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LEADERSHIP AND PERSONALITY CHARACTERISTICS IN THE ARMED FORCES: A COMPARISON OF THREE LEVELS OF MANAGERIAL EXPERIENCE

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Abstract. This study examines associations between the level of managerial experience in leading people and selected personality and motivational characteristics relevant to military leadership. A quantitative cross-sectional design compared three groups of members of the Armed Forces of the Slovak Republic: cadets without practical leadership experience (XX-I, n = 40), commanders with short-term managerial experience (XX-II, n = 40), and senior officers with long-term managerial experience (XX-III, n = 38). Personality characteristics were assessed using the Bochum Personality Inventory (BIP). Data were analyzed using descriptive statistics, between-group comparisons (analysis of variance with post-hoc tests), and correlational analyses between experience level and BIP dimensions. The results revealed small to moderate differences between groups, particularly in the domains of social competencies and work style. Sociability, decisiveness, and conscientiousness showed the most consistent positive associations with higher levels of managerial experience, whereas emotional stability and resistance to stress did not display a systematic linear pattern across career stages. Overall, the findings suggest that certain personality characteristics relevant to military leadership are associated with career progression and may differentiate across stages of professional development. From a practical perspective, the results may inform more targeted selection and development of commanders, with greater emphasis on socio-interactional competencies and the professionalization of work-related behaviors.

Keywords: Military leadership; Personality; Bochum Personality Inventory (BIP); Managerial experience; Social competencies; Armed Forces of the Slovak Republic

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1. Introduction

The current political, security, and economic situation in Europe—and consequently also in Slovakia—has in recent years been shaped by the ongoing high-intensity conflict in Ukraine, the deterioration of the global and regional security environment, and an unstable geopolitical context marked by increasing great-power rivalry (Jurčák & Ivančík, 2023). The causes can be sought in the context of a centuries-old struggle for power on a European and global scale (Ivančík & Dušek, 2026a,b; Andrassy et al., 2026).

The causes can be sought in the context of a centuries-old struggle for power on a European and global scale. The real challenge today is how to mitigate contemporary security deficits in a way that legitimizes everyday social relations and satisfies fundamental human needs (Cieleszky, 2023). Historical analyses further show that political movements have long shaped conceptions of military organization, recruitment, training, and combat readiness. These developments underscore the need for states to maintain credible defense capabilities and, importantly, a professional and resilient military workforce. Within this context, leadership in the armed forces becomes a critical determinant of operational readiness and organizational effectiveness. From this perspective, the leader's person is of crucial importance, as the selection of leaders with appropriate competencies is essential not only for individual professional development but also for maintaining and increasing organizational effectiveness (Szabó Szabóné, 2024).

Military leadership represents a specific form of leading people conducted under conditions of formal hierarchy, high responsibility, and often heightened uncertainty, risk, and operational strain. Research on leadership in “dangerous” or extreme environments suggests that such contexts amplify demands for rapid decision-making, team coordination, emotion regulation, and sustained performance under resource constraints (Hannah et al., 2009). Consequently, leadership effectiveness in the military is not determined solely by professional and tactical expertise, but also by psychological dispositions that support adaptive functioning under pressure and enable leaders to shape the motivation and behavior of subordinates.

From the perspective of organizational and military psychology, individual differences in personality and motivation have repeatedly been linked to leadership outcomes. Meta-analytic evidence indicates that traits associated with work discipline and social engagement—most prominently conscientiousness and extraversion—show robust associations with leadership emergence and effectiveness (Judge et al., 2002; Nordmo et al., 2022). Electoral candidates and elected politicians demonstrate higher levels of both cognitive and non-cognitive abilities compared with the general population, indicating positive selection based on ability traits (Jokela et al., 2025). This pattern reinforces the argument that cognitive and personality characteristics play a crucial role in leadership emergence and selection, even in complex decision environments. In addition, trait emotional intelligence and Dark Tetrad traits (narcissism, Machiavellianism, psychopathy) explain additional variance in transformational leadership beyond traditional HEXACO personality factors (Schreyer et al., 2023). A higher level of proactive personality was associated with lower psychological withdrawal behaviors at work, and this negative relationship was stronger under high servant leadership (Song & Lee, 2020).

In military settings, these foundations are complemented by additional demands related to self-regulation, emotional stability, and the capacity to maintain functional judgment under stress (Hannah et al., 2009). Evidence from other high-risk occupational groups further indicates that personality traits are systematically related to perceived stress levels. For example, except for extraversion, personality traits were linked to levels of augmented stress among Indian marine engineers during the COVID-19 pandemic (Mitra, 2023). Personality traits show predictive validity for post-traumatic symptoms, with neuroticism amplifying symptom severity and extraversion offering a protective effect (Ryder et al., 2025). Hardiness was associated with successful admission to military leadership selection, with hardy candidates scoring higher on interview and field exercises and being less likely to withdraw from challenging field tasks (Nordmo et al., 2022). The results confirmed that decision-making processes are related to personal qualities and differ among representatives of various professions in the face of social instability, with rational strategies predominating but avoidance strategies also present (Hubal et al., 2024). Results suggested a specific profile of UK special forces operators composed of nine specific factors: resilience, adaptability, self-belief, perseverance, emotional regulation, self-control, drive, humility, and stubbornness (Breen & Cotterill, 2025). From an applied standpoint, achievement orientation, social competencies, and stress-related resources are therefore commonly considered key elements of a military leader's competency profile.

A central question, however, concerns the extent to which these characteristics differ across career stages and levels of managerial experience in leading people. Leader development research suggests that leadership-related capabilities evolve through cumulative experience, feedback, self-reflection, and role internalization (Day et al., 2014). Although basic personality traits tend to display relative stability, their expression in professional roles

may become more consistent over time as individuals adapt to role demands and organizational expectations. In the military domain, this process may be particularly salient because leadership responsibilities are systematically tested in situations with real consequences and high accountability.

The present study contributes to this line of research by examining associations between the level of managerial experience in leading people and personality characteristics relevant to military leadership. Using the Bochum Personality Inventory (BIP), a cross-sectional comparison is conducted across three groups of members of the Armed Forces of the Slovak Republic at different stages of professional development: cadets without practical leadership experience (XX-I), commanders with short-term managerial experience (XX-II), and senior officers with long-term managerial experience (XX-III). The study aims to identify whether selected personality-relevant dimensions differ across these stages and how they relate to increasing levels of experience, with implications for leader selection and development in the armed forces.

2. Leadership in the Armed Forces

Leadership in the military is typically conceptualized as a process of influencing individuals and groups to accomplish missions and sustain unit readiness under conditions that may involve elevated strain and risk. Unlike many civilian organizations, military leadership is embedded in a formal hierarchy with explicit normative expectations, role clarity, and standardized procedures. At the same time, contemporary perspectives emphasize that formal authority alone may be insufficient for sustained performance, particularly in complex and dynamic operational environments.

Current approaches to military leadership often draw on established leadership frameworks while acknowledging the specific demands of military contexts. Transformational leadership highlights the role of vision, inspiration, and follower development (Bass, 1990), which aligns with the military need to foster cohesion and motivation beyond compliance. Situational approaches emphasize adapting leadership behaviors to the competence and readiness of subordinates, a relevant consideration in heterogeneous units and changing operational conditions. Authentic leadership focuses on self-awareness, ethical conduct, and transparency, which may strengthen trust and cohesion (Avolio & Gardner, 2005; Vermetten et al., 2025). Across these perspectives, a shared assumption is that effective military leadership requires strong self-regulation and interpersonal effectiveness, particularly under psychologically demanding conditions. Psychological diagnostics plays a key role in maintaining the mental health of soldiers and supporting their operational readiness. Psychophysiological and psychological diagnosis of military personnel is a crucial preventive measure in medical and psychological rehabilitation, as it helps determine both fitness for service and the need for treatment or further rehabilitation (Klymenko et al., 2023).

Clinical evidence from military psychiatric settings indicates that targeted inpatient interventions can effectively reduce symptom severity associated with maladaptive personality traits. Specifically, inpatient psychiatric treatment targeting avoidant personality traits resulted in significant improvement in psychiatric symptoms among military personnel (Zimmermann et al., 2013). Higher trust in leadership was associated with a lower likelihood of endorsing barriers to accessing mental health support among military personnel following deployment (Born et al., 2024). “Strengths-based Leadership (SBL) is not formally part of standard leadership training programs within the FAS, nor is it explicitly embedded in the military leadership doctrine” (Díez et al., 2025, p. 2).

Research on leadership in extreme or high-risk environments further indicates that environmental “extremity” can alter both leadership requirements and the mechanisms through which leaders influence outcomes. Under such conditions, team coordination, morale maintenance, and the capacity to restore resources (including psychological energy) may become decisive (Hannah et al., 2009). Accordingly, managerial experience in the military may reflect not only accumulated practice in leading people but also gradual adaptation to the demands of responsible decision-making in high-stakes settings.

Personality Prerequisites of Leaders and Their Development

Personality and motivational characteristics relevant to leadership commonly include achievement orientation, social competencies, self-confidence, stress-related resources, and self-regulatory capacity. Meta-analytic findings indicate stable associations between conscientiousness and extraversion and leadership indicators, while neuroticism (low emotional stability) tends to show negative associations with leadership effectiveness (Judge et al., 2002). In military contexts, these relationships may be particularly consequential due to the premium placed on disciplined work style, effective interpersonal coordination, and the management of stress and uncertainty. From a developmental perspective, it is important to differentiate the relative stability of broad trait dispositions from the development of competencies and role-related behavioral consistency. Leader development research emphasizes that leadership growth is supported by experience, training, feedback, and self-reflection and often unfolds cumulatively over time (Day et al., 2014). Entry into leadership roles may be accompanied by recalibration of self-evaluations and gradual consolidation of leadership behaviors. Less experienced individuals may therefore display greater variability in self-assessment and role-related expression, whereas more experienced leaders may show more consistent patterns aligned with role expectations and organizational standards.

Managerial Experience as a Developmental Factor

Managerial and command experience represents a central developmental input in military leadership. Repeated exposure to decision-making, accountability for subordinates, and feedback based on real outcomes can contribute to increased self-confidence, more accurate self-assessment, and more effective behavioral regulation. In this sense, experience may support the integration of the leadership role into an individual's professional identity and promote a more stable expression of leadership-relevant characteristics in day-to-day practice.

Conceptually, this process can be described as a transition from leadership potential to professionalized performance. Early in a career, achievement motivation and the need to prove competence may be more salient, whereas increasing experience may foster a stronger long-term orientation toward responsibility, team effectiveness, and institutional goals. This view is compatible with transformational leadership perspectives (Bass, 1990) as well as leader development frameworks emphasizing cumulative growth over time (Day et al., 2014). "Transactional leadership tends to accomplish what is expected and is based on legitimate authority within a bureaucratic organisation" (Stříbrný et al., 2022, p. 109). In military contexts, these developmental dynamics are further shaped by the demands of operational strain and high-stakes environments, which place sustained emphasis on self-regulation and adaptive functioning under pressure (Hannah et al., 2009). For example, perceptions of leadership style among military cadets vary by training and personality traits. Langdon and Collins (2025) found that "leaders with high defensive fight were viewed as more transformational by untrained rather than trained cadets, and leaders with high reward reactivity were viewed as transformational leaders with high levels of subordinate trust by trained rather than untrained cadets."

3. Methodology

The aim of the study is to examine associations between the level of managerial experience in leading people and personality characteristics relevant to leadership in the armed forces. Specifically, the study compares personality profiles of three groups of members of the Armed Forces of the Slovak Republic (XX-I, XX-II, XX-III) and investigates whether selected dimensions of achievement motivation, work style, social competencies, and psychological constitution, assessed by the Bochum Personality Inventory (BIP), differ across career stages and relate to increasing experience level.

Internal consistency of the analyzed BIP dimensions was estimated in the present sample using Cronbach's alpha (α) and McDonald's omega (ω) based on item-level scoring data extracted from the BIP protocols. Reliability coefficients for each dimension are reported in Table 1 (N varies across dimensions due to incomplete item-level availability in a subset of protocols).

Table 1. Internal consistency of BIP dimensions (study sample)

BIP dimension	k	N	α	ω
Achievement motivation	14	115	0.763	0.823
Creative motivation	12	116	0.522	0.657
Leadership motivation	15	115	0.830	0.867
Conscientiousness	14	117	0.798	0.845
Flexibility	14	116	0.711	0.788
Decisiveness	14	116	0.820	0.860
Sensitivity	12	103	0.689	0.776
Contact ability	16	82	0.777	0.834
Sociability	15	80	0.728	0.797
Team orientation	13	80	0.827	0.866
Assertiveness	12	79	0.790	0.846
Emotional stability	16	79	0.867	0.893
Stress resistance	13	79	0.833	0.875
Self-confidence	16	80	0.776	0.828

Note. *k* = number of items; *N* = number of cases with complete item-level data for the given dimension; α = Cronbach's alpha; ω = McDonald's omega (omega total). *N* varies across dimensions due to incomplete item-level availability in a subset of protocols.

Internal consistency estimates suggested that most BIP dimensions demonstrated acceptable reliability in the present sample. Cronbach's alpha coefficients were generally above 0.70, with the exception of Creative motivation, which showed lower internal consistency. McDonald's omega coefficients indicated acceptable to good composite reliability across all analyzed dimensions. These results support the use of the BIP scales for examining individual differences in leadership-relevant personality characteristics.

Research Questions

- **RQ1:** Do the groups XX-I, XX-II, and XX-III differ in BIP dimensions?
- **RQ2:** What is the relationship between managerial experience and selected BIP dimensions?

Research Design and Sample

The study employs a quantitative, comparative, cross-sectional design. The sample consisted of three naturally occurring groups differentiated by their level of managerial experience in leading people: cadets without prior leadership experience (XX-I, *n* = 40), commanders with short-term leadership experience (XX-II, *n* = 40), and senior officers with long-term managerial and command experience (XX-III, *n* = 38). Data were collected in 2025 using the Bochum Personality Inventory (BIP), which assesses work-related personality and motivational characteristics across four domains: (a) achievement motivation, (b) work style, (c) social competencies, and (d) psychological constitution. BIP results were analyzed using standardized normative scores (approx. T-scores; normative mean $\approx$ 50, SD $\approx$ 10) for each dimension. Basic demographic characteristics (e.g., age, gender, and length of service) were not systematically collected in a form suitable for quantitative analysis. Consequently, these variables were not included in the present study. This limitation is acknowledged and addressed in the section on limitations.

Ethical considerations

Participation was voluntary. All respondents were informed about the purpose of the study, data processing procedures, and the intended use of results prior to data collection. Informed consent was obtained, anonymity was ensured, and data were processed and reported in aggregated form only, in accordance with applicable ethical and data protection standards.

Statistical analysis

Statistical analyses were conducted in three steps. First, descriptive statistics (means, *M*, and standard deviations, *SD*) were computed for each BIP dimension separately for groups XX-I, XX-II, and XX-III. Second, between-group differences were tested using one-way analysis of variance (ANOVA). Where statistically

significant omnibus effects were observed, Tukey's HSD post-hoc tests were used for pairwise comparisons, and η^2 was reported as an effect size. Third, the association between managerial experience level and BIP dimensions was examined using Spearman's rank correlation coefficient (ρ), because experience level was operationalized as an ordinal variable (XX-I = 0, XX-II = 1, XX-III = 2). Statistical significance was evaluated at $\alpha = .05$ (two-tailed). Assumptions for analysis of variance were evaluated prior to inferential testing. Homogeneity of variances was examined using Levene's test. In cases where the assumption of homogeneity was violated, Welch's ANOVA was used as a robustness check. Given the approximately balanced group sizes, ANOVA was considered sufficiently robust to moderate deviations from normality.

4. Descriptive Results of Empirical Findings for Individual Groups

Table 2 presents means (M) and standard deviations (SD) of standardized BIP scores of the Bochum Personality Inventory (BIP) in groups XX-I, XX-II, and XX-III. The results suggest distinct personality profiles that can be interpreted within the context of career development of military leaders.

Table 2. Descriptive statistics of BIP dimensions by group (standard scores; approx. T-scores)

BIP Dimension	XX-I M	XX-I SD	XX-II M	XX-II SD	XX-III M	XX-III SD
Achievement motivation	56.78	7.21	55.98	9.65	53.26	10.05
Creative motivation	43.02	6.77	41.82	5.11	42.18	6.81
Leadership motivation	55.10	10.15	55.60	8.68	52.71	13.40
Conscientiousness	57.32	9.44	63.92	7.44	59.21	13.13
Flexibility	45.78	6.84	44.32	4.97	43.42	9.52
Decisiveness	54.30	9.66	63.15	8.94	62.26	8.01
Sensitivity	54.57	10.41	53.60	10.29	51.58	11.43
Contact ability	50.53	8.82	52.75	8.51	54.24	11.59
Sociability	58.00	7.57	63.12	8.85	64.16	7.78
Team orientation	52.58	9.58	55.45	9.36	56.16	10.18
Assertiveness	52.95	10.35	51.15	10.28	50.37	11.49
Emotional stability	62.05	11.81	65.53	18.58	54.39	20.54
Stress resistance	54.72	7.90	59.65	9.21	52.89	9.11
Self-confidence	58.38	9.66	57.70	10.16	55.13	12.13

Note. Values are standardized BIP scores (approx. T-scores; normative mean ≈ 50 , SD ≈ 10). Higher scores indicate a higher level of the respective characteristic. XX-I = cadets without practical leadership experience ($n = 40$), XX-II = commanders with short-term managerial experience ($n = 40$), XX-III = senior officers with long-term managerial and command experience ($n = 38$). M = mean; SD = standard deviation.

In the achievement motivation domain, mean scores were broadly comparable across groups, with XX-I showing the highest mean for achievement motivation (M = 56.78, SD = 7.21), followed by XX-II (M = 55.98, SD = 9.65) and XX-III (M = 53.26, SD = 10.05). Leadership motivation showed very similar means in XX-I (M = 55.10, SD = 10.15) and XX-II (M = 55.60, SD = 8.68), while XX-III displayed a slightly lower mean (M = 52.71, SD = 13.40). Standard deviations indicated moderate within-group variability across these dimensions. In work style, conscientiousness differed more clearly across groups, with higher means in XX-II (M = 63.92, SD = 7.44) and XX-III (M = 59.21, SD = 13.13) compared to XX-I (M = 57.32, SD = 9.44). Flexibility showed relatively similar low-to-moderate means across groups (XX-I: M = 45.78, SD = 6.84; XX-II: M = 44.32, SD = 4.97; XX-III: M = 43.42, SD = 9.52), without marked differences.

Within social competencies, sociability increased across the three groups (XX-I: $M = 58.00$, $SD = 7.57$; XX-II: $M = 63.12$, $SD = 8.85$; XX-III: $M = 64.16$, $SD = 7.78$). Contact ability and team orientation also showed higher means in XX-III relative to XX-I. Assertiveness showed comparable mean values across groups (XX-I: $M = 52.95$, $SD = 10.35$; XX-II: $M = 51.15$, $SD = 10.28$; XX-III: $M = 50.37$, $SD = 11.49$).

In psychological constitution, emotional stability was highest in XX-II ($M = 65.53$, $SD = 18.58$) and lower in XX-I ($M = 62.05$, $SD = 11.81$) and XX-III ($M = 54.39$, $SD = 20.54$). Stress resistance was also highest in XX-II ($M = 59.65$, $SD = 9.21$) and lowest in XX-III ($M = 52.89$, $SD = 9.11$). Self-confidence showed relatively similar mean levels across groups (XX-I: $M = 58.38$, $SD = 9.66$; XX-II: $M = 57.70$, $SD = 10.16$; XX-III: $M = 55.13$, $SD = 12.13$).

Association between experience and BIP dimensions

The relationship between managerial experience and BIP dimensions was examined using correlational analysis. Because managerial experience was operationalized as an ordinal variable (XX-I = 0, XX-II = 1, XX-III = 2), associations were evaluated using Spearman's rank correlation coefficient (ρ). Correlation coefficients and p-values are reported in Table 3.

Table 3. Correlations between managerial experience level and BIP dimensions (N = 118)

BIP Dimension	ρ	p
Sociability	0.362	< .001
Decisiveness	0.352	< .001
Conscientiousness	0.230	.012
Team orientation	0.154	.095
Contact ability	0.124	.180
Emotional stability	0.027	.773
Creative motivation	0.013	.891
Sensitivity	-0.003	.972
Flexibility	-0.033	.721
Self-confidence	-0.065	.481
Assertiveness	-0.088	.344
Leadership motivation	-0.090	.330
Achievement motivation	-0.099	.287
Stress resistance	-0.109	.242

The strongest positive associations with experience level were observed for sociability ($\rho = 0.362$, $p < .001$) and decisiveness ($\rho = 0.352$, $p < .001$). A statistically significant but smaller association was found for conscientiousness ($\rho = 0.230$, $p = .012$). Associations for team orientation ($\rho = 0.154$, $p = .095$) and contact ability ($\rho = 0.124$, $p = .180$) were weak and not statistically significant. No statistically significant monotonic association was observed for emotional stability ($\rho = 0.027$, $p = .773$) or stress resistance ($\rho = -0.109$, $p = .242$). Other dimensions showed negligible correlations.

One-way ANOVA revealed statistically significant group differences in decisiveness, $F(2,115) = 11.89$, $p < .001$, $\eta^2 = .171$; sociability, $F(2,115) = 6.56$, $p = .002$, $\eta^2 = .102$; stress resistance, $F(2,115) = 6.26$, $p = .003$, $\eta^2 = .098$; conscientiousness, $F(2,115) = 4.42$, $p = .014$, $\eta^2 = .071$; and emotional stability, $F(2,115) = 4.19$, $p = .018$, $\eta^2 = .068$. Tukey's HSD post-hoc tests indicated that XX-II and XX-III scored higher than XX-I in decisiveness and sociability; XX-II scored higher than both XX-I and XX-III in stress resistance; XX-II scored higher than XX-I in conscientiousness; and XX-II scored higher than XX-III in emotional stability. No other tested BIP dimensions showed statistically significant group differences.

Table 4. One-way ANOVA results for group differences in BIP dimensions (XX-I, XX-II, XX-III)

Dimension	XX-I M(SD)	XX-II M(SD)	XX-III M(SD)	F(2,115)	p	η^2	Post-hoc (Tukey)
Decisiveness	54.30 (9.66)	63.15 (8.94)	62.26 (8.01)	11.89	< .001	.171	XX-II > XX-I; XX-III > XX-I
Sociability	58.00 (7.57)	63.12 (8.85)	64.16 (7.78)	6.56	.002	.102	XX-II > XX-I; XX-III > XX-I
Stress resistance	54.72 (7.90)	59.65 (9.21)	52.89 (9.11)	6.26	.003	.098	XX-II > XX-I; XX-II > XX-III
Conscientiousness	57.32 (9.44)	63.92 (7.44)	59.21 (13.13)	4.42	.014	.071	XX-II > XX-I
Emotional stability	62.05 (11.81)	65.53 (18.58)	54.39 (20.54)	4.19	.018	.068	XX-II > XX-III

Note. Values are standardized BIP scores (approx. T-scores; normative mean ≈ 50 , $SD \approx 10$). XX-I = cadets without practical leadership experience ($n = 40$), XX-II = commanders with short-term managerial experience ($n = 40$), XX-III = senior officers with long-term managerial and command experience ($n = 38$). η^2 = eta squared (effect size). Post-hoc comparisons were conducted using Tukey's HSD test. Only statistically significant post-hoc differences are reported. M = mean; SD = standard deviation.

Group description

XX-I (Cadets).

Cadets displayed mean scores around the normative average in achievement motivation ($M = 56.78$, $SD = 7.21$) and leadership motivation ($M = 55.10$, $SD = 10.15$). Conscientiousness was lower than in the two more experienced groups ($M = 57.32$, $SD = 9.44$). In the domain of social competencies, sociability ($M = 58.00$, $SD = 7.57$) and contact ability ($M = 50.53$, $SD = 8.82$) were lower than in the more experienced groups. Emotional stability ($M = 62.05$, $SD = 11.81$) and stress resistance ($M = 54.72$, $SD = 7.90$) were in the moderate range.

XX-II (Commanders with short-term experience).

Commanders with short-term experience showed higher conscientiousness ($M = 63.92$, $SD = 7.44$) and decisiveness ($M = 63.15$, $SD = 8.94$) compared to cadets. Sociability ($M = 63.12$, $SD = 8.85$) and contact ability ($M = 52.75$, $SD = 8.51$) were also higher than in XX-I. This group exhibited the highest mean levels of emotional stability ($M = 65.53$, $SD = 18.58$) and stress resistance ($M = 59.65$, $SD = 9.21$) among the three groups.

XX-III (Senior officers with long-term experience).

Senior officers demonstrated the highest mean level of sociability ($M = 64.16$, $SD = 7.78$) and higher contact ability ($M = 54.24$, $SD = 11.59$) and team orientation ($M = 56.16$, $SD = 10.18$) compared to the other groups. Conscientiousness ($M = 59.21$, $SD = 13.13$) and decisiveness ($M = 62.26$, $SD = 8.01$) remained elevated. Emotional stability ($M = 54.39$, $SD = 20.54$) and stress resistance ($M = 52.89$, $SD = 9.11$) were lower than in XX-II.

Comparative Analysis of Results (XX-I vs. XX-II vs. XX-III)

Overall, the results indicated group differences primarily in decisiveness, sociability, and conscientiousness, as well as in selected indicators of psychological constitution (emotional stability and stress resistance) (Table 4). The pattern was partly monotonic for social-competence dimensions—most notably sociability, with higher mean scores in the more experienced groups—whereas psychological constitution dimensions did not follow a monotonic trend across the three career stages.

Compared with cadets (XX-I), commanders with short-term experience (XX-II) scored significantly higher in decisiveness, sociability, stress resistance, and conscientiousness. This group also exhibited the highest mean levels of emotional stability among the three groups. In contrast, senior officers (XX-III) scored significantly higher than XX-I in decisiveness and sociability, but their mean levels of stress resistance and emotional stability were lower than those observed in XX-II, with XX-II scoring significantly higher than XX-III on both indicators.

Taken together, the comparative results suggest that decisiveness and sociability differentiate cadets from both experienced groups, whereas conscientiousness and stress-related indicators show a more specific pattern in which the short-term commander group (XX-II) differs from either cadets (XX-I) or senior officers (XX-III). These findings are consistent with the correlational results, which showed the strongest associations between experience level and sociability and decisiveness, and a smaller but significant association with conscientiousness.

5. Discussion

The aim of this study was to examine associations between the level of managerial experience in leading people and personality characteristics relevant to leadership in the armed forces. Across the three career-stage groups (XX-I, XX-II, XX-III), the results indicated differences primarily in selected social-competence and work-style dimensions, most consistently sociability, decisiveness, and conscientiousness. In contrast, indicators of psychological constitution (emotional stability and stress resistance) did not follow a monotonic pattern across the career stages and appeared to differentiate groups in a more complex way.

The most robust pattern concerned sociability and decisiveness. Both dimensions showed significant between-group differences, with post-hoc tests indicating that XX-II and XX-III scored higher than XX-I, and they also demonstrated the strongest positive monotonic associations with experience level in correlational analysis. This convergence across descriptive, ANOVA, and correlational results suggests that experience level is reliably associated with higher standing on interpersonal confidence and decision-related tendencies captured by the BIP. These findings align with evidence that in high-demand environments, leader effectiveness relies heavily on social influence processes and rapid decision-making under uncertainty (Hannah et al., 2009). They are also compatible with research indicating that leader behaviors which strengthen cohesion and collective functioning are particularly important in military teams (García-Guiu et al., 2016), implying that socio-interactional capacities may become more salient as individuals progress into roles with higher responsibility.

A smaller but consistent association was observed for conscientiousness. Conscientiousness differed significantly between groups (with XX-II higher than XX-I) and was positively associated with experience level. This pattern is consistent with the idea that professional role demands and accountability may be linked to more pronounced work-discipline and structured work behavior over time, which is in line with broader leadership evidence highlighting the relevance of conscientiousness-related characteristics for leadership outcomes (Judge et al., 2002). Importantly, given the cross-sectional design, the findings should be interpreted as differences across career-stage groups rather than within-person developmental change.

Results for psychological constitution were notably non-linear. While one-way ANOVA indicated significant group differences in stress resistance and emotional stability, the direction of differences did not reflect a simple increase with experience. Instead, XX-II displayed the highest mean levels on both indicators, scoring higher than XX-I in stress resistance and higher than XX-III in both emotional stability and stress resistance. Correlational analysis did not support a monotonic association between experience level and either dimension. This pattern suggests that stress-related resources captured by the BIP may be more sensitive to current role demands, selection into positions, or contextual factors than to experience length alone. Such a conclusion is consistent with the broader view that the relationship between personality-related characteristics and leadership outcomes is context-dependent and may be shaped by mediating behavioral processes and situational constraints (Javalagi et al., 2024). In practical terms, these findings caution against assuming that resilience-related characteristics automatically strengthen with seniority and instead support the need for ongoing monitoring and targeted support at different command levels.

Regarding motivational dimensions, achievement motivation did not show a strong increasing pattern across the groups in descriptive results, and it was not significantly related to experience level in correlational analysis. This is compatible with the notion that motivational and stress-related processes may operate relatively independently, particularly in early career phases (Sefidan et al., 2021), and reinforces the importance of distinguishing between motivation-oriented and stress-regulation-oriented aspects of leadership readiness. Overall, the observed pattern is compatible with leader development perspectives emphasizing cumulative exposure, feedback, and role internalization as career progresses (Day et al., 2014), while also indicating that not all leadership-relevant dispositions vary in the same direction across stages.

Verification of Research Questions and Hypotheses

RQ1 (group differences). RQ1 was supported for a subset of BIP dimensions. One-way ANOVA showed statistically significant group differences in decisiveness, sociability, stress resistance, conscientiousness, and emotional stability, while other dimensions did not demonstrate significant between-group differences.

RQ2 (relationship between experience and BIP dimensions). RQ2 was addressed using correlational analysis with managerial experience operationalized as an ordinal variable. Statistically significant positive associations with experience level were confirmed for sociability, decisiveness, and conscientiousness, whereas emotional stability and stress resistance did not show significant monotonic associations. This suggests that experience level is most consistently related to selected socio-interactional and work-style dimensions, while stress-related characteristics may vary in a non-monotonic manner across career stages.

Tabular Evaluation of Hypotheses

Table 5. Evaluation of hypotheses – statistical tests (ANOVA + correlation)

Hypothesis	BIP dimension	F(2,115)	p	η^2	ρ	p (ρ)	Conclusion
H1	Sociability	6.56	.002	.102	0.362	< .001	supported
H1	Decisiveness	11.89	< .001	.171	0.352	< .001	supported
H1	Conscientiousness	4.42	.014	.071	0.230	.012	supported
H2	Emotional stability	4.19	.018	.068	0.027	.773	not supported (no monotonic association)
H3	Stress resistance	6.26	.003	.098	-0.109	.242	not supported (no monotonic association)

Table 5 summarizes the hypothesis tests combining between-group comparisons (one-way ANOVA) and monotonic associations with experience level (Spearman's ρ). Hypothesis H1 was supported for sociability, decisiveness, and conscientiousness: all three dimensions showed statistically significant group differences and significant positive associations with experience level. In contrast, H2 and H3 were not supported as monotonic hypotheses: although emotional stability and stress resistance differed between groups, their associations with experience level were non-significant, indicating that these dimensions do not follow a simple monotonic pattern across the three career stages.

Table 6. Post-hoc comparisons for significant ANOVAs (Tukey HSD)

Dimension	Significant comparison	Direction	p (Tukey)
Decisiveness	XX-II vs. XX-I	XX-II > XX-I	< .001
Decisiveness	XX-III vs. XX-I	XX-III > XX-I	< .001
Sociability	XX-II vs. XX-I	XX-II > XX-I	.015
Sociability	XX-III vs. XX-I	XX-III > XX-I	.003
Stress resistance	XX-II vs. XX-I	XX-II > XX-I	.035
Stress resistance	XX-II vs. XX-III	XX-II > XX-III	.003
Conscientiousness	XX-II vs. XX-I	XX-II > XX-I	.013
Emotional stability	XX-II vs. XX-III	XX-II > XX-III	.015

Post-hoc analyses using Tukey's HSD specified the group pairs responsible for the significant omnibus ANOVA effects. For decisiveness and sociability, both experienced groups (XX-II and XX-III) scored higher than cadets (XX-I). For stress resistance and emotional stability, the short-term commander group (XX-II) scored higher than senior officers (XX-III), and stress resistance was also higher in XX-II than in XX-I. Conscientiousness differed primarily between XX-II and XX-I, with higher scores observed in XX-II.

Link to Military Leadership Theories and Personality Development

The observed associations between experience level and sociability, decisiveness, and conscientiousness are consistent with models of military leadership emphasizing the importance of social influence, decisiveness, and disciplined work behavior in high-accountability environments (Hannah et al., 2009). They are also compatible with transformational leadership theory, which highlights the role of leaders in inspiring, motivating, and

guiding followers through interpersonal influence and exemplary conduct (Bass, 1990). These findings further align with broader evidence that traits related to social interaction and responsibility are among the more consistent correlates of leadership-related outcomes, while the strength of trait–leadership relationships can vary as a function of context and leadership level (Javalagi et al., 2024). Importantly, because the present study is cross-sectional, the results should be interpreted as differences across career-stage groups and experience levels rather than direct within-person developmental change.

Conclusion

This study examined associations between managerial experience in leading people and leadership-relevant personality characteristics in the Armed Forces of the Slovak Republic. By comparing three career-stage groups (XX-I cadets, XX-II commanders with short-term experience, and XX-III senior officers with long-term experience), the study identified systematic differences in selected Bochum Personality Inventory (BIP) dimensions and clarified which characteristics are most consistently linked to experience level.

Across analyses, the most consistent results concerned sociability, decisiveness, and conscientiousness. These dimensions showed significant between-group differences and significant positive monotonic associations with experience level. Post-hoc comparisons further indicated that decisiveness already differentiated cadets from the two more experienced groups, whereas sociability differentiated cadets from both experienced groups and reached the highest mean levels among senior officers. Together, these patterns suggest that experience level is most reliably associated with socio-interactional confidence, decision-related tendencies, and selected work-style characteristics relevant to military leadership. Kane and Tremble (2000) showed that while at lower levels of leadership transformational leadership has a stronger impact on subordinate motivation and individual performance, at higher levels its effect shifts toward managing social relationships, shaping climate, and coordinating complex organizational processes. This shift is consistent with the results of the present study, in which senior officers exhibited stronger socio-interactional competencies and a more stabilized work style.

In contrast, dimensions of psychological constitution—particularly emotional stability and stress resistance—did not display a simple monotonic pattern across career stages. While both variables differed significantly between groups, the short-term commander group (XX-II) showed the highest mean values, and correlational analysis did not support a monotonic association with experience. These findings indicate that resilience-related characteristics assessed by the BIP may depend not only on experience length but also on contextual and role-related demands, selection effects, and current workload. From an applied perspective, this supports treating resilience and self-regulation as ongoing developmental targets across command levels rather than assuming they increase automatically with seniority.

From a theoretical standpoint, the study contributes empirical evidence that leadership-relevant personality characteristics do not vary uniformly across career stages. Instead, some socio-interactional and work-style dimensions show clearer experience-related differentiation, whereas stress-related resources may fluctuate across roles. Practically, the results support a stage-sensitive approach to leader development: strengthening interpersonal competencies and decision-making confidence early in training, supporting disciplined work routines and decision-making processes during the transition into command roles, and ensuring systematic support for self-regulation and resilience in positions with higher responsibility.

The study is limited by its cross-sectional design, which precludes causal inferences and direct conclusions about within-person change over time. Future research should therefore employ longitudinal designs and combine self-report measures with external criteria of leadership effectiveness (e.g., supervisor ratings, 360-degree feedback, or performance indicators). Such work would help clarify the mechanisms through which experience relates to leadership-relevant characteristics and outcomes in military contexts.

Overall, managerial experience in the armed forces is associated with measurable differences in several personality dimensions closely linked to leadership functioning. The findings provide an empirical basis for refining selection and development practices and highlight priorities for further research on leadership dynamics in military settings.

Practical Implications

The results have implications for the selection, education, and development of leaders in the armed forces. Dimensions that show the most pronounced developmental trends (especially sociability, decisiveness, and conscientiousness) may serve as indicative markers when planning developmental programs and assessing readiness for command positions. At the same time, the findings suggest that not all personality characteristics increase automatically with experience, which supports the need for targeted and individualized work with leadership potential (e.g., training in interpersonal competencies, mentoring, decision-making under stress training).

Research Limitations and Directions for Future Research

The main limitation is the cross-sectional design, which does not allow conclusions about within-person change over time. Future research should employ longitudinal designs to examine whether the observed differences reflect developmental trajectories or cohort/selection effects. Further, expanding the sample to additional command levels and occupational specializations could clarify whether patterns differ across functional roles. Finally, combining self-report measures with multi-source assessments (e.g., supervisor ratings, peer ratings, 360-degree feedback, or performance indicators) would provide a more comprehensive picture of leadership development and its relationship to personality characteristics. A further limitation is the absence of systematically collected demographic data (e.g., age, gender, length of service), which prevents controlling for potential confounding effects of these variables.

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