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Training culture

A new conceptualization to capture values and meanings of training in organizations

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Abstract

Purpose – The purpose of this study is to introduce and validate the concept of training culture defined as a subset of the main organizational culture that allows examining meanings and values attributed to the training within an organization by management and employees.

Design/methodology/approach – This study, following the deductive scale development process, examines the theoretical foundation and psychometric properties of the training culture scale (TCS), testing the utility and appropriateness of the measure. The TCS has been designed and developed on three specific dimensions: individual, group and organizational. A confirmatory factorial analysis has been performed to assess the internal structure.

Findings – Results confirm the three dimensions initially hypothesized: individual, group and organizational, with good reliability indexes on the three factors.

Practical implications – The implementation of the TCS allows training experts to have a broader understanding of training in the organization and to better tailor the training activities according to the training culture profile of the organization.

Originality/value – Cultural analyses are usually carried out from the managerial perspective. The TCS considers the individual perception, including both management and employees in the definition of a training culture profile that enables the organization to develop more effective strategies for training and development.

Keywords Training, Organizational culture, Construct validity, Measurement development, Training culture

Paper type Research paper

Introduction

The recent literature in organizational studies is mainly oriented toward the analysis of informal learning and learning opportunities in daily work (Marsick and Watkins, 2001; Salas and Cannon-Bowers, 2001), with specific focus on topics such as organizational learning, organizational



learning culture and work-related informal learning (Froehlich *et al.*, 2017; Cortini, 2016; Marsick and Watkins, 2003; Noe *et al.*, 2013; Rebelo and Gomes, 2011). Nevertheless, training still represents a process of strategic importance, to foster individual and organizational learning (Antonacopoulou, 1999; Martocchio and Baldwin, 1997), as well as one of the most important leverage to enhance human resource practices (Berk and Kaše, 2010) with a significant influence on developing and maintaining individual and organizational capabilities (Valle *et al.*, 2000).

Over the years, training has changed and broadened its objectives and characteristics to adapt to the change of organizations, work environment and the needs of individuals (Bartlett, 2001; Huerta *et al.*, 2006; Kraiger, 2014), representing not only a way to enhance individual capabilities but also a strategic tool to govern team processes and organizational outcomes (Bell *et al.*, 2017). Despite in the past, training researchers failed in taking into consideration the contextual factors related to training, today, training is considered as a system enclosed in an organizational context (Salas and Cannon-Bowers, 2001), able to influence the capacity of an organization to assimilate new knowledge in routines and processes (Berk and Kaše, 2010). This capacity to absorb new knowledge is strictly related to the main features of organizational culture and the process of change within an organization (Valle, 1999). Organizational culture and training are, indeed, associated: the main features of the organizational culture produce a visible impact on the development and implementation of training programs and, vice versa, training programs affect organizational culture (Kissack and Callahan, 2010).

In this regard, there is a consistent amount of research on both organizational culture and training, with a lack of dialogue between the two (Kissack and Callahan, 2010). From the training side, topics such as training and development, on the job training, training design and delivery styles, transfer of training, are some of the most analyzed aspects in organizational studies (Bunch, 2007; Khan *et al.*, 2011). However, little attention has been paid to the reciprocal influence between organizational culture and organizational training (Hassi and Storti, 2011). In other words, training is usually considered as a human resource management practice subject to the influence of a specific organizational culture (Ballesteros-Rodríguez *et al.*, 2012; Kusluvan *et al.*, 2010), utilized to meet specific organizational and institutional interests, without taking into consideration the reciprocity between training and organizational culture (Kissack and Callahan, 2010). This paper aims to extend the previous literature analyzing the relationship between organizational culture and training, considering training as a subset of the main organizational culture, to provide a framework capable of examining meanings and values attributed to the training within an organization at individual, team and organizational level. Further, in most of the studies, training is approached from the organizational perspective, while the recipients of training are marginally considered in the analysis, despite they play a crucial role in the relationship between training and culture (Antonacopoulou, 1999; Kissack and Callahan, 2010). In this study, we approach the analysis from the individual perception about training within the organization, to define a training culture profile that enables the organization to develop more cohesive and effective strategies for training and development. Therefore, the aim of this paper is twofold:

- (1) to define the training culture construct as a subset of the main organizational culture that includes set of norms of conduct, work attitudes, values and assumptions about training within an organization; and
- (2) to introduce the training culture construct and present validity evidence for the measure, examining the theoretical foundation and psychometric properties of the scale, to test the utility of the measure.

The study is conducted through a quantitative analysis using a 23-items scale based on the individual perception of the respondent about the topic. Top management, middle

management and employees were asked to describe training in their organization at three different levels: individual (what is training for me), team (what is training for my team) and organizational (what is training for my organization).

Literature review

In the literature, there are several constructs regarding learning and training within organizations, such as learning culture, organizational learning, training climate and transfer climate (Holton *et al.*, 1997; Marsick and Watkins, 2003; Tracey and Tews, 2005; Yang *et al.*, 2004). The most relevant ones for our study are learning culture and training climate. The former is described as a specific type of organizational culture, oriented toward the promotion and facilitation, sharing and dissemination of workers' learning (Marsick and Watkins, 2003), contributing to organizational development and performance (Rebello and Gomes, 2011; Cortini *et al.*, 2016). This conceptualization refers mostly to the informal learning at workplace and does not represent a specific subset of the organizational culture, but an orientation of the organizational culture itself (Škerlavaj *et al.*, 2010). Training climate, on the other hand, concerns the "work-related factors that may influence training success and failure. It is instrumental in preparing individuals for formal development activities and achieving desired learning objectives" (Tracey and Tews, 2005; p. 354). Training climate may also have an impact on formal and informal training activities (Tracey and Tews, 2005). Nevertheless, the lack of conceptualization regarding durable and stable features of training within an organization, reflecting values, norms and assumptions, requires more research, especially oriented toward building new constructs (Song *et al.*, 2009). As a consequence, in this paper, we introduce the concept of training culture. Training culture has its origins in the merging of two salient concepts in the study of organizations: training and organizational culture.

In the literature, training is commonly defined as a planned activity, implemented to promote employees' learning of competencies in terms of knowledge, skills and attitudes useful for their job/future job (Noe, 1986; Schmidt, 2007). Moreover, from the organizational perspective, training is instrumental in fitting organizational needs, and it is developed on the basis of values, beliefs and practices, commonly adopted within the organization (Huerta *et al.*, 2006). Additionally, with the transition to a more collaborative way of working, training became not only a means to develop employees' core competencies, but also a way to enable them to negotiate meanings in the workplace (Kraiger, 2014). Training does not have a standard way to be managed and implemented, but it is related to the needs and features of the specific organizational context and the characteristics of the organizational population (Martínez Lucio and Stuart, 2003). Furthermore, training does not take place in a vacuum, but it is contextualized in a specific organization with specific characteristics (Bunch, 2007). Therefore, it is possible to highlight that the concept of training is strictly related to the concept of organizational culture.

Culture represents the personality of an organization (Cartwright and Cooper, 1993). In the past 20 years, the concept has been widely examined by scholars and practitioners (Ashkanasy *et al.*, 2000; Hofstede, 1998; Schultz, 1995), and what is extensively shared in the field is that culture is an attribute of a specific group or organization (Schein, 1985), and it refers to different elements such as ideas, shared meanings, values, rules, habits and symbols that people hold in common (Lewis and Thornhill, 1994). These factors both influence and shape the meaning and values shared within the organization, and the ways to behave and react to specific circumstances (Zammuto and O'Connor, 1992). In fact, as stated by Schein (1985), there are several factors that may condition the meaning and values of individuals and groups within the organization and these features are visible in the way people respond to specific situations. In other words, culture defines the way things are done

in a specific context, the way leaders establish their strategic objectives, and in turn the practices to achieve them (Ballesteros-Rodríguez *et al.*, 2012).

After providing a brief excursus of the constructs present in the literature, and defining the concepts of training and organizational culture, in the following paragraph we attempt to give a first definition of the concept of training culture.

Training culture

In light of the previous considerations, we define training culture as a set of meanings and values attributed to training in a specific organization. In this regard, training culture refers mostly to the formal learning that is planned and dispensed in a specific context and focuses on stable and durable features and meanings of training. Such specific and sectorial features constitute a subset of the organizational culture, formed by employees' and management perceptions about meanings and values attributed to the training in the work environment at an individual, team and organizational level. In this definition, following Hofstede's (1998) perspective, we adopted the individual approach, in which culture is considered as an attribute of an organization manifested and measured toward individuals aggregated to the level of the organizational unit. In turn, this construct aims to understand how training is perceived within the organization and how much the perspectives of different members of the organization are similar, to determine the strength of a culture (Schulz, 2001). Moreover, the decision of including management and employees in the training culture definition is because cultural analyses in the managerial literature are usually carried out exclusively from the managerial perspective, while culture is located in the mental programs of all the members of the organization (Hofstede, 1998).

Considering the three dimensions proposed by Marsick and Watkins in the dimension of the Learning Organization Questionnaire (DLOQ), training culture is also deployed on three different levels: individual, team and organizational. As stated by Aguinis and Kraiger (2009), the benefits of training are detectable at different levels, and these levels are stratified and interconnected. Indeed, training fosters the individual performance, allows employees and management to update their knowledge and skills, it supports problem-solving within the organization, and it helps new employees to orient themselves into the organizational context (Dolan *et al.*, 1999). Training culture at individual level concerns all those aspects related to the benefits of training for the individual, for example, the usefulness of training for maintaining the job, acquiring new knowledge, increasing the chance of being promoted and achieving career success (Noe, 1986; Tziner *et al.*, 2007). Subsequently, the team dimension represents a cornerstone in modern organizations, individuals, aggregated to the level of team share meanings, mental models and understanding, crucial for the coordination of the team itself (Cannon-Bowers and Salas, 1998). Following this reasoning, training culture has also a team dimension that refers to the meaning of training for the team, specifically in terms of impact on work processes, quality of the service, customization and inefficiencies related to the training.

Finally, the organizational level of training culture is based on a variety of topics that are related to organizational values (Williams, 2002), business ethics (Craft, 2010), and targets and goals that the organization is going to achieve. The employees' perception of training at the organizational level can be indirect, not directly affecting them and their career (Kim *et al.*, 2015). In other words, this third level refers to the strategic role of training within the organization. Nevertheless, training is not always planned and aimed to impact on all these dimensions.

In conclusion, understanding training culture is important to shed light on the role that training plays within the organization in cultural terms: meaning, values, practice, attitudes

and behaviors. Regarding meanings and values, [Kontoghiorghes \(2004\)](#) asserts that when the culture of an organization is oriented toward employees' growth and development, trainees perceive their training efforts as valuable for the organization. Contrarily, cultures where training is considered an investment without return can have a negative impact on trainees' perception ([Nikandrou et al., 2009](#)). Moreover, the construct allows also to better understand the real essence of some organizational practices. For example, as [Bunch \(2007\)](#) suggests, training facilities or investments in training can be used to provide training of no value to the organization or the employees. This occurs because the organization uses training as an artifact without really believing in its importance. Finally, the comparison between management and employees perception can bring out a discrepancy about training culture; it can happen that the culture does not really embrace the training, despite managers believing in the opposite and vice versa ([Ballesteros-Rodriguez et al., 2012](#)). In light of these considerations, in the following paragraph, we illustrate the main features of the scale implemented to measure the training culture construct.

Construct validity

Methodology

The training culture scale (TCS) was created through a deductive scale development process, following the guidelines for scale development from [Slavec and Drnovsek \(2012\)](#). Although their guidelines are contextualized in entrepreneurship research, they are aligned to the basic principles for new measures' development present in the literature ([Bagozzi and Edwards, 1998](#); [Carmines and Zeller, 1979](#); [Churchill, 1979](#); [DeVellis, 2003](#); [Hinkin, 1998](#); [Netemeyer et al., 2003](#)). At first, we conducted an in-depth interdisciplinary literature review on training and organizational culture, both from the theoretical and methodological standpoint. Further, we discussed the findings with experts and practitioners, also involving the staff of the organization where we conducted the preliminary study[1], to verify the need for the new measure and provide a content domain specification ([Cervai and Polo, 2015](#)). On the basis of the results of the literature review and discussion with experts, we developed a pool of items following the criteria of clearness, simplicity and shortness. Twenty-six items were initially developed and categorized into three dimensions: individual (8 items), team (9 items) and organization (9 items). The scale was pre-tested in a small sample of 25 people operating in healthcare sector and discussed with experts in the field, to verify the understandability and appropriateness of the items. Further, we provided a content validity evaluation to verify the degree to which the items of our scale are relevant and representative of the training culture construct ([Haynes et al., 1995](#)).

The sample for this study consists of 360 cases in six organizations operating in healthcare sector, nine in managerial positions and 351 employees. Participation was voluntary and anonymous; 67 per cent were female, and the number of hours spent in training in one year was 75.6 in average.

Response choice alternatives are ranged on a scale from 0 (not at all) to 100 (completely). Respondents select the items they consider relevant to describe what training means in their organization, and they provide a score from 0 to 100 to each one, to define the importance of each item for them. The questionnaire was administered online, and the level of agreement is expressed through a numerical value determined by moving a slide-bar of a visual scale.

Considering that the TCS has been designed and developed on three specific dimensions: individual, group and organizational [following [Marsick and Watkins \(2003\)](#), DLOQ], a confirmatory factorial analysis (CFA) has been performed to assess the internal structure, to verify if the three dimensions initially hypothesized are consistent.

The validation process has been performed through a latent variable model (LVM); specifically, it has been implemented as a reflective LVM to point out the underlying structure that produced relationships among multiple manifest variables (Beaujean, 2014). Further, reliability and construct validity have been assessed to verify to what extent the scale measures the construct that is expected to measure (Netemeyer *et al.*, 2003).

Results

To analyze the statistical evidence of the construct, as a first step, it has assessed the dimensionality of the construct. The results of the CFA support the three-factors model (Table I): individual level (8 items), team level (7 items) and organizational level (8 items). Three items (useless, waste of time and waste of money) were not significant (coefficient > 0.40), and they have been discarded from the scale (Table I).

As a second step, it has assessed the reliability of the questionnaire. The most common method for the measurement of the reliability is the internal consistency, assessed through Cronbach’s coefficient alpha (Cronbach, 1951). The overall reliability, tested on the entire set of items, is 0.94. Subsequently, we also calculated the reliability of each dimension,

Dimension	Latent variables	Estimate	Standard error	<i>p</i> (> z)
Individual	An individual opportunity to acquire new competences	1.000		0.000
	An individual opportunity to improve in my job	1.079	0.054	0.000
	An opportunity to transfer what I learnt from my colleagues	1.016	0.052	0.000
	An opportunity to reflect on my own work dimension	0.992	0.057	0.000
	Useful for my career development	0.896	0.068	0.000
	Corresponding to individual training requests/needs	1.028	0.063	0.000
	An individual duty	0.851	0.067	0.000
	An individual choice	0.885	0.067	0.000
Team	An opportunity to improve team work processes	1.000		0.000
	An opportunity to offer a better service	0.961	0.043	0.000
	An opportunity to improve also for colleagues	1.024	0.044	0.000
	Customized for teams’ needs	0.995	0.046	0.000
	Shared with the team	0.918	0.049	0.000
	Higher risk of inefficiencies when people are in training	-0.308	0.055	0.000
	More workload for colleagues	-0.313	0.058	0.000
Organization	Useless	-0.004	0.043	<i>0.931</i>
	A waste of time	0.063	0.038	<i>0.097</i>
	A strategy to improve the whole organization	1.000		0.000
	A strategy for excellence in the organization	1.059	0.048	0.000
	A strategy for organizational learning	1.045	0.046	0.000
	A strategy to value human resources	1.010	0.050	0.000
	Shared with all employees	1.003	0.051	0.000
	A long-term plan	0.990	0.053	0.000
	Based on an appropriate needs’ analysis	1.016	0.053	0.000
A normative requirement	0.585	0.067	0.000	
A waste of money	-0.016	0.042	<i>0.700</i>	

Table I.
Results of the confirmatory factor analysis (CFA)

Note: The items in italics are the ones with coefficient > 0.40

obtaining 0.88 for the individual level, 0.73 for the team level and 0.92 for the organizational level, and all values are > 0.70 (Hair *et al.*, 1998).

As a third step, we calculated the mean inter-item correlation (MIC) and its average variance extracted (AVE) to assess the construct validity. The MIC of the TCS is 0.42, which is coherent with the suggestions coming from the literature (Piedmont, 2014). The AVE is 0.55 that can be considered adequate following Slavec and Drnovsek (2012).

Discussion and implications

Through this study, we tested the factors underpinning the training culture construct, confirming its multidimensionality and validity. Indeed, the three factors structure emerged through the analysis supports the initial hypotheses of the researchers. The results show also internal consistency and construct reliability. Nevertheless, further research could explore and confirm reliability through the test-retest.

This study represents a first attempt to develop an instrument for the measurement of the training culture of an organization, recognizing its important role in defining how training is perceived and conceived within an organization by management and employees. The research has implications for both theory and practice. From the theoretical standpoint, we aim to provide evidence to fill the gap in research regarding the mutual relationship between organizational culture and training through the introduction of a solid construct for the understanding of training culture within the organizations. This research contributes to the literature by developing a first conceptual definition of training culture, bringing evidence of its validity and in turn providing a scale for its measurement. From the organizational perspective, developing measures is crucial for diagnostic purposes (Tracey and Tews, 2005), and defining the training culture of an organization is important, because it allows the organization to get a feedback about the meaning and values attributed to the training within the organization. The implementation of the TCS brings relevant information and insights regarding how training is perceived within the organization by management and employees, pointing out possible gaps and improvement areas, when data highlight a strong difference between employees and managerial perception.

Moreover, the calculation of a dispersion index gives the opportunity to determine the strength of a culture, where a larger dispersion suggests that meanings and values attributed to the training within the organization are less shared among employees. Awareness about cultural dimensions allows trainers and training experts to better tailor the training activities according to the training culture profile of the organization (Kissack and Callahan, 2010). The figures below (Figures 1, 2 and 3) illustrate possible outputs obtainable through the implementation of the TCS. In this paper, we discuss two organizations among the six involved in the study to give an overview of the scale application. Organization 1 and Organization 2 have been selected, because they show different training culture profiles on each dimension (individual, team and organization) and some interesting differences between leadership and employees perception. Figure 1 shows how the meanings attributed to training at an individual level are different comparing employees and leadership. Indeed, in Organization 1 employees attribute higher scores to most of the items, while in Organization 2 is the leadership that assigns higher scores to most of the items. Moreover, through the figures, it is possible to have some information about the training culture in the specific organization. Indeed in Figure 1, the leadership of Organization 2 attributes lower scores compared with the employees to the item “individual choice” stating that training is not only a choice in the organization, but is also a compulsory aspect of the individual working activity. Concerning the group dimension (Figure 2), the pattern of the two organizations is similar to the previous one. In Organization 1, employees

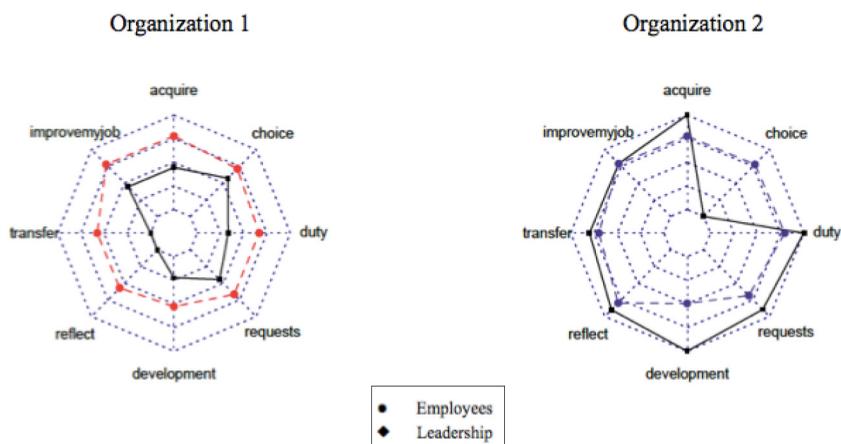


Figure 1. Individual level

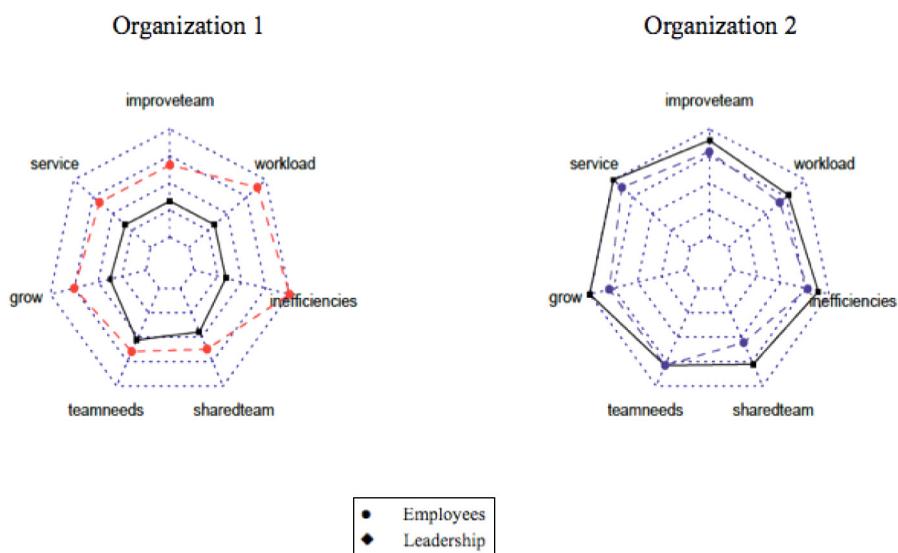


Figure 2. Team level

are attributing higher scores to all the items with a considerable distance from the leadership point of view, while in Organization 2, the perception of leadership and employees is very similar. At an organizational level (Figure 3), leadership and employees' perception about training is very similar in both organizations. Performing this kind of analysis through the TCS implementation allows scholars and practitioners to gather information on how training is perceived within an organization, and what are the different points of view of the members of the organization, to identify areas of improvement.

The illustrative analysis presented in this paragraph shows the results of data analyzed at an aggregate level, but it is important to acknowledge that even different groups within the same organization can have different cultures or subcultures (Lewis and Thornhill, 1994).

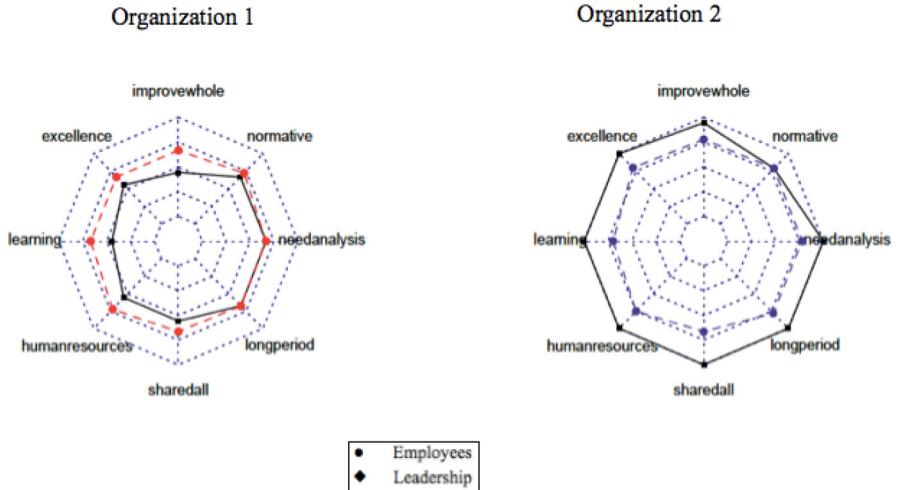


Figure 3.
Organizational level

Through the comparison of training culture in different departments, as well as among different professional categories, it is possible to highlight the presence of specific training subcultures. Based on the training culture assessment, the organization can identify peculiar subculture and better tailor training programs on the basis of their characteristics. Further research is required to shed light on the impact of subcultures on the main training culture.

Furthermore, it is reasonable to inquire, as [Rebello and Gomes \(2011\)](#) expected with regard to organizational learning culture, that employees' characteristics, tenure in the organization, age and level of education can have an influence on the individual perception about training culture. For this reason, future research should address this issue, and the implementation of the TCS could facilitate this task.

Moreover, it is important to consider that the nature of the business environment significantly differs from sector to sector ([Smith and Dowling, 2001](#)), and for this reason the TCS needs to be implemented in different type of organizations and organizational settings. Further studies are needed to cross-validate the TCS in different sectors.

Note

1. The first version of the TCS has been developed and tested in the European project expero4care LLP project 2013-1-IT1-LEO05-03975, coherently with the expero4care standard.

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