Iranian Evolutionary Educational Psychology Journal
IEEPJ
University of Hormozgan
Online ISSN: 2588 - 4395
Homepage: https://ieepj.hormozgan.ac.ir

Cultural Adaptation, Validation, and Examination of the Psychometric Properties of the Military Identity Scale among Air Force Personnel of the Armed Forces of the Islamic Republic of Iran

Seyyedeh Zahra Mousavi[1], Mahnaz Askarian[2]✉, Sareh Zamani[3]

1. Department of Psychology, Sav.C., Islamic Azad University, Saveh, Iran
2. Department of Psychology, Ash.C., Islamic Azad University, Ashtian, Iran, mahnaz.askarian@iau.ir
3. Department of psychology, yi.C., Islamic Azad University, Tehran, Iran

Article Info

Article type:
Research Article

Article history:
Received 14 Feb. 2026
Received in revised form 19 Apr. 2026
Accepted 21 Jun. 2026
Published online 01 Sep. 2026

Keywords:
Military identity,
Idealism,
Professionalism,
Individualism,
Validation,
Factor analysis,
Iranian Armed Forces

ABSTRACT

Objective: Military identity, a multidimensional construct comprising idealism, professionalism, and individualism, plays a fundamental role in shaping service motivation, organizational commitment, and combat effectiveness. Despite its importance, no valid, reliable instrument has been developed to assess it within the Iranian Armed Forces. This study aimed to culturally adapt and validate the Persian version of the Military Identity Scale (Johansen et al., 2013) and examine its psychometric properties among Iranian military personnel.

Methods: This descriptive–analytical cross-sectional study was conducted among Air Force personnel of the Armed Forces of the Islamic Republic of Iran with at least six months of service. Participants were selected via proportionate stratified random sampling based on organizational rank. Cultural adaptation included forward translation, back-translation, expert review of conceptual equivalence, and a qualitative pilot study. Data were analyzed using exploratory and confirmatory factor analyses and structural equation modeling in SPSS and AMOS.

Results: Exploratory factor analysis supported the scale's three-factor structure, accounting for 45.32% of total variance. Individualism (24.23%) accounted for a greater proportion of variance than idealism (9.95%). After model modification through correlated measurement errors among several items, confirmatory factor analysis showed an acceptable fit for the three-factor model. Discriminant validity was confirmed for all three dimensions via the Fornell–Larcker criterion.

Conclusions: The Persian version of the Military Identity Scale is a reliable, valid instrument for assessing the three dimensions of military identity among Iranian Armed Forces personnel. The instrument may support periodic monitoring of military identity and future research in Iranian military psychology.

Cite this article: Mousavi, S. Z., Askarian, M. & Zamani, S. (2026). Cultural adaptation, validation, and examination of the psychometric properties of the military identity scale among air force personnel of the armed forces of the Islamic Republic of Iran. *Iranian Evolutionary Educational Psychology Journal*, 8 (3), 1-19.
DOI: https//doi.org/

Publisher: University of Hormozgan.
DOI: https// doi.org/

Introduction

Human identity, according to the social identity approach, is formed through an individual's simultaneous membership in multiple social, cultural, and ideological groups, and individuals categorize themselves on the basis of these memberships (Tajfel et al., 1979; Turner, 1985). These multiple identities constitute a primary source of self-esteem, belonging, social support, and psychological security, and they shape a person's beliefs, goals, values, and behavioral norms (Wenzel & Woodyatt, 2024; Haslam et al., 2021; Butler et al., 2018; Hogg, 2007). Among socializing institutions, the armed forces occupy a unique position; this institution recruits individuals from entirely different geographic, cultural, and social backgrounds and, through a systematic process, aligns them with its expected values, attitudes, and behavioral patterns (Jackson et al., 2012). Ricks's (2007) research on United States Marine Corps training shows that this process is not merely the transmission of knowledge and skill but a fundamental reconstruction of the individual's self-concept; new recruits are cultivated within a culture that renders them not only distinct from civilians but, in their own minds, superior to them. This process deepens as length of service increases or as the service context becomes more specialized (such as infantry or special forces), leading to the formation of what Mills (2019) calls a “military mindset.” From this perspective, the armed forces can be defined as a social subsystem that individuals join voluntarily and within which they accept order and hierarchy in exchange for acquiring the collective capacity to defend society — a process that takes shape within the laws and regulations governing this subsystem's functioning (Prodanciuc, 2018). Military identity, accordingly, arises from three interconnected processes: identifying oneself as a member of the new group, internalizing that group's values and norms, and socially comparing it with other groups; it can be defined as the degree of motivation and willingness of personnel to internalize the stated values and goals of the armed forces (Johansen et al., 2014).

Despite this concept's deep roots in military sociology and its derivation from the classical theories of Huntington (1957), Janowitz (1960), and Moskos (1977), there is no clear consensus on how this construct should be interpreted, measured, or on the extent of its influence on members of a military organization (Evetts, 2003; Lock-Pullan, 2001). This conceptual ambiguity stemmed largely from the one-dimensional treatment of military identity in earlier research — an approach that Johansen et al. (2013) challenged by formulating and operationalizing three distinct

dimensions: idealistic military identity, occupational (professional) military identity, and individualistic military identity, thereby laying the groundwork for the development of multidimensional quantitative measurement instruments.

Idealistic military identity is grounded in strong collectivism, patriotism, and altruistic values, and conceptually overlaps with the values and motives of traditional institutions — values regarded as a necessary condition for the development and maintenance of military professionalism (Ulriksen, 2001; Snider, 2005). However, empirical evidence indicates that — contrary to the common assumption that their importance is declining in modern armed forces — these values remain valid predictors of service motivation and military performance and have been underestimated in prior research (Johansen et al., 2013; Ben-Dor et al., 2007). By contrast, occupational military identity is defined by characteristics such as willingness to participate in international joint operations, an instrumental focus on developing combat skills, the revival of warrior culture and virtues, and service motivation rooted in team cohesion rather than service to a higher ideal (Janowitz, 2017; Johansen et al., 2013). This distinction can be seen as a reflection of the theoretical opposition between Huntington's concept of “management of violence” and Janowitz's concept of a “constabulary force” (Griffith, 2009).

The third dimension, individualistic identity, is rooted in a broader social transformation in which the growth of individualism and personal self-interest has diminished the authority and collective values of the nation-state and has expanded individual rights at the expense of social obligations — a process that stands in direct tension with the collectivist nature of the armed forces. This phenomenon can also be analyzed through the lens of a generational gap: studies show that more recent generations (Generation X and the Millennial generation) are generally more materialistic, individualistic, and self-reliant, and their principal motives for joining the armed forces — educational benefits, vocational training, and pay — reflect labor-market logic more than service to a collective ideal (Johansen et al., 2013). This finding is consistent with Moskos's (1977) institutional–occupational thesis, according to which military service has shifted from an institutional model — legitimized by institutional values — to an occupational model legitimized by labor-market logic. Nevertheless, this theory applies more readily to the analysis of organizational trends than to explaining the relationship between individual values and performance, since institutional and occupational orientations can coexist, and an individual with

occupational motives is not necessarily a weak soldier. What matters is the size of the gap between service requirements and individual interests; once this gap exceeds a certain threshold, it has a significant negative effect on combat performance and individual commitment (Faris, 1995, 1988; Griffith, 2008, 2007).

The consequences of these identity dynamics are not confined to the level of organizational performance but also carry serious psychological consequences at the individual level. The influence of military identity on an individual's self-concept and their relationship with civilian life is so profound that leaving service can lead to significant identity change or even an identity crisis (Kleykamp et al., 2021). Recent research has explained this vulnerability through a theory of "selfhood lost in transition": as individuals transition out of service, they become caught in an in-between space between their former and future selves, and the longer this state persists, the greater their psychological vulnerability (DeSilva, 2022). This pattern is observed particularly among personnel whose military identity has become highly concentrated and salient through intensive acculturation processes, such that their occupation, relationships, and even family life revolve around the military institution (Lane & Wallace, 2020; Lunasco et al., 2010; Klein & Bastian, 2023); and in qualitative studies, a substantial proportion of veterans have reported a sense of discontinuity between their past, present, and future selves — a pattern associated with a more difficult transition, symptoms of post-traumatic stress, and reduced life satisfaction (Mitchell et al., 2020; Grimell, 2024). These findings clearly demonstrate that the accurate and valid measurement of military identity — not merely as an organizational variable but as an indicator of personnel's long-term psychological vulnerability — is a strategic necessity for the armed forces of any country.

The importance of this necessity is clearly evident in the actual experience of the Norwegian Armed Forces; in that country, the transition of the strategic environment following the Cold War and increased participation in multinational operations challenged the idealistic military identity based on the "nation in arms" model, leading in 2005 to a strategic decision to move toward military professionalism — known as the "paradigm shift" of the Norwegian military (Eriksson, 2006, 2004; Ulriksen, 2002). This experience clearly shows that strategic and sociocultural changes can redefine the nature of a country's military identity on a broad scale, without a valid instrument necessarily being available to monitor this redefinition — a point also emphasized by

Matlary (2009), who noted that little effort has been devoted to operationalizing and validating constructs such as military professionalism.

Despite this relatively rich theoretical and empirical background, at least three fundamental gaps remain in the existing literature. First, most existing conceptual frameworks and measurement instruments have been developed in Western contexts (particularly Norway and the United States) and overlook different value, religious, and historical foundations; owing to its unique historical and revolutionary context — including the experience of the eight-year Sacred Defense, religious teachings grounded in jihad and martyrdom, and Basij culture — military identity in Iran cannot be assessed solely on the basis of Western idealism–professionalism models, particularly given that certain components of these models, such as the explicit separation of patriotism from mission requirements in the Norwegian occupational construct (Edstrøm, Lunde, & Matlary, 2009), have limited compatibility with the value foundations governing the Iranian armed forces. Second, to date no valid and reliable psychometric instrument has been developed and validated to simultaneously measure the three dimensions of military identity (idealism, professionalism, individualism) within the context of the armed forces of the Islamic Republic of Iran, even though evidence from international research indicates that the centrality and nature of military identity carry long-term consequences for personnel's mental health, well-being, and combat effectiveness (Kleykamp et al., 2021; Grimell, 2024; Mitchell et al., 2020).

The present study was designed to fill these gaps and specifically seeks to develop and psychometrically validate a locally grounded scale of military identity for the armed forces of the Islamic Republic of Iran. The scale's initial items were developed based on the existing theoretical literature on the three dimensions of idealism, professionalism, and individualism, while incorporating locally grounded components drawn from Iran's military, religious, and revolutionary culture. The scale's factor structure was examined through principal component analysis, and its internal consistency and test–retest reliability were evaluated; in addition to providing the first valid psychometric instrument for measuring military identity in the Iranian context, the results of this study may carry important practical implications for training policy, succession planning, and human resource management within the armed forces of the Islamic Republic of Iran.

Material and Methods

This study is a cross-sectional, descriptive psychometric study designed to culturally adapt and validate the Persian version of the Norwegian Military Identity Scale (Johansen et al., 2013) within the population of Iranian armed forces personnel. Grounded in a positivist philosophy and a deductive approach, the study treated the three-dimensional structure of the original scale (idealism, professionalism, and individualism) as an a priori model and tested its fit against empirical data within the Iranian sociocultural-military context.

The study population consisted of active-duty Air Force personnel of the armed forces of the Islamic Republic of Iran (officers, non-commissioned officers, and enlisted personnel) with at least six months of continuous service; this threshold was chosen based on the need to pass through the period of organizational socialization required for military identity to stabilize (Johansen et al., 2013). Sampling was carried out via proportionate stratified random sampling based on organizational rank. Sample size was set at 400 participants, based on a minimum ratio of ten respondents per item for a 33-item scale (Kline, 2015) and a strategy of splitting the sample to independently conduct exploratory and confirmatory factor analyses. Prior to the final administration, the questionnaire was piloted qualitatively with 20 personnel and revised accordingly, and an independent subsample of 50 participants was used to assess temporal reliability (test–retest with a two-week interval). Data collection for the main sample was conducted electronically, following receipt of the required ethical and organizational approvals.

Military identity was measured using the Norwegian Military Identity Scale (Johansen et al., 2013). This 33-item scale, developed partly on theoretical grounds and partly derived from earlier scales (Franke, 1997; Franke & Heinecken, 2001; Laberg et al., 2005; Holland, 2008; Jacobsen, 2005), is organized into three dimensions:

Idealism (11 items), which emphasizes military service as a national duty, loyalty to the country, and the priority of collective interests over individual needs;

Professionalism (12 items), which measures mastery of military skills, motivation to participate in high-intensity operations, and adherence to unit values and codes of honor;

Individualism (10 items), which encompasses motives grounded in personal interest, comparison of military employment with civilian jobs, and the priority of individual rights over duty.

All items were rated on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). Five items that were worded in the direction opposite to their respective dimension's content (items 9 and 11 in the idealism dimension, items 8 and 11 in the professionalism dimension, and item 6 in the individualism dimension) were reverse-scored prior to analysis so that their conceptual direction would align with the other items in each dimension. In Johansen et al.'s (2013) original study, the internal consistency reliability of the three dimensions ranged from a Cronbach's alpha of 0.60 to 0.86, and the scale's factor structure was supported through exploratory and confirmatory factor analysis.

Table 1. Items of the Military Identity Scale by dimension

No.	Item
Idealism	
1	The primary duty of the armed forces is to defend the country's territorial integrity and borders.
2	My motivation to participate in missions abroad depends on whether that mission serves the country's national interests.
3	It is wrong to participate in military operations that do not explicitly promote the country's values and interests.
4	It is wrong to take part in military actions in a country other than my own without a clear defensive or national justification.
5	Defending the country's borders and territory takes priority over participating in missions abroad.
6	I consider serving in the armed forces a mission through which I can serve my country.
7	Serving in the armed forces to defend the country is a clear sign of being a good citizen.
8	My driving force for being in the armed forces is serving something more important than my personal needs.
9	The cause or ideal for which I fight in operations is of secondary importance to me. (Reversed)
10	Wearing a military uniform evokes in me a sense of national pride.
11	Traditional values such as service, command, and country are outdated concepts belonging to the past. (Reversed)
Professionalism	
12	My motivation is to gain hands-on experience by applying my military skills in high-intensity operations.
13	The opportunity to participate in combat operations is an important motivating factor for me.
14	Sacrifice, courage, and combat camaraderie matter more now than ever before.
15	I prefer serving in high-intensity combat operations over low-intensity security and advisory missions.
16	One important motivating factor for me is the full development and mastery of my military skills.
17	When I joined the armed forces, I had a clear expectation of participating in combat operations.
18	Ethical principles (military honor) and unit values are of great importance in the armed forces.
19	Command can send me on any mission, so long as it does not conflict with my ethical principles.
20	The most important part of my military role is preparing for and carrying out combat operations.
21	I believe controlled aggression is an important element if I am required to take part in combat operations.
22	Combat camaraderie (fellowship in arms) is only a secondary motive for me in participating in operations. (Reversed)
23	The armed forces should have a well-recognized combat and warrior culture.
Individualism	
24	Self-reliance and self-fulfillment are a very important part of my motivation for serving in the armed forces.
25	I am motivated to serve in the armed forces because of the opportunities and challenges it offers.
26	An important precondition for participating in missions abroad is receiving high pay and benefits.
27	The armed forces should respect my civilian life (family, housing, leisure interests).
28	I view service in the armed forces as an ordinary job.
29	In the armed forces, performing one's duty takes priority over individual rights. (Reversed)
30	I regard service in the armed forces as one of several possible career options.
31	It is natural for me to compare the advantages and disadvantages of serving in the armed forces with a civilian job.
32	If offered a civilian job with better pay and conditions, I would be inclined to leave the armed forces.
33	Adequate pay is one of the most important preconditions for me to participate in missions abroad.

Regarding the cultural adaptation process, the linguistic-cultural adaptation of the scale was carried out based on the standard COSMIN framework (Mokkink et al., 2010) and proceeded through four steps: independent forward translation by two translators fluent in both languages, back-translation by two translators unfamiliar with the original version, review of conceptual equivalence between the original and back-translated versions by a committee consisting of three military psychologists and two professional translators, and a qualitative pilot administration of the final version with 20 personnel. In this process, items that directly referenced the Norwegian national context were replaced with equivalents appropriate to the Iranian context, without altering the item's underlying conceptual content. Prior to the final administration, the content validity of the Persian version was evaluated by a panel of military psychology experts through calculation of the content validity ratio (based on Lawshe's method) and the content validity index at both the item and total-scale level.

The analyses focused on the factor structure, validity, and reliability of the Persian version of the scale. Sampling adequacy was examined using the Kaiser-Meyer-Olkin (KMO) index and Bartlett's test of sphericity. The main sample was randomly split into two equal subsamples: half of the data were allocated to exploratory factor analysis using the principal components method with promax rotation in SPSS (the number of factors was determined based on the Kaiser criterion, the scree plot, and parallel analysis), and the other half was allocated to confirmatory factor analysis in AMOS to test the fit of the resulting structure. Model fit was assessed using the χ^2/df, CFI, TLI, RMSEA, and SRMR indices, and convergent and discriminant validity were examined, respectively, through the average variance extracted (AVE) and comparison of its square root with the inter-construct correlations. Internal consistency reliability was assessed with Cronbach's alpha and composite reliability, and temporal reliability was assessed with the intraclass correlation coefficient (ICC) based on test–retest data from the 50-person subsample. All descriptive and preliminary analyses were conducted in SPSS version 26.

Results

A total of 400 Air Force personnel of the armed forces of the Islamic Republic of Iran took part in the study as the statistical sample. After data collection, a careful screening process was carried out to identify and remove incomplete or invalid responses in order to ensure the quality and

integrity of the data for subsequent analyses. Descriptive statistics on the demographic characteristics of the final sample are presented in Table 2.

Table 2. Demographic characteristics of participants (N = 400)

Variable	Category	N	%
Education	Bachelor's degree	188	47.0
	Master's degree	131	32.8
	Doctorate	33	8.3
	Diploma	48	12.0
Marital status	Married	318	79.5
	Single	82	20.5
Age (years)	25–30	25	6.3
	31–35	75	18.7
	36–40	125	31.3
	41–45	100	25.0
	46–50	65	16.2
	51 and above	10	2.5
Length of service (years)	Under 5	10	2.5
	5–10	75	18.7
	11–15	65	16.3
	16–20	125	31.2
	21–25	90	22.5
	26 and above	35	8.8
Service branch	Support and operations	161	40.25
	Flight crew	119	29.75
	Staff personnel	68	17.00
	Health and medical services	43	10.75
	Other	9	2.25

Descriptive findings showed that the majority of the sample held a bachelor's degree and were married. In terms of age, the highest frequency corresponded to the 36–40 age group, followed by the 41–45 age group, indicating a predominance of mid-career personnel in the sample. In terms of length of service, the largest share fell within the 16–20-year range, and in terms of organizational branch, the largest number of participants were serving in support and operations, followed by flight crew.

Table 3. Descriptive statistics and normality of the study variables

Variable	Mean	SD	Skewness	Kurtosis
Idealism	38.4235	7.74119	−.085	−.432
Professionalism	43.2765	8.14150	.131	−.455
Individualism	39.3412	6.13179	−.559	.178

Note. Skewness and kurtosis values within the ±2 range indicate acceptable normality of the distribution (Kline, 2016).

As shown in Table 3, mean scores on the idealism dimension (38.42, SD = 7.74), professionalism (43.28, SD = 8.14), and individualism (39.34, SD = 6.13) fall within the mid-range of the scale

(given the possible range of scores). Examination of the score distributions through skewness and kurtosis indices showed that all dimensions had skewness and kurtosis values within the ±2 range. These results indicate that the score distributions for all three dimensions of military identity tend toward normality and, accordingly, that the assumptions of relative data normality required for subsequent analyses (such as CFA) were satisfied.

Table 4. KMO and Bartlett's test results

Index	Value
Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy	.802
Bartlett's Test of Sphericity (χ^2)	4880.012
df	528
Sig.	.000

Prior to conducting the exploratory factor analysis, the adequacy of sampling and the appropriateness of the data for factor analysis were examined using the Kaiser-Meyer-Olkin (KMO) index and Bartlett's test of sphericity. Results showed a KMO value of 0.802, which, according to Kaiser's (1974) classification, falls within the "good" range and indicates the adequate sample size for conducting factor analysis. Bartlett's test of sphericity was also significant (χ^2 = 4880.012, df = 528, $p < .001$), indicating that the item correlation matrix differs significantly from the identity matrix and, therefore, that the data are suitable for identifying the underlying factor structure.

Table 5. Factor loadings and explained variance in the exploratory factor analysis (EFA)

Individualism		Professionalism		Idealism	
Item	Loading	Item	Loading	Item	Loading
2	.891	3	.844	1	.896
1	.836	2	.832	3	.848
6	.822	7	.736	4	.821
5	.807	1	.732	6	.751
10	.778	6	.683	8	.728
3	.639	10	.661	11	.670
9	.638	11	.627	7	.564
7	.574	5	.572	10	.499
		9	.462	2	.457
Eigenvalue	7.995	Eigenvalue	3.675	Eigenvalue	3.285
% variance	24.228%	% variance	11.138%	% variance	9.954%
% cumulative	24.228%	% cumulative	35.365%	% cumulative	45.319%

The results of the exploratory factor analysis showed that the three military identity factors together explained 45.319% of the total variance. In order, these factors were individualism

(24.228%), professionalism (11.138%), and idealism (9.954%), all of which had significant and appropriate factor loadings.

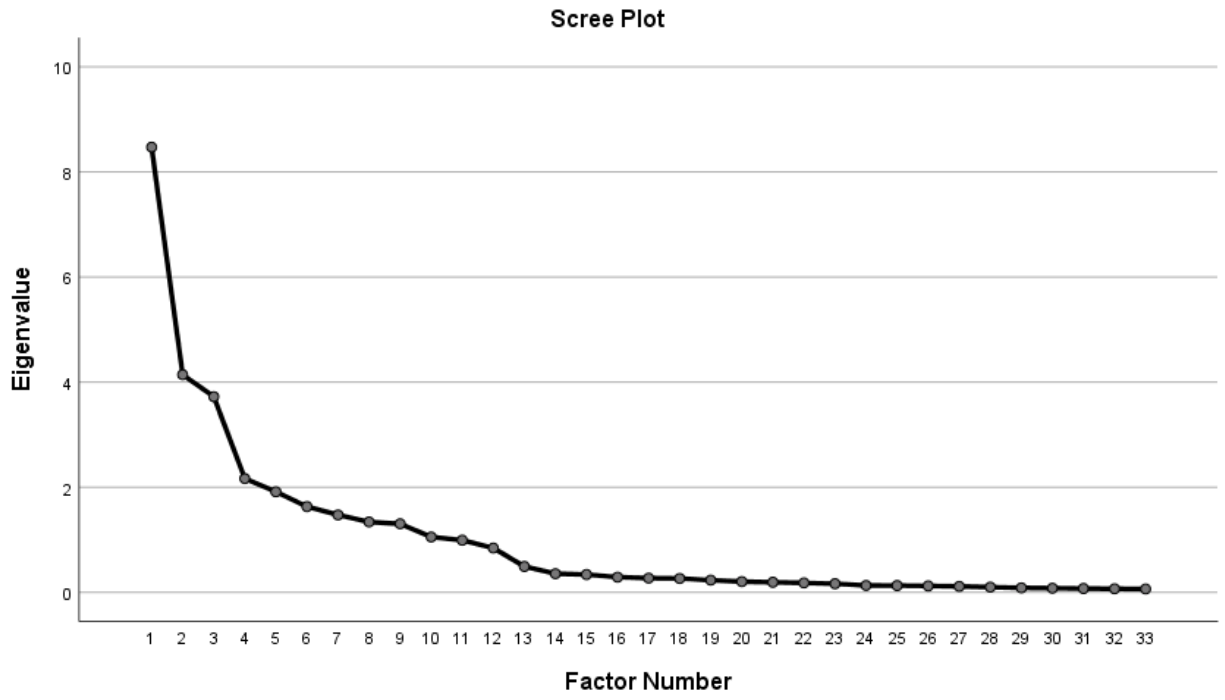

Figure 1. Scree plot for determining the number of factors

Table 6. Fit indices of the military identity measurement model

Model	χ^2	CMIN/DF	GFI	PNFI	CFI	SRMR	RMSEA (90% CI)
Critical values*	–	1–5	>0.90	>0.60	>0.90	<0.08	<0.08
Initial three-factor model	1901.127	5.479	0.555	0.505	0.596	0.113	0.163 [0.156, 0.170]
Modified three-factor model	578.960	1.744	0.797	0.758	0.936	0.100	0.066 [0.057, 0.075]

The results of the confirmatory factor analysis examining the fit of the military identity measurement model are presented in Table 6. The initial three-factor model showed poor fit with the data. However, based on modification indices and theoretical considerations, the model was revised by adding correlations between the measurement errors of related items. Following these modifications, the final model showed a very good fit with the data.

Table 7. Cronbach's alpha, split-half, composite reliability, and AVE statistics

Factor	No. of items	Cronbach's alpha	Split-half	CR (composite reliability)	AVE (average variance extracted)
Idealism	9	0.895	0.887	0.873	0.461
Professionalism	11	0.866	0.857	0.834	0.364
Individualism	8	0.911	0.957	0.895	0.533

Table 7 presents the reliability and convergent validity of the military identity measurement instrument. All three factors of the questionnaire showed very good internal reliability, with Cronbach's alpha values (idealism = 0.895, professionalism = 0.866, individualism = 0.911) and composite reliability (CR) values (idealism = 0.873, professionalism = 0.834, individualism = 0.895) exceeding the 0.70 criterion for all three factors. Likewise, the split-half coefficient for all three factors (idealism = 0.887, professionalism = 0.857, individualism = 0.957) exceeded 0.70, indicating favorable internal stability of the instrument. Regarding convergent validity, the average variance extracted (AVE) for the individualism factor (0.533) exceeded the 0.50 criterion, confirming its adequate convergent validity. Although the AVE values for the idealism (0.461) and professionalism (0.364) factors were below 0.50, given the high composite reliability values (CR > 0.70) for these factors, their convergent validity is also considered acceptable.

Table 8. Discriminant validity based on the Fornell–Larcker criterion

Factor	AVE	Idealism (r^2)	Professionalism (r^2)	Individualism (r^2)	Discriminant validity result
Idealism	0.461	–	$(0.60)^2 = 0.36$	$(0.50)^2 = 0.25$	Confirmed (0.461 > 0.36)
Professionalism	0.364	$(0.60)^2 = 0.36$	–	$(0.55)^2 = 0.30$	Confirmed (0.364 > 0.36)
Individualism	0.533	$(0.50)^2 = 0.25$	$(0.55)^2 = 0.30$	–	Confirmed (0.533 > 0.30)

As shown in Table 8, based on the Fornell and Larcker (1981) criterion, discriminant validity was confirmed for all constructs. The average variance extracted (AVE) for each factor (values on the table's main diagonal) is greater than the square of its highest correlation with the other factors (off-diagonal values). For example, the AVE of the idealism factor (0.461) is greater than the squared correlation between idealism and professionalism (0.36) and between idealism and individualism (0.25). This finding indicates that the constructs of idealism, professionalism, and individualism are empirically distinct from one another and do not exhibit excessive conceptual overlap.

Discussion

The aim of the present study was to develop and validate the Persian version of Johansen et al.'s (2013) Military Identity Scale and to examine its psychometric properties among Air Force personnel of the armed forces of the Islamic Republic of Iran. In the present study, following the linguistic-cultural adaptation of the items based on the standard COSMIN framework and content review by a panel of military psychology experts, the face and content validity of the scale were confirmed. The results of the Kaiser-Meyer-Olkin test (KMO = 0.802) confirmed the adequacy of the sample for conducting factor analysis, and Bartlett's test of sphericity indicated that the correlation matrix was not an identity matrix. According to the results of the exploratory factor analysis, using the principal components method, the scale's items loaded overall onto three factors with eigenvalues above 1, which together explained 45.32% of the total variance of the variables. The individualism factor, explaining 24.23% of the variance, was the most dominant extracted factor, whereas idealism, explaining only 9.95% of the variance, ranked third. This finding is not consistent with the factor structure of Johansen et al.'s (2013) original Norwegian study, which reported a different order of importance among the dimensions; however, it is consistent with Moskos's (1977) institutional–occupational thesis and with the evidence of Ben-Dor et al. (2007) regarding the tendency of more recent generations of military personnel toward materialism and self-reliance. It appears that, given that the present study's sample consisted exclusively of Air Force personnel — a technically specialized branch in which recruitment and retention are often based on technical skill and career opportunities — this particular motivational profile may have created conditions conducive to a more pronounced expression of individualistic components compared with other branches of the armed forces. This finding reinforces the hypothesis that the military identity scale, like many organizational psychological constructs, is context-dependent — that is, it can yield different patterns of relative dimension importance in samples with different occupational, cultural, and strategic compositions. In explaining this, it can be said that military communities differ from one another in terms of formal discourse, organizational culture, and the specialized nature of their tasks; it is natural for differences to exist between technical-support branches and combat-infantry branches regarding the relative prominence of idealism versus individualism, just as the military sociology literature has also pointed to differences between institutional and occupational orientations across different subgroups of a military organization.

The confirmatory factor analysis conducted in the present study showed that the initial three-factor model had an unfavorable fit, but after the model was revised by adding correlations among the measurement errors of several related items, the fit reached an acceptable level (RMSEA = 0.066; CFI = 0.936). This finding indicates that the military identity scale possesses relatively favorable construct validity in the study population, although the need for model modification suggests that the conceptual boundary between the idealism and professionalism dimensions is not as distinct in the Iranian context as in the original Norwegian model — likely because, in official Iranian military discourse, idealism grounded in jihad and mastery of combat skill are often represented as interrelated rather than distinct. Cronbach's alpha for the three dimensions ranged from 0.866 to 0.911, indicating high internal consistency of the scale; compared with the alpha range reported in Johansen et al.'s (2013) original study (0.60 to 0.86), this represents considerably higher reliability, suggesting that the Persian version of this scale is capable of stable measurement under similar conditions. The average variance extracted (AVE) for the individualism dimension (0.533) confirmed favorable convergent validity, but for the idealism (0.461) and professionalism (0.364) dimensions it fell below the 0.50 threshold. Nevertheless, since the composite reliability values for both dimensions exceed 0.70, these AVE values are also considered acceptable; that is, compared with the individualism dimension, these dimensions played a relatively weaker role in explaining the variance of observed scores, which may reflect the natural content heterogeneity of these two dimensions. Likewise, the square root of the AVE index for all three factors, based on the Fornell and Larcker criterion, indicated acceptable discriminant validity of the constructs — that is, the three dimensions of military identity measure relatively distinct psychological characteristics in relation to one another.

Overall, the findings of the present study showed that the Persian version of the Military Identity Scale is an instrument with favorable reliability and validity that, while filling an existing instrumental and research gap in the field of Iranian military psychology, can be used by human resource specialists and officials of the armed forces to identify personnel's motivational patterns and to design targeted training interventions. The prominence of the individualism dimension in the present sample conveys an important practical message: training and succession-planning programs that rely solely on reinforcing idealistic discourse may overlook a considerable portion of personnel's genuine motives — such as the desire to develop technical skill and to maintain a

balance between military and civilian life; designing retention policies that simultaneously target all three identity dimensions could therefore be more effective. In addition, this instrument can be used as a system for the periodic monitoring of military identity within military psychology units, in order to track changes in this construct at strategic turning points.

The present study also faced certain limitations. First, sampling was confined to a specific branch of the armed forces (the Air Force) and may not fully represent the entire Iranian military population; this makes generalizing the results to other branches (Army Ground Forces, Navy, IRGC, and Basij) a matter requiring caution. Second, the cross-sectional design of the study does not allow for causal inference or for examining the trajectory of personnel's military identity development over the course of service. Third, reliance on self-report data may expose the scale to socially desirable responding bias, particularly for idealism items, which may be influenced by the organization's formal normative expectations. In addition, the scale's possible dependence on organizational and cultural context may yield different results in other military branches or in other military societies, which warrants further investigation. Future studies could use multi-branch samples to test the measurement invariance of this scale across different organizational groups and examine its relationship with external variables such as organizational commitment, combat performance, and intention to remain in service — as anticipated in the overall design of this study — in order to provide additional evidence regarding the instrument's criterion validity. Longitudinal studies could naturally examine the stability or development of military identity dimensions over the course of personnel's service. To further enhance the validity of this scale, it would be appropriate for the present study to be replicated in other branches of the Iranian armed forces and with larger, demographically more diverse samples.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Ethics statement

The studies involving human participants were reviewed and approved by ethics committee of Islamic Azad University.

Author contributions

All authors contributed to the study conception and design, material preparation, data collection and analysis. All authors contributed to the article and approved the submitted version.

Funding

The authors did (not) receive support from any organization for the submitted work.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

References

Ben-Dor, G., Pedahzur, A., Canetti-Nisim, D., Zaidise, E., Perliger, A., & Bermanis, S. (2007). I versus we: Collective and individual factors of reserve service motivation during war and peace. *Armed Forces & Society, 34*, 565–592. https://doi.org/bmqvxp

Butler, T. L., McKimmie, B. M., & Haslam, S. A. (2018). The approach–avoidance dilemma at the heart of group-based support: Evidence that group identification increases willingness to seek support at the same time that identity-based support threat reduces it. *European Journal of Social Psychology, 49*(1), 31–46. https://doi.org/10.1002/ejsp.2384

DeSilva, S. (2022). *Lost in transition: The impact of identity on psychological well-being during periods of significant life change* [Unpublished manuscript]. Flinders University.

Edstrøm, H., Lunde, N. T., & Matlary, J. H. (2009). På jakt etter den militære profesjon [The hunt for a military profession]. In H. Edstrøm, N. T. Lunde, & J. H. Matlary (Eds.), *Krigerkultur i en fredsnasjon* [Warrior culture in a peaceful nation] (pp. 17–48). Abstract Forlag.

Eriksson, M. (2004). Idealism eller professionalism? [Idealism or professionalism?]. *Militært Tidsskrift for Etisk og Teologisk Refleksjon, 7*, 75–90.

Eriksson, M. (2006). Er det møjligt at utveckla en relevant militær professionsidentitet i Norge? [Is it possible to develop a relevant military professional identity in Norway?]. *PACEM, 10*, 21–37.

Evetts, J. (2003). Explaining the construction of professionalism in the military: History, concepts and theories. *Revue Française de Sociologie, 44*, 759–776.

Faris, J. H. (1988). The social psychology of military service and the influence of bureaucratic rationalism. In C. Moskos & F. R. Wood (Eds.), *The military—More than just a job?* (pp. 57–79). Pergamon.

Faris, J. H. (1995). The looking-glass army: Patriotism in the post–Cold War era. *Armed Forces & Society, 21*, 411–434. https://doi.org/c2ngvr

Griffith, J. (2007). Institutional motives for serving in the U.S. Army National Guard: Implications for recruitment, retention, and readiness. *Armed Forces & Society, 34*, 230–258. https://doi.org/fwf7t4

Griffith, J. (2008). After 9/11, what kind of reserve soldier? Considerations given to emerging demands, organizational orientation, and individual commitment. *Armed Forces & Society, 35*(2), 214–240. https://doi.org/cc5kxr

Grimell, J. (2024). You can take a person out of the military, but you can't take the military out of the person: Findings from a ten-year identity study on transition from military to civilian life. *Frontiers in Sociology, 9*, Article 1406710. https://doi.org/10.3389/fsoc.2024.1406710

Haslam, C., Haslam, S. A., Jetten, J., Cruwys, T., & Steffens, N. K. (2021). Life change, social identity, and health. *Annual Review of Psychology, 72*(1), 635–661. https://doi.org/10.1146/annurev-psych-060120-111721

Hogg, M. A. (2007). Uncertainty–identity theory. *Advances in Experimental Social Psychology, 39*, 69–126. https://doi.org/10.1016/S0065-2601(06)39002-8

Huntington, S. P. (1957). *The soldier and the state: The theory and politics of civil–military relations*. Harvard University Press.

Jackson, J., Bradford, B., Hough, M., Myhill, A., Quinton, P., & Tyler, T. R. (2012). Why do people comply with the law? Legitimacy and the influence of legal institutions. *British Journal of Criminology, 52*(6), 1051–1071.

Janowitz, M. (1960). *The professional soldier: A social and political portrait*. Free Press.

Johansen, R. B., Laberg, J. C., & Martinussen, M. (2013). Measuring military identity: Scale development and psychometric evaluations. *Social Behavior and Personality: An International Journal, 41*(5), 861–880.

Johansen, R. B., Laberg, J. C., & Martinussen, M. (2014). Military identity as predictor of perceived military competence and skills. *Armed Forces & Society, 40*(3), 521–543.

Klein, J. W., & Bastian, B. (2023). The fusion–secure base hypothesis. *Personality and Social Psychology Review, 27*(2), 107–127. https://doi.org/10.1177/10888683221100883

Kleykamp, M., Montgomery, S., Pang, A., & Schrader, K. (2021). Military identity and planning for the transition out of the military. *Military Psychology, 33*(6), 372–391.

Lane, J., & Wallace, D. (2020). Australian military and veteran's mental health care part 1: An introduction to cultural essentials for clinicians. *Australasian Psychiatry, 28*(3), 267–269. https://doi.org/10.1177/1039856220901470

Lock-Pullan, R. (2001). Review article—'And the wall came tumbling down': The current debate on the changing nature of the military professional. *Defense Studies, 1,* 122–132. https://doi.org/fbjg67

Lunasco, T. K., Goodwin, E. A., Ozanian, A. J., & Loflin, E. M. (2010). One shot–one kill: A culturally sensitive program for the warrior culture. *Military Medicine, 175*(7), 509–513. https://doi.org/10.7205/milmed-d-09-00182

Matlary, J. H. (2009). Kriger i kamuflasje? Profesjon og politikken [Camouflaged warrior? The profession and politics]. In H. Edstrøm, N. T. Lunde, & J. H. Matlary (Eds.), *Krigerkultur i en fredsnasjon* [Warrior culture in a peace nation] (pp. 92–131). Abstract Forlag.

Mills, C. W. (2019). The power elite. In *Social stratification, class, race, and gender in sociological perspective* (2nd ed., pp. 202–211). Routledge.

Mitchell, L. L., Frazier, P. A., & Sayer, N. A. (2020). Identity disruption and its association with mental health among veterans with reintegration difficulty. *Developmental Psychology, 56*(11), 2152–2163. https://doi.org/10.1037/dev0001106

Moskos, C., Jr. (1977). From institution to occupation: Trends in military organization. *Armed Forces & Society, 4*, 41–50. https://doi.org/fgmz7h

Moskos, C., Williams, J. A., & Segal, D. R. (2000). *The postmodern military: Armed forces after the Cold War*. Oxford University Press.

Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior, 14*, 224–247. https://doi.org/b26bsn

Prodanciuc, R. (2018). Military identity. In *Proceedings of the International Conference Knowledge-Based Organization* (Vol. 24, No. 2, pp. 377–382).

Ricks, T. E. (2007). *Making the Corps: With a new afterword by the author*. Simon and Schuster.

Snider, D. M. (2005). *The future of the army profession* (2nd ed.). McGraw-Hill.

Stensønes, M. (2012). *På våre vegne* [On our behalf]. Aschehoug.

Tajfel, H., Turner, J. C., Austin, W. G., & Worchel, S. (1979). An integrative theory of intergroup conflict. In *Organizational identity: A reader*.

Turner, J. C. (1985). Social categorization and the self-concept: A social cognitive theory of group behavior. In E. J. Lawler (Ed.), *Advances in group processes* (Vol. 2, pp. 77–122).

Ulriksen, S. (2002). *Den norske forsvarstradisjonen—militærmakt eller folkeforsvar?* [The Norwegian defense tradition—military power or people's defense?]. Pax Forlag.

Wenzel, M., & Woodyatt, L. (2024). The power and pitfalls of social norms. *Annual Review of Psychology*, *75*. https://doi.org/10.1146/annurev-psych-020124-120310