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Roberto Serpieri *and Sandra Vatrella **

Authors' information

- * Department of Social Science, University of Naples "Federico II", Italy.
- ** Department of Social Science, University of Naples "Federico II", Italy.

Contact authors' email addresses

*profrobertoserpieri@gmail.com

**sandravatrella@yahoo.it

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Collaborative Leadership and Teachers Wellbeing. Research Strategies and School Governance in the Italian Education Field

Roberto Serpieri* and Sandra Vatrella**

Abstract: The article deals with the relationship between research methods and strategies of governing in Italian education field. In particular, it relates to the surveys, whose interpretative and methodological machinery colludes with the neomanagerialist re-culturing of education space by embedding new public management ideas and tools within the educational texture. Thus, in order to analyse the generative effects that certain methodological choices can have on producing the field to be inquired, it focuses on the way in which defining unit of analysis, choosing techniques to collect data and aiming to such research objectives contribute to produce the "representation for the field to be governed [...] the techniques to be employed, and the ends to be achieved" (Dean 2010, p. 268) in education field. Our findings show how: the neo-managerialist 'tyranny of numbers' (Ball, 2007) - imposed both on education space, and research methods in education field can be refused, because - despite inquiry contexts "governed by numbers" (Ozga, 2009) - readings in line with a democratic perspective can be supplied.

Keywords: leadership, teachers' wellbeing, strategies of governing, research tools and methods

^{*} Department of Social Science, University of Naples "Federico II", Italy. E-mail: profrobertoserpieri@gmail.com

^{**} Department of Social Science, University of Naples "Federico II", Italy. E-mail: sandravatrella@yahoo.it

Introduction

This article explores the relationship between research strategies and strategies of governing in Italian education field. In particular, we relate to the spreading of surveys, whose interpretative frame colludes with the neomanagerialist re-culturing of education space. The phenomenon in focus is strictly related to the tuning of methodological machinery, which is based on (and produces) the embedding of new public management (NPM) ideas and tools within the educational texture. Moreover, interpretative frame and methodological machinery intertwine, blurring the boundaries between research objectives and tasks of governing. So, to understand how the relationship in focus works and takes shape, we identified a prime example of such a research. It is the survey conducted by the National Health Wellbeing Observatory (ONSBI) between 2013 and 2014, in order to investigate wellness/health outcomes in a group of 1510 Italian teachers. The survey in exam, which was attended by scholars and professionals from various educational agencies and research institutions (after all universities), arises from the need to promote a wellness culture at school, so that to intercept the "real world of teaching needs" (Fiorilli, De Stasio, Benevene, Cianfriglia, & Serpieri, 2015). Additionally, it represents the first step of a wider project that aims to design and implement organizational changes directed towards the development of emotional skills. The survey in focus allowed us to present the aforementioned relationship, taking into account the main elements that make up a research project: unit of analysis, techniques to collect data and research objectives.

In particular, on the one hand, these elements appear as 'surfaces of emergence' for scientific practices, which carry on the main tenets of NPM into the Italian education system (Grimaldi, Serpieri & Vatrella, 2015). That is:

- 'Heroic' subjectivities who perform their capability of steering and control (head teachers as lever for change, and teachers as actors identified by their results);
- Standards and measuring devices as *the one best way* to understand the field of education and as technologies of "governing by numbers";
- Effectiveness, improvement and accountability as the main values and truths inspiring educational policies.

On the other hand, these elements open up to spaces of possibility and alternative paths to the neo-managerialist understanding of the education field. Therefore, we follow a double trajectory. We treat the methodological machinery of ONSBI as a discursive device (Hood, 1991; Pollitt & Bouckaert, 2011), i.e. we look at the way in which the "representation for the field to be governed [...] the techniques to be employed, and the ends to be achieved" (Dean, 2010, p. 268; Grimaldi & Serpieri, 2013) take shape and perform themselves. Then, we try to uncover if and how - despite an enquiry context focusing on the importance of 'evidence', measuring and measuring devices - readings in line with a 'democratic perspective' (Serpieri, 2008; Serpieri, Grimaldi & Spanò, 2009; Gunter, Grimaldi, Hall, & Serpieri, 2016) could be worked out.

This article is structured in five paragraphs. The first one introduces the theoretical approach, by presenting how critical studies, and in particular the critique to NPM discourses, informed our analysis and directed our gaze towards the intertwining between subjectivities, technologies and tasks of governing. Moreover, this perspective is brought together with a democratic discourse for schools and develops further into a coherent research framework. The second one presents the methodological trajectory we followed to analyse and interpret our data. In particular, in the third paragraph we deconstruct the Onsbi protocol, its data collection tools and measuring devices. Thus, we have tried to unveil both, the ontological/epistemological presuppositions, and the methodological choices, trying to show the role played by the strategies of research for widening and strengthening an education field 'governed by numbers' (Ozga, 2009; Simola, 2011). In particular, having analysed the data collection tools, we move on to the data set collected by Onbsi. The fourth paragraph is focussed on the so-called underlying factors and extract "meaningful components" (Di Franco & Marradi, 2003) by resorting to the Principal Component Analysis (PCA). Finally, in the fifth paragraph we put the same factors in relation by drawing a path diagram that represents a prime example of the many trajectories that could be undertaken, within a democratically oriented perspective. The findings allow us, on the one hand, to interpret such research projects (and researchers) as integral part of the neo-managerialist re-culturing of the education field. On the other hand, they suggest how developing interpretative approaches and methodological strategies through which, we can deny and refuse the 'tyranny of numbers' (Ball, 2007) imposed both on education space, and research methods in

education field. In conclusion one of the main results of our research is to show how the context should be seriously take into account and this implies to re-think leaders shifting from individualistic-interactionist conception towards a network of practices context of leadership (Serpieri, 2016).

Theoretical background

Impinging upon critical studies, this article intertwines two branches of research: the critique to NPM discourses and school improvement studies, and the *Collaborative Leadership Theory* (Telford, 1996) as, may be, part of a *democratic discourse for schools* (Serpieri, 2008).

As far as the first one is concerned, we refer to literature that considers neo managerialist ideas and tools as a discursive device (Hood, 1991; Pollitt & Bouckaert, 2011), which carries on a 'heroic' vision of leadership (Hopkins, 2007), supports a performative image of teaching, and in so doing it contributes to produce actors, who are able to guarantee school improvement and effectiveness (Heck & Hallinger, 2005; Hallinger, 2012; Day et al., 2009). This implies and leads to enact knowledge, advice and experts in quantification, classification, and measurement aimed at enhancing guiding improvement efforts. It is a circular process, which besieges and shapes the educational field, because of and through the two tasks in focus. Briefly, improvement and effectiveness are constructed and re-produced by virtue of the 'invisible play of power', that in the last decades works more and more by imposing tasks, standards, performances, outputs (Ball, 2015). This complex assemblage of 'numbers' (Vatrella, 2016) reshapes education field as an "apparatus of uninterrupted examination" (Foucault, 1979, p. 186). That is, it produces a field, which is capable of being subjected to endless measurement processes. So, according to the neoliberal discourses of what education is or should be, i.e. consistently with the values of the neo-managerialist model (Newman, 2001; Gunter, 2012; Hall, 2013), the ever-growing emphasis on issues of standardisation, audit, performance measurement and accountability technologies play an increasing role in the government of education space (Lawn & Grek, 2012). These instruments emerge as bearers of values of the education field that are operationalized by particular techniques and tools of detection, and that as a result have the ability to: design policies, determine how actors behave, privilege certain representations of aims to be addressed. So, the field to be

governed is represented as environment, which is accountable and controllable; the techniques to be employed are showed as tools, which ensure the actual and objective measurement of each part of education field; the aims to be achieved are constructed, on the one hand by providing accountable subjectivities, and on the other hand by defining the measurable results to be performed and improved time by time.

However, if we evaluate the three elements in focus (representation of education field, techniques and ends) in themselves, they unveil their semantic and structural independence from the neo-managerialist domain. Thus, their main feature is to be pre-assertive, i.e. they are meaningful tools of thinking and requirements that allow to attribute a truth value to the propositions expressed through these concepts. So, they are not governed by aprioristic truth criteria, but are subject to criteria of usefulness, relevance and heuristic fertility (Landucci, 2004; Vatrella, 2015). Thus these in focus are issues of epistemological and epistemic kind; concepts in fact provide a vocabulary, which defines a space of potential clauses and attributes. Following Kaplan (1964) concepts found our scientific questions and let us to decide and produce the spectrum of feasible answers. Therefore, consistently with their pre-assertive nature, the aforementioned elements can be analysed and re-thought paying due attention to the vocabulary, which they imply, i.e. taking into account the 'cutting of reality', that is being chosen and constructed, when we define and employ those concepts. So, starting from this point of view, we can re-think and re-define representation of education field, techniques and ends to be pursued, otherwise. That is to say, we can situate those concepts into a democratic perspective for the school (Grimaldi & Serpieri, 2010; 2015), which means, in our perspective, referring to a specific vision of both steering style and educational culture in schools, which is founded on a collaborative representation of the school.

Relating to a collaborative representation of education field, it means resorting to an approach, which far from a conception of leaders as potential heroes of an effective school explores a participatory vision of decision-making. It contributes then to produce a "power-sharing (which is) actively promoted, through agreed-upon political behaviour" (Telford, 1996, p. 123). In this respect, quite relevant are the contextual dimensions involved (both at macro and micro level), and the way in which they intertwine and overlap each other's. Understood as practices made up of social interactions between head-teachers, teachers, students and parents, the contexts are embedded within socio-economic and political environments. From this standpoint, the

two issues in exam (steering style and educational culture) appear as closely connected and completely interdependent because of the dissolution of the first one within the second one. In other words, a democratically inspired idea of leadership challenges the legitimacy of the concept itself, because of "the social and political arena within which leadership is embedded and its (unavoidable?) dissolution within a network of practices" (Serpieri, Grimaldi, & Spanò, 2009, p. 222).

Therefore, such an approach treats the two dimensions of context as closely intertwined, while it misses the leader as ontological subject. So represented, the field to be governed suggests the techniques of steering to be employed: the sharing of roles and responsibilities; the planning of internal and well-defined policies; the adoption of specific strategies of communication, which take into account viewpoints of educational community; a cooperative teacher learning also through workgroups combining expertise; the support to staff cohesion and relationship, which in turn promotes a school climate without hierarchy; the production of coalitions founded on the basis of issues, rather than individuals. Finally as far as the ends is concerned, a democratic discourse for the school proposes a definition of the aims to be pursued as the promotion of participation and collaboration, equity-oriented practices in the educational field, and egalitarian outcomes, where processes of collaboration, collective empowerment and reflexivity are enacted (Grimaldi & Serpieri, 2010, p. 76). In addition, in a democratic perspective the aims are thought as ethical, discursive and decisional rationalities.

Equity and social justice are the main values to be pursued and collaboration is the regulating mechanism to be adopted in the setting and pursuance of social goals [...] The democratic discourse promotes transparency while demanding the inclusion of the primary beneficiaries in decisional processes concerning any policy solutions. Actors (head teachers, teachers, public administrators and citizens) are expected to strive for the common good (*ethical rationality*), practice ethical rationality through dialogue and recognition of differences (*discursive rationality*) and be active contributors to the creation of the institutions, cultures and relationships they inhabit (*decisional rationality*) (Grimaldi & Serpieri, 2010, p. 78)

The methodological trajectory

Consistently with the theoretical approach, we drew and developed a double research strategy. In particular, we intertwined the critical analysis of the ONSBI protocol (i.e. its data collection tool and the related measuring scale) that carries on a neo-managerialist understanding of the educational field, with the attempt of re-thinking such an approach in a more democratic perspective.

At this aim:

- First, we deconstructed the ONSBI protocol analysing both questionnaire items and measurement scales, intended as text (Montesperelli, 2014), i.e. looking at the meanings, the knowledge(s) and the methodological features implied;
- We then pay attention to "underlying meanings", thanks to the resorting of the PCA (Di Franco & Marradi, 2003) to the data set provided by Onsbi and starting from the selection of the most closely related variables, we construct a set of six factors;
- Finally, we put in relation the identified factors and adopting the PA technique (Brown, Lent, Telander, & Tramayne, 2011), we depict a model in line with that of collaborative leadership proposed by Telford (1996). In other words, we construct a model, which moves away from the neo-managerialist perspective, and gets closer to a democratic approach.

To pursue the first research objective, i.e. in order to show how certain research projects collude with the neo-managerialist way of governing education field, we made a sort of semantic study (Montesperelli, 2014) of Onsbi protocol. Briefly, we analysed the questionnaire and the measuring devices that it comprises as both a sort of text to be interpreted, and a discursive device that implies and produces meanings and knowledge(s). Therefore, starting from the presupposition that the knowledge of a text is contextual and relational (Eco, 2006), we analysed both "the what" (what kind of date/information) the protocol collects and "the how" it works (what kind of practices, aims, beliefs and values it carries on), to uncover the implicit understanding implied by the Onsbi questionnaire; in other words, we tried to unveil the "hidden presumptions"...

In doing so, after showing how the protocol in focus colludes with the neo-managerialist understanding of education, we *throw down the gauntlet*: we refuse such an approach and propose something different. At this aim,

i.e. in order to pursue the second research aim; in order to highlight that, despite the inquiry context, a different kind of analysis can be achieved (i.e. an analysis which aims to consider semantically meaningful elements), we choose those techniques for analysing data (PCA an PA) that more than others allow us to do semantic/qualitative/relational considerations. In fact, the PCA is a multivariate technique, which usually aims to extract some relevant information from a wide data set; it depicts them as new orthogonal variables (the so-called principal components); it shows the semantic closeness of variables, which are represented as points in maps. Moreover, it is worth noting that, we resort to PCA in two steps (Di Franco & Marradi, 2003), i.e. a specific kind of PCA, which allows us to reflect on some specific indicators, and to carry out a progressive selection of variables, based on their correlation. So that:

- In the first phase, we have selected those variables, that compared to the initial basket proved to be more closely related;
- In the second phase, we have considered the two detected subsets and we have chosen to improve the first component, revealing an underlying factor.

This procedure has allowed us to select, starting from a multi-dimensional semantic space, outstanding and relevant conceptual areas. So, paying due attention to the factor score coefficients, we have identified six components: appreciation of the leadership; cooperation; relational wellbeing; professional vocation; satisfaction with the hygienic-environmental factors and informational needs. That is to say, the same factors that - among many others - are encompassed by the model of collaborative leadership proposed by Telford (1996).

Then, in order to provide just an example of the various strategies, that could be undertaken to avoid collusive attitudes towards the neomanagerialist approach in education studies, we put the so constructed six factors in relation as variables through the PA technique. This methodological choice has been made taking into consideration that PA is commonly used by cognitive and positive psychological theories of work performance, self-efficacy and performance goals (Lent, Brown & Hackett, 1994; Brown, Lent, Telander & Tramayne, 2011; Edwards & Lambert, 2007).

Therefore, PA allowed us to situate the components within a model, appearing congruent with the scientific context to which the analysed data set belonged. In fact, we analysed those factors in terms of correlations so to

identify some possible causal relationship. Then, starting from "a set of relationship in which the causal connections between several variables are examined simultaneously" (Jupp, 2006, p. 22) we drew a path diagram. That is, a model in which path coefficients provide the numeric value of the strength of relationship and show direct and indirect pathways to a dependent factor that we named 'appreciation on leadership'. What emerges is a model that, consistently with our theoretical rationale, converges towards the cooperative leadership model proposed by Telford (1996), or quite precisely - as we will show in the next paragraphs - to some of the features and elements that the scholar underlies of it.

Deconstructing the neo-managerialist way to understand school

As far as the research protocol is concerned, it should be noted that, the empirical base of ONSBI has been constructed by resorting to the most commonly used tool to collect data, i.e., the questionnaire. Though, that tool was not constructed as an original attempt to answer to specific research questions, but it was developed using a merely cumulative/additional logic. That is to say, it is an assemblage of three pre-existing measuring devices, through which the interviewed was told to answer resorting to a six points (from 1 almost never, to 6 always) Likert scale. In addition, the measuring devices, which were respectively born in California, (MBI), Denmark, (CBI-ES), and Holland (UWES), have been simply displaced in the Italian education field. That is, they have been merely imported without considering the field of destination, its interactive and network-practices contexts. In particular, the Onsbi questionnaire has been constructed by resorting to the following measuring devices:

- The Maslach Burnout Inventory Educators Survey (MBI-ES) (Maslach, Jackson & Leiter, 1997);
- The Copenhagen Burnout Inventory (CBI; Kristensen, Borritz, Villadsen, & Christensen, 2005);
- The Utrecht Work Engagement Scale (UWES) (Schaufeli, Bakker & Salanova, 2006).

The first one is a widely known and widespread tool to measure burnout, i.e. a multidimensional construct comprised by three components: emotional exhaustion, depersonalization, and reduced personal accomplishment. In particular:

Emotional exhaustion is characterized by overwhelming feelings of being emotionally overextended and drained by others. Depersonalization is characterized by a tendency to perceive and relate to clients in an overly impersonal, detached fashion. A reduced sense of personal accomplishment refers to a conscious judgement, that one's efforts are not achieving the desired outcomes (Kokkinos 2006, p. 26; Maslach, Jackson & Leiter, 1997).

Here we could recognise at least two elements of a neo-managerialist approach to educational knowledge: a) the reference to the pupils as clients, i.e. the semantic overlapping between the two concepts and the related reshaping of students as educational commodities targets; b) the emphasis on accomplishment and achievement as dimensions, that define teachers' identity trough the aims they have to pursue, and their performances in terms of outcomes and attainments. In addition, the scale implies several methodological problems, which affect and intertwine with the conceptual dimensions. In particular, the items of the scale in focus produce the socalled phenomenon of curvilinearity (Osborne & Waters, 2002; Marradi, 2007) due to the fact that people, who have different opinions on the argument in question, might answer the same. E.g., if a teacher replied 'always', to the item I don't really care what happens to some recipients, this could be due to two opposite reasons. That is to say, he might relate to pupils in a completely impersonal way, or on the contrary, the teacher might be completely absorbed by pupils. So, from the teacher point of view, what other recipients (e.g. parents, head teachers and so on) think or do is quite irrelevant. In addition:

There are limitations regarding the definition and measurement of burnout, and understandability of the items across cultural groups; two dimensions measured by this instrument (depersonalization and personal accomplishment) do not pertain to the burnout syndrome (Milfont, Denny, Ameratunga, Robinson, & Merry, 2008, p. 170).

The Onsbi researchers acknowledge these *limitations*. So, in order to overcome them, they intertwine MBI-ES with a more complex measuring device. It is the so-named Copenhagen Burnout Inventory (CBI) (Kristensen, Borritz, Villadsen, & Christensen, 2005), a questionnaire to investigate

¹ The phenomenon was detected for the first time by Edwards and Kenney (1946) and Coombs (1953). For more on curvilinearity see: Gobo, G., & Mauceri, S. (2014). *Constructing Survey Data: An Interactional Approach*. London: Sage.

burnout among human service workers, which is articulated in three subdimensions and scales:

- Personal burnout:
- Work-related burnout:
- Client-related burnout.

It is a more sensitive tool, but not enough. Some studies (Kristensen, Borritz, Villadsen, & Christensen, 2005; Winwood & Winefield, 2004) show how the questionnaire in focus has good reliability and validity, but it does not resolve the aforementioned faults. In particular, the personal burnout scale "has six items and measures the degree of physical and psychological fatigue and exhaustion experienced by a person regardless of their participation in the workforce" (Milfont, Denny, Ameratunga, Robinson, & Merry, 2008, p. 171). It is a generic burnout scale and us such it does not take into account neither the characteristics of the teaching job, nor the individual narratives (family history, critical events, and so on), which can affect personal burnout.

The work-related burnout "has seven items and measures the degree of physical and psychological fatigue related to work" (Milfont, Denny, Ameratunga, Robinson, & Merry, 2008, p. 171). That is to say, the CBI considers physical/psychological stress in a generic way. In other words, the scale overlooks the different kind of fatigue that different kinds of job imply.

The client-related burnout scale "has six items and measures the degree of physical and psychological fatigue experienced by people who work with clients" (Milfont, Denny, Ameratunga, Robinson, & Merry, 2008, p. 171). Therefore, as just shown for the MBI-ES, it implies a market-oriented conceiving of childhood, which defines and produces pupils as 'buyers' of educational products that in turn have to be accountable and effective.

Finally, the research conducted by ONSBI measures work engagement by resorting to the UWES scale. This tool has been produced by the positive psychology (Schaufeli, Bakker & Salanova, 2006), that is "the study of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today's workplace" (Seligman & Csikszentmihalyi, 2000, p. 698). It is a perspective, which defines the dimension of work engagement as "positive, fulfilling work-related state of mind" (Schaufeli, Bakker & Salanova, 2006, p. 702), by resorting to three sub-dimensions and the related scales of vigour, dedication, and absorption. On closer inspection, it is possible to discern that the relationship between dimension and sub-

dimensions has been enacted so that the first one shifts and overlaps the second ones, and in so doing it carries on a performative vision of teaching practices. We should consider in fact that:

vigour is characterized by high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence even in the face of difficulties [...] Dedication refers to being strongly involved in one's work and experiencing a sense of significance, enthusiasm, inspiration, pride, and challenge [...] Absorption being fully concentrated and happily engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work (Schaufeli & Bakke, 2006, p. 702).

That excerpt conveys and spreads a vision of work engagement as a matter of physical strength and mental energy, strong involvement and full concentration, which in turn are produced as personal features and property that have to being shown off. In other words, it is a way to enact a performance-based meaning of wellbeing, whose indicators have been produced so that they carry on dependence on work and effective sense of work activities, as positive values and aims that have to being pursued.

There are several 'loose threads', but almost all depart from the same point: the disappearance of the context. It is a disappearance that works as a sort of black hole from which a lot of questions escape. E.g. what is the discourse, from which education field takes shape and how it changes across nations and/or occupational groups? What about the semantic space, which the items involve when they are translated in the Italian language? How it affects the relationship between indicators and their operational definition? What about the individual features and trajectories, which affect on both burnout and work engagement?

In fact, what at first glance we named 'loose threads' on closer inspection, emerge as the results of a specific research strategy, which appears as a mean to carry on education field as a complex assemblage of subjectivities, technologies and tasks coming from the NPM discourse. They appear as overlapped each other and so closely related, that they seem to be mixed within the same neo-managerialist black box. However, despite the high degree of overlapping, which characterises the relationship between research strategies and strategies of governing, we can identify the way in which it works, i.e., we can point out how some methodological choices are affected

by (and reproduce) the epistemological presuppositions of a wider political vision. So, coming back to the three elements that make up a research project (unit of analysis, technique to collect data and research objectives) we can now summarize our findings as follow:

- a) The ontological presuppositions that underlie the definition of a unit of analysis, its attributes and referents affect and steer the subjectivities themselves. In other words, defining unit of analysis contribute to produce performative subjectivities, who in turn are produced and governed by a sort of 'tyranny of standards' (Ball, 2015), that defines desirable features and aims to being pursued (e.g., teachers, whose wellbeing is closely related to their measurable performance, strength and full concentration).
- b) Choosing standardized techniques and scoring systems to collect standardised data might translate in technologies of governing founded on homogenization of knowledge and meanings (i.e., scaling techniques as the one best way to produce understanding, is a way to claim to be depicting and creating a simple and accountable idea of wellbeing, within an accountable educational context).
- c) Pursuing research objectives aiming to comparability (by resorting to standards, and scoring systems), is a way to promote effectiveness, improvement and accountability as the main tasks towards which the aforementioned subjectivities have to move (for example, teachers wellbeing as a matter of performance to being increased and showed).

These just listed, on the one side represent the first findings of our reflection; on the other side, constitute – as we will show - the starting point from which the attempt to analyse the data collected by ONSBI in a perspective democratically inspired, it unfolds and develops.

Towards a democratic perspective

In order to follow the aforementioned objective, we resorted to PCA in two steps (Di Franco & Marradi, 2003), i.e., the analysis technique that more than others, allows us to pay attention to the meanings of variables. In fact, resorting to PCA in two steps means choosing a way to reflect on some specific indicators, carrying out a progressive selection of variables, based on their correlation. Therefore, firstly we have selected those variables, that compared to the initial basket proved to be more closely related; secondly

we have considered the two detected subsets; thirdly we have chosen to improve the first component, revealing an underlying factor.

As said, following this procedure and paying due attention to the factor score coefficients, we have identified six factors: Appreciation of the leadership2; Cooperation; Relational wellbeing; Professional vocation; Satisfaction with the hygienic-environmental factors; Informational needs (see tables 1a. and 1b).

As far as the first factor is concerned, we refer to the attitude towards head teacher, i.e., a complex dimensions which the ONSBI protocol measured by analysing indicators that contribute to the acquisition of self-efficacy/social support levels (Schwarzer & Hallum, 2008) and organizational wellbeing. What we named 'appreciation of the leadership' is made up of three variables, which are ascribable to the same semantic space. In particular, the interviewed teachers was told to use a six-point scale (from 1 almost never, to 6 always), in order to express themselves, their opinion and feeling, about the following items: how often do you feel appreciated by your head teachers; my head teacher helps us to work in the best way; my head teacher manages conflicts effectively.

The component intertwines the personal feeling of being respected and esteemed by the head-teacher (and the related self-confidence that it produces), with the positive evaluation of its managerial capability, relational aptitudes and attitudes towards individual and collective works. Therefore, the factor can be interpreted as indicator of an interpersonal style of leadership (Ball, 1987), which is perceived by teachers as 'open' (Blase & Anderson, 1995), able to promote both mutual adaptation and conflict resolution. The variable in focus evokes the presence of head-teachers, who facilitate a school climate, where the focus is on interactions among human agents. Such an interactive context works thanks to those head teachers who are able to: manage subjects through their decentring; support collective achievements as the main aim towards which individuals have to move on. In doing so, leaders contribute to produce and reproduce those practices, understood as complex processes in which human agents, institutions, cultures and material artefacts intertwine and influence each other, i.e. they

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² It is relevant to pay attention to the way in which Onsbi protocol measured teachers' attitude towards head teacher, i.e. by merely analysing indicators that contribute to the acquisition of self-efficacy/social support levels (Schwarzer & Hallum, 2008) and organizational wellbeing.

support the so named network-interactive contexts (Grimaldi, Serpieri & Spanò, 2009).

Table 1a. Indexes, variables and componential coefficients

The appreciation of the leadership		Cooperation		Relational wellbeing	
Variables	C.C.	Variables	C.C.	Variables	C.C.
How often do you feel appreciated by your head teacher	.423	I have a cooperative relationship with my colleagues	.298	How often do you feel appreciated by your colleagues	.361
My head teachers helps us to work in the best way	.428	Working in a partnership and talking with my colleagues it allows me to show my skills	.285	How often do you feel appreciated by the students' parents,	.442
My head teacher manage conflicts effectively	.339	Working in a partnership with my colleagues, allows us to find effective solutions to problems	.301	How often do you feel appreciated by the students	.417
		Conflicts with my colleagues are effectively managed)	.286		

Source: Our elaboration on data collected by ONSBI

The second factor, that we named cooperation, is made up of four variables (*I have a cooperative relationship with my colleagues; working in a partnership and talking with my colleagues it allows me to show my skills; working in a partnership with my colleagues, allows us to find effective solutions to problems; conflicts with my colleagues are effectively managed*). It suggests the presence of "workgroups of committed professionals, who with shared and directed purpose, have the capacity to work together in a problem solving way to determine tentative answers to the unknown, to take action on the basis on what they have discovered, and move on" (Telford, 1996, p.13). Thus, the factor points out a collaborative organizational climate, and albeit indirectly, seems ascribable to a "transformational

leadership" (Burns, 1978), which is based on a cohesive school community, able to pursue collective reasons and shared objectives.

In the same way, the relational wellbeing factor, within which converges three variables3 (how often do you feel appreciated by your colleagues, how often do you feel appreciated by the students' parents, how often do you feel appreciated by the students), conjures to a "participated understanding" of the processes of decision-making, where feeling appreciated at work by different actors, who live the school community (colleagues, parents, and pupils) seems to reflect a thoughtful and positive resort to the authority. It is a general feeling of appreciation produced by interaction, a cooperative approach to educational aims, cohesion between staff, student and parent, as values and attitudes, which require the striving of a leader, who sustains, develops and embodies them into daily educational practice (Telford, 1996, p. 93).

The component, which we named 'professional vocation' (see table 1.b), is composed of seven variables (I am enthusiastic about my work; My job inspires me; I am happy when I work intensively; I am proud of my job; I am immersed in my job; For me, my job is stimulating; I let myself get completely when I work). The index combines the variables of work engagement in a sui generis way.

That is, it makes the semantic space of the dimension in focus smaller. Thus, it turns the three sub-dimensions, by which work engagement is made up (physical, emotional and cognitive), towards an underlying cultural dimension, which directly concerns the identity and motivational factors of the professional practices.

In particular, the component converges towards the centrality of teaching, high value and regard for a profession, which gains its sense of identity from satisfying work and personal expression. In addition, on the one hand, it indirectly reveals what the teachers need, i.e., "to tap into each one's truest, unique self; to reach so that he has a chance to succeed; to become what every person desires to become - an effective, recognized, rewarded individual in the work setting" (Telford, 1996, p. 59).

³ The interviewed was told to answer resorting to a six points (from 1 almost never to 6 always) Likert scale. The index reproduces 67% of total variance.

⁴ Index reproduces 71% of variance.

Table 1b. Indexes, variables and componential coefficient

Professional vocation		Satisfaction regarding the hygienic-environmental		Information needs	
Variables	C.C.	Variables	C.C.	Variables	C.C.
I am enthusiastic about my work	.853	Pleasant environments and furnishing	.860	Clarity of information	.244
My job inspires me	.859	Space available per person	.794	Clarity of the objectives and tasks	.246
I am happy when I work intensively	.807	Sanitary facilities	.816	Career development of the staff	.270
I am proud of my job	.833	Conditions of school premises	.831	Training and re- training of the staff	.255
I am immersed in my job	.825			Organizational structure or work processes	.261
For me, my job is stimulating	.884				
I let myself get completely when I work	.839				

Source: Our elaboration on data collected by ONBBI

On the other hand the component, indirectly suggests the presence of leaders, who respond to the needs of teachers: they promote skills and talents, encourage teachers to express their professional individuality, "value teaching and learning as the primary and overriding role of the school" (69).

The factor we named 'Satisfaction regarding the hygienic-environmental' comprises four variabless (*Pleasant environments and furnishing; Space available per person; Sanitary facilities; Conditions of school premises*). It identifies environmental and safety state of the site where teachers work as elements which albeit indirectly affect teachers' wellbeing and contribute to reduce their dissatisfaction (Herzberg, 1968).

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⁵ The Factor reproduces 68% of variance.

The component of 'Information needs' is made up of five variables6 (Clarity of information; clarity of the objectives and tasks; Career development of the staff; Training and re-training of the staff; Organizational structure or work processes). It suggests that, vocational training and need for greater clarity of tasks and objectives are strictly interrelated and affect the perceiving of what is to improve. At same time, it shows the relevance of a headship, which is able to promote a collaborative culture, grounded on the basis of democratic principles and practices as, e.g., those of clearly communicating and sharing information, promoting broadranging professional development; creating opportunities for training and reretraining, in order to support the talents and the skills of the staff (Telford, 1996, p. 57).

As shown, PCA provides a parsimonious representation of the associations among variables. In addition, the technique in focus does not involve a specific hypothesis to be tested, but it reveals underling meanings that have to being understood. Thus, starting from the above consideration, and in order to provide an example of analysis technique which challenge the inquiry context on which it is applied, we have investigated the relationship between leadership and teachers' wellbeing by testing the different paths that link each other.

Organizational context and leadership as factors of teachers' wellbeing

According to our purposeful/proactive attempt, we have selected those elements which are mainly interrelated and through the multivariate data analysis and the recourse to the technique of *path analysis* (PA) we have tested different models that have allowed us to understand the "cooperative nature of the leadership" (Serpieri, 2008, p. 95), i.e., in what way and through which mechanisms, the cooperation among teachers modifies the approval of the leadership and, subsequently, affects their well-being.

The path diagram shows that, working in a 'cooperative context' increases the organizational climate, regardless of the positive effects that this produces on the well-being of the teachers, in turn identified by two elements: professional vocation and relational well-being.

⁶ Index reproduces 61% of variance.

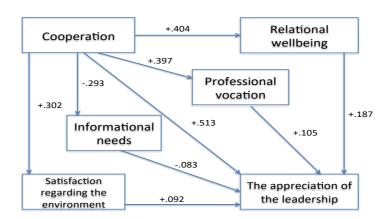


Figure 1. Organizational context and leadership as factors of wellbeing

As depicted in the path diagram, taking under control relational well-being, professional vocation, informational needs and satisfaction with the environment, the cooperation exerts a highly positive influence (+. 513) on the appreciation of leadership. At the same time, if we consider the effects that influence the four intervening variables, we can see how the underlying mechanisms converge towards Telford model.

As the collaboration's score increases, the relational wellbeing grows, the professional vocation strengthens, the satisfaction with environment improves and the informational needs - that in turn negatively affects appreciation of the leadership - drops. However, the indirect effect of the collaboration through the relational wellbeing is three times higher (.075) than that carried out both by the informational needs (.024) and through the satisfaction with the environment (.027).

The effect that collaboration carries through professional vocation (.032) and relational wellbeing (.075) is to be highlighted. The last two variables exert a direct casual effect on the appreciation of leadership, lower than that direct effect exercised by collaboration, yet still quite significant (.105 and .187).

Finally, the model we have attained reproduces 52% of the total variance related to the appreciation of leadership and doesn't present any spurious effect. Two conclusions then can be drawn from these results:

- It is a warning related to the caution necessary in dealing with the model: the remaining 48% of variance can be attributed to other variables, therefore there is nothing prescriptive in what has been discussed so far;
- It does not only points out the appropriateness of the adopted approach, but also the chance to explore new research paths.

Conclusive remarks: opening the leadership black box

This article has shown how methodological choices (in terms of defining the unit of analysis, the selection between the available techniques to collect data and the specification of research objectives) affect and produce the field to be investigated. So, following the analytical trajectory that conducts from a pars destruens to a pars construens, first we have underlined how certain research strategies collude with the neo-managerialist way to understand and produce education field; second, by resorting to the same deconstructed measuring devices, we have provided a reading in line with the democratic perspective. What we want to underline here of the complex trajectory which links research strategies and strategies of governing, are two issues concerning the two parts, destruens and construens respectively, i.e. the disappearance of the context and its reappearance. In our opinion, if we consider the three methodological elements in focus, and try to look behind the data, it is quite plain to understand the 'why' of the disappearance of the context. In fact, certain ways to do research need that disappearance because of aims and tasks they pursue, that in turn require measuring devices and technologies it comprises. As shown, those technologies have been simply displaced in the Italian frame, without considering the field of destination, its interactive and network-practices contexts. That is to say, they deliberately ignore the multiple differences ascribable to various national fields (and sometimes also those dissimilarities that can be credited to occupational groups), as well as they reject those attributable to educational environments. In other words, they do not take care of social interactions among human agents, nor envision the intertwining between actors, institutions, cultures and material artefacts, because of the aims it pursues. That is, a homogeneous system of knowledge and an accountability regime founded on making comparisons by resorting to pre-codified standards, which in turn work as control system producing standardized agents. Thus, consistently with a neo-managerialist perspective, this kind of research appears as governed by a sort of tyranny of standards (Ball, 2015), which defines and produces desirable features and property for those who belong to educational space, starting from teachers and head teachers. Evocative is the fact that, linking 'vigour' to 'dedication' and 'absorption', associating them to work engagement, and finally to occupational wellbeing is tantamount to define teachers and head-teachers trough the performances they have to achieve. This is a way to produce controlled subjectivities, who are steered by performance values, in compliance with accountability regime and audit, i.e., according to a reductionist approach and a the neomanagerialist discourse. In this respect, it is worth noting how the overlapping between performance and wellbeing, among other things, allowed to measure something that could not be measured. In effect, wellbeing is a multidimensional construct (Hackman & Oldham, 1980) that should be thought as a dynamic conceptual dimension associated to the school context and life that involves complex semantic considerations. It goes beyond collected data and suggests genealogy, ethnography and narrative as appropriate forms of analysis and interpretation. However, in due awareness of the difficulties on the ground of such a research object, i.e., an object that goes beyond collected data and suggests genealogy, ethnography and narrative as appropriate forms of analysis and interpretation, nevertheless focusing and reasoning on the complex semantic space, which underlies different sets of variables is not impossible.

As shown, methodological choices are at same time ontological, epistemological and political options. They vary in a complex range of analytical possibilities, which comprise the opportunity of resorting to those strategies, that emerge as relevant not only in terms of the interpretative tools they provide, but also from a governmentality perspective (Dean, 2010). The claim of a collaborative climate, which positively affects the appreciation for the leadership, is almost tautological. Therefore, in a certain way, the findings are not so relevant in themselves. Nevertheless, they are important for the ethical consequences they talk about: the risks of collusion of some research strategies; the need of increasing a methodological debate in educational research, as standpoint for a wider re-thinking of political choices, by casting light on the context, and subtracting them, from the opacity to which the neo-managerialist way has convicted it.

From this standpoint, the link between research strategies and strategy of governing, takes shape here, by showing what happens, when the context re-

emerge: i.e., the disappearance of the educational leadership. So, the relationship in exam comes to light as a matter of cooperative environment, which improves the appreciation of the leadership because of its dissolution. Or, in other words, as a question of cooperative climate for the school, which raises the appreciation for the head-teacher by dissolving it and of a leadership, whose effectiveness seems to be measurable by its capability of disappearing.

The article is the outcome of a common effort. In order to ascribe responsibility, we declare that Roberto Serpieri wrote section *Theoretical background*, Sandra Vatrella wrote sections *The methodological trajectory*, *Deconstructing the neo-managerialist way to understand school, Towards a democratic perspective, Organizational context and leadership as factors of teachers' wellbeing*. While *Introduction* and *Conclusive remarks* were authored by both of us.

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