



ORIGINAL STUDY

Preliminary validation of the organisational climate survey for the Armed Forces and the Police (QCO-FAP)

Validazione preliminare del questionario sul clima organizzativo per le Forze Armate e di Polizia (QCO-FAP)

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Abstract: This study aims to describe four preliminary validation studies of the Organisational Climate Survey for the Armed Forces and the Police (QCO-FAP), which was conducted between 2021 and 2024 on Italian Carabinieri units deployed in Kosovo and Gibuti (N = 471). To support construct validity, exploratory factor analysis identified a model consisting of 32 items organised into six factors, in addition to one item measuring service satisfaction; the structure that emerged shows a satisfactory internal consistency and is consistent with the relevant theoretical model. Furthermore, the organisational climate index correlates positively with satisfaction with the service and negatively with the discomfort associated with 'anti-Covid' measures. To support reliability of the findings, a repeated-measures t-test highlighted the sensitivity of the 'Collaboration' factor to actual organisational changes linked to staff turnover. As further evidence of its ecological validity, logistic regression analyses show that the QCO-FAP climate index enables staff to be correctly classified according to the nature of their role. Overall, the results support QCO-FAP reliability; the appropriateness and relevance of this tool for the defence and security sectors are discussed in light of the institutional requirement frameworks to which the survey makes a consistent and relevant contribution.

Riassunto: Nel presente lavoro vengono descritti quattro studi di validazione preliminare del Questionario sul Clima Organizzativo per le Forze Armate e di Polizia (QCO-FAP), condotti tra il 2021 e il 2024 su reparti dell'Arma dei Carabinieri impiegati in Kosovo e a Gibuti (N = 471). A supporto della validità di costruito, l'analisi fattoriale esplorativa ha individuato un modello a 32 item organizzati in sei fattori, cui si aggiunge un item di soddisfazione per il servizio; la struttura emersa presenta una consistenza interna soddisfacente ed è coerente con il modello teorico di riferimento. Inoltre, l'indice di clima organizzativo correla positivamente con la soddisfazione per il servizio e negativamente con il disagio associato a misure "anti-Covid". A sostegno dell'attendibilità, un t-test per misure ripetute ha evidenziato la sensibilità del fattore "Rapporto di collaborazione" a cambiamenti organizzativi reali legati al turn-over. Come ulteriore prova di validità ecologica, analisi di regressione logistica indicano che l'indice di clima del QCO-FAP consente di classificare correttamente il personale in funzione della natura dell'incarico. Nel complesso, i risultati supportano l'affidabilità del QCO-FAP; l'appropriatezza e la rilevanza dello strumento per gli ambiti della difesa e della sicurezza vengono discusse alla luce dei quadri istituzionali di esigenza cui il questionario fornisce un contributo coerente e pertinente.

Keywords: organisational climate, psychosocial risks, survey, armed forces, police forces.

Keymessages:

- QCO-FAP fills a methodological void that is instrumental to organisational analysis within Armed Forces and Police forces.
- It is the first survey of proven reliability, with a robust and compact structure and convincing psychometric indices, designed to analyse organisational climate within the Italian Armed Forces and Police, both at home and abroad. Its sensitivity to operational differences and changes means it can be used flexibly to meet a range of institutional needs.

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Introduction

Organisational climate represents the combination of shared perceptions among members of such organisation regarding characteristics of the working environment and how this influences the performance of professional activities (1, 2). It emerges from the common exposition to operational conditions, management practices and relational dynamics, and is seen as a collective feature of the working group rather than the mere sum of individual opinions (3-6).

The literature describes organisational climate as a multi-dimensional construct that includes aspects such as professional autonomy, communication, leadership, cooperation and organisational support (7, 8). Subsequently, researches moved on to the development of approaches based on specific domains, such as security, innovation, mental health and inclusion of individual features (2, 9-12).

Various outcomes showed that organisational climate has an impact on variables that are crucial to organisations' functioning, including job satisfaction, psychological wellbeing, individual performance and productivity (13-22). Furthermore, it improves the effectiveness of organisational changing processes and contributes to the quality of the services provided (23-25).

Even in the military and police contexts, organisational climate is a strategic factor. Studies conducted within the military show the impact of supportive leadership, communication quality, cohesion and mutual trust on personnel wellbeing, service length, operational safety and efficacy of institutional activities (26-29). Similarly, within the public security sector, organisational climate is associated with professional satisfaction, operational performance and prevention of work-related stress and burnout (30-37).

Despite the relevance of such construct, there is no available instrument in Italian language specifically validated to evaluate organisational climate within military and police contexts, considering specific features of such contexts in operational theatres both at home and abroad. This void limits the systematic use of climate analysis as a support to decisional processes, promotion of organisational wellbeing and psychosocial risk management.

This study aims to fulfil such need through preliminary validation of the Organisational Climate Survey for the

Armed Forces and the Police (QCO-FAP). The Survey is a self-report tool developed within climate analysis activities conducted on Italian Carabinieri units between 2021 and 2024 (41), based on the multidimensional structural model of the organisational climate (38-40). In particular, three pilot studies and one validation study are presented, aimed at examining construct validity, internal consistency, reliability and the degree of agreement amongst respondents – a fundamental prerequisite for interpreting organisational climate as a collective property of the organisation.

Materials and Methods

This section is divided into three parts. The first part describes the development process of the Organisational Climate Survey for the Armed Forces and the Police (QCO-FAP). The second part presents three pilot studies designed to verify the preliminary validity of the instrument and its applicability in different military and police contexts. The third part portrays the validation study, which includes an analysis of the factor structure, interrater agreement, and reliability of the instrument.

Development of the QCO-FAP

The QCO-FAP was first developed in 2021 to support an analysis of the organisational climate conducted on the Multinational Specialized Unit (MSU) deployed in Kosovo. The first version (QCO-FAP v.1) included 53 items, of which 48 were specifically related to organisational climate, one to the overall satisfaction for the service term and the other four concerning the experience with COVID-19 restrictive measures. Replies to the survey were based on a 6-point Likert scale (1 = "strongly disagree"; 6 = "strongly agree").

The content validity was ensured by constructing the items based on ten dimensions of the multidimensional structural model of organisational climate (40), including psychophysical environment, role meaning and objectives, role clarity, communication, reward system, autonomy, integration and dynamism, organisational coherence and fairness, freedom of expression and participation, leadership and supervision, and workgroup cohesion. A panel of experts subsequently confirmed the relevance and representativeness of the items with respect to the theoretical constructs under consideration.

First study

The first study was conducted on the MSU in 2021. After excluding incomplete surveys, the final sample consisted of 101 military personnel belonging to two different organisational macro-areas: internal logistics (ALPI) and external operations (AOPE). During the survey, difficulties have emerged regarding three items phrased in negative form, which were subsequently excluded.

For each participant, a composite index of organisational climate was calculated, obtained by related-items average, as well as an index related to distress caused by COVID-19 restrictive measures. Preliminary validity of the instrument was evaluated through correlation analysis between climate index, job satisfaction and perceived distress. Furthermore, a logistic regression analysis was conducted to assess the climate index's ability to distinguish between personnel units belonging to the two organisational units. The qualitative feedback collected during the survey also highlighted the need to strengthen the guarantees of anonymity.

Second study

The second version of the survey (QCO-FAP v.2) was released in 2022. Negative items were rephrased in positive form, in addition to lexical changes made to improve their understanding. In order to reduce the risk of replies influenced by the perception of identifiability, personal information was collected separately from survey replies. After excluding incomplete surveys, the final sample consisted of 112 military personnel. The same statistical analyses conducted in the first study were repeated.

Third study

In 2023, the QCO-FAP v.2 was administered to personnel of the Italian Training Mission (MIADIT) Somalia, aiming at verifying the instrument's applicability in a new organisational setting. After excluding incomplete surveys, the final sample consisted of 44 military personnel. Considering the sample size and the removal of the section related to COVID-19 restrictions, the analysis focused exclusively on the correlation between organisational climate and job satisfaction.

In 2024, the survey was further revised. Two items were added related to engagements with foreign staff, in order to investigate interoperability and multinational integration. The content validity of these items was ver-

ified by experts based on the 'intergroup cooperation' component of the theoretical framework (40). At the same time, all items were standardised in accordance with the direct consensus model (42), replacing collective formulations with those referring directly to the respondent. This methodological choice is coherent with the literature guidelines on organisational climate (7, 42). The final version (QCO-FAP v.3) consists of 50 items related to organisational climate and one to overall satisfaction for the service term. The survey was administered to 214 MSU staff units in May 2024 and again in October 2024. A subgroup of 35 participants completed it both times, thus allowing to conduct longitudinal analyses.

The survey's factor structure was examined through exploratory factor analysis (EFA) applied to the covariance matrix of the 50 climate items. Factor extraction was carried out using maximum likelihood estimation, whilst the number of factors was determined through parallel analysis. A GeominQ oblique rotation was used, as it is appropriate for potentially correlated factors (49). Factor loadings of ≥ 0.40 were considered significant. The internal consistency of the scales was assessed using Cronbach's alpha. Interrater agreement was examined using the rWG index (3), which allows us to verify whether individual opinions can be aggregated and interpreted as an expression of the collective organisational climate. In line with the literature, values above .50 were considered indicative of adequate agreement. The reliability of the tool was assessed by examining its ability to detect variations consistent with organisational changes observed over time. To this end, a paired t-test was carried out on the subgroup of participants who had completed the survey in both rounds of data collection. Finally, the correlation analyses between organisational climate index and job satisfaction, as well as the logistic regressions designed to assess the instrument's sensitivity with respect to the various organisational areas under consideration, were replicated.

Results

This section is divided in two parts. The first part ("Pilot studies") describes preliminary evidence supporting construct validity and the survey's practical relevance, as well as its applicability to different military and police units. The second part ("Validation study") presents the outcomes of the exploratory factor analysis, the analysis



of interrater agreement index, and the reliability study. In the first pilot study, the climate index showed a positive linear correlation with the job satisfaction score ($r = .86$; 95% CI [.91, .80]; $t_{(99)} = 16.77$, $p < .001$) and a negative linear correlation with the distress index associated with Covid-19 restrictive measures ($r = -.32$; 95% CI [-.06, -.54]; $t_{(99)} = -3.36$, $p < .05$). Furthermore, based on the climate index, staff units were classified, using logistic regression, into the ALPI and AOPE groups with an overall accuracy of 72% ($\chi^2_{(99)} = 23.51$, $p < .001$; $b = -1.23$, 95% CI [-1.93, -0.66], $p < 0.001$; OR = 0.27). From a qualitative perspective, staff responses to the QCO-FAP v.1 enabled the military psychologist to identify certain key issues, which were further explored in subsequent focus groups, as part of a broader analysis of the organisational climate while emerging from the public health crisis.

The second pilot study confirmed the previous results. In QCO-FAP v.2, the climate index showed a positive linear correlation with the job satisfaction score ($r = .83$; 95% CI [.88, .77]; $t_{(110)} = 15.61$, $p < .001$) and a negative linear correlation with the distress index associated with Covid-19 restrictive measures ($r = -.40$; 95% CI [-.17, -.59]; $t_{(110)} = -4.58$, $p < .05$). Subsequently, based on climate index, staff units were classified, using logistic regression, into the ALPI and AOPE groups with an overall accuracy of 72% ($\chi^2_{(110)} = 18.44$, $p < .001$; $b = -1.40$, 95% CI [-2.13, -.66], $p < .001$; OR = .25). In this case, the use of QCO-FAP v.2 also provided greater objectivity to the analysis of staff opinions, to the extent that these could be included in a report on climate analysis, which was annexed to the *Documento di Valutazione dei Rischi (DVR)*¹.

The third pilot study was conducted on a unit substantially different from that of previous studies, i.e. MIADIT Somalia. Also in this case, climate index showed a positive linear correlation with the overall satisfaction for the service term ($r = .57$; 95% CI [.74, .33]; $t_{(42)} = 4.50$, $p < .001$).

Validation study

Among the 50 climate items in QCO-FAP v.3, EFA identified 32 of them subdivided in six factors, with the model explaining 58% of the observed variance ($\chi^2_{(940)} = 1759.49$, $p < .001$) (**Table 1**). Absolute fit indices are good (i.e., RMSEA = .06 e SRMR = .03), while incremental fit indices are acceptable (CFI = .90 e TLI = .87; 50). Item no. 8, which showed dual loading – .41 on Factor 1, “Hi-

erarchical Relationship,” and .53 on Factor 3, “Intercommunication” – was assigned to the latter. The entire factor solution is also clear from a theoretical perspective. Four factors consist each entirely of items with content that is completely consistent with the climate dimensions specified by the theoretical model on which they were originally based. (40) (**Table 1**). Specifically, Factor 1, “Hierarchical Relationship,” consists of ten items from the Leadership/Supervision dimension; Factor 4 “Working relationship” consists of four items from the Team cohesion dimension; Factor 5 “Sense of belonging” consists of two items from the Integration and dynamism dimension. Also Factor 6 “Multinational interactions” consists of two items of the Intergroup cooperation component, from the Integration and dynamism dimension.

As regards the remaining factors, the homogeneity observed is only partial (**Table 1**): of the nine items in Factor 2 ‘Service Context’, five correspond to the ‘Role Meaning and Goals’ and ‘Job Description’ dimensions (items 2, 4, 5 and 9, and item 10 respectively), whilst the remaining items represent the dimensions of ‘Psychophysical Environment’ (item 1), ‘Leadership’ (item 6), Autonomy (item no. 12) and Reward system/structure (item no. 13). Of the five items in Factor 3 ‘Intercommunication’, three correspond to the ‘Communication’ dimension (items 15, 30 and 31), whilst the remaining two represent the ‘Reward system/structure’ (item 8) and ‘Freedom of expression/voicing and participation’ (item 32) dimensions, which are, however, semantically linked to the domain of communication between subordinates and superiors.

In four of the six factors, Chronbach’s alpha coefficient ranges from .86 to .90, indicating excellent internal consistency; the value for the ‘Sense of Belonging’ factor is .66, which is acceptable given its small number of items; for the ‘Hierarchical Relationship’ factor, the value is .96, suggesting the presence of redundant items (51) (**Table 2**).

As regards within-group agreement, rWG coefficients were found to be above the .50 cut-off, while z-tests show that the observed disagreement was lower than expected (**Table 2**). This result enables to calculate summary statistics for each factor, thereby facilitating their interpretation as indicators of the status of the organisational attributes under consideration (**Table 3**). In this regard, the absence of agreement would have shifted the

¹ Translator’s note: Mandatory paperwork required by Italian workplace safety law. The direct translation is ‘Risk Assessment Document’.



Table 1. Structure of the third version of the Organisational Climate Survey for the Armed Forces and the Police (QCO-FAP v.3) as revealed by the exploratory factor analysis (EFA) conducted on the responses of 214 military personnel from the MSU Regiment. Numbers shown in the 'Item No.' column indicate the position of statements in the questionnaire. For each factor, the items are ordered in descending order of saturation points (i.e., covariance between the item and the factor).

Item no.	Factors	Saturation
1: HIERARCHICAL RELATION		
38	My Hierarchical Superior effectively supports me in case of critical issues and conflicts.	.93
36	My Hierarchical Superior provides me with practical help in resolving work-related issues, demonstrating technical and professional expertise.	.89
42	My service has been appropriately modernised and improved under the leadership of my Hierarchical Superior.	.88
35	My Hierarchical Superior listens to me and takes my suggestions into consideration.	.88
40	My Hierarchical Superior involves me in the work and makes me feel part of a team.	.86
33	My Hierarchical Superior helps me understand how to achieve my objectives and motivates me to give my all.	.86
39	My Hierarchical Superior communicates properly with me.	.86
34	My Hierarchical Superior appreciates me when I do my job well.	.84
41	My division is properly organised under the leadership of my Hierarchical Superior.	.78
37	My Hierarchical Superior treats me fairly.	.49
2: SERVICE CONTEXT		
5	My workload is equally distributed amongst colleagues in my unit.	.97
2	I carry out my duties at a manageable pace.	.78
9	My role matches my professional profile.	.77
4	I would like to continue working in my unit (e.g. platoon, squad, team)	.70
10	I know what to expect from my service.	.59
13	My overall salary fits my workload and responsibilities.	.58
1	I carry out my duties and spend my time in suitable environments (e.g. spaces, workstations, lighting, noise levels, etc.).	.57
6	I accept service-related decisions taken impartially by my Hierarchical Superior.	.54
12	I have a reasonable degree of autonomy in carrying out my duties.	.42
3: INTERCOMMUNICATION		
31	The feedback I receive helps me to understand how to improve my results.	.61
30	I am fully aware of how my performance is assessed.	.53
8	Any merits I may have would be acknowledged.	.53
32	I am consulted when it comes to defining the result to achieve and the necessary action.	.44
15	I receive and exchange operational information in an appropriate manner.	.40
4: WORKING RELATIONSHIP		
47	I am encouraged to cooperate by colleagues in my division.	.70
46	Colleagues in my division are always willing to help me, even when it is not part of their job description.	.61
44	I work as a single team with colleagues in my operational unit (e.g. my platoon, my squad or my team).	.60
45	I am professionally fulfilled by working with colleagues in my division.	.54
5: SENSE OF BELONGING		
22	I promote the Regiment's image by speaking positively about it to colleagues, family members and friends.	.42
24	I consider the Regiment to have a high reputation at national level.	.42
6: MULTINATIONAL INTERACTIONS		
50	There were some misunderstandings with a few foreign military personnel of this Regiment, which have made it difficult to carry out my duties (e.g. compliance with the Rules of Engagement, instructions or orders).	1.07
51	There were some misunderstandings with a few foreign military personnel of this Regiment, which have made it difficult to enjoy our leisure time (e.g. chats at 'Casa Italia', dinners, table tennis or table football games, or using the music room).	.73



Table 2. Internal consistency and agreement indices for each factor of the third version of the Organisational Climate Survey for the Armed Forces and the Police (QCO-FAP v.3), calculated on the basis of responses from 214 military personnel from the MSU Regiment.

Factors	Internal consistency	Agreement	
	Cronbach's alpha	rWG	z^a
1: Hierarchical relationship (10 item)	.96	.60	-14.80
2: Service context (9 item)	.88	.69	-19.05
3: Intercommunication (5 item)	.90	.66	-16.95
4: Working relationship (4 item)	.89	.77	-30.30
5: Sense of belonging (2 item)	.66	.89	-51.27
6: Multinational interactions (2 item)	.86	.57	-10.43

Note: ^a for all values of z , $p < .001$.

focus of analysis from the institutional level – that is, specific organisational attributes (or the organisational climate) – to the individual level, also referred to as psychological climates (7).

Furthermore, October scale score for Factor 4 'Working Relationship' was lower than that observed in May ($M = 5.30$ and $SD = 1.13$, respectively; $M = 5.70$ and $SD = 0.48$; $t_{(34)} = 2.01$, $p < .05$), reflecting the decline in performance and level of cohesion reported by staff, as observed by the acting Commander of the MSU. In line with the findings of previous pilot studies, QCO-FAP v.3 responses showed a positive linear correlation between workplace climate index and job satisfaction score ($r = .75$; 95% CI [.80, .68]; $t_{(212)} = 16.51$, $p < .001$); based on climate index, staff units were classified, using logistic regression, into the ALPI and AOPE groups with an overall accuracy of 63% ($\chi^2_{(212)} = 22.02$, $p < .001$; $b = -1.12$, 95% CI [-1.64, -.60], $p < .001$; OR = .33). In this instance, military psychologists, together with Senior Command Officers (Regiment Commander, Brigade Commander and Space Operations Commander), conducted a focus group on results of the QCO-FAP v.3. The discussion allowed for the identification of unproductive organisational processes underlying potential areas for proximal development, leading to considerations regarding possible enriching interventions.

Discussion

This study has provided preliminary evidence supporting the validity and practical utility of the Organisational Climate Survey for the Armed Forces and the Police (QCO-FAP). Overall, the results obtained support the instru-

ment's ability to identify key aspects of organisational climate in military and police contexts, enabling the production of summary indicators that can be used to support decision-making processes and staff welfare activities. With regard to construct validity, exploratory factor analysis revealed a structure comprising six factors that are interpretable and consistent with the multidimensional theoretical model used to create the instrument (40). The factor solution obtained shows a satisfactory correspondence between the theoretical domains of organisational climate and the selected items, ensuring adequate coverage of the main organisational dimensions relevant to military and police contexts.

The internal consistency of the scales was also generally good. Values suggest that the items belonging to each factor measure homogeneous aspects of the construct, while describing its different facets. However, the high reliability of the "Hierarchical Relationship" factor suggests that future studies should examine whether there are any partially redundant items. Further evidence of validity comes from the correlations observed between the organisational climate index and job satisfaction, as well as from the inverse relationship with the distress derived from COVID-19 restrictions which was found in the pilot studies. These results are consistent with the literature on organisational climate and confirm the role of QCO-FAP within a theoretical network of relationships that is compatible with the construct (16, 19, 44-46). The reliability of the QCO-FAP was proved by its ability to detect variations consistent with organisational changes that actually took place in the division. In particular, the decrease in the "Collaboration" factor scores between



Table 3. Mean (M), standard deviation (SD) and percentile distribution of the scores for each organisational climate factor, and of 'Organisational Climate' and 'Job Satisfaction' indices for the Carabinieri of the MSU Regiment who completed the Organisational Climate Survey for the Armed Forces and the Police (QCO-FAP) in 2024 (N = 214).

		FACTORS						Indices	
		Hierarchical relationship	Service context	Intercommunication	Working relationship	Sense of belonging	Multinational interactions	Organisational climate ^a	Job satisfaction ^b
	N	214	214	214	214	214	214	214	214
	M	5.35	5.20	5.18	5.60	5.67	5.68	5.35	5.52
	SD	.87	.81	.84	.69	.56	.96	.64	.72
P E R C E N T I L E	5°	3.60	3.63	3.40	4.41	4.50	3.83	4.08	4.00
	10°	4.33	4.11	4.00	4.75	5.00	5.00	4.45	5.00
	15°	4.50	4.33	4.40	5.00	5.00	6.00	4.69	5.00
	20°	4.80	4.67	4.60	5.25	5.00	6.00	4.88	5.00
	25°	5.00	4.89	4.80	5.50	5.50	6.00	5.07	5.00
	30°	5.20	5.00	5.00	5.50	5.50	6.00	5.22	5.00
	35°	5.35	5.11	5.00	5.75	6.00	6.00	5.28	5.00
	40°	5.50	5.33	5.20	5.75	6.00	6.00	5.34	6.00
	45°	5.60	5.44	5.20	6.00	6.00	6.00	5.47	6.00
	50°	5.60	5.44	5.40	6.00	6.00	6.00	5.55	6.00
	55°	5.80	5.56	5.40	6.00	6.00	6.00	5.63	6.00
	60°	5.90	5.56	5.60	6.00	6.00	6.00	5.69	6.00
	65°	6.00	5.67	5.69	6.00	6.00	6.00	5.73	6.00
	70°	6.00	5.67	5.80	6.00	6.00	6.00	5.81	6.00
	75°	6.00	5.78	5.80	6.00	6.00	6.00	5.84	6.00
	80°	6.00	5.78	6.00	6.00	6.00	6.00	5.88	6.00
	85°	6.00	5.89	6.00	6.00	6.00	6.00	5.94	6.00
	90°	6.00	6.00	6.00	6.00	6.00	6.00	5.97	6.00
	95°	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00

Note: ^a "Organisational climate" = average of QCO-FAP 32 items; ^b "Job satisfaction" = score for item 49.

May and October 2024 reflected a decline in the perceived level of cohesion following staff turnover. Although this evidence must be confirmed by further longitudinal studies, it suggests that the instrument is highly sensitive to changes affecting organisational life. Another interesting element is interrater agreement. The values of rWG indices confirmed the presence of sufficiently shared perceptions regarding the factors examined, allowing the aggregate scores to be interpreted as an expression of organisational climate rather than as mere individual perceptions. This aspect is particularly significant because it represents an essential methodological prerequisite for any organisational climate analysis (3, 7).

From an applied perspective, the QCO-FAP has proven useful in four organisational climate analyses conducted

between 2021 and 2024. On these occasions, the instrument helped identify strengths, critical issues, and areas for improvement, which were subsequently explored in greater depth through focus groups with staff and management. The experience suggests that this survey can serve as a valuable tool for planning organisational initiatives aimed at improving staff wellbeing and departmental efficiency.

The results also indicate that the QCO-FAP can be used both domestically and in overseas operational theatres. The factors "Hierarchical Relationships," "Service Context," "Intercommunication," and "Working Relationships" describe key dimensions for the functioning of military and police organisations regardless of the operational context, while the factors "Sense of Belonging" and "Multinational Interactions" allow for a deeper ex-



ploration of aspects that are particularly relevant in international missions.

The instrument can also be applied in the assessment of work-related stress, complementing the objective indicators set out in standard procedures with a structured measurement of staff perceptions regarding key organisational factors. From this perspective, the QCO-FAP could contribute to early identification of conditions potentially associated with workplace distress and psychosocial risks.

However, certain limitations must be taken into account. Validation was conducted primarily in contexts related to the Italian Carabinieri Corps and with samples characterised by a limited number of female participants, circumstances that may limit generalisability of the results. Furthermore, this study is based mainly on exploratory analyses; it will therefore be necessary to confirm the factor structure through confirmatory factor analyses conducted on larger samples that are more representative of the various components of the Armed Forces and Police.

Further developments may involve refining the existing scales and developing modules dedicated to analysing specific organisational climates, such as safety, innovation, mental health and inclusion – areas which the literature recognises as particularly important for staff wellbeing and performance (12,55-57).

Conclusions

This study represents an initial contribution to the validation of the Organisational Climate Survey for the Armed Forces and the Police (QCO-FAP), a tool developed to address the lack of measures specifically designed for the Italian military and police context. The evidence gathered supports the survey's preliminary validity, internal consistency, reliability and practical relevance. In particular, the QCO-FAP has proven capable of identifying significant organisational dimensions, distinguishing between different operational contexts and detecting changes consistent with the evolution of working environments. The instrument offers a structured methodology for gathering and summarising staff perceptions regarding key aspects of organisational life, facilitating the identification of areas of strength and potential issues. Therefore, it can support organisational monitoring activities, improvement programmes, initiatives to promote wellbeing and procedures for assessing

work-related stress risk. Although further studies are needed to consolidate its psychometric properties and extend its validation to different institutional contexts, results suggest that the QCO-FAP represents a promising tool for the analysis of organisational climate within the Italian Armed Forces and the Police, contributing to the development of more effective and resilient organisations that are attentive to the wellbeing of their staff.

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