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Political culture and defence policy: a model of five-subtypes to explain the Spanish defence political culture.

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European citizens' attitudes towards defence are a fundamental element of common identity in the EU's aim of becoming a unitary international actor. In Spain, since the early 2000s, the Spanish Ministry of Defence and the Armed Forces have developed a public policy to promote defence culture to influence Spanish society's views, perceptions, opinions, etc., towards defence and military policies. However, this approach is flawed because, despite being defined as part of the Spanish citizens' political culture, these institutions reduce this concept to 'knowledge' or 'awareness of its importance'. Therefore, the understanding of the Spanish defence political culture has been ill-analysed. Hence, a political culture related to defence issues can be best explained within the political culture framework, from which an ideal type, in the Weberian sense, can be established. Thus, based on previous studies, using survey data and both exploratory and confirmatory factor analysis (EFA & CFA), we test five sub-models to explain this political culture. This research is relevant to the study of the defence political culture because it reaffirms the existence of different cultural subtypes and civil-military relations and shows that the cultural gap in the convergence of values must be worked on in a segmented manner.

Keywords: Political culture, Defence and security policy, Defence culture, European identity, Spain, Quantitative methods

Introduction

Defence and military issues are experiencing their momentum in Europe. The War in Ukraine and Russia's military assertiveness —also as a common threat to Europe—, but also other challenges on the horizon —nuclear proliferation, critical infrastructure protection, China's rise, terrorism, innovative military technological disruption, etc.— have brought the armed forces and national and European defence policies back to the centre of the European public debate¹. Hence, a vital element of these developments is the attitudes that European citizens may have towards these institutions, and which is the political culture towards this specific political system.

The acceptance and legitimisation of these policies, i.e. what they are and what they should be, are crucial in democratic societies in relation to the military (Kernic, 2023), also as one of the key dimensions of civil-military relations (Pion-Berlin & Martínez, 2017). In fact, Pion-Berlin and Martínez affirm that the interaction and potential convergence between society and military do not mean social homogeneity; quite on the contrary, societies are all heterogeneous, which implies the coexistence of different political subcultures embedded in different groups. A statement valid both at the European level and at the various sub-national levels.

Indeed, from a theoretical perspective, we can establish that political culture related to defence policy comprises —as political culture as a whole— diverse attitudes that, depending on how they are interrelated, give rise to diverse subcultures (Howorth, 2002; Meyer, 2005;

¹ In the fall of 2023, according to the Standard Eurobarometer survey (No. 100), when Europeans were asked to identify the main problems facing the European Union, the war in Ukraine emerged as the foremost concern, followed by the international situation as the third most cited issue.

Irondele et al, 2015; Bueno et al, 2023). However, political culture has been a controversial concept due to debates over the methodologies to measure its composition (Caciagli, 2019; Kavanagh, 1972; Street, 1994), and thus the possibility of empirically analysing these different subcultures. In a preliminary theoretical work based on the case of Spain, we have shown, in line with the work of Irondele et al (2015), that the defence political culture is not a unique construction (Bueno et al., 2023); in that study, we proposed an ideal type of defence political culture within a democratic political system, and from it, according to how the different attitudes that make up political culture —cognitive, affective, evaluative, and conative— interrelate with each other, we have detailed various possible subcultures: critical support, uncritical support, indifference, critical rejection, and uncritical rejection (Bueno et al., 2023).

This paper aims to demonstrate empirically that our model of cultural subtypes based on indicators that operate on four variables is accurate and can be valid not only for the Spanish case, but for any democratic political system. In this sense, the growing relevance of empirical research in present-day societies and politics is intertwined with investigations into the social approval of the military (public support) and prevailing public attitudes toward security, defence policy, and the implementation of military force (Kernic, 2023: 95-96). The selected case study works as a theory-confirming and theory-infirming case (Lijphart, 1971: 692; Hamel et al, 1993; Sartori, 2009:157). Thus, the suggested model can be a valid theoretical-empirical proposal for analysing the defence political culture in European states or in the European Union itself at a crucial moment for security and defence policies.

Indeed, for several decades, the idea of creating and reinforcing a European identity on security and defence issues has been at the forefront of EU policies. Moreover, a fundamental element of common identity is the EU's aim to present itself as a unitary international actor on

the international stage. Even at the individual level, a common system of defence is important, as people relate feelings of Europeanness to the political, social and defence systems across Europe (Pichler, 2008: 420). Significant within this consideration is the development of a common security and defence policy, which will ultimately require institutional reinforcements in the field of security and defence (Matonytė y Morkevičius, 2012; Calcara 2019; Haroche, 2020). Nevertheless, it has been observed that there are profound differences between Member States in terms of support for a common defence policy (Peters, 2014; Hakansson, 2021).

Hence, with governments serving as the primary actors within the European political system, the common foreign and defence policy essentially reflects how member states address external threats (Schoen, 2008: 8). For these reasons, European citizens' attitudes towards defence institutions must still be analysed nationally. Scholars such as Meijer & Wiss (2018) have highlighted the need to delve deeper into national perspectives and policies, examining their military approaches, organisations, cultures and capabilities, among other factors related to their defence posture.

In this regard, the Spanish case holds significance for two purposes, namely research-oriented and policy-oriented: on the one hand, an exploratory review of the academic literature shows that the case of Spain has attracted limited interest, despite being Europe's fourth largest economy, a middle power in a key geostrategic position and a major participant in NATO and EU missions, or one of the main contributors to the EU's new defence industry programmes. On the other hand, Spanish Ministry of Defence has expressed for decades its regret at a so understood deficient defence political culture among Spaniards; therefore, both the Ministry and the Armed Forces have promoted the so-called “defence culture policy” in order to generate knowledge —understood as culture— and awareness —i.e., defence policy is a critical policy—

among the citizens; both elements would boost at the end the support for defence and military policies. This concept, and its related public policy, has consequently generated much debate in the Spanish defence community, not always with sufficient theoretical and empirical development (Díez Nicolás, 1999; IEEE, 2011; López Mora & Ballesteros, 2011; Bueno, 2016: 50–52; Pérez, 2017).

The Spanish case reflects very well the paradox enunciated by Judith N. Shklar on political culture: although this term is not well defined, it is a useful notion for policymakers and academics (cited in Welch, 2013: 2). Nevertheless, talking about political culture, this disquisition between culture and awareness makes no sense. The concept of political culture refers to a combination of attitudes, values, knowledge, interests, feelings, sensations, desires to influence, and perceptions of the citizenry towards political objects (Pye, 1968: 218). Therefore, to separate knowledge from interest or feelings towards the political object is to break it down into elements that are unintelligible on their own without reference to the whole, which is political culture. This theoretical approach facilitates to determine that knowledge about political actors and institutions —cognitive attitudes— does not —always— imply support; in the same way, that lack of knowledge about them does not automatically translate into lack of support for a concrete policy.

Moreover, it is a community —society—, and not the individual —citizens—, that possesses political culture. Thus, the differences between groups will give rise to trends, models, and patterns that will shape different cultures and even subcultures. As a consequence, the most important implication in policy-oriented terms is that segmenting the population into different subtypes allows the political decisionmaker to know what kind of attitudes should be reinforced and/or addressed in the design of a defence culture policy.

For these potential measurements of an ideal type of defence political culture and the different subtypes, we proposed a series of indicators grouped around four variables —social environment, military sphere, defence policy, and personal involvement— constructed inductively from the questions we extracted from the questionnaires drawn up by the research project REPENFAS21.² To do so, we use data from the Spanish Centre for Sociological Research (CIS in Spanish acronym) surveys to perform a Mixed Factor Analysis. This method facilitate us to test specific hypotheses on dimensions underlying a set of variables (Kline, 2015). We will take those indicators of our variables embedded in the last survey conducted by the CIS in 2017, No. 3188, and we will carry out our analysis in several steps. First, we perform an Exploratory Factor Analysis (EFA) to measure the optimal number of factors in the data vis-a-vis our four theoretical variables, and then we implement a Confirmatory Factor Analysis (CFA), which will allow us to test the validity of our model and thus have an impact on the construction of defence culture policies.

The paper is structured as follows: it starts with a theoretical discussion on the concept of defence culture, delving into existing literature and proposing specific subtypes within this framework. Following this, the methodology section details our innovative approach, emphasizing the use of a two-step factor analysis process. Subsequently, the results section then presents the findings of our analyses, examining and discussing the validity and robustness of

² Researchers from seven Spanish universities carried out the research project ‘Rethinking the role of the Armed Forces in the face of new security challenges’, in which in-depth interviews have been conducted with parliamentary spokespersons of the defence committees of the Congress and Senate, CEOs of the Spanish defence industry, and admirals and generals of the Armed Forces and the Ministry of Defence.

our model. Finally, the paper concludes by highlighting our theoretical contributions and suggesting directions for future research in Defence studies.

Defence political culture

The definition of the *defence political culture* requires its insertion into the debates and theories on political culture in political science, as well as its differentiation from other concepts such as strategic culture (Meyer, 2005; Biava et al, 2011; Biehl et al, 2013; Martínez 2024: 148) or security culture (Howorth, 2002; De Goede, 2011); in the European security and defence literature, those terms are more frequently used instead of the concept of defence culture. However, all of them are explicitly based on the concept of political culture.

First, this concept has been developed mainly since Gabriel Almond's studies (1956), which works as an independent variable that influences the behaviour of individuals or the legitimacy of political systems (Lowenthal, 1979; Pye, 1965; Verba, 1964) Thus, individual actions are better explained by cultural rather than rational approaches (Ersson & Lane, 2005: 2–3). As a logical result, political culture is the sum of the attitudes that individuals in a group (nation, community, or class, among others) have towards political objects (Elkins & Simeon, 1979).

Hence, the basic unit of political culture is attitudes, although it is difficult to isolate them from other elements such as values, as they are closely related. Values are underlying elements that, together with social norms, would be the internal standards that specify the actors' behaviour; they are the result of primary socialization, which can occur in the family, in peer groups, in reference groups, at school or in the media (Millán, 1995; Percheron, 1985). On the other hand, attitudes are shaped by the interaction of these values and social norms with the

behaviour of the actors and in relation to political objects. In other words, attitudes are shaped by external stimuli. In short, an attitude is influenced by deep-seated values and develops a particular behaviour—an opinion or an act—which has specific effects (Homer & Kahle, 1988). In this sense, although not immediate, a change in attitudes is easier to bring about since an opportunity structure can be altered through institutional transformations (Shi, 2001, p. 402). Past war experiences, number of casualties, ideological position, religion, gender... are factors that determine people's attitudes towards war, military affairs and defence (Torabian, & Abalakina, 2012).

There are different types of attitudes: cognitive, evaluative, affective, and conative (Vallès, 2011). From these attitudes, it is possible to study the support, or not, of individuals for their political objects. This support can be specific or diffuse (Easton, 1975). The former takes the form of support for a decision or material achievement; it is sometimes confused with public opinion. The latter, on the other hand, implies an attitude towards the political object in a more lasting way, beyond short-term policies; diffuse support is part of political culture (Magre & Martínez, 2006: 304).

Based on this conceptualization, the defence political culture would be the aggregation of the attitudes of the members of a political community towards a series of political objects related to national defence within the framework of the political (sub)system of national defence (Bueno, 2016). It does not refer to a mere accumulation of knowledge or a particular valuation and feeling towards the political objects of the defence system, but the outcome of the combination of different attitudes towards these political objects.

Therefore, we can group these attitudes into different groups whose members have a specific political orientation according to these attitudes. Concerning the defence policy

subsystem, we define the different attitudes following Bueno et al.'s theoretical typology (2023: 79-81): (i) cognitive attitudes are based on knowledge or beliefs about the political objects of defence (government, armed forces, industry, security threats, international commitments, and others); (ii) evaluative attitudes attribute meaning and provide the criteria for making judgements (positive or negative stance); (iii) affective attitudes configure an attachment, rejection or indifference towards the social norms or values represented by the political objects of advocacy or their symbols; and (iv) intentional or conative attitudes determine whether individuals may engage in one political behaviour or another, such as, for example, participation in volunteering, voting, demonstrations, boycotts, or attendance at public events. This typology allows us to identify different political subcultures of defence, as explained in the following section.

Secondly, regarding the different notions of culture, defence culture is not to be confused with strategic culture. It is important to clearly establish these differences in order to avoid concept stretching, that is taking a narrowly defined concept and applying it in ways that may lose precision or go beyond the idea's applicable scope conditions (Sartori, 1970); if every study of defence matters is labelled as strategic, the analytical richness will be diminished.

The idea of different strategic cultures was born out of the idea of explaining why some countries have accepted the use of atomic weapons and others have not (Snyder, 1977; Gray, 1981). Later, the term has become conceptually broader, evolving towards when and why a society legitimizes the use of force (Lord, 1985; Klein, 1988). The latest definitions (Longhurst, 2000; Carter, 2015), have brought it closer to the concept of political culture that we use. But the major difference is that strategic culture mainly interrogates the use of force, while the concept discussed here—in addition to being operationalized, rather than merely discussed in theoretical terms (Bueno, et al, 2023)—, alludes to everything that involves national defence policy, beyond

the narrow definition of the former term. In addition, the keepers of the strategic culture are the elites, while the defence culture refers to the whole community.

On the other hand, in academic literature, it is widely acknowledged that security culture, whether defined by its substantive content or the encompassing means of realization, transcends the boundaries of strategic culture — encompassing diverse realms such as the economy, climate, and energy—, which is a subset of that broader framework (Latham, 1998; Edwards, 2006; Gariup, 2009).

A proposal for an ideal type and sub-types of defence political culture

The academic literature identifies various efforts to establish different typologies (in some cases, with dichotomous categories) of sets of attitudes towards security and defence issues. On the security culture of Europeans, Howorth (2002) distinguished six dichotomies that explained the differences between national security cultures (allied/neutral, Atlanticist/European, projection power/territorial defence, nuclear/non-nuclear, civilian/military instruments, large/small states, arms creators/consumers). Meyer (2005) referred to (i) changes in threat perception, (ii) institutional socialisation and (iii) learning in crises. Irondelle et al. (2015) identified the idea of defence culture typologies: pacifists, traditionalists, humanitarians, and globalisers. The academic literature identifies various efforts to establish different typologies (in some cases, with dichotomous categories) of sets of attitudes towards security and defence issues. While these proposals are enriching, none deal specifically with defence subcultures apart from the "threat perception" dimension (Meyer, 2005), none of these typologies overlap with the elements contained in our proposal, while underlining once again the need to distinguish between strategic culture/security culture, and defence culture.

Bueno et al. (2023) establish an ideal model — drawing on a Weberian ideal model— plus five types of defence policy subcultures, based on cognitive, affective, evaluative, and intentional attitudes; each one is operationalized from indicators extracted from multiple surveys³. The ideal model is called *republican culture*,⁴ while the subcultures are named as: 1) *uncritical support*; 2) *critical support*; 3) *indifferent*; 4) *critical rejection*; 5) *uncritical rejection*. The order of these subcultures is a scale ranging from unconditional and unwavering support to staunch and unquestioning opposition.

The ideal type of *republican* defence political culture is made up of individuals who:

- (1) Know and positively value the role of the political objects and actors of defence in the political system.
- (2) Consider that defence policy is necessary for the development and stability of their countries, as well as of the international order.
- (3) Appreciate the importance of the defence of national interests.
- (4) They identify effectively with the community with which they share common values.

³ For the complete set of indicators visit [Online Appendix](#)

⁴ This term derives from the political theories of republicanism. This theory considers Government should be treated as a "res publica", whereby public policies should be the responsibility of the whole citizenry and not of a class or elite. In this way, citizens should have a more significant role in political participation. The republican approach establishes a defence of civic values and the virtue of citizenship as an element of overcoming the loss of political vigour and civic health in society (Gargarella, 1999; Barber, 2003; Skinner, 2010).

- (5) It does not prevent them from being critical of deviations in the behaviour of actors or institutions that could undermine fundamental freedoms or rights in the system; and
- (6) They consider that defence is not only a matter for the elites but for all citizens.

Therefore, they have cognitive attitudes to process and organize the information of this defence system. Their affective attitudes are manifested by a feeling of belonging to a political community (State). They have positive evaluative attitudes; although critical, they are wary of any concentration of power. Moreover, their conative attitudes refer to their responsibility as citizens to participate in the defence of the community. In short, this republican ideal shows *diffuse support* for defence policy, based on legitimacy and trust in the actors and rules of the game, as well as *specific critical support* for the different political actions.

The main characteristic of individuals within the *uncritical support* subculture is that they do not possess a critical cognitive attitude towards the defence sub-system. They may possess knowledge, even very advanced knowledge, about some specific aspects (militarizing bias). They have extreme affective attitudes based on pride in belonging to a political community and contempt for those who do not share this pride. Therefore, their national identity is intense and attached to military values and traditions. Valuational attitudes are positive, except towards actors or objects that want to challenge the status quo. Conative attitudes are also present and focused on symbolic aspects. The defence should not be 'everyone's business, but that of the armed forces. There is diffuse support, seamless, based on trust above all in the armed forces and based on legitimization as the safeguard of the political community.

The subculture of *critical support* comprises individuals who possess advanced and critical cognitive attitudes towards the defence subsystem, which allows them to order and process information according to these principles. Affective attitudes are not essential in this

subculture; there need not be a priori rejection, but neither is their identification with values and social norms of the armed forces. The evaluative attitudes are positive, although the criteria for formulating judgements and opinions are critical; that is to say, some elements of the system can be evaluated as negative or inadequate. It is also a group very wary of gestures or positions that might reveal traces of militarization. Conative attitudes are also unimportant. These individuals do not tend to mobilize around defence-related issues. Instead, they develop moderate diffuse support for the political actors in the system, i.e., a moderate trust and regard for legitimacy.

The *indifferent* subculture comprises individuals who do not possess significant attitudes towards the political subsystem of defence. They may understand and be informed about these issues but are neither relevant nor interested in them. Diffuse support for the defence system is neutral. It does not exist as such, but neither is their explicit rejection - negative support; if nothing disturbs or antagonizes them, they let it go. It means that trust and legitimacy in the political objects and actors of the defence subsystem are linked to attitudes towards the political system in general or other subsystems.

The *critical rejection* subculture comprises knowledgeable individuals about the defence system but who judge it negatively, considering that the actions and even the very existence of some of the system's actors —mainly the armed forces— do not correspond to the national and international reality should be. These individuals have critical cognitive attitudes towards the defence subsystem, with reproaches regarding the role attributed to each of its actors and the functioning of defence policy nationally and internationally. They reject the processes of securitization of many issues on political agendas. Affective attitudes of pride in belonging to a political community are weak. There is a rejection of military values. Valuational attitudes are negative concerning judgements of the system's shape and the actors' role. Individuals in this

subculture have conative attitudes, as they can mobilize in relation to the defence system, mainly to criticize it and demand its inaction and eradication. There is no diffuse support, which leads to a specific rejection of the actors and the system, mainly due to a consideration of the lack of legitimacy of these actors, which is essentially ideological and, to a lesser extent, structural. There is also a lack of trust. Nevertheless, this institution does not prevent us from finding specific support for a particular object of the defence subsystem at certain moments.

The last one is the of *uncritical rejection* subculture. It comprises individuals who reject outright the role that the actors of the defence subsystem play in the system. These individuals have little knowledge of this subsystem; their cognitive attitudes are one of rejection. Therefore, other attitudes prevail. Affective attitudes are the most important, and they are of visceral rejection towards the actors and the rules of the game, understanding that they are not only unnecessary but also represent an obstacle to the configuration of an ideal political system. They reject the values and social norms that the armed forces represent. They do not identify generically with the political community, they are anti-nationalists, but they can identify with peripheral political communities. They are militant anti-militarists. Their evaluative attitudes are also negative. They have conative attitudes, as they can mobilize to oppose this system. There is a total absence of diffuse support without contemplation. This absence of diffuse support generates specific negative support for all political system elements.

Proposal of Defence Culture Indicators

To measure the ideal type of defence political culture and the different subtypes, a set of indicators grouped around four variables, constructed inductively in the theoretical study by Bueno et al. (2023), is proposed. The four variables we work with are social environment,

military sphere, defence policy, and personal involvement. We argue that these four latent variables are composed as follows:

Social environment. It refers to socio-demographic, political, and institutional factors that do not determine the defence political culture, but subliminally intervene in shaping it. Thus, subjective national identification, an affinity for centralized or federalist dynamics, party or religious orientation, income level, and living or having lived near a military installation are considered; in other words, socio-demographic factors. Likewise, the assessment of the social return on defence spending, the collaboration of the armed forces with other administrations, whether they reflect or should reflect the country's linguistic, political, and religious diversity, and the advisability of organizing a civilian service for young people, the image conveyed by the media, or the international organization that would best help Spain in the face of risks or threats.

The military sphere. It is the variable that integrates the aspects referring to the meaning and configuration of the armed forces. It informs us about whether or not they are necessary, their usefulness, their training, and level of preparation, the need for the military instrument as an element of the State's external action and a tool for safeguarding national interests, about whether this type of activity generates international prestige for the country, about whether it gives it greater international political weight. The strengths and weaknesses of the armed forces, the image they project, their values, and their convergence with social values. On their social prestige, on whether they are socially integrated or whether they can integrate naturally social groups according to gender, religious or ethnicity criteria.

Defence Policy. It analyses the issues that give meaning and shape to policy. It assesses the elements that contribute to the implementation of defence policy. Hence, the risks and threats

facing the country and the scenarios in which defence spending and implication are justified, the degree of involvement and responsibility of the different actors involved in national security, as well as the type of missions we expect the armed forces to carry out inside and outside the country and whether the armed forces are considered appropriate to perform non-combat missions. This variable also includes the future model of the armed forces, both in terms of their potential integration with other national and international structures, the role attributed to NATO and the EU in the construction of this policy, the volume of troops needed, and whether or not it is necessary to re-establish military service —voluntary or compulsory—. It also includes economic questions such as whether the international spending commitments acquired will be met or whether the level of expenditure assumed is to tackle the risks identified. Finally, it asks whether the industrial and technological base of Spanish defence is enough to generate autonomous defence capabilities, whether it should be prioritized or whether it should move towards generating capabilities in cooperation with third parties within the framework of the EU. Even one's own idea of what defence culture is will be relevant when operationalizing this variable.

Personal involvement. This variable fundamentally refers to affective and conative considerations: which measures the individual's ties and intentions towards the political object. It analyses the proximity and interest to issues related to defence, the level of information about it, the discomfort or not generated by living near a military settlement, or the personal historical memory of the Civil War of 1936. Questions related to symbolic patriotism —pride in the anthem or the flag or in being Spanish—, to their predisposition to participate in events related to defence, to become active as a reservist, or their willingness to risk their lives, even participating voluntarily in the military defence of the country, are included. It also examines whether there is

a military background in the family, what values they considered essential in the education of their children, and what their opinion would be if a son or daughter expressed a desire to be in the military.

Data and method

In this paper, our methodological approach is designed to explore and validate the concept of Defence Culture, utilizing a two-step factor analysis process. This research employs data from the 2017 *Spanish Centre for Sociological Research* (CIS in Spanish acronym) survey about public attitudes toward Defence and Armed Forces (descriptive statistics are available in table 3 of the [Appendix](#)). The questions that we take from this survey include socioeconomic characteristics and subjective national identification (Environment), feelings about patriotic symbols such as the flag and the anthem, and the will to defend Spain (Personal involvement). It also includes questions about some aspects surrounding the military environment such as the role of the armed forces in the international area or their level of training to fulfil their functions (The Military), as well as assessments of the annual defence budget or the number of troops and technical means (Defence policy). Although the survey does not encompass the entire spectrum of our theoretical model of Defence Culture, it still works as it captures at least the four critical dimensions that -we argue- build the concept of defence culture. The indicators that we pull from the CIS⁵ survey are set out in the following table:

[TABLE 1]

⁵ CIS no. 3188 2017

We aim to explore to what extent this data may reveal four major theoretical variables and, in particular, how these can contribute to explaining different aspects of Defence Culture. To empirically test these theoretical statements and construct our defence culture estimators, we employ a Mixed Factor Analysis methodology. Following the recommendation of Worthington and Whittaker (2006) and Orçan (2018) this research scaling and measuring method is comprised of two distinct phases: Exploratory Factor Analysis (EFA) and Hierarchical Confirmatory Factor Analysis (CFA), each serving a specific purpose in our study.

The first phase, EFA, is essential for identifying potential latent structures within our dataset. By examining the 19 indicators from the CIS survey, EFA allows us to hypothesize about the underlying dimensions of Defence Culture. This step aligns with the guidance of Costello and Osborne (2005), highlighting factor analysis as a suitable tool for measuring phenomena that are not directly observable, like our main dependent variable and the four latent exogenous variables. The use of EFA is particularly significant as it enables us to assess the viability of our four theoretical variables, confirming the 'adequate' number of factors (Marsh et al., 2014). This exploratory phase is crucial as it does not impose any predefined model structure but rather lets the data guide the identification of potential defence culture dimensions.

Following the EFA, we will undertake a Hierarchical Confirmatory Factor Analysis (CFA) to test the validity of the structure suggested by the EFA results. The CFA requires us to specify a model a priori based on the EFA findings and then assesses how well this model fits the empirical data. This phase of CFA, as suggested by Worthington and Whittaker (2006), allows us to confirm whether the hypothesized dimensions of defence culture are consistent with the observed data patterns. It is important to clarify that while EFA and CFA can suggest relationships between variables, they do not establish causality. Our aim with CFA is not to infer

causal relationships but to validate the defence culture dimensions identified in the EFA, thereby enhancing the robustness and credibility of our findings.

Our mixed method approach, integrating both EFA and CFA, is ideal for our research objectives. Defence Culture, as an aggregation of multiple attitudes towards a series of political objects related to national defence, is intended to function as a multidimensional indicator. Therefore, a hierarchical model, as we propose, better suits our theoretical structure. This sequential use of EFA and CFA ensures a systematic and rigorous exploration and validation of the Defence Culture construct, setting our study apart in its methodological rigor and contribution to the field.

Based on the previous theory, our model of defence culture is constructed as shown in figure 1. As it shows, it is a second-order measurement model where, from this series of observable variables (box-shaped), we build the four exogenous latent variables (circle-shaped) that we will use to measure defence culture.

[Figure 1. Estimators of Defence Culture]

As we mentioned before, an FA is quite useful at this stage as we can use it to confirm that there is correspondence between the data and the theory. Factor analysis have developed different ways to identify the number of factors to extract. In this case we use a set of visual and statistical techniques to decide which number of factors to obtain. These are: (a) inspection of the residual matrix, (b) the standardised root mean squared residual (SRMR), (c) the root mean square error of approximation (RMSEA), (d) eigenvalues > 1 , (e) the scree plot, and (f) parallel analysis (see figure 3 in the [Appendix](#)). From this exploratory analysis we can conclude that any number of factors superior to 3, is statistically satisfactory. Hence, retaining four factors -as we theoretically propose- is possible with this data. It is necessary to emphasise that ultimately the

decision about the number of factors retained must be made against the background of the theoretical meaningfulness and interpretability (Preacher & MacCallum, 2003). As Bruin (2006) points out ‘there is no “true” number of factors to retain. Rather, the goal of the factor analysis is to identify the major factors that account for the correlations of the items.’

[Table 2. Eigenvalues and Variance Explained for Rotated Factor Solution]

Table 2 shows the Eigenvalues which are the total variance explained by each factor. All Eigenvalues are above 1. We used an oblique rotation (Oblimin). Since there is a high correlation between variables (see figure 4 in the [Appendix](#)), this method allows natural covariation between constructs and does not distort the natural relationship between two theoretically similar constructs. The current 4-factor model explains 51.8% of the total observed variance, therefore is sufficient to explain our data.

For addressing the nonnormality condition of our data, we use mean-corrected maximum likelihood (MLM) with robust standard errors to estimate the model parameters. Even though diagonally weighted least squares (DWLS) is the most common estimator when using categorical data, it corrects “to mimic a population value of a fit function that is always misspecified thus carries no meaning” (Savalei, 2018).

Discussion

To facilitate the interpretation of the loadings we standardized the variance of both the endogenous (Y) and exogenous (X) variables. They range from -1 to 1; thus, following Guadagnoli and Velicer (1988), we can consider loadings higher than .4 as stable. In our model, this is the case for almost all indicators. However, this is not the case for age (.23), the support for women in the Armed Forces (.136), the position over the future of the Armed Forces (.14),

signing up as a reservist (0.24) and gender (.043). Nevertheless, all but the last the last one, are statistically significant. The indicator with the highest loading (.865) is the budget valuation, which is an inverse scale from 1 to 3, where 1 is considered insufficient and 3 as excessive. We also found significant relationships between our latent variables with defence culture. In addition, in contrast to our base model, we have applied a series of modifications to release some of the restrictions and allow for residual correlations between common items that are tailored to ask about similar issues (e.g., emotion for the flag with emotion for the national anthem).

Figure 2 shows the standardized correlation coefficients for each of our latent variables and observable variables. Only path coefficients and covariances with a p-value lower than .05 are shown, which is the case for most of the factors. In the first level of the measurement model, almost every indicator has a positive statistical significance correlation. Only gender indicates no correlation. Age, although statistically significant, has a low factor load (.22). These findings are relevant because they indicate that defence culture is not determined by non-cognitive characteristics such as gender or age, but other aspects of our social environment more related to socialization processes such as religion (.58), ideology (.57) or national identity (.50) are more important.

[Figure 2. CFA Model of Defence culture]

Regarding the military sphere, the most important indicators revolve around the perception of the Armed Forces as an instrument of prestige at the national level (.86) and at the international level (.80). Likewise, the perception that the Armed Forces are well trained to do their job (.56) and ready to defend Spain (.54). However, the indicator related to the support for women being part of the Armed Forces has a low loading, only .16, so it seems to be an irrelevant issue for this model. Therefore, when referring to military sphere, is this idea of the

Armed Forces as a professional institution, prepared to perform its duty, what is closely correlated with people attitudes about defence-related issues.

On personal involvement, which is the variable most closely related to defence culture, the affective indicators are the most decisive. The variables with the highest loadings are those that capture those people who report feeling moved by the national anthem (.81), the flag (.79) or feel proud to be Spanish (.79). On the other hand, the indicators on the willingness to defend Spain (.45) or being part of the reserve (.24), have lower factor loadings. Consequently, we could say that the symbolic and affective aspects have a much greater weight in defining personal involvement in defence issues than even the will to be part of the institution itself.

The defence policy variable is composed of indicators that are constructed as scales that evaluate whether different components of the Armed Forces are insufficient or excessive. The indicators on defence budget (.86), number of troops (.66) and technical means (.63), all have high, positive coefficients and therefore are important elements to consider when evaluating defence policy. The other indicator that is part of this variable refers to the future of the Armed Forces. To capture individuals' perspective over the future of the Armed Forces, we took the question "Preference between national army, European army or international army as more positive for Spain". We interpreted this question as a scale ranging from more sovereignty (exclusive control of the army by the national government) to less sovereignty (army under the control of an international authority). We found that this indicator holds a considerably low loading (.14) and could be regarded irrelevant to the model. Because we only have this survey to know the assessments of individuals on aspects that make up defence policy, the information is limited and resulted in this variable being under identified vis-a-vis the others.

Finally, regarding the second order of our model, we find that our four endogenous variables have high factor loads. For the defence policy variable, we find that there is a negative path coefficient (-.71) associated with defence culture. Then again, regardless of the directions taken by the path coefficients, from this model we only seek to confirm that there is an association between these four major theoretical variables and the indicators that construct it. Nevertheless, we could explain this negative relation by the way the indicators that compose it are measured. The variable in the military sphere that we observe revolves around the training of the armed forces and its instrumentality as a figure of national and international prestige has a load of 0.86. The two most significant variables are personal involvement (.96) and the social environment (.93). This finding is extremely relevant as it shows that when explaining defence culture, the most important predictors are elements closer to affective attitudes, values, and noncognitive characteristics, than the knowledge itself or the “objective” evaluation of the armed forces.

Model fitness

When performing a Confirmatory Factor Analysis, it is essential to check that the proposed model fits the data. As the baseline is a null model, typically in which all the observed variables are constrained to covary with no other variables (put another way, the covariances are fixed to 0) just individual variances are estimated. This is what is often taken as a ‘reasonable’ worst-possible fitting model. Indeed, our base model, despite having statistically significant correlation coefficients for most of the measurements, does not meet the necessary fit indices to be considered “acceptable”. Therefore, we have applied a series of modifications to release some of the restrictions of the base model and allow for some residual correlations. Most of the

modifications only come to allow correlations between items oriented to ask about similar issues (e.g., emotion for the flag with emotion for the national anthem). However, we also relax restrictions on gender and income, as these are essential predictors of support for security and defence policies (Santamaría, 2017). Therefore, all modifications applied are based on theory and past findings.

[Table 3. Fit measures]

In table 3, we display some statistics commonly used to show the model significance and fit. In we show that the chi-square statistic is rejected ($p < .001$). Though this is by design in the case of the baseline/null model. Following Hu and Bentler (1999) and Kline (2015), we also report two additional indices to check for model fitness such as the Comparative Fit Index (CFI) and the standardized Root Mean Square Residual (SRMR). We found that the relaxed model has a CFI value higher than 0.95 and a SRMR around 0.052, which following the “rule of combination” (Kline, 2015), would indicate that this model is “acceptable”. As our model does not meet the equivalence of tau nor is it unidimensional, we estimate reliability using omega hierarchical (McNeish, 2018). The overall model has an omega hierarchical coefficient of 0.8, and each latent variable has a composite reliability $>.5$, then the model counts with stable internal reliability.

Conclusions

In the analysis, we have presented a plausible hierarchical measurement model for examining four factors of defence political culture: social environment, military sphere, defence policy, and personal involvement. We used a Hierarchical Confirmatory Factor Analysis (CFA) to validate our theoretical model. This model was the more suitable as it allowed us to build exogenous

constructs and confirm that there is a significant association between these four major theoretical variables with defence culture and that the model is well fitted to the population.

Despite some previous research suggesting a strong correlation between gender and age, and defence policy support (Santamaría, 2017), our conclusions stress that these factors are not key aspects in forming the defence political culture. Instead, emotional attitudes play a more significant role in defining defence culture. This finding aligns with the work of Remiro (2023), who underscores the importance of territorial identity and political ideology in the perception of the Armed Forces. Therefore, this model represents a first step in identifying the diverse attitudes and sub-cultures within the population towards defence issues. In this sense, it allows us to know which factors and indicators to retain, and to consider when measuring defence culture.

Consequently, we can say that defence culture is not only determined as a better or worse knowledge of defence policy, or as a position - of support - towards political objects of the defence system, but rather multiple affective, evaluative, and intentional attitudes play a significant role in constructing this concept. The cultural gap between the armed forces and their parent society must be addressed with segmented policies for each cultural subtype. To do so in a generic and homogenizing way is to fail to understand the existing social differences.

However, our study is not without limitations. The primary constraint lies in the scope of the data used. While the CIS survey served as a valuable starting point, a more comprehensive dataset would facilitate a fuller exploration and more robust validation of our hypotheses. Despite this, our current findings are promising. Even though we aim for a more ambitious proof of concept through the implementation of our full questionnaire in future research, we can currently conclude that the cultural subtypes we have theoretically generated appear to be valid.

Hence, we have been able to empirically validate the existence of different political subcultures of defence in Spain. This represents a significant step forward in understanding the complexities of defence culture.

Therefore, future research should aim towards a proof of concept using a more extensive questionnaire that includes a complete set of indicators. This approach will not only facilitate a comprehensive validation of our hypothesis but also assist in refining any indicators that do not correlate as expected. Additionally, exploring the applicability of our findings in a broader European context offers an exciting research opportunity. Integrating questions related to defence attitudes into the European Values Survey could yield more detailed insights on a European scale. Such an expansion of our research could significantly enhance the analysis and implementation of European security and defence policies, both within the European Union and its Member States, by providing a deeper understanding of the diverse political cultures of citizens.

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Data availability statement

The data that support the findings of this study are available from the corresponding author, LR, upon reasonable request.

References

- Almond, G. A. (1956). Comparative political systems. *The Journal of Politics*, 18(3), 391–409.
- Barber, B. (2003). *Strong democracy: Participatory politics for a new age*. University of California Press.

- Biava, A., Drent, M., & Herd, G. P. (2011). Characterizing the European Union's strategic culture: An analytical framework. *JCMS: journal of common market studies*, 49(6), 1227-1248.
- Biehl, H., Giegerich, B., & Jonas, A. (2013). *Strategic cultures in Europe*. Springer Vs.
- Bueno, A. (2016). La política pública de fomento de la cultura de defensa en las universidades españolas: de su definición a su planificación. *Revista Ensayos Militares*, 2(2), 31–48.
- Bueno, A., Calatrava, A., Remiro, L., & Martinez, R. (2023). Defence culture in Spain: A new theoretical-conceptual proposal. [Manuscript submitted for publication]
- Bruin, G. P. (2006). The dimensionality of the general work stress scale: A hierarchical exploratory factor analysis. *SA Journal of Industrial Psychology*, 32(4).
<https://doi.org/10.4102/sajip.v32i4.250>
- Caciagli, M. (2019). Cultura política, culturas políticas. *Política y Gobernanza. Revista de Investigaciones y Análisis Político*, 3, 5–19.
- Calcara, A. (2019). Making sense of European armaments policies: A liberal intergovernmentalist research agenda, *Comparative Strategy*, 38:6, 567-581, DOI: 10.1080/01495933.2019.1674084
- De Goede, M. (2011). *European security culture: Preemption and precaution in European security* (Vol. 411). Amsterdam University Press.
- Díez Nicolás, J. (1999). *Identidad nacional y cultura de defensa*. Síntesis.
- Easton, D. (1975). A re-assessment of the concept of political support. *British Journal of Political Science*, 5(4), 435–457.
- Elkins, D. J., & Simeon, R. E. B. (1979). A Cause in Search of An Effect; Or What Does Elite Political Culture Explain. *Comparative Politics*, 11, 117–146.
- Ersson, J.-E. L. S., & Lane, J. E. (2005). *Culture and Politics. A Comparative Approach*, 2nd Edn. Aldershot: Gower.
- Feaver, P., Feaver, P. D., Kohn, R. H., & Kohn, R. H. (2001). *Soldiers and civilians: The civil-military gap and American national security*. Mit Press.
- Gargarella, R. (1999). *Las teorías de la justicia después de Rawls*. Barcelona: Paidós.
- Håkansson. C. (2021). The European Commission's new role in EU security and defence cooperation: the case of the European Defence Fund, *European Security*, 30: 4, 589-608. DOI: 10.1080/09662839.2021.1906229.

- Hamel, Jacques, Dufour, Stephane & Fortin, Dominic,(1993) Case Study Methods, Qualitative Research Methods (vol.32) Newbury Park, London, New Delhi, SAGE Publications.
- Haroche, P. (2020). Supranationalism strikes back: a neofunctionalist account of the European Defence Fund, *Journal of European Public Policy*, 27: 6, 853-872, DOI: 10.1080/13501763.2019.1609570
- Howort, Jolyon (2002) "The CESDP and the Forging of European Security Culture" *Politique Européenne*, 8: 88-108.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1–55.
- IEEE (2011). La Cultura de Seguridad y Defensa, un proyecto en marcha. Cuaderno de Estrategia, 155.
- Irondelle, Bastien, Mérand, Frédéric y Foucault, Martial (2015) « Public support for European defence: Does strategic culture matter? *European Journal of Political Research* 54: 363-383.
- Kavanagh, D. (1972). Political culture. Macmillan International Higher Education.
- Kernic, F. (2023). The Issue of Acceptance and Legitimacy of Modern Armed Forces. In War, Peace and the Military: Sociological Perspectives (pp. 95-110). Wiesbaden: Springer Fachmedien Wiesbaden.
- Kline, R. B. (2015). Principles and practice of structural equation modeling. Guilford publications.
- López Mora, F. & Ballesteros, M. A. (2011). *Ensayos sobre la cultura de defensa y la paz en la España actual*. Universidad de Córdoba-Ministerio de Defensa.
- Lowenthal, R. (1979). Political legitimacy and cultural change in West and East. *Social Research*, 401–435.
- Magre, J., & Martínez, E. (2006). La cultura política. In M. Caminal Badia (Ed.), *Manual de ciencia política* (pp. 285–312). Tecnos.
- Martínez, R. (2024) "Knowledge, expertise, and effectiveness" in Aurel Croissant, David Kuehn and David Pion-Berlin (eds.) *Research Handbook on Civil–Military Relations*, Cheltenham and Northampton, Edward Elgar. <http://dx.doi.org/10.4337/9781800889842>
- Matonyte, I., & Morkevicius, V. (2012). The other side of European identity: Elite perceptions of threats to a cohesive Europe. *The Europe of elites*, 94-121.

- Meijer, H. & Wyss, M. (eds.) (2018). The handbook of European defence policies & armed forces. Oxford UP.
- Meyer, Christoph O. (2005). Convergence Towards a European Strategic Culture? A Constructivist Framework for Explaining Changing Norms. *European Journal of International Relations*, 11 (4):523-549.
- Millán, J. B. (1995). La construcción de los universos políticos de los ciudadanos. *Sociedad y Política: Temas de Sociología Política*, 227–268.
- Orçan, F. (2018). Exploratory and confirmatory factor analysis: which one to use first?. *Journal of Measurement and Evaluation in Education and Psychology*, 9(4), 414-421.
- Percheron, A. (1985). La socialisation politique. Défense et illustration. *Traité de Science Politique*, 3, 165–235.
- Pérez, P. E. (2017). Opinión pública y propuestas sobre Defensa en las campañas electorales españolas. *Revista de Pensamiento Estratégico y Seguridad CISDE*, 2(1), 43–64.
- Peters, , D. (2014). European security policy for the people? Public opinion and the EU's Common Foreign, Security and Defence Policy. *European Security*, 23(4), 388-408. <https://doi.org/10.1080/09662839.2013.875531>
- Pion-Berlin, D., & Martínez, R. (2017). Soldiers, politicians, and civilians: reforming civil-military relations in democratic Latin America. Cambridge University Press.
- Preacher, K. J., & MacCallum, R. C. (2003). Repairing Tom Swift's electric factor analysis machine. *Understanding Statistics: Statistical Issues in Psychology, Education, and the Social Sciences*, 2(1), 13–43.
- Pye, L. W. (1965). Introduction: Political Culture and Political Development. In L. Pye & S. Verba (Eds.), *Political Culture and Political Development*. Princeton University Press.
- Pye, L. W. (1968). Political culture. *International Encyclopedia of the Social Sciences*, 12, 218–225.
- Remiro, L. (2023). Polarización en la valoración de las fuerzas armadas españolas: Identidad territorial e ideología política. *Revista " Cuadernos Manuel Giménez Abad"*, (26), 82-95.
- Santamaría, R. C. (2017). Public Expenditure Preferences in Spain: Self-interest or Values? *Revista Española de Investigaciones Sociológicas*, 19–37. <https://doi.org/10.5477/c/s/reis.160.19>

- Sartori, G. (2009) “Comparing and miscomparing” in David Collier and John Gerring (eds.) *Concepts and Method in Social Science*, New York and London, Routledge.
- Shi, T. (2001). Cultural values and political trust: a comparison of the People’s Republic of China and Taiwan. *Comparative Politics*, 401–419.
- Skinner, Q. (2010). On the Slogans of Republican Political Theory, *European Journal of Political Theory*, 9:1, 95–102. DOI:10.1177/1474885109349407
- Street, J. (1994). Political culture—from civic culture to mass culture. *British Journal of Political Science*, 24(1), 95–113.
- Torabian, S., & Abalakina, M. (2012). Attitudes toward war in the United States and Iran. *Iranian Studies*, 45(4), 463-478.
- Vallès, J. M. (2011). *Ciencia política. Una introducción* (8th ed.). Ariel, SA.
- Verba, S. (1964). El estudio de la ciencia política desde la cultura política. *Revista de Estudios Políticos*, 138, 5–52.
- Welch, S. (2013). *The Theory of Political Culture*. Oxford.
- Worthington, R. L., & Whittaker, T. A. (2006). Scale development research: A content analysis and recommendations for best practices. *The counseling psychologist*, 34(6), 806-838.

Appendix

[Table 4. Descriptive statistics]

[Figure 3. Scree plot]

[Table 5. Measurement model factor loadings]

[Figure 4. Correlation matrix]

Table 1. Indicators description

Latent variable	Indicator	Description
Social Environment	NS	Nationalist sentiment
Social Environment	LEFT-RIGHT	Ideological identification
Social Environment	SEX	Sex
Social Environment	RELIGION	Religion
Social Environment	AGE	Age
Personal involment	DEF VOL	Willingness to voluntarily defend Spain in the face of military attack
Personal involment	RESERVIST	Degree of probability of thinking about becoming a voluntary reservist in the next three years
Personal involment	FLAG	Feeling when seeing the Spanish flag in an act or ceremony
Personal involment	ANTHEM	Feeling when listening to the national anthem
Personal involment	PRIDE	Degree of pride in being Spanish
The Military	AAFF PREPARATION	Degree of readiness of the Armed Forces to defend Spain
The Military	WOMEN AAFF	Degree of agreement with the fact that a woman occupies combat positions
The Military	TRAINING	Degree to which the Spanish Armed Forces are trained to perform their duties.
The Military	PRESTIGE SPAIN	Degree to which the Armed Forces contribute to Spain's international prestige.
The Military	PRESTIGE INT	Degree of contribution of the Armed Forces to the international prestige of a country.
Defence policy	BUDGET	Assessment of the annual budget allocated to national defence and the Armed Forces
Defence policy	FUTURE	Preference among national army, European army, or international army as more positive for Spain
Defence policy	TECH MEANS	Assessment of the technical and material means of the Spanish Armed Forces
Defence policy	TROOPS	Assessment of the volume of troops in the Armed Forces

Table 2. Eigenvalues and Variance Explained for Rotated Factor Solution

	Vaccounted.WLS 1	Vaccounted.WLS 4	Vaccounted.WLS 2	Vaccounted.WLS 3
SS loadings	3.533	2.535	2.516	1.266
Proportion Var	0.186	0.133	0.132	0.067
Cumulative Var	0.186	0.319	0.452	0.518
Proportion Explained	0.359	0.257	0.255	0.129
Cumulative Proportion	0.359	0.616	0.871	1

Table 3. Fit measures

	Fit measure	Value
1	DF	144
2	Chisq P-Value	0
3	CFI	0.936
4	TLI	0.924
5	RMSEA	0.057
6	SRMR	0.054

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Table 4. Descriptive statistics

Variable	Mean	SD	range
Sex	1.363790	0.4814968	1 (1-2)
NS	3.314721	1.1027408	4 (1-5)
Pride	3.241963	0.8948055	3 (1-4)
Flag	3.714044	1.1399327	4 (1-5)
Anthem	3.763113	1.1592194	4 (1-5)
Voluntary_Defence	2.510998	1.1685704	3 (1-4)
WomenAAFF	3.536379	0.6417242	3 (1-4)
Reservist	1.443316	0.8002660	3 (1-4)
AAFFPreparation	2.900169	0.7308110	3 (1-4)
Prestige_Int	3.104907	0.9015014	3 (1-4)
Prestige_Spain	2.869712	0.9287935	3 (1-4)
Budget	1.883249	0.7466810	2 (1-3)
Tech_means	1.671743	0.6408655	2 (1-3)
Troops	1.827411	0.6139562	2 (1-3)
Training	3.082910	0.6900472	3 (1-4)
Future	1.714044	0.7598767	2 (1-3)
Age	2.055838	0.5692060	2 (1-3)
Religion	3.373943	1.0418031	3 (1-4)
Left_Right	2.010152	0.6888200	2 (1-3)

N = 591

Table 5. Measurement model factor loadings

Latent Factor	Indicator	est.std	Z	SE	p-value	ci.lower	ci.upper
Military_Sphere	AAFFPreparation	0.542	15.146	0.036	0.000	0.472	0.612
Military_Sphere	WomenAAFF	0.136	2.824	0.048	0.005	0.042	0.230
Military_Sphere	Training	0.566	15.662	0.036	0.000	0.495	0.637
Military_Sphere	Prestige_Spain	0.864	45.371	0.019	0.000	0.827	0.901
Military_Sphere	Prestige_Int	0.804	31.124	0.026	0.000	0.754	0.855
Pers_Involment	Voluntary_Defence	0.458	12.919	0.035	0.000	0.389	0.528
Pers_Involment	Reservist	0.247	7.064	0.035	0.000	0.178	0.316
Pers_Involment	Flag	0.797	34.716	0.023	0.000	0.752	0.843
Pers_Involment	Anthem	0.814	39.275	0.021	0.000	0.774	0.855
Pers_Involment	Pride	0.797	32.956	0.024	0.000	0.750	0.845
Social_Enviroment	NS	0.501	12.739	0.039	0.000	0.424	0.578
Social_Enviroment	Sex	0.043	0.949	0.046	0.343	-0.046	0.133
Social_Enviroment	Left_Right	0.550	15.738	0.035	0.000	0.482	0.619
Social_Enviroment	Age	0.226	5.387	0.042	0.000	0.144	0.308
Social_Enviroment	Religion	0.515	11.776	0.044	0.000	0.429	0.601
Defence_policy	Tech_means	0.633	15.310	0.041	0.000	0.552	0.714
Defence_policy	Troops	0.666	17.356	0.038	0.000	0.591	0.741
Defence_policy	Budget	0.865	33.626	0.026	0.000	0.815	0.915
Defence_policy	Future	0.141	3.072	0.046	0.002	0.051	0.231
Defence_culture	Pers_Involment	0.960	43.723	0.022	0.000	0.917	1.004
Defence_culture	Social_Enviroment	0.934	25.570	0.037	0.000	0.862	1.005
Defence_culture	Military_Sphere	0.826	30.316	0.027	0.000	0.772	0.879
Defence_culture	Defence_policy	-0.712	-21.12	0.034	0.000	-0.778	-0.646

Figures captions:

- Figure 1. Estimators of Defence Culture
- Figure 2. CFA Model of Defence culture
- Figure 3. Scree plot
- Figure 4. Correlation matrix

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