs; and (d) do women in the junior ranks, mid-level ranks and senior ranks significantly differ in their perceptions of gender parity and job satisfaction?

The study was guided by the following objectives:

To examine the level of perceived gender parity among women in the army.

To assess the level of job satisfaction among women in the army.

To analyse the association between gender parity and job satisfaction.

To examine differences in job satisfaction and perceived gender parity across rank levels.

The findings are expected to contribute to theoretical development in military organisational behaviour and offer actionable recommendations for military human resource policy.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Gender Parity in Organisational Contexts

Constructing gender parity is not only about mere numerical representation but also concerns procedural, distributive, and interactional aspects of organisational life (Colquitt et al., 2019; Mor Barak et al., 2021). Distributive fairness refers to instances in which outcomes, including promotions, assignments, and remunerations, are distributed fairly, whereas procedural fairness refers to the methods by which decisions are arrived at. Interactional justice pertains to the manner in which individuals interact and the treatment they receive from others in their workplace (Greenberg, 1987; Ambrose and Schminke, 2009). These dimensions are especially topical in the military since it is both a hierarchy and a set of unwritten rules that characterise experience (Kaur and Sharma, 2021).

Studies have found that women in hierarchical organisations, such as the military, are systematically under-represented in promoted posts, access to leadership, and development opportunities (Anand and Bhatnagar,

2020; Thomas et al., 2021). Research on the experiences of Western military units has reported the continued presence of glass ceiling syndrome and informal networks of exclusion that prevent the access of the female gender to the highest roles of leaders (Dempsey and Holtzblatt, 2020; Park et al., 2020). Such effects tend to be enhanced by cultural norms of gender roles within the military environment of developing countries, presenting a two-tier barrier to women officers and enlisted members (Nair and Pillai, 2022; Raj and Mehta, 2023).

Recent quantitative research has also started to chart the impact of particular aspects of gender parity, such as equal task division, equal access to training, and inclusive decision-making, on individual-level attitudes, such as organisational commitment, turnover intention, and motivation to perform (Gupta and Verma, 2022; Srivastava and Singh, 2020). These studies all support a social fact: gender parity is not a simple issue of normative compliance but a main lever of organisational performance, especially for institutions that rely on high-performing human capital.

2.2 Job Satisfaction: Theoretical Foundations and Military Applications

Job satisfaction is fully theorised and empirically studied and has been studied over many decades of organisational research. Herzberg's theory (1959) identified two factors (hygiene factors (extrinsic conditions that prevent dissatisfaction) and motivators (intrinsic factors that create positive satisfaction)) as elements of hygiene factors and motivators. According to the job characteristics model developed by Hackman and Oldham (1976), there were five fundamental dimensions of job content identified as those dimensions: skill variety, task identity, task significance, autonomy, and feedback that are predictors of internal motivation and satisfaction. More modern models, such as the job demands-resources model (Bakker and Demerouti, 2017), focus on the dynamic interaction between workplace stressors and organisational and individual resources in determining the well-being of employees.

In an army context, job satisfaction has been researched most notably regarding deployment stress, quality of leadership, pay equity and family-work balance (Borah and Bhagat, 2020; Dempsey and Holtzblatt, 2020). A study conducted on Indian military service members by Vashist and Kumar (2021) revealed intrinsic motivation, especially a sense of purpose; unit cohesion; and recognition were the best predictors of overall satisfaction, and institutional fairness contributed considerably to this effect. Likewise, other studies on the military staff of other Commonwealth countries can detect the same conclusions with the organisational perceived support, which is indicated to mediate the connection between rank-based demands and the level of satisfaction (Park et al., 2020; Thomas et al., 2021).

In women, in particular, military service has been recorded to be the only gender climate that is responsive to satisfaction, i.e., collective understanding of the degree to which an organisation appreciates and acknowledges a contribution of women (Raj and Mehta, 2023; Singh and Pandey, 2021). Positive gender climates within

organisations, where there are clear promotion methods, mentoring opportunities, and no tolerance towards harassment, would always show a greater percentage of satisfied and retained women staff (Mor Barak et al., 2021; Nair and Pillai, 2022).

2.3 Gender Parity and Job Satisfaction: The Link

This theoretical confluence between gender parity and job satisfaction is pegged on the equity theory of evaluation of experience (Adams, 1965), in which people assess their job experience based on the inputs-output ratio of their work against the input-output ratio of reference people. In the event that the perceived parity is high, i.e., where women believe that they get the payoff that reflects their contribution and is equal to that of male counterparts, then the equity calculus will be solved, leading to high levels of satisfaction. On the other hand, when there is perceived inequity, it creates cognitive dissonance in the form of resentment, frustration, or withdrawal (Colquitt et al., 2019).

This framework is further enriched by the organisational justice theory, which determines that procedural justice is especially a powerful indicator of satisfaction that does not depend on favourable outcomes (Greenberg, 1987; Ambrose and Schminke, 2009). This means that women who feel that the mechanisms through which decisions are taken are equitable, even without the presence of outcomes that are gradually equitable, are more apt to indicate satisfaction. It has been empirically validated in manufacturing, healthcare, and education/learning conditions (Bakker and Demerouti, 2017; Colquitt et al., 2019), and new sources are becoming available to support this theoretical assumption to be true in a military context (Kaur and Sharma, 2021; Vashist and Kumar, 2021).

A survey of the paramilitary women carried out by Singh and Pandey (2021) revealed that there existed a positive significant correlation ($r = .41$ 0.01) between perceived gender fairness and purposeful job satisfaction, whereas when the authors conducted a study of women in the position of public sector, results were comparable ($r = .39$). Correlation coefficients are stable with a moderate-to-large effect size ranging between .30 and .55 that has been reported in international studies to connect these constructs with an assortment of different work settings (Mor Barak et al., 2021; Park et al., 2020).

2.4 Rank Level and Differential Perceptions

The military is organised based on a formal ranking system which operates as a system of authority, distribution of resources and status differentiation. Psychologically, the rank level determines the occupational experiences bandwidth that can be enjoyed by a person, such as their exposure to gender discrimination, their access to mentorship and sponsorship networks, and their ability to make an impact on the organisational culture (Anand and Bhatnagar, 2020; Gupta and Verma, 2022).

Women are disproportionately vulnerable to gender inequity because of the low levels of institutional power, higher rate of operational interactions that are gender-mixed, and less access to formal grievance mechanisms by the junior-rank women (Nair and Pillai, 2022; Thomas

et al., 2021). Conversely, higher-ranked women officers may have more subtle or even negative understandings of institutional equity, as older women officers have encountered institutional restrictions directly over an extended career trajectory (Dempsey and Holtzblatt, 2020; Raj and Mehta, 2023). Mid-level employees are situated at a middle ground where they experience being more visible and competitive to advance.

Empirical research that investigated the variation in job satisfaction between military women based on rank has shown mixed results. According to some studies, there is a monotonically growing satisfaction with rising rank (because of higher autonomy, better remuneration and unit leadership) (Vashist and Kumar, 2021), and in some other studies, satisfaction grows according to seniority, potentially negating the satisfaction of long-term staff (Singh and Pandey, 2021). Such mixed findings, in turn, justify the use of empirical research of rank-based differences among study populations.

3. RESEARCH METHODOLOGY

3.1 Research Design

This paper uses a quantitative and descriptive research design. The quantitative methodology was chosen based on the aim of the study, i.e., testing directional hypotheses with the help of inferential statistics, i.e. (Creswell and Creswell, 2018; Sekaran and Bougie, 2019).

3.2 Data Collection and Instrument

A structured self-administered questionnaire was used to gather primary data in the form of a questionnaire consisting of three sections. Section A of the survey gathered demographic profile data of the participants, such as age, rank level, years of service, education qualification, and broad nature of work. The eighth and last Likert questions (GP1–GP8) in section B reflected the independent variable, gender parity, on aspects such as equal treatment, promotion fairness, training access, decision-making inclusion, distribution of tasks, accessible leadership, supportive policy, and interpersonal respect. Section C included a set of eight Likert-scale measures (JS1 to JS8) of the dependent variable, job satisfaction, and included role satisfaction, motivational, work environment, perceived value, career development, accomplishment, organisational support, and overall job satisfaction measures.

Each item was rated on a five-point scale with a rating of 1 (Strongly Disagree) to 5 (Strongly Agree). The instrument will be developed using the principles of existing scale development, relying on the validated constructs of the literature related to the previous military and organisational behaviour (Gupta and Verma, 2022; Srivastava and Singh, 2020; Nair and Pillai, 2022). The questionnaire was piloted on a small subgroup ($n = 25$) to test the face validity and to check the clarity of the items, and small language corrections were done prior to the administration of the questionnaire on a full scale.

3.3 Sample Size and Sampling Technique

This study was done with a purposive convenience sample of 200 women military personnel. Purposive sampling has been applied to have respondents who have at least served in the army a minimum of six months in the ongoing services and so have adequate exposure to the institution so that their responses to items in regard to gender parity and job satisfaction are meaningful. A sample size of 200 is also appropriate in correlation and ANOVA studies based on the need to have sufficient statistical power, and it is suggested that a heuristic requirement of at least 10 respondents in each measured variable is sufficient since Hair et al. (2019) indicated that a sample size of 10 to 20 is acceptable.

This stratified representation by levels of rank allowed these planned between-group comparisons to be done and helped to make sure that no one rank group made a disproportionate contribution to the analytical results.

3.4 Variables of the Study

The study incorporated the following variable classification:

Independent Variable: Gender Parity (composite mean of GP1–GP8)

Dependent Variable: Job Satisfaction (composite mean of JS1–JS8)

Grouping Variable: Rank Level (Junior, Mid-Level, Senior)

3.5 Statistical Tools for Analysis

Data were analysed using IBM SPSS Statistics (Version 26). Three principal statistical techniques were applied. First, frequency analysis and descriptive statistics (mean, standard deviation, variance, minimum, and maximum) were computed for all scale items and composite scores. Second, Pearson product-moment correlation analysis was conducted to test H1 and H2, assessing the direction, magnitude, and statistical significance of the relationship between GP_Total and JS_Total. Third, one-way analysis of variance (ANOVA) was performed with Rank Level as the grouping factor to test H3 (DV = GP_Total) and H4 (DV = JS_Total). Where significant omnibus F-statistics were obtained, Bonferroni-adjusted post-hoc tests were conducted to identify specific pairwise rank differences. The alpha level was set at .05 for all hypothesis tests (Field, 2018; Hair et al., 2019).

4. DATA ANALYSIS AND INTERPRETATION

4.1 Demographic Profile

Table 1 presents the demographic distribution of the 200 respondents. The majority were aged 25–30 years (31.5%), held graduate qualifications (52.0%), served in the administrative department (37.5%), and were at the junior rank level (42.5%), followed by mid-level (38.0%) and senior (19.5%).

Table 1. Demographic Profile of Respondents (N = 200)

Variable	Category	Frequency	Percentage (%)
Age	Below 25	33	16.5
	25–30	63	31.5
	31–35	44	22.0
	36–40	41	20.5
	Above 40	19	9.5
Rank Level	Junior	85	42.5
	Mid	76	38.0
	Senior	39	19.5
Years of Service	0–5 years	60	30.0
	6–10 years	60	30.0
	11–15 years	50	25.0
	Above 15 years	30	15.0

Variable	Category	Frequency	Percentage (%)
Education	Graduate	104	52.0
	Postgraduate	81	40.5
	Others	15	7.5
Department	Combat	59	29.5
	Administrative	75	37.5
	Technical	40	20.0
	Others	26	13.0

Note. Frequencies and percentages derived from survey data; n = 200.

4.2 Descriptive Statistics

Table 2 shows descriptive statistics of all the gender parity and job satisfaction items. The mean score on the GP composite was $M = 3.481$ ($SD = 0.386$), which expressed moderate-positive expectations of gender parity among the sample. The $M = 4.101$ ($SD = 0.648$) on the JS composite mean was quite significant, and it means that the level of job satisfaction was rather high. The highest rating was in the case of GP items GP1 and GP4 (equal treatment and valued opinions) ($M = 3.54$ each), and the

lowest rating was for GP7 (policy support) ($M = 3.40$). In the case of JS items, the highest rating was recorded by the JS1, and the same happened with the JS4 ($M = 4.16$ each), with the lowest ratings being recorded on the JS3 and the JS7 ($M = 4.02-4.06$). The general trend is similar to the previous military satisfaction studies which have reported a high level of baseline satisfaction coupled with moderate institutional equity perception (Harrell and Miller, 1997).

Table 2. Descriptive Statistics: GP and JS Items (N = 200)

Code	Mean	Std. Dev.	Interpretation
GP1	3.540	0.867	Agree
GP2	3.530	0.924	Agree
GP3	3.430	0.900	Neutral–Agree
GP4	3.540	0.923	Agree
GP5	3.525	0.918	Agree
GP6	3.420	0.910	Neutral–Agree
GP7	3.400	0.880	Neutral–Agree
GP8	3.460	0.890	Neutral–Agree
GP Total	3.481	0.386	Moderate–Positive
JS1	4.160	0.876	Agree
JS2	4.065	0.869	Agree

Code	Mean	Std. Dev.	Interpretation
JS3	4.020	0.891	Agree
JS4	4.160	0.948	Agree
JS5	4.115	0.936	Agree
JS6	4.135	0.889	Agree
JS7	4.055	0.903	Agree
JS8	4.095	0.928	Agree
JS Total	4.101	0.648	High-Positive

Note. Scale: 1 = Strongly Disagree to 5 = Strongly Agree. Interpretation: ≤ 2.49 = Low; 2.50–3.49 = Moderate; ≥ 3.50 = High

Table 3 shows the alpha-reliability coefficient of Cronbach. The scale of job satisfaction showed good

internal consistency ($\alpha = 0.864$), which is higher than the commonly accepted standard of 0.70 (Nunnally, 1978). The Gender Parity scale produced a smaller alpha ($= 0.762$) at the thresholds (DeVellis, 2016).

Table 3. Scale Reliability: Cronbach's Alpha Coefficients

Scale	No. of Items	Cronbach's α	Interpretation
Gender Parity (GP)	8	0.762	Acceptable for exploratory study
Job Satisfaction (JS)	8	0.864	Good-Excellent

4.3 Pearson Correlation Analysis (H1 and H2)

To test hypothesis H1 (significant relationship between gender parity and job satisfaction), H2 (positively orientated form of influence of gender parity on job satisfaction) Pearson product-moment correlation was calculated between GP_Total and JS_Total. They are shown in Table 4.

Table 4 Pearson Correlation Matrix — GP_Total and JS_Total

		GP_Total	JS_Total
GP_Total	Pearson Correlation	1	.478**
	Sig. (2-tailed)		.000
	N	200	200
JS_Total	Pearson Correlation	.478**	1
	Sig. (2-tailed)	.000	
	N	200	200

Note. ** Correlation is significant at the 0.01 level (2-tailed). $r = .478$ constitutes a moderate-to-large effect (Cohen, 1988).

The test produced a statistic Pearson correlation coefficient of $r = .478$ ($p < .001$, $S = 2$), meaning that the relationship between gender parity and job satisfaction is statistically significant, moderate-large, and positive. The finding helps to reject the null hypothesis of H1 to prove that there is a significant relationship between the two constructs. H2 is further supported by the positive direction of the coefficient, which suggests that the greater the perception of gender parity, the greater the level of job satisfaction. The benchmarks of Cohen (1988) on the interpretation of effect size (small, .10; medium, .30; and large, .50) indicate that the coefficient of .478 is within the range of moderate and large effect size that indicates an

association of the two variables that is both practical and significant. The coefficient of determination ($r^2 = .229$) shows that gender parity perceptions explain a significant portion of the job satisfaction variance (22.9), which is a significant value when using a single-predictor bivariate evaluation in a multifaceted social area.

4.4 One-Way ANOVA: Job Satisfaction by Rank Level (H4)

A one-way ANOVA was done to determine whether the levels of job satisfaction were significantly different between the junior, mid-level, and senior rank groups. Table 5 shows the disaggregated descriptive statistics by the rank level, and Table 6 has the ANOVA summary.

Table 5 Descriptive Statistics — JS_Total by Rank Level

Rank Level	N	Mean	Std. Dev.	Std. Error	95% CI Lower	95% CI Upper
Junior	85	3.704	0.634	0.069	3.568	3.841
Mid-Level	76	4.293	0.465	0.053	4.187	4.400
Senior	39	4.590	0.441	0.071	4.447	4.733
Total	200	4.101	0.648	0.046	4.011	4.191

Table 6 One-Way ANOVA Summary — JS_Total

Source	Sum Squares	df	Mean Square	F	Sig.
Between Groups	25.347	2	12.674	43.170	.000
Within Groups	57.863	197	0.294		
Total	83.210	199			

Note. $F(2, 197) = 43.170$, $p < .001$.

The one-way ANOVA had a very significant omnibus F-statistic, $F(2, 197) = 43.17$, $p < .001$. The mean job satisfaction scores increased monotonically with rank level: Junior ($M = 3.704$, $SD = .634$), Mid-Level ($M = 4.293$, $SD = .465$), and Senior ($M = 4.590$, $SD = .441$). It shows that women of high rank levels report significantly higher job satisfaction, which can be aligned with the theories of seniority and high autonomy, resource accessibility, and intrinsic motivation (Bakker and Demerouti, 2017; Vashist and Kumar, 2021). The hypothesis that H4 was null was rejected.

The tests corrupted with Bonferroni revealed statistical significance in the 3 pairwise comparisons, which were as

follows: Junior vs. Mid-Level (mean difference = $-.589$, $p = 0.001$), Junior vs. Senior (mean difference = $-.886$, $p = 0.001$), and Mid-Level vs. Senior (mean difference = $-.297$, $p = 0$). The biggest variance occurred between the ranks of the junior and the senior rank, implying that there is an enlargement of a gap in satisfaction between and throughout the ranks.

4.5 One-Way ANOVA: Gender Parity by Rank Level (H3)

One-way ANOVA was tenfold to compare perceived gender parity levels across the levels of rank, whether the difference was significant or not. The results are presented in tables 7 and 8.

Table 7 Descriptive Statistics — GP_Total by Rank Level

Rank Level	N	Mean	Std. Dev.	Std. Error	95% CI Lower	95% CI Upper
Junior	85	3.262	0.291	0.032	3.199	3.325
Mid-Level	76	3.528	0.333	0.038	3.452	3.605
Senior	39	3.865	0.318	0.051	3.762	3.968
Total	200	3.481	0.386	0.027	3.427	3.535

Table 8 One-Way ANOVA Summary — GP_Total

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	11.283	2	5.641	50.380	.000
Within Groups	22.057	197	0.112		
Total	33.340	199			

Note. $F(2, 197) = 50.380, p < .001$. This *F*-value represents the largest effect in the study

The omnibus *F*-statistic when gender parity was used is even bigger than it was in the case of job satisfaction, $F(2, 197) = 50.38, p < .001$, which is the biggest effect found in the study. Perceived gender parity increased progressively with rank: Junior ($M = 3.262, SD = .291$), Mid-Level ($M = 3.528, SD = .333$), and Senior ($M = 3.865, SD = .318$). The pattern indicates that older female officers have a relatively more favourable view of their organisational context as gender-equitable compared to their junior counterparts, a result that could indicate positive changes in institutional equity in higher ranks or selection biases, with women who stay in service to senior positions having adjusted favourably to the organisational culture. The H_3 null hypothesis was rejected.

The pairwise Bonferonni comparisons of GP_Total were all significant: Junior vs. Mid-Level (mean difference = $-.266, p < .001$), Junior vs. Senior (mean difference = $-.603, p < .001$), and Mid-Level vs. Senior (mean difference = $-.337, p < .001$). It is interesting to note that the gender disparity perception gap between the Juniors and the Seniors ($-.603$) was greater in comparison to the scale range compared to the gender disparity perception gap between the Juniors and the Seniors in job satisfaction ($-.886$), indicating that the rank stratification would be high in the equity perceptions.

5. FINDINGS AND DISCUSSION

5.1 Discussion of Correlation Findings (H1 and H2)

This study’s major empirical contribution is the finding of a statistically significant positive correlation between gender parity and job satisfaction ($r = .478, p < .001$). This

finding is in line with theoretical predictions of equity theory (Adams, 1965) and organisational justice theory (Greenberg, 1987) that perceptions of fair treatment lead to positive affective states including job satisfaction. The observed effect size (moderate-to-large by Cohen’s, 1988, benchmarks) is generally consistent with prior empirical literature. For example, Singh and Pandey (2021) reported $r = .41$ in a paramilitary sample, Borah and Bhagat (2020) found $r = .39$ in a public sector context, and Park et al. (2020) reported $r = .44$ in a Western military sample. The present coefficient of $.478$ is at the high end of this range, suggesting that gender parity may be a particularly salient predictor of satisfaction in the cultural and institutional context of this study.

The positive directional effect of gender parity on job satisfaction (H2) is consistent with the argument that institutional equity practices are organisational resources in the job demands-resources framework (Bakker & Demerouti, 2017). When women feel there are equal opportunities for promotion (GP2: $M = 3.530$), that their views are valued in decision-making (GP4: $M = 3.540$) and that they are valued regardless of gender (GP8: $M = 3.460$) this creates a sense of organisational inclusion that revitalises and sustains their motivational engagement with their roles. This energising effect is directly expressed in high intrinsic satisfaction, motivation (JS2: $M = 4.065$), accomplishment (JS6: $M = 4.135$) and overall satisfaction (JS8: $M = 4.095$).

In contrast, the lowest mean scores on the GP scale (policy support, GP7: $M = 3.400$; leadership access, GP6: $M = 3.420$) suggest that respondents are most sceptical about structural dimensions of gender equity. This finding is in line with international evidence that suggests that barriers

to leadership access constitute the most persistent form of gender inequity in military and hierarchical organisations (Dempsey & Holtzblatt, 2020; Mor Barak et al., 2021; Thomas et al., 2021). So addressing these structural barriers – through transparent succession planning, leadership mentorship programmes for women and formal gender audit processes – may deliver the biggest marginal gain in perceived equality, and hence job satisfaction.

5.2 Discussion of ANOVA Findings (H3 and H4)

The ANOVA results were highly significant for gender parity ($F[2, 197] = 50.38, p < .001$) and job satisfaction ($F[2, 197] = 43.17, p < .001$) and support the notion that rank level is a strong structural determinant of both constructs. The increasing values of GP_Total and JS_Total from Junior to Mid-Level to Senior are consistent with the theoretical framework that seniority is associated with greater embeddedness in the institution and more access to resources and status-based entitlements (Gupta & Verma, 2022; Vashist & Kumar, 2021).

Large job satisfaction gradient: Senior women ($M=4.590$) scored almost 0.9 scale points higher than junior women ($M=3.704$), and the difference was highly significant, as Bonferroni post-hoc tests revealed ($p < .001$). This is of practical importance and suggests that junior women may be a particularly vulnerable group in terms of institutional satisfaction and, by inference, retention vulnerability. This is consistent with findings by Nair & Pillai (2022), who found junior women were disproportionately prone to attrition due to unmet expectations regarding institutional support, clarity of career and gender-related fairness.

The gender parity gradient was even steeper in relative terms with the largest F-value (50.38) in the study. Junior women perceived less gender equity ($M = 3.262$) than senior women ($M = 3.865$) on a five-point scale, $t(86) = 4.72, p < .001, d = .603$. There are two ways of interpreting the result. It can be a real reflection of the institutional reality. Admittedly, junior women at the operational edge and those in lower-prestige jobs may experience more gender discrimination, fewer opportunities for mentoring and less policy enforcement at the unit level. It might also be a form of senior-rank assimilation bias, where women who have reached senior rank within a male-dominated institution have internalised institutional norms and hence perceive the environment as more equal than the objective conditions suggest (Raj & Mehta, 2023; Thomas et al., 2021). A qualitative study of lived experience at different levels of rank would be required to unpack these mechanisms.

The mid-level group was statistically different on both constructs and was in the middle. Bonferroni comparisons indicated significant differences between mid-level women and the junior and senior groups on GP_Total and JS_Total. This means that perceptions and satisfaction associated with rank are not merely a dichotomy between junior and senior but graded. This finding suggests the value of including mid-level analysis in military equity research rather than lumping all non-junior ranks into one senior level.

5.3 Comparison with Prior Studies and Theoretical Implications

The collective findings of this study resonate with and extend the literature in a few important ways. The finding of a strong positive association between gender parity and job satisfaction replicates and supports findings from non-military organisational settings (Colquitt et al., 2019; Srivastava & Singh, 2020) and provides rare empirical substantiation in a military context. The effect size ($r = .478$) is comparable to meta-analytic estimates of the organisation-justice-satisfaction link reviewed by Colquitt et al. (2019) and suggests that military institutions are not fundamentally different from other organisations in the equity-satisfaction dynamic.

The differences in gender parity and job satisfaction by rank levels make a considerable contribution to the institutional side of the literature. Past research has either examined women in the military as a homogenous group or has been primarily based on samples of high-ranking officers (Dempsey & Holtzblatt, 2020; Park et al., 2020). The present study reveals that the level of rank results in systematic variance in both the constructs, which has implications for targeted interventions and differentiated human resource strategies (Anand & Bhatnagar, 2020; Gupta & Verma, 2022).

The study also contributes to the ongoing discussion of the appropriate unit of analysis in military gender equity research. The study captures both the aggregate relationship between constructs and rank-based variation within institutions, providing a more nuanced picture of women's institutional experience than cross-sectional studies that ignore hierarchical structure. This is in line with recent calls in the literature for multi-level research designs that can capture both individual perceptions and structural drivers of gender equity outcomes (Mor Barak et al., 2021; Thomas et al., 2021).

6. CONCLUSION

The present study aimed to examine the relationship between gender equity and job satisfaction of women in the army and to investigate whether the constructs differed significantly across the levels of rank. The study used a sample of 200 women military personnel and applied a battery of inferential statistical techniques, including Pearson correlation and one-way ANOVA with Bonferroni post-hoc tests. The study yielded consistent and statistically robust findings in support of all the four research hypotheses.

There was a significant positive relationship between gender parity and job satisfaction, $r = .478, p < .001$, with perceptions of gender parity accounting for ~22.9% of the variance in job satisfaction. Both constructs were significantly different across rank levels, with the highest levels of perceived parity and job satisfaction found among senior women and the lowest among junior women. Bonferroni correction indicated that all pairwise differences in rank level were statistically significant, implying a clear and consistent hierarchical gradient in both constructs.

These findings have important implications for military institutions wishing to improve gender inclusion outcomes and workforce retention. They posit that gender parity is not only a question of social justice but is also a tangible factor in operational effectiveness, as it directly influences the satisfaction, motivation and, hence, performance and retention of women personnel. The fact that junior-rank women are the lowest-scoring group in both gender parity and job satisfaction suggests the need for targeted interventions at this early career stage.

This study adds to the rather scant empirical literature on women's experiences in military organisations, particularly in non-Western contexts, and offers a methodologically rigorous template for future research. The cross-sectional design and convenience sample limit causal inference and generalisability, but the findings provide a meaningful and actionable evidence base for policy development.

7. RECOMMENDATIONS

The empirical findings and the broader literature provide the basis for submitting the following recommendations to military policymakers and human resource leaders: First, military organisations should institutionalise regular gender equity audits at the unit level, taking special note of procedural dimensions – promotion processes, task allocation and access to leadership pipelines – where the lowest GP item means were found (GP6: $M = 3.420$; GP7: $M = 3.400$). These audits should produce metrics of unit accountability and be directly incorporated into the performance assessments of commanding officers (Anand & Bhatnagar, 2020; Gupta & Verma, 2022).

Second, targeted mentorship and sponsorship programmes for women at the junior ranks should be prioritised. Structured mentoring relationships with senior women officers can be a direct satisfaction enhancer and a mechanism to communicate institutional support and advance women's career trajectories given the considerable satisfaction and parity gap found between junior and senior personnel in this study (Nair & Pillai, 2022; Raj & Mehta, 2023).

Third, the monitoring of access to the military training and professional development opportunities should explicitly include gender disparities. The average score of GP3 (Equal training: $M = 3.430$) indicates that training equity remains a concern. Formal tracking of training participation rates by gender and rank can provide objective data to complement subjective perceptions (Kaur & Sharma, 2021; Srivastava & Singh, 2020).

Fourth, institutional policies promoting gender equality (GP7) should be more visible and operationally tangible at all rank levels. This and other studies (Singh & Pandey, 2021; Thomas et al., 2021) reflect an inconsistency between the existence and perceived effectiveness of policies, suggesting the need for proactive communication, training supervisors on gender-sensitive leadership, and effective enforcement mechanisms for anti-discrimination.

Fifth, well-being and satisfaction measurement should be disaggregated by rank level in regular military personnel surveys. The large rank-based differences reported here

suggest that aggregate satisfaction scores may conceal important at-risk sub-populations—namely, junior-rank women—whose low satisfaction may be indicative of early-stage attrition risk that is not revealed when data are examined at only the aggregate level.

8. LIMITATIONS OF THE STUDY

Several limitations of the present study should be considered when interpreting the present findings. Firstly, the cross-sectional design does not permit causal inferences but is suitable for descriptive and correlational purposes. Gender parity is statistically significantly associated with job satisfaction, but we cannot infer causality from a change in gender parity to a change in satisfaction. Whether the relationship is bidirectional or what its direction is remains an open question. To establish causal relationships, longitudinal research designs or natural experiments would be needed, for example, exogenous shocks like policy changes (Creswell & Creswell, 2018; Bryman, 2016).

Second, the sample size of 200 respondents was adequate for the statistical techniques used; the sample was drawn through purposive convenience sampling. This limits the external validity of the findings to the particular institutional context and sample composition. The findings cannot be generalised to all women military personnel, men military personnel or armed forces in other countries without replication studies.

Third, the self-reported data are also subject to common method variance bias, which results from the fact that the correlation between constructs measured with the same instrument and at the same time can be inflated by response consistency tendencies (Podsakoff et al., 2003). Future research could collect criterion data via supervisor ratings or institutional records to triangulate self-reported satisfaction.

Fourth, the Gender Parity scale had a low Cronbach's alpha ($\alpha = .362$), and therefore the precision of GP_Total as a composite measure should be considered with caution. This is theoretically justified by the multi-dimensionality of the construct and the heterogeneous content of its items. Future research should consider developing separate sub-scale composites for the structural, relational and policy dimensions of gender equity to better capture the construct specificity.

Fifth, the study could not control for potentially confounding variables such as the years of service, educational qualification, unit type, age or marital status, all of which may independently influence perceptions of gender parity and job satisfaction. Future studies could be more precise and interpretable if such controls were included in multivariate analyses such as hierarchical multiple regression or structural equation modelling.

9. FUTURE SCOPE OF RESEARCH

This work opens up a number of promising avenues for future investigation. Larger stratified probability samples, with multiple branches of the armed forces and geographic diversity of military installations, would greatly enhance external validity and allow for cross-unit or cross-region comparisons. Longitudinal studies tracing

the same personnel across repeated career transitions would illuminate how perceptions of gender parity and satisfaction evolve with seniority, experience, and changing institutional contexts.

Mixed-methods approaches that combine quantitative surveys with in-depth qualitative interviews would be useful for understanding why differences in perceptions of gender parity exist at the rank level, going beyond the statistical documentation of the phenomenon to including explanatory accounts of the mechanisms involved. Qualitative stories from junior, mid-level and senior women would be particularly illuminating to distinguish between real environmental differences and attitudinal adaptation.

Future research should also investigate mediating and moderating mechanisms in the gender parity–job satisfaction relationship. Potential mediators are psychological safety, organisational identification and perceived supervisor support. Potential moderators are gender climate at the unit level, family support structures and individual resilience. Structural equation modelling and multi-level modelling techniques would serve these more complex research questions well (Hair et al., 2019; Sekaran & Bougie, 2019).

Comparative studies across military services (army, navy, and air force) and across national contexts examining gender parity and job satisfaction would increase the generalisability of findings and identify contextual factors, including culture, institutional policy maturity, and operational role composition that moderate the parity-satisfaction relationship. Finally, advanced techniques such as machine learning-aided text analysis of open-ended survey responses could complement Likert-scale data to identify nuanced themes in women's organisational experiences that traditional survey instruments may not fully capture.

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