VALIDATION OF THE MORALE QUESTIONNAIRE FOR MILITARY OPERATIONAL THEATERS

VALIDACIÓN DEL CUESTIONARIO DE MORAL PARA ZONAS DE OPERACIONES MILITARES

ALBERTO PASTOR ÁLVAREZ[1], FERNANDO MOLERO ALONSO[2] Y JUAN ANTONIO MORIANO LEÓN[2]

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Abstract

To assess the morale of the troops has been a concern of military leaders throughout history, mainly because of the level of involvement that this factor could have in the resolution of conflicts on the battlefield. The purpose of this research was to obtain evidence of the validity of the internal structure of the Morale Questionnaire used by the Spanish Armed Forces in military operations overseas. Two subsamples of 250 Spanish soldiers deployed on an international mission in Lebanon participated in the study. The questionnaire was applied at the beginning and at the end of the mission, respectly. The results obtained through Exploratory and Confirmatory Factorial Analysis and Structural Equation Modelling, allowed to assess the questionnaire statistically obtaining a tool that consists of 26 items, agglutinated in six factors. The theoretical dimensions of the original tool were mostly maintained. This will permit Spanish Armed Forces to have a reliable measuring instrument that will facilitate specific predictions about morale and its consecuences on the battlefield

Keywords: Morale; Cohesion; Motivation; Espirit de corps; Combat exhaustion.

Correspondence address [Dirección para correspondencia]: Alberto Pastor Álvarez. Ministerio de Defensa, España.
Email: albertopastoralvarez@gmail.com

ORCID: Alberto Pastor Álvarez (https://orcid.org/0000-0002-2060-9257), Fernando Molero Alonso (https://orcid.org/0000-0001-9789-9822) y Juan Antonio Moriano León (https://orcid.org/0000-0002-8332-1314).

[1] Ministerio de Defensa, España.
[2] Universidad Nacional de Educación de Distancia (UNED), España.

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Resumen

Evaluar la moral de las tropas ha sido una preocupación de los líderes militares a lo largo de la historia, principalmente por el nivel de participación que este factor podría tener en la resolución de conflictos en el campo de batalla. El objetivo de esta investigación fue obtener evidencias sobre la validez de la estructura interna del cuestionario de moral utilizado por las Fuerzas Armadas Españolas en operaciones militares en el exterior. Dos submuestras de 250 soldados españoles desplegados en una misión internacional en Líbano participaron en el estudio. El cuestionario se aplicó al principio y al final de la misión. Los resultados obtenidos a través del Análisis factorial exploratorio y confirmatorio, así como el Modelo de ecuaciones estructurales, permitieron validar el cuestionario obteniendo estadísticamente una herramienta que consta de 26 ítems, aglutinados en seis factores. Las dimensiones teóricas de la herramienta original se mantuvieron en su mayoría. Esto permitirá a las Fuerzas Armadas españolas tener un instrumento de medición confiable que facilitará predicciones específicas sobre la moral y sus consecuencias en el campo de batalla.

Palabras clave: Moral; Cohesión; Motivación; Espíritu de unidad; Estrés de combate.

Introduction

Morale of soldiers has been a concern of military leaders throughout history, mainly because of the level of involvement that this factor could have in the resolution of conflicts on the battlefield. The purpose of this research is to obtain evidence of the validity of the internal structure of the Morale Questionnaire used by the Spanish Armed Forces in military operations overseas.

The concept of moral has different meanings depending on who uses it. In the military field, the concept of morality has been used in military operations as a diagnostic tool for advising in command. According to Childs (2016), morale is a core element of military capabilities, consequently its assessment becomes essential in the identification of strengths and weaknesses of military personnel, as a fundamental part to be considered in operational tactics and military deployments.

No single definition can cover all the elements that constitute morale (Kane, 2013). Sometimes synonyms such as motivation, organizational climate, job satisfaction, among others; are used to define or describe the concept. But it is important to emphasize that morale in warfare must be differentiated from the rest, although they could be part as individual factors of it.

According to the US Department of Army (1983), morale is defined as the mental, emotional, and spiritual state of the individual. Munson (1921), defined morale as the "determination to succeed in the purpose for which the individual is trained, or for which the group exists". Munson (1921) and Baynes (1967) highlighted the importance of morale as a determining factor in the effectiveness of military units. Other authors refer to the concept as an intangible force which will move a whole group of men to give their last ounce to achieve something, without counting the cost to themselves (Slim, 1956); as the confidence in activity to be undertaken (MacCurdy, 1943); or as the "X Factor" that permits soldiers to push on for so long in such miserable conditions (Spiegel, 1973; Tolstoy, 1904).

We can find in the 2008 edition of British Defense Doctrine (BDD), where "maintenance of morale" is listed as a second most important tenant of warfare, a definition that compile in general the ideas of the authors mentioned previously: "positive state of mid derived from inspired political and military leadership, a shared sense of purpose and values, well-being, perceptions of worth and group cohesion" (Anon, 2008).

The morale´s effect in the battlefield

According to Manning (1994), morale is the enthusiasm and persistence with which a member of a group engages in the prescribed activities of that group. It relates to confidence, enthusiasm and discipline at a given time. That is, the self-assurance to undertake a given task, the level of passion for that task and the degree of will-power in relation to that task (Childs, 2016). Hence, it would be

feasible to think that morale could have a direct relationship with the individual performance or the outcomes of the group in the battlefield.

Motowidlo and Borman (1978) suggested that morale constituted three elements: satisfaction, motivation and group cohesiveness. According to Jones (2012), actors that sustain morale are: confidence in commanders, unit cohesion, belief in the task, the fair provision of rest and recreation. Sparrow (1949) identified a number of variables that supported morale: a positive military situation, confidence in leaders, efficiency of training and weapons, comradeship and esprit de corps, good living conditions, medical services, entertainments and welfare generally, the efficient administration of leave, posting and promotion. Other authors (Evonic, 1980; Gal & Manning, 1987; Smith, 1985) highlighted the contribution of aspects as self-confidence, controls and material means, cohesion and the psychological disposition for combat, in periods of war. In addition to these, Holmes (2003) included espirit de corps, defined as loyalty and identification with a group; and pride in a unit, as an specific concept linked to comradeship and unit cohesion.Various studies have shown that unit cohesion or esprit de corps not only strengthens a unit's level of morale, but also acts as "a powerful preventive measure against psychiatric breakdown in battle and as a 'generator' of heroic behavior among the unit's members" (Gal, 1986).

Research has shown that there is a strong relationship between cohesion, soldiers' level of morale, and combat efficiency (Stewart, 1994). But we should not only focus on the attributes of morale regarding the positive effects in the battlefield. Good levels of morale also protect the mental health of service personnel exposed to danger or prolonged periods of stress, that is, morale protects troops against psychological disorders. On the other hand, low morale is hypothesized as increasing the risk of short-term breakdown (combat stress reaction) and longer-term psychological disorders such as post-traumatic stress disorder (PTSD), anxiety states, depression and alcohol dependency (Jones, 2012).

As a result of these World War II observations, morale, and group identification suddenly emerged as concepts of great importance to military medicine (Richardson, 1978). Morale was critical to the Allied victory in the war, yet the morale of frontline soldiers was often neglected. This occurred with such frequency that many combat soldiers suffered from a new category of wound known as "combat exhaustion." For example, in the Normandy campaign higher headquarters had to react to the growing number of combat exhaustion cases which were draining the manpower of combat units (Kane, 2013).

Through an examination of what influenced combat soldiers' morale, a clearer understanding of what the Army did well and how it failed to support combat troops emerges, as does an explanation for why combat exhaustion caused so many casualties during the European campaign. This link between morale maintenance and combat exhaustion was critical to the efficiency of combat units during the war and ultimately helped determine the shape and outcome of every battle (Kane, 2013). However, the connection among morale and the battle performance has not been studied in depth and is often regarded as a given (Jones, 2012).

Morale on military peacekeeping missions

Peacekeeping missions offer us a dangerous scenario where the lack of activity can make a dent in the level of performance of troops. Routine surveillance activities that usually occur in peacekeeping missions can influence the lack of motivation of the soldiers, and consequently, in their readiness to respond to a critical incident.

The main enemy of this new scenario is the thought that nothing ever happens. The routine in daily activities provokes the feeling that time passes slowly and promotes discomfort and criticism. Leaders must be creative to maintain a proper level of activity and efficient preparation for combat of their subordinates, respecting the rest and the quality of life of the troops. The belief that those in charge have little or no concern for servicemen's welfare damage morale.

Jones (2012) identified: poor accommodation, a lack of good quality food, dull routine tasks and the failure to provide entertainment in the camps, as crucial failings that exerted a greater effect in those non-combat missions, in-

creasing the conflicts among troops. Then, the main goal should be to reduce conflicts that could be behind the erosion of morale. Signs of low morale include absenteeism, desertion, high sickness rates, general untidiness and frequent disciplinary offences. However, none of these measures is an infallible measure of morale.

As MacCurdy observed (1943), morale is not a given. Within a group, morale fluctuates and can be brought down or elevated by a single event of significance. That is even more important during military deployments, where it cannot be granted. Although assessments can be made of its current state, predictions about future morale are notoriously difficult.

We can find in the bibliography some attempts to use questionnaires related to morale. The CEPPU-94 (Nuñez, 1994) was the first tool published to analyze the psychological potential of Spanish military personnel, considering factors related to morale and motivation. It has been traditionally used to assess cohesion and other variables linked to climate and fellowship (García-Guiu, 2017). This questionnaire was based on the moral model developed by the Center for Human Relations of the French Army, called "Psychological Capacity of Unity", assuming the existence of six dimensions: confidence in the boss, self-confidence, confidence in the means, cohesion, legitimacy of action and personal situation. In fact, the variables of the CEPPU-94 correspond almost entirely with the French version: cohesion, self-confidence, trust in leaders, confidence in the environment, legitimacy of action and personal situation; with the difference that the latter refers to confidence in the environment rather than in the material means.

A reviewed version of the CEPPU-03 (García, Gutiérrez, & Núñez, 2005) was published adding new variables to reinforce the concept assessed. Spanish Armed Forces had undergone changes (presence of Spanish military Units abroad and professionalization of the troops) that meant that the new questionnaire had to adapt to the new realities and needs of units. The modification of greater relevance, taking into account that the development of this instrument was based on techniques of Factorial Analysis, was the change of a model from six dimensions to eight. On the one hand, the "trust in the environment" factor is divided into "confidence in the material means" and "confidence in the Unit". On the other hand, "legitimacy of the action" is specified in "personal conviction" and "social support". Likewise, the factor "personal situation" disappears and another one called "working conditions" appears. The final dimensions of CEPPU-03 would then be the following: cohesion, self-confidence, trust in managers, confidence in material means, confidence in unit, personal conviction, social support and working conditions.

Other examples can be found, as the Questionnarie of Morale Profile of the Unit CPMU (Trujillo & Piñeira, 2005), and the Questionnaire of Morale Evaluation in Operational Environments CEMO (Galindo, 2013).

The CPMU, proposes the evaluation of morale from an approach of sixteen dimensions, grouped into three main axes. Leadership Axis would have the following dimensions: vertical relationships, conflict, confidence in leaders, confidence in the immediate boss and institutional support. Group Axis: trust in the group, material means, performance of the unit, cohesion, horizontal relationships. Individual Axis: self-efficacy, self-confidence, job satisfaction, social support, legitimacy of war, personal concerns. This tool was built from an exploratory approach, and it has not ever used in real military missions.

The CEMO (Galindo, 2013), following the theoretical model of the CPMU, seeks to become a more agile tool that can be used in operational environments, within international missions that Spanish Armed Forces participate abroad. The final questionnaire consists on 59 items (compared to 162 of the CPMU), grouped around seven fundamental factors: cohesion and horizontal relationships, self-efficacy and individual coping, vertical relationships and conflict, confidence in leaders, confidence in the immediate boss, confidence in material means and job satisfaction.

According to the literature reviewed, the aim of this research will be to analyce the internal structure of the “morale questionnaire” of the Spanish Army. Concretely, the main purpose will be to confirm the multifactorial structure of the tool and to assess its validity and reliability. The final objective will be to provide a feasible tool to use during Spanish military deployments. This would become a

useful item to support the exercise of command during campaigns.

Method

Sample

The sample consists on two subsamples of 250 military members of the Spanish Armed Forces deployed overseas, within the United Nation Internacional Forces in Lebanon (UNIFIL). The tasks of the troops during the mission were focused on the surveillance of the border, facilitating control of the area by conducting patrols on foot and by vehicle, and controlling movements to prevent trafficking of weapons in the area and launching of rockets towards Israel.

The sample was obtained through a proportional stratified sampling method. Participants were not voluntary for the activity, due to it is a compulsatory measure during the deployments. Other details about de profile of the participants have been omitted to preserve the identity both of them and their Units.

Measures

The instrument used to assess morale was de *Spanish Version of the Morale Questionnaire for Operational Theaters* 2014, created by the Psychologist Division of the Health Direction of the Spanish Army. It is feasible to think that the origin of this tool was the CEPPU-94, due to its similarity of items and dimensions. But during the following years, the questionnaire has been being modified, including new factors and items, as those related to health status and assintance support. Comparing both tools, we discovered some coincidences but also items that disappeared from the original CEPPU and this test. We find also similarities with the other morale questionnaries mencioned previously, but we can not establish the real origin or the way of developing this final tool that we want no analysis in this manuscript. There is a general agreement in the main dimensions of the morale concept in most of the different questionnaires, which goes in the same theoretical line as the models used by armed forces of the main world powers (Galindo, 2013).

The current tool consists on 68 items on a 5-point Likert scale, ranging from 1 = *totally disagree* and 5 = *totally agree*. The questionnaire has a multidimensional nature designed to assess: (a) Legitimacy of the action/social support: justification and necessity of the mission, and the support perceived by the family and social environment (six items, example: “my family and friends are proud of my participation in the mission”); (b) Self-confidence: in own qualities, aptitudes and professional qualifications (six items, example: “I feel qualified to solve the difficulties that may occur”); (c) Confidence in command: perceived professional competence of the boss. It is determined by his credibility, by his personal, professional and physical qualities, and his ability to solve the problems of the Unit (seven items, example: “the knowledge and training of my boss are adequate”); (d) Confidence in material means: confidence in the materials and equipment used, and in the logistical support (six items, example: “I rely on the ability of my unit's combat capabilities to accomplish missions”); (e) Cohesion and confidence in the Unit: reciprocal trust that the group members have among themselves, as well as the degree of identification or pride for belonging the group (11 items, example: “I am proud to belong to my unit in the area of operations”); (f) Personal satisfaction and health status: individual feelings about physical and psychological status (17 items, example: “my current mental status (humor, predisposition to work) is good”); and (g) Assistance support: living conditions of the base: food, facilities, dependencies and services. (13 items, example: “The variety, quantity and quality of the food bags are adequate”). Two more items are included in order to control de variability of the answers, item 67 “in general my morale status is high” and item 68 “I have answered the questionnaire sincerely”.

Procedure

Data was collected in two different times during the mission, using two different subsamples of 250 participants each time. The first was gotten at the end of the first month of staying, and the second at the beginning of the 6th month. Between the first data collection and the sec-

ond one, approximately 120 days had elapsed. Questionnaires were completed in groups of 50 soldiers, in the dining room of the base, taking advantage of the free day after the routinary and weekly patrols. The average time to complete the test was about thirty minutes. The same procedure was used to carry out the activity in both times, having been coordinated by the operational section of the headquarter, for not influencing the tactical activities of the units.

Data analysis

Initially, using the data of the first subsample, an Exploratory Factor Analysis (EFA) was carried out to find the possible dimensional structure of the instrument and to check the validity of items in those dimensions. We discarded to include the last item (nº 68) for its content ("I have answered the questionnaire with sincerity"). Likewise, items from Assistant Support dimension (nº: 7, 14, 17, 20, 23, 29, 33, 36, 41, 46, 50, 57, and 59) were not considered either, because of their specificity about facilities and accomodations of the camp located in Lebanon. Therefore, the number of items considered for the realization of this EFA were 54. In order to study the factor structure of the scale and the adequacy of the six-factor structure proposed the EFA was performed using the FACTOR 10.9.02 software (Lorenzo-Seva & Ferrando 2006). The polychoric correlation matrix was used. Then, the six dimensions were extracted using the Parallel Analysis (PA) method, Robust Unweighted Least Squares (RULS) with the oblique Promin rotation (Lorenzo-Seva 2013). After the Parallel Analysis, a 5-dimensions model was advised, due to the appareance of factors with low factorial weights. Then, we proceed to verify the new 5-dimensions model, achieving better fit model results.

In the second part we proceeded to perform a Confirmatory Factor Analysis (CFA), using the second subsample. To assess the model, we used the Structural Equation Modelling (SEM), using again a Unweighted Least Squares (ULS) method. We considered the statistical estimators: GFI, AGFI, NFI and RFI, expecting to obtain values above .90, that means that they fit properly with the model; and RMR, expecting values close to zero.

For the analysis we used IBM AMOS 22.0..

Results

Exploratory Factor Analysis (EFA)

Descriptive results show items mostly located in the central-upper part of the scale of values. The averages range from 2.71 (item 64) to 4.42 (item 38). The ranges cover the full scale in most of the items, so we can admit that the variability is good.

In the initial set of the 54 items, the value of the KMO index is very high (.899, in scale 0-1). The Bartlett Sphere Test presents a value $\chi2(1431, N = 250) = 7186.5$, $p < .001$; that allows us to reject the identity matrix hypothesis, so that factorization of variables is possible.

For the extraction of the factors, RULS method was used. It was tested with an oblique method of rotation (Promin), to maximize factor simplicity. During this process, the appearance of a number of items that had low factorial weights was verified (values < .400), as well as some other with loads in more than one dimension. For these reasons, these items were eliminated step by step and cyclically repeating the entire extraction and rotation process, using the method mentioned above.

These steps determined the lack of adequate validity of 17 of the 54 initial items; consequently the final version proposed of the questionnaire consists on 37 items, agglutinated in five dimensions.

In this latest version, the ratio subject/items amounts to 6.75 exceeding the minimum required for the use of an EFA. In addition, it continues to adequately verify the remaining conditions that are required for a factorization: high KMO (0.906) and significant Bartlett test $\chi2$ (666, $N = 250) = 5098.8$, $p < .001$.

The dimensional structure (Table 1) determined the existence of 5 factors that explain 62.28 % of the total variability: F1 explains 37.08 %, from F2 to F5 they explain between 9.45 % and 4.18 %. Therefore, the variability explained by the set of the 5 extracted dimensions is high. The factorial loads are quite high, clearly showing the belonging of each item to each dimension. The previous table only shows the high factorial weights (those above .400).

Table 1.

Exploratory Factorial Analysis. Structure of the Morale Questionnaire. N = 250.

Robust Unweighted Least Squares with Promin Rotation (RULS)				**Factor 1**	**Factor 2**	**Factor 3**	**Factor 4**	**Factor 5**
KMO = 0.906			***% Total Variance***	37.08	9.45	6.63	4.94	4.18
Bartlett: *p* <.0001			***% Cumulative Variance***	37.08	46.53	53.16	58.10	62.28
Item	**Descriptive**			**Saturations >.400**				
	Mean	*S.D.*	*Commonality*	**Factor 1**	**Factor 2**	**Factor 3**	**Factor 4**	**Factor 5**
3	3.81	1.22	0.647	0.866				
10	3.37	1.23	0.691	0.769				
21	3.58	1.10	0.646	0.798				
34	3.75	1.13	0.687	0.762				
47	3.68	1.28	0.850	0.950				
54	3.92	1.01	0.754	0.801				
56	3.76	1.14	0.849	0.853				
61	3.868	1.09	0.838	0.811				
1	4.04	0.89	0.483		0.408			
11	3.26	1.05	0.486		0.504			
15	3.32	1.08	0.320		0.400			
18	3.53	0.99	0.372		0.510			
25	3.64	1.07	0.357		0.560			
32	3.63	0.86	0.523		0.693			
45	3.48	0.90	0.441		0.430			
51	4.38	0.78	0.392		0.473			
55	3.66	0.92	0.637		0.589			
58	3.272	0.88	0.342		0.505			
63	3.300	1.10	0.564		0.655			
8	4.12	0.91	0.623			0.466		
9	4.38	0.60	0.535			0.610		
13	4.07	0.88	0.648			0.649		
19	4.27	0.71	0.422			0.551		
26	3.80	1.00	0.347			0.464		
28	4.38	0.67	0.400			0.429		
38	4.42	0.63	0.672			0.745		
65	3.956	0.97	0.651			0.582		
67	4.240	0.77	0.777			0.790		
5	3.22	1.08	0.538				0.804	
22	4.00	0.87	0.435				0.643	
31	3.35	0.96	0.626				0.776	
48	4.20	0.94	0.368				0.456	
60	3.604	0.97	0.758				0.874	
43	3.33	1.05	0.672					0.746
49	2.86	1.25	0.740					0.857
53	2.96	1.10	0.554					0.662
64	2.708	1.28	0.359					0.605

These dimensions according to the Promin method show correlations with each other, moderate or low (Table 2). Coefficients that indicate a greater degree of association (> .400) can be found between the factors: F1-F3, F1-F4, F1-F5, F2-F3, F3-F4 and F3-F5.

Our sample achieved in this version, with 37 items in 5 dimensions, a high reliability coefficient named ORION (acronim for 'Overall Reliability of fully-Informative prior Oblique N-EAP scores') was achieved in all dimensions (> .800). The value of the coefficient for each dimension was calculated separately (Table 2).

Table 2.

EFA. Correlational and reability coefficients among extracted dimensions.

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Factor 1	***.96***				
Factor 2	.394	***.89***			
Factor 3	.518	.543	***.91***		
Factor 4	.546	.397	.518	***.90***	
Factor 5	.479	.373	.422	.300	***.89***

Note. Reliability coefficients are reported in diagonal.

FACTOR software offers us the possibility of analyse the Robust Goodness of Fit Statistics resulting from EFA. Table 3 presents the fitness statistical estimators: RMSEA, NFI, CFI, TLI, GFI, AGFI and WRMR scores, that confirm the goodness of the five-dimensions model.

Table 3.

EFA: Fitness indexes.

Model	***RMSEA***	***NFI***	***CFI***	***GFI***	***AGFI***	***WRMR***
Five Factors	0.000	1.006	1.004	0.990	0.987	0.209

Confirmatory Factor Analysis (CFA)

For this CFA, only the 37 items whose validity were previously proven in the EFA (Table 1) are considered. We obtained good results that made us being optimistic towards the 5-dimension factorial structure. Figure 1 presents the model checked in this CFA, in which item 64 from factor F5 was excluded due to its low factorial weight. Therefore, the current proposal would be defined by 5 factors that agglutinate 36 items.

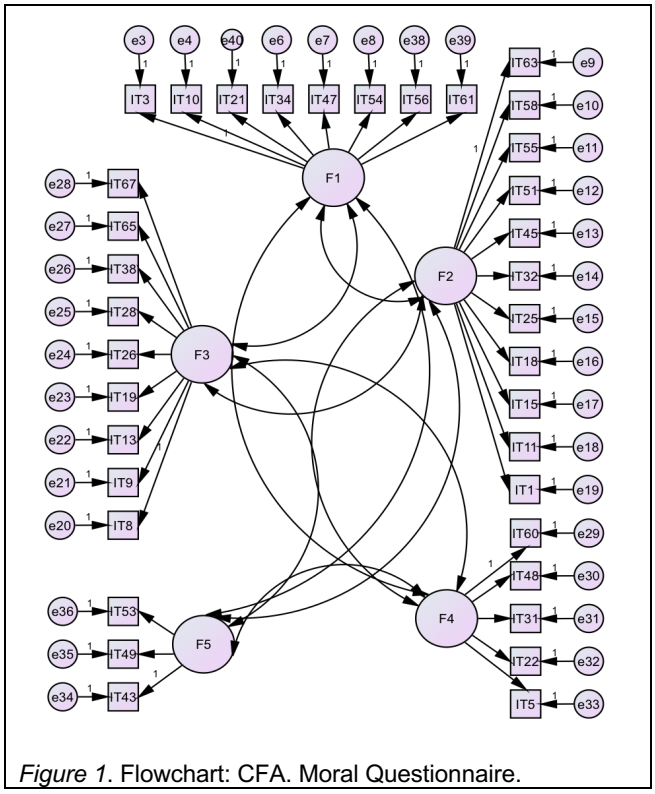

Figure 1. Flowchart: CFA. Moral Questionnaire.

The results of this CFA are quite similar to the previous EFA. The values of the standardized coefficients (Table 4) are significant (at least for p <.001), as well as the coefficients of correlation between factors, some of them of considerable magnitude (> .450).

Table 4.

CFA. Moral Questionnaire.

	Standardized regression coefficients				
Item	**Factor 1**	**Factor 2**	**Factor 3**	**Factor 4**	**Factor 5**
3	.718				
10	.766				
21	.740				
34	.846				
47	.867				
54	.750				
56	.889				
61	.860				
1		.661			
11		.692			

	Standardized regression coefficients				
Item	**Factor 1**	**Factor 2**	**Factor 3**	**Factor 4**	**Factor 5**
15		.404			
18		.550			
25		.583			
32		.686			
45		.595			
51		.502			
55		.810			
58		.453			
63		.651			
8			.712		
9			.491		
13			.759		
19			.501		
26			.504		
28			.453		
38			.586		
65			.678		
67			.733		
5				.643	
22				.604	
31				.798	
48				.574	
60				.854	
43					.650
49					.668
53					.650
	Correlation coefficients among factors				
	Factor 1	**Factor 2**	**Factor 3**	**Factor 4**	**Factor 5**
Factor 1	--				
Factor 2	.425	--			
Factor 3	.477	.707	--		
Factor 4	.589	.549	.660	--	
Factor 5	.448	.398	.452	.398	--

Checking the possible fitness of the model (Table 5), we observe statistical estimators (GFI, AGFI, NFI and RFI) obtaining values above .90, that means that the model fits properly; and RMR with a value that make us optimistic with the goodness of the proposal. “Insert Table 5”

Table 5.

CFA: Fitness indexes.

Model	***RMR***	***GFI***	***AGFI***	***NFI***	***RFI***
Five factors	0.058	0.974	0.970	0.966	0.964

Discussion

Morale is a vital component in every military operation. High morale was regarded as almost essential to success and low morale as a possible ground for failure, which in a military context, could be catastrophic (Kane, 2013). The aim of this research was to obtain evidence of the validity of the internal structure of the Morale Questionaire used by the Spanish Armed Forces in Operational Theaters overseas. The purpose consisted on analyce the factorial structure of the tool, maintaining the original dimensions. Some mistakes had to be overcome, finding a final solution of 36 items agglutinated in 5 factors.

Despite the number of items that were excluded from the original version of the questionnaire, the factorial structure of the new proposal matches theortically with de previous one. The only difference between both versions is that we propose a 5-dimension model, because it has obtained a better statistical adjustment. The composition of the dimensions and the proposed denomination for each of them are detailed (Table 6). It has been tried to maintain the name they had in the initial questionnaire, although in some cases it had to be modified.

The statistical validation of this tool will permit to do more accurate preditions about the morale leves of the troops deployed. It will facilitate leaders to know a great deal about the status of their unit and its cohesiveness. As a prime beneficiary of good morale and cohesion, mental health professionals will be able to provide advice and assist the leaders about mental status of their troops, motivation, performance level; and in periodically using it to assess the units. What could prevent what Vaughn (1982) called “one of the most lamentable of yesterday's mistakes”, about the failure to anticipate the pivotal role that morale would come to play in the Vietnam War.

That is only the first step for the Spanish Army to achieve the capability of study the psychological performance level of the troops in warzones. This validation could represent in the future the cornerstone for advanced researches. It will facilitate information that could affect not only from a psychological point of view, but also in the tactical issues of the deployments. It will permit to do predictions at the level of the Armed Forces from another

countries, for instance the use that the Israel Defense Forces (IDF) made of the Combat Readiness Questionnaire (Catignani, 2004), or the reports that the US Mental Health Advisory Team (MHAT) made in Iraq and Afghanistan, to asses the programs undertaken in combat zones during the Operation Iraqui Freedom and the Operation Endurin Freedom, respectly (MHAT, 2006, 2008).

In the near future the use of the Spanish Morale Questionnaire for Operational Theaters should be promoted, using this initial validation or strengthening it with new or

Table 6

Dimensions of the Morale Questionnaire for Operational Theaters.

F1. **"*Confianza en el mando*"**
- 3. Mi jefe directo nos trata a todos por igual, sin distinciones.
- 10. En mi Unidad, mi jefe directo ha conseguido que formemos una piña.
- 21. Cuando hacemos algo bien, mi jefe directo nos felicita.
- 34. Mi jefe directo es el primero en cumplir las normas, nos da ejemplo.
- 47. Si tuviera que repetir, me gustaría volver con mi jefe directo otra vez.
- 54. La preparación física de mi jefe directo es buena para cumplir la misión.
- 56. Creo que mi jefe directo sabría sacarnos de cualquier situación de peligro.
- 61. Los conocimientos y adiestramiento de mi jefe directo son adecuados.
F2. "*Legitimidad de la acción y medios*"
- 1. Participar en esta misión está siendo una buena oportunidad profesional.
- 11. Cuando se me encargan tareas se me dota de los adecuados recursos y medios.
- 15. Creo que estamos ayudando a personas que realmente lo necesitan.
- 18. La capacidad del ET para afrontar la misión es igual o mayor que la de otros países.
- 25. Mi preparación previa para la misión ha sido buena.
- 32. El equipo individual que manejo para mi trabajo es seguro y funciona bien.
- 45. El apoyo (mantenimiento, transporte, administración, sanidad) recibido es bueno.
- 51. Mi familia/amigos se sienten orgullosos de que yo participe en esta misión.
- 55. Confío en la capacidad de los medios de combate de mi unidad para cumplir las misiones.
- 58. Siento que, en general, la sociedad española apoya la realización de esta misión.
- 63. El equipo (vehículos, radio, maquin.) utilizado es seguro y adecuado para cumplir la misión.
F3. "*Confianza y Satisfacción personal*"
- 8. En lo personal, me satisface esta experiencia y me alegro de poder estar aquí.
- 9. Me siento capacitado para resolver las dificultades que puedan ocurrir.
- 13. Mi actual estado de ánimo (humor, predisposición al trabajo) es bueno.
- 19. Por el momento aguanto bien la separación de mi familia y amigos.
- 26. En general, duermo bien y tengo digestiones normales.
- 28. Sé manejar correctamente el material que empleo.
- 38. Veo que estoy preparado física y mentalmente para cumplir la misión.
- 65. Estoy satisfecho con mi destino o puesto aquí en ZO
- 67. En general, mi estado de moral es alto.
F4. "*Cohesión y confianza en la Unidad*"
- 5. Aquí, en ZO, hay más compañerismo que en España.
- 22. Si tuviera problemas personales, podría contar con la ayuda de mis compañeros.
- 31. El ambiente dentro de mi Unidad es bueno y la gente se apoya entre sí.
- 48. No me gusta que otros critiquen a mi Unidad delante de mí.
- 60. Existe entre nosotros espíritu de equipo.
F5. "*Tiempo libre*"
- 43. El horario de trabajo a diario es bueno y tengo tiempo para mí.
- 49. El nº de horas de tiempo libre durante los fines de semana, es adecuado.
- 53. Las excursiones programadas los fines de semana me parecen acertadas.

implemented researches. Always with the intention of improving the conditions of our troops overseas, its level of performance, trying to become tangible, "the intangible entity that bonds men together and motivates them to push themselves to the last ounce of their strength or ability was evident throughout the cases" (Cox, 1995).

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