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**Elena Bruni, Laura Cortellazzo,
Sara Bonesso and Fabrizio Gerli**

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LEADERSHIP STYLES SCALE: CONCEPTUALIZATION AND INITIAL VALIDATION

Elena Bruni
elena.bruni@unive.it
Department of Management
Ca' Foscari University Venice

Laura Cortellazzo
laura.cortellazzo@unive.it
Department of Management
Ca' Foscari University Venice

Sara Bonesso
bonesso@unive.it
Department of Management
Ca' Foscari University Venice

Fabrizio Gerli
gerli@unive.it
Department of Management
Ca' Foscari University Venice

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Abstract. *This paper describes the development and validation of a scale to measure leadership styles that lead to resonant or dissonant organizational environment. Differently from other scales that focus their attention on one specific style, we offer a holistic approach that considers a broader range of behaviours. Based on theory, a pilot study, and questionnaires, we developed a tool to assess six styles of leader behaviours (Inspirational, Supportive, Aggregating, Democratic, Demanding, and Authoritarian). We tested the model in a sample of students and practitioners. We also run a non-parametric test that confirms that resonant styles of leadership have a positive impact on projects' performance. The results supported the validity and reliability of the six-dimensional items. We thereby contribute to the literature by providing a practical tool of 36-item instrument, labelled the Behavioral Leadership Styles Evaluation (BELEADER) Questionnaire.*

Keywords: leadership, leadership styles, scale validation

JEL Classification Numbers: O15

Correspondence to:

Marco Fasan
Dept. of Management, Università Ca' Foscari Venezia
San Giobbe, Cannaregio 873
30121 Venezia, Italy
e-mail: marco.fasan@unive.it

Introduction

The assumption that an effective leader is fundamental to organizational success is nowadays taken for granted (Scully et al., 1994; see Avolio, Reichard, Hannah, Walumbwa, & Chan, 2009 for a detailed description). The last four decades have seen an increasing discussion about leadership concept and its different styles. Leadership style has been defined as the extent by which a person emphasizes particular types of leadership over another, namely when a leader displays a particular set of behaviours and attitudes of leadership (e.g. *transactional* or *transformational*) (Bass, 1990). A style is usually measured by the frequency of specific leadership behaviour adopted and using multiple items and Likert scales (Li et al., 2016). Individuals, groups, and organizations may require different styles of leadership according to specific needs and organizational configuration. Thereby, a leadership style may be effective in certain settings, while they may not be suitable in other contexts.

So far, several studies have tried to look at how different styles affect followers and on organizational climate (Li et al., 2016). Literature has also elaborated that leadership is itself an ‘emotion-inducing phenomenon’ (Li et al., 2016: 108). A leader, in order to face and manage the complexity of organizational contexts, needs to activate different styles of leadership and to manage his/her own emotions and those of followers. Moreover, the leader has to possess the capacity to settle a relationship with his/her followers that is coherent with the context. For instance, Situational Leadership theory (SLT) discussed about four levels of follower development and a corresponding alternate optimal style of leadership (Hersey & Blanchard, 1969; 1974). Another stream of literature, the competency-based model of Emotional Intelligence has pointed out that effective leaders create a *resonant* environment, namely a context in which leaders are in tune with their followers (Goleman, Boyatzis, & McKee, 2002; Boyatzis and McKee, 2005; McKee, Boyatzis, Johnston, 2008). Thereby, as shown by many studies, emotional intelligence and leadership effectiveness are intertwined because the two components together create positive working environment and subordinates’ superior performance (Goleman, 2000; Goleman, Boyatzis & McKee, 2002; Kerr et al., 2006).

Despite the growing interest on leadership and its Emotional Intelligence aspects, there is a lack of a validated scale that tests different styles. Beyond the scales that measure specific styles of leadership such as transformational or transactional, currently there are no tools that consider the multiplicity of styles that a leader can adopt to effectively manage collaborators in different contexts. Literature has analysed which are the most effective styles based on the context (i.e. depending on the commitment or the competences of the follower as for SLT), sensibly advancing our knowledge about leadership. However, a broader perspective has been neglecting since these studies mainly restrict their attention on a dichotomous concept of leadership style, e.g. transformational or transactional. Indeed, there is a need to provide a more comprehensive analysis of different styles by a tool that measures the behaviour, then a style, adopted by a leader in a certain context.

This paper aims to address this void by offering a valid scale, in terms of both face and, internal and criterion validity. Accordingly, the main purpose of the present study is (1) to theoretically underpin the nature of different styles of leadership (2) to provide a conceptualization and operationalization of a tool to measure six different styles of leadership (3), and to build, refine, and validate a new instrument to measure the styles. This paper begins by reviewing the main contributions of leadership literature and different styles of leadership. Second, we present how we developed a pool of items by a pilot study, and specifically on three distinct rounds of focus groups.

Third, in the first study, we show how six styles are valid measures to test the impact of different leadership behaviours. We finally present our results and we conclude by discussing the main implications, from both a theoretical and methodological perspective.

1. Theoretical Background

1.1 Leadership Styles

Although the subject of leadership has been largely studied, scholars still struggle to find a set of behaviours and styles that fully describe what a leader should do and behave. There is a plethora of studies that look at leadership from different angles. Trait theory (Zaccaro, 2007), behavioural theory (Bass, 1990), or contingencies theory (Yukl, 2011) share the assumption that the leader is the person who is capable to influence some followers toward a common goal. Leadership is made by complex patterns of behaviours (Zaccaro, 2007) and it yields to different styles of leadership. Leadership styles refer to how a leader behaves and interacts with his/her collaborators, and the behaviour adopted has relevant impact on the performance achieved by the team and by the entire organization, because it directly influences the organizational climate. The way they adopt to guide and manage their collaborators impact on the followers' sense of responsibility, commitment, the efficiency and the effectiveness in performing tasks (George, 2000; Cavazotte et al., 2012).

One of the most well-known model is that proposed by Hersey and Blanchard (1969; 1982; Hersey, Blanchard, & Johnson, 2001) in which relationship behaviour and task behaviour are blended together and they result into four different styles: *supporting*, *delegating*, *coaching*, and *directing* (see Tortorella & Fogliatto, 2017 for a detailed description). This framework was firstly introduced as 'Life Cycle of Leadership' construct (Hersey & Blanchard 1969) and it is nowadays known as *Situational Leadership* (SLT). The name of *situational* is due to the situational variable of subordinate maturity. According to this model, as the maturity of a subordinate increases, less directive leadership is necessary. As a result, there is a U-shaped curve between the leader behaviour and subordinate performance (see Yukl, 2011 for a detailed description).

It is clear how this model shifted the focus of analysis from a task-oriented perspective toward a more people-centre concern. In *Situational Leadership* model, leaders who guide low-maturity subordinates should adopt a more task-oriented behaviour, while with senior subordinates' leaders can go for a more relations-oriented behaviour (Yukl, 2011). According to this model, that relies on the profile of followers in order to identify the suitable leadership style, the enthusiastic beginner (a person low on competence but high on commitment) should be guided by a directive style of leadership. With a disillusioned learner (low on competence and low on commitment), a coaching leadership style should be able to provide the right high-supportive behaviour with a correspondent high-directive behaviour. The capable but cautious performer (from moderate to high on competence but with variable commitment) probably needs a supportive style of leadership. Finally, the self-reliant achiever (high on both competence and commitment) needs a delegating style of leadership. Situational Leadership Theory (SLT) has been criticized for its theoretical and empirical weaknesses (Bass, 2008), in terms of measurement, content, and research design (e.g. Thompson & Vecchio, 2009). A recent study (Thompson & Glasø, 2015) addressed this issue and it tested the validity of SLT by using a sample of 80 supervisors and 357 followers. By measuring the degree of agreement between leader rating of follower competence and commitment and follower

self-rating, the authors found that drawing on leader rating alone is not sufficient to establish which kind of style is suitable for specific followers (Thompson & Glasø, 2015).

Another widely accepted theory of leadership is the so-called *transformational leadership*. In the last decades, transformational leadership has been the ‘single most studied and debated idea with the field of leadership’ (Bass, 1985; Diaz-Saenz, 2011: 299;). Leaders are transformational when ‘broaden and elevate the interests of their employees’ (Bass, 1985: 21), and this kind of attitude generates awareness and acceptance of the purposes and mission by the members of the group, diminishing self-interest and augmenting harmony within the group. Thereby, *transformational* leadership model revolves around the idea that the leader has the capacity to create a sense of inspiration in followers, so then they are willing to ‘look beyond self-interest in favour of the group's objectives by modifying their morale, ideals and values’ (Kissi, Dainty, & Tuuli, 2013: 486). Four major transformational leadership styles (called dimensions) have been defined: *inspirational motivation*, *intellectual stimulation*, *individualized consideration*, and *idealized influence* (Bass, 1990; Bass & Steidlmeier, 1999). Bass and Riggio (2006) summarized the four dimensions as the following: *idealized influence* is made by two components: the followers, who wish to emulate the leader’s behaviour, and the leader who perceives to be admired, respected and trusted. *Inspirational motivation* relies on leader’s ability to motivate and inspire the followers by providing a common meaning and challenging tasks. *Intellectual stimulation* is that capacity of involving the followers in questioning assumptions, reframing status quo of situations by adopting creative problem solving. *Individualized consideration* implies that the leader acts as a coach or a mentor. Through a supportive climate, the leader assists and develop the followers. The first two components, the *idealized influence* and *inspirational motivation*, have been also classified with the term charisma, often in an interchangeable way. Thereby, some authors have confused transformational leadership with charismatic leadership. According to Bass (1985), charisma is fundamental to transformational leadership, but it does not imply that a charismatic leader is also transformational. In order to avoid such misunderstanding, Antonakis, Avolio, and Sivasubramaniam (2003) changed the term charisma with that of *idealized influence* (including both attribute and behaviour of a leader) to stress whether the leader is perceived as being confident and powerful and if his/her actions are centred on values, beliefs, and a sense of mission. A leader to be transformational has to ‘inspiring, developing, and empowering [his/her] followers’ (Yukl, 2011: 287).

Podsakoff et al. (1996) considered transformational leadership as made by six dimensions of *transformational leadership*: *articulating vision*, *providing an appropriate model*, *fostering the acceptance of group goals*, *high performance expectations*, *individualized support* and *intellectual stimulations*.

Burns (1978) examined *transformational* leadership versus *transactional* leadership, clarifying the ethical dimension of being a leader. *Transactional leadership* theory mainly focuses the attention on the exchange between leaders and followers (Bass, 1985; 1990). As the name recalls, transactional leaders usually motivate followers by leveraging on their own personal self-interest and in exchange of some benefits. In this scenario, leaders explain what they expect from their followers and what they have in return in case of good or poor performance. Thereby, *transactional* leadership consists of contingent reinforcement and contingent rewards, in the sense that followers find the motivation to follow the leader because of his/her promises and rewards and to avoid negative feedback or disciplinary actions (Bass & Steidlmeier 1999).

Due to the consensus of these models, a technique has been developed to test the dimensions of both *transformational* and *transactional* leadership, the Multifactor Leadership Questionnaire (Avolio & Bass, 2002). It is a psychometric tool, namely a questionnaire that helps in assessing the Full Range of Leadership (FRL) model. Bass's original theory contained four transformational and two transactional leadership factors. The updated version of the model (MLQ Form 5X) comprise five transformational leadership factors, namely three transactional leadership factors, and one nontransactional laissez-faire leadership (the resulting name of Full Range of Leadership (FRL) model) (Avolio et al., 1991). The MLQ (Form 5X) is structured into 45 items, whose 36 items represent the nine leadership factors: *Idealized influence* (attributes); *Idealized influence* (behaviours); *Inspirational motivation*; *Intellectual stimulation*; *Individualized consideration*; *Contingent reward*; *Management-by-exception active*; *Management-by-exception passive*; *Laissez-faire*. Antonakis and colleagues (2003) tested the validity of the measurement model and factor structure of the questionnaire. By using a large sample, they confirmed the validity of the model. However, they suggest that the context plays a relevant role in 'how the factor structure of [the] survey instrument behaves' (Antonakis, Avolio, & Sivasubramaniam, 2003: 284) and they recommend that the preliminary exploration of the context plays a fundamental role in assessing the style. Furthermore, using non-homogenous samples (e.g., mixing environmental conditions, leader or rater gender samples, different hierarchical levels, etc.) may lead to inconsistent findings (Antonakis et al., 2003: 283).

In an attempt to clarify the distinction between *transformational* and *transactional* leaders, it has been developed another construct (Bass & Steidlmeier, 1999): *authentic* and *inauthentic* leadership. The *authentic* leader put great attention on words, actions, and values. Moreover, such leaders have a high self-awareness, especially regarding their values, beliefs, and emotions (see Avolio & Gardner, 2005). Recently, Neider and Schriensheim (2011) suggested a validation of a new measure of authentic leadership, the Authentic Leadership Inventory (ALI), an advancement of the Transformational Leadership Inventory (ALI) that comprises: *identifying and articulating a vision*, *providing an appropriate model*, *fostering the acceptance of group goals*, *high performance expectations*, *providing individualized support*, and *intellectual stimulation*. The main limitation of this tool is that TLI is protected by copyright, hence it makes its use difficult for research purposes.

Walumbwa and colleagues (2008) had developed sixteen items to define *authentic leadership*, a construct that summarized insights from social psychology, moral, and ethical philosophy. They developed a four-factor Authentic Leadership Questionnaire (ALQ) consisting of the following four factors (Walumbwa et al., 2008: 121-122): *self-awareness* (the capacity to seek feedback to improve interactions with others and accurately describe how others view his or her capabilities), *relational transparency* (the capacity to say exactly what he or she means; the leader is willing to admit mistakes when they are made), *balanced processing* (the leader solicits views that challenge his or her deeply held positions; the leader listens carefully to different points of view before coming to conclusions), *internalized moral perspective* (the leader demonstrates beliefs that are consistent with actions; the leader makes decisions based on his/her core beliefs). By employing five independent samples (two from a university setting and three from field settings), they provide a strong support for the construct of authentic leadership, that it is possible to discriminate it from other leadership theories (e.g., ethical leadership and transformational leadership). They also tested its validity across different cultural settings (Walumbwa et al., 2008).

1.2 Leadership and Emotional Intelligence

The last decades have seen the emergence of another stream of literature that tries to investigate leadership and Emotional Intelligence (George, 2000; Gardner & Stough, 2002). These studies have shifted the attention on the emotions of the leader and how they impact the organizational context (George & Bettenhausen, 1990; George, 2000; Gardner & Stough, 2002). According to these studies, leadership is an emotion-laden process. A leader, to be effective, has to be able to manage his/her own emotions and ones of the others (George, 2000; Antonakis et al., 2009). The empirical study of Gardner and Stough (2002) showed the strong relationship between transformational leadership and overall emotional intelligence. In particular, emotional intelligent leaders are more inclined to desire success, lead an effective team but they also feel more satisfaction on working with others (Gardner & Stough 2002). Indeed, ‘emotional intelligence is the *sine qua non* of leadership’ (Goleman, 1998: 82). Leadership is then looked within processes of social interactions (Kerr et al., 2006) that can have impact on followers’ emotional states (Humphrey, 2002). A research made by the consulting firm Hay/McBer on a random sample of 3,871 executives selected from a database of more than 20,000 executives worldwide, stressed that there are six distinct leadership styles, stemming from different components of Emotional Intelligence: *coercive*, *authoritative*, *affiliative*, *democratic*, *pacesetting*, *coaching* (Goleman, 2000). The model has been slightly revised few years later and it now encompasses the following styles: *pacesetting*, *commanding*, *visionary*, *coaching*, *affiliative*, and *democratic* (Goleman, Boyatzis, & McKee, 2002; Goleman, 2011).

The first two styles, *pacesetting* and *commanding*, are recognized as being *dissonant* styles of leadership: as for music, dissonance produces an unpleasant sound and it is characterized by a lack of harmony. Dissonant leaders guide groups that ‘feel emotionally discordant, in which people have a sense of being continually off-key’ (Goleman, Boyatzis, and McKee, 2002: 44). On the other way around, the other four styles generate a *resonant* leadership, in which the leader is ‘grounded in a shared set of constructive values [that] keep emotions resounding in the positive register’ (Goleman, Boyatzis, & McKee, 2002: 49).

The *commanding* leader is a person who demands that his/her orders will be executed immediately without explaining the reasons behind them. Moreover, these kind of leader uses threats in case of orders have not been followed. This leader prefers not to delegate the authority and tends to have a tight control over any kind of situation (Goleman, 2000; Goleman, Boyatzis, & McKee, 2002; Goleman, 2011). The *pacesetting* leader is a leader who expects excellence by his/her group. He/she also pretends that people know what to do and demands challenging goals. Both the two styles should be used carefully, and only in specifics situations because they often create a negative environment (Goleman, 2000; 2011; Goleman, Boyatzis, & McKee, 2002; Goleman, 2011).

The other four styles, *visionary*, *coaching*, *affiliative* and *democratic* build a resonant environment because they bring positive emotional impacts into the organizational climate. It has been shown that they help in getting more financial results, such as return on sales, revenue growth, more profitability and higher performance (Goleman, Boyatzis, & McKee, 2002; Goleman, 2011). The *visionary* leader moves people towards shared ideas and goals; the *coaching* leader is able to link the desires of the members of the group with the organization’s goals. The *affiliative* leader creates harmony in the group by connecting people to one another; and finally, the *democratic* leader takes into large consideration the values and opinions of the members of his/her group and engages people through participation (Goleman, Boyatzis, & McKee, 2002; Goleman, 2011). So far,

literature has not developed any shared measures to test these styles. There are still fragmented contributions that attempt to capture the different styles of leadership and mainly at a descriptive level. Despite the momentum the topic of leadership among behavioural and management scholars, there is still a lack of a validated scale that tests the six styles of leadership. To our knowledge, there are not research that provides a comprehensive scale for measuring the aforementioned styles.

Table 1 indicates the most important contributions about leadership and how they measure different constructs and scales. Most of these studies focused their attention on a specific style (e.g. transformational versus transactional), without take into consideration more styles together. It is also reported how different constructs are correlated to variables, such as Big Five Traits or job satisfaction.

insert Table 1 about here

Nowadays leaders have to challenge unprecedented issues, stress, and unpredictable events. Thereby, only one dimension (i.e. *transformational* versus *transactional*) is not sufficient to describe leaders' behaviour and how they daily interact with their followers. Hence, we propose to enlarge this dichotomous perspective by suggesting a tool that captures this level of complexity. To do so, we elaborated six styles of leadership: *Inspirational*, *Supportive*, *Aggregating*, *Democratic*, *Demanding*, and *Authoritarian*. Furthermore, we provide a preliminary validated scale on a sample of 112 of people, a six-dimensional, 36-item instrument, labelled the Behavioral Leadership Styles Evaluation (BELEADER) Questionnaire.

2. Method

Building on prior research and recent conceptualization of Emotional Intelligence and Leadership, we elaborated six different styles of leadership: *Inspirational*, *Supportive*, *Aggregating*, *Democratic*, *Demanding*, and *Authoritarian*.

The *Inspirational* leader has a clear perspective and expresses it to others by identifying the way to follow. S/he clarifies which are the objectives and the ideals, but also gives autonomy in the definition of the behaviors to adopt. Leaders who emphasize vision elicit more adaptability and openness in their followers (Boyatzis et al., 2015). They support their teams by communicating the final goal and by encouraging a self-goal setting (Arnold et al. 2000). Indeed, articulating a vision yields to a general team members' satisfaction and organizational commitment (Scully et al., 1994; Podsakoff et al., 1996; Goleman, 2011). They have a vivid image of the future and expresses it with enthusiasm to the others (de Vries 2012). They articulate their visions through charismatic language, thereby they are often referred as Charismatic Leaders who are able to engage people through intellectual stimulation (Fanelli et al., 2009; Densten & Sarros, 2012). Podsakoff and colleagues (1996) define these leaders as good at stimulate followers at intellectual level by articulating an inspiring vision. Instead, the Situational Leadership Theory framework considers this style of leadership as a delegating leader who passes most of the responsibility onto the follower or group (Hersey & Blanchard, 1969; 1974). All these characteristics are synthetised by Scully et al

(1994) with the concept of Visionary Hero. This leader conveys a clear vision, stimulates followers, and inspires by emotional commitment.

The *Supportive* leader constantly dialogues with the members of his/her team, listening, guiding, and providing advice. S/he connects the goals of the individual with ones of the team and helps others to understand their own strengths and weaknesses, but also helping in connecting them to their own aspirations (Goleman, 2011). Namely, a coach leader is a person who educates his/her team members to become self-reliant (Arnold et al., 2000). This type of style, also studied as *Supportive* style of leadership, helps to build and maintain relationships that are effective and increasing job satisfaction and stress tolerance (see Yukl, 2011 for a detailed description). By showing interpersonal warmth, this type of leaders is concern for the welfare of group members and they are willing to share the power with peers and collaborators (de Vries, 2012). According to Hersey and Blanchard (1969; 1974), this style of leadership falls into “selling” quadrant since leaders provide guidance of how to perform the work to their followers and keeping a constant dialogue with them. Same line of reasoning sees these leaders as defined into the archetype of SuperLeader (Scully et al., 1994), because they are an ‘influential source of wisdom and direction’ (Scully et al., 1994: 66). Transformational leadership theory considers these aspects as characterized by a motivation of fostering the acceptance of group goals (Podsakoff et al., 1996). In fact, these leaders foster collaboration among work groups, and they encourage followers to be team players (Podsakoff et al., 1996).

The *Aggregating* leader creates harmony by developing relationship and ties between members, by encouraging the sharing of ideas and feelings to nurture a sense of mutual trust and belonging (Podsakoff et al., 1996). Some scholars refer to this style as Individualized support or individualized consideration (Neider & Schriesheim, 2011; Podsakoff et al., 1996; Bass & Steidlmeier, 1999). It has been found to be correlated with employee altruism and to a good predictor for employees’ satisfaction, trust in leader, and not ultimately for higher performance (Podsakoff et al., 1996). Leaders who focus more on relationships and less on directing their employees demonstrate to have a participating approach to leadership (Hersey & Blanchard, 1969; 1974).

The *Democratic* leader promotes the contribute of individuals and produces involvement through participation. This type of leader seeks that everyone feels involved, in the phase of collecting ideas, and in the determination of objectives. In this way, s/he generates trust, respect, and commitment among people (Scully et al., 1994; Arnold et al., 2000). This participative style of leadership refers to a ‘leader’s use of team members’ information and input in making decisions (Arnold et al., 2000: 255). It is closed to the definition of Relational Transparency developed by Walumbwa and colleagues (2008). According to the authors, this type of leader ‘presents one’s authentic self [...] to others. Such behaviour promotes trust through disclosures that involve openly sharing information and expressions of one’s true thoughts and feelings while trying to minimize displays of inappropriate emotions’ (Walumbwa et al., 2008: 95). These leaders assign responsibility to the followers but still monitoring their advancements (Hersey & Blanchard, 1969; 1974).

On the other hand, the *Demanding* style defines challenging goals and demands high effort to achieve excellent results. This kind of leader is primarily concerned with the immediate task and imposes a fast pace, taking for granted to be immediately understood (Podsakoff et al., 1996; Arnold et al., 2000). Some studies have emphasized that this style can have positive impacts, such as to ‘perform less routine tasks, or are less professionally oriented, exhibit more courteousness to

their peers' (Podsakoff et al., 1996: 280). In fact, they are also labelled as leaders requiring High Performance Expectations (Podsakoff et al., 1996). However, this style can augment the transactional aspect of leadership, thereby it has to be adopted in certain contexts. According to Hersey and Blanchard (1969; 1974), a dissonant leader shows a telling style of leadership. These types of leaders tell their followers what to do and how to do it. However, providing task feedback could moderate the negative effect of this style (e.g. Podsakoff et al., 1996). In fact, some authors refer to this style as Task-oriented leadership (Bass, 1990; de Vries, 2012) because s/he organizes the activities the group have to develop and always remembers standards and deadlines (de Vries, 2012).

As for *Demanding* style of leadership, the *Authoritarian* style has more dissonant characteristics. It is characterized by an authoritarian leader who exercises his/her authority and strict control on every single detail, providing clear guidelines and requires obedience. S/he provides a closed control over collaborators' work and every decision is taken by the leader (Goleman, 2011). Also defined as the Strongman leader (Scully et al., 1994) this leader tends to tell the subordinate how to do the task, without explaining the reasoning behind. In a study that compared directive style of leadership with empowering style, Martin and colleagues (2013) found that directive behaviour of leadership increased work unit core task proficiency, but it does not promote a proactive behaviour among followers, since employees feel to be constantly monitored and they are discouraged to deviate from what has been told to do.

To operationalize these six styles, we tested a multidimensional model and a questionnaire (Behavioral Leadership Styles Evaluation- BELEADER). The accuracy of measurement of a construct is one of the most difficult task in conducting research in organizations (Hinkin, 1998). Indeed, a construct is a higher-order representation of something that is not a directly observable phenomenon. In order to represent the construct under analysis in as more precise way as possible, we followed specific criteria to provide a soundness measurement instrument. We then proceeded to measure (i) face validity, (ii), construct and internal consistency, (iii) criterion-related validity, (iv) convergent validity.

2.1 Step 1: Item Generation and scale validation

We followed Hinkin's (1998) suggestions in generating items for the Behavioral Leadership Styles Evaluation questionnaire. The first stage of scale development is to create a pool of items that can assess the construct under examination (Hinkin, 1998). In order to do that, we used both deductive and inductive approaches for item generation to assess which kind of style a leader adopt among the six styles. We generated a pool of six items for each style that potentially could represent our construct. Each item addressed a single behaviour (Hinkin, 1998) in order to not create confusions among respondents and to clearly set the boundaries among the styles. Initial content specification was based on an extensive literature review to test whether there were overlapping categories to discard or include in our model. We started with a larger set of items to allow removing of items during the development process (MacKenzie et al., 1991; Hinkin, 1998). The authors constantly gathered together and commented them. Next, items were evaluated on content and classified into six dimensions by two experts in the leadership field. Misclassifications or comments suggesting ambiguity led to generate 36 items.

2.2 Pilot test: face validity

A pilot test to verify the generation of 36 items and the six behavioural styles was conducted among three different samples of students (36 participants in total). We administered a set of random items that have been developed to measure various constructs, along with definitions of the six styles (Hinkin, 1998). We first involved a group of Master students and we asked to match items with their corresponding definition and to provide detailed explanations in case of mismatch between items and styles. We then content analysed their responses. We observed that some items were confused between *Supportive* and *Aggregating* styles and we asked them to provide us feedback and explanations. We used these results to refine the pool of items and based on these initial results, we agreed on not to add any other dimensions or items but to change some words or verbs to narrow down the behaviour expressed by the items. We proceeded with a second focus group with a different Master students to test the face validity of new items (DeVellis, 2003). We found an improvement in terms of match between items and styles. However, minor adjustments were needed since few items were still confused between *Supportive* and *Aggregating*. We re-adjusted verbs and we then tested the new items in a final round of focus group with a class of Phd students who did not know about the first two steps (Hinkin, 1998; DeVellis, 2003). The final focus group highlighted that the items fully captured the six styles of leadership, and we obtained content adequacy (Hinkin, 1998). In fact, we achieved an acceptable agreement index, namely the percentage of respondents who correctly classified items was more than 90 percent (Hinkin, 1998).

We finally elaborated the items into a questionnaire, whose order was randomized to avoid bias in further factor analyses.

2.3 Sample and procedure

Study 1 was conducted among a sample of respondents in Italy. To collect data, we followed a “snowball” procedure in order to have a diversified sample in terms of sectors, hierarchical level and jobs (Kalshoven et al., 2011). We distributed questionnaire by emails and participation was voluntary. We agreed on offering a final report as incentive to participate upon completion of the study. In total, we collected 112 questionnaires. Nine participants declined to provide demographic data and we discarded them from the final sample. Of the remaining 103, the study consisted of participants’ average age of 30.35 (SD of 10.18) with a minimum of 21 years old and a maximum of 63 years old; 61.02 per cent are male while 38.8 per cent are female (SD 0.49).

2.4 Measures

The BELEADER’s 36-item was used to measure the six styles of leadership. All items were administrated in Italian and we used a Likert-scale that range from 1 (*strongly disagree*) to 7 (*strongly agree*). We also collected personality traits information. Personality traits have been measured in accordance with the Five-Factor Model which have gained distinct prominence in the field (Pervin, 1994; John & Srivastava, 1999). To assess the personality traits, we relied on the Italian version of the Big Five Questionnaire (BFQ-2) (Caprara et al., 2008) which assess the 5 dimensions of personality and 10 sub-dimensions on the basis of 132 items rated on a 5-choice answer scale that ranges from complete disagreement (1 = *very false for me*) to complete agreement (5 = *very true for me*). The BFQ-2 showed a structure in agreement with the FFM and comparable to other personality trait measurement instruments like the CPS and the NEO-PI (Caprara,

Barbaranelli, Borgogni, & Perugini, 1993). We also collected demographic variables to see whether age and gender could be correlated.

2.5 Analysis: construct and internal validity

In order to achieve a sound multidimensional measure that holds under cross-validation, exploratory factor analysis was used as a first step. We performed an Exploratory Factor Analysis using the Maximum likelihood and we analysed the unidimensionality and the construct validity of the scales. For all leadership styles, we examined the inter-item correlation and the internal competency consistency (loading magnitude). We also calculated the Cronbach's alpha to test the reliability, which is the most commonly accepted measure in field studies (Hinkin, 1998). Spearman correlations have been used to analyse the association between the leadership style score and other related variables.

3. Results

3.1 Factor analysis and reliability

All inter-item correlations were significant and ranged from .30 to .65. To ensure a proper structure, the loading values for all items should be both large ($> .30$) and significant ($p < .05$) (Hair et al., 1998). In our study, all items show factor loadings ranging from .41 to .95, exceeding the recommended cut-off (factor loadings $> .40$; Hinkin, 1998). As for reliability, as shown in Table 2 the scales presented a satisfactory Cronbach's alpha ranging from .77 to .88.

Insert Table 2 about here

3.2 Relationship with personality traits: convergent validity

Previous studies have already stressed different relations between styles of leadership and personality traits (de Vries, 2012). Thereby, we also tested how styles of leadership are correlated to Big Five traits. Analysing the degree of linear association between the leadership styles and personality traits, which is reported in Table 3 we found that Extroversion has significant but low correlations with the *Aggregating* (.20 p -value $< .05$) and *Supportive* styles (.23 p -value $< .05$), and a moderate positive correlation with *Demanding* (.32 p -value $< .01$) and *Inspirational* (.49 p -value $< .01$). We found the same styles to be correlated with Conscientiousness. Agreeableness presented a low positive correlation with the *Democratic* style (.25 p -value $< .05$), and a moderate negative correlation with the *Authoritarian* style (-.41 p -value $< .01$). All *resonant* leadership styles were correlated with Openness, respectively *Aggregating* .26 (p -value $< .05$), *Supportive* .34 (p -value $< .01$), *Democratic* .22 (p -value $< .05$), and *Inspirational* .27 (p -value $< .01$).

It seems there is clear evidence between all *resonant* leadership styles with the trait of Openness to experience, confirming previous results that found an association between Emotional Intelligent leaders or transformational leaders and Big Five personality factors (Wong & Law, 2002; Cavazotte et al., 2012; Gardner & Stough, 2002). Consistently with previous results that stressed the correlation between openness and transformational leadership (Bono & Judge, 2004; Cavazotte et al., 2012), we however found that more than conscientiousness and agreeableness, a leader who drives intellectual stimulation can create a *resonant* environment, thereby maintaining

and renovating a positive organizational environment. In particular, our results confirm a previous study conducted on both leader-and subordinate ratings of leader personality and leadership styles that showed openness to experience as a strong predictor of leadership emergence and effectiveness (de Vries, 2012). However, our mixing results confirm that Emotional Intelligence can improve predictions of leadership more than the Big Five traits of personality, as already shown in other studies for emotional intelligence and performance (Cherniss, 2010). Thereby we argue that emotional intelligence might have an incremental validity when compared with the Big Five measures (Cherniss, 2010).

3.3 Relationship with demographic variables

We also examined the relationship between demographic variables and different styles of leadership, which are summarized in Table 3. Gender seems not to have a strong impact on the adoption of a specific leadership style, except for the *Authoritarian* style which is adopted significantly more by males. As for age, we found negative correlations with the *Aggregating* (-.27) and the *Supportive* (-.25) styles (p-value <.01), showing that older people tend to adopt less *resonant* behaviour coherent with previous studies (San Lam & O'Higgins, 2012; Densten & Sarros, 2012). They assumed that age and gender may be correlated to emotional intelligence and transformational leadership style, and our results seem partially to confirm such insight, especially for the age. For instance, the study conducted by Densten and Sarros (2012), found a correlation between age and contingent reward, thereby between older leaders and being rewarded, which is a behaviour at the heart of transactional leadership style. However, it would be beneficial to deepen whether more dissonant leaders are as well older leaders who tend to adopt more authoritarian and directive styles of leadership.

Insert Table 3 about here

3.4 Relationship with other variables: criterion validity

We also tested criterion validity (DeVellis, 2003) and we analysed whether the six styles of leadership could have an impact on other variables, for instance regarding the outcome of projects. By using a smaller sample of leaders (N=16) who guide construction sites in Italy, we distinguished individuals who perform above the average and below the average. We carried out the Mann-Whitney *U* test to determine the differences in means for the following dimensions about the last projects they developed: (1) profitability, (2) innovation of the project, (3) satisfaction among the members of the group, (4) project completed by deadline, (5) positive image of the company, (6) client satisfaction. We used variables already tested by Aga and colleagues (2016) to analyse the relationship between transformational leadership and project success. We send self-assessment questionnaires to middle-managers who are in charge of multiple construction sites in Northern Italy. On average, they have 12 team members and they constantly interact with different divisional and operational units to get tasks completed.

As far as profitability dimension concerns, we found that *Inspirational* and *Democratic* styles are distinctive style of leadership for managers whose performance is above average. Since construction field is a complex and long term working environment, an *Inspirational* leader, by

constantly remembering the final goal, can motivate employees to achieve that goals. S/he leverages on a vision to create a vivid image of the goals the company must accomplish. On the other hand, the *Democratic* style is a very participative behaviour, in which conflicts are resolved constructively. The *democratic* leader engages peers and employees by asking their opinions.

As regards the innovation dimension of projects, we found better performers adopt a *Supportive* style of leadership. This kind of style put emphasis on long-term development of others. Usually these leaders help individuals identify their unique strengths and weaknesses, by providing constant feedback. Innovation is a trial-error process. In order to enhance creativity within a group without undermining individuals' feelings, a leader needs to dialogue with his/her members and leave them autonomy and tolerate possible mistakes.

Regarding group satisfaction, the test revealed that *Inspirational* and *Supportive* styles of leadership are the styles mainly adopted by best performers. It is not surprising since both the two styles emphasize the importance of group in achieving any goal. For instance, an *Aggregating* leader creates harmony by developing relationships within his/her members, and s/he encourages the sharing of ideas and opinions to provide a sense of mutual trust and belonging.

As for the respect of deadline, we found that *Aggregating* and *Democratic* styles of leadership are the most significant ones. In order to get tasks completed on time, often under pressure and stress, the adoption of resonant styles of leadership seems to assure positive outcomes. In fact, both *Aggregating* and *Democratic* leaders work closely with their teams and keep a constant dialogue with them. The *Aggregating* and *Democratic* styles increase the cohesion of the group through the harmony and by involving each member of the group. In so doing, they guarantee that technicians and employees work synchronically, and hence respect the deadlines.

An increasing positive image of the company is, on the contrary, achieved by leaders who mainly adopt *Inspirational* and *Supportive* styles. We expected to find the *Inspirational* leader among the best performers. In fact, these leaders have a clear perspective in mind, but they are also good at to communicate it to others and they create enthusiasm among people.

Finally, the clients' satisfaction is provided by *Aggregating* leaders. These leaders promote harmony among followers and help to solve conflicts since they carefully listen to other people and they have good communication skills.

In sum, we provided empirical support to previous studies that attempted to understand the impact of different leadership behaviour on projects' success (Aga et al., 2016; Gundersen et al., 2012). We confirmed their results, by enlarging the scope of analysis and showing (i) *resonant* leadership styles have an impact on different dimensions of projects. As recently emphasized by Aga and colleagues (2016) empirical work on leadership in project management contexts are scarce and it usually considers transformational style of leadership; (ii) we deepen their contribution by matching and exploring the characteristics of a project to the style of leadership by showing that each style of leadership (e.g. *Inspirational* or *Supportive*) is likely to bring certain results and thereby to have an impact on the broader organizational context.

Table 4 summarizes the results obtained by Mann-Whitney *U* test.

Insert Table 4 about here]

4. Discussion and conclusion

4.1 Theoretical Contributions, Limitations, and Future Research Directions

The development of the Behavioral Leadership Styles Evaluation (BELEADER) questionnaire has implications for future research on leadership in the workplace. Despite the attention on the topic in recent years, empirical research on Emotional Intelligence, styles and leadership has been limited. We might explain this shortage of research with the difficulty to measure different styles and with the lack of a proper tool. This paper attempts to address this void by offering a tool that is theory-driven and that provides evidence in terms of reliability and validity. We found that all six styles (*Inspirational*, *Supportive*, *Aggregating*, *Democratic*, *Demanding*, and *Authoritarian*) are valid measures to test whether a leader is resonant or dissonant.

The findings of the current study provide an important glimpse into how resonant leadership provides better performance among employees and followers. As suggested by previous studies, Emotional Intelligent leadership is fundamental to reach positive outcomes, both at individual and organizational level (George, 2000; Boyatzis & McKee, 2005). However, with this study we enlarge the comprehension of leadership effectiveness by showing how different styles of leadership affects the organizational ecosystem. Moreover, we provided preliminary empirical evidence that resonant leadership style has more positive outcomes than dissonant leadership styles, which should be used carefully. In fact, this insight is also confirmed by the Mann-Whitney *U* test that proves how, at different degree, resonant leadership styles influence outcomes within construction sites, a working setting in which relationships among members are complex and collaboration between leaders and followers is crucial in order to reach a common and positive result.

This study has its limitations. First, the data which formed the study was less than 150 respondents, as contrarily suggested by Hinkin (1998). Therefore, there is a need to test the validity in future studies with a larger sample. Second, we only collected self-assessment questionnaire. Scale validation is a continuous process (Hinkin, 1998; DeVellis, 2003; Walumbwa et al., 2008;) and we aim to enlarge the sample in order to provide more empirical evidence on the scale. We thereby maintain that further research is necessary to assess the discriminant, convergent, and predictive validity of these styles with a much broader range of both sample and different contexts. We also intend to test whether our results of gender and age are consistent with our preliminary results. We could also hypothesize that those who are able to master different styles of leadership also have greater life and career satisfaction.

Furthermore, coherent with recent theorizing on leadership and the idea that *resonant* leaders are fundamental in creating a difference among their followers (Boyatzis & McKee, 2005; Goleman, 2011), we have chosen to develop a scale at the individual level of analysis. This individual level is not intended to rule out the potential for dyadic, group, or organizational levels of analysis for a type of more collective styles of leadership. As already encouraged by Walumbwa and colleagues (2008: 119) there is ‘ample evidence that leadership in general has strong theoretical and empirical bases to be conceptualized at multiple levels of analysis’. Following the same reasoning, we assume that different styles of leadership may be used in combination or adopted differently according to team or the context. Thereby, we ask for further research to examine the extent to which each style is used and its impact on different contexts. Another further line of research should concentrate their focus of analysis on the relationship between leadership and

performance in order to test whether certain styles of leadership (i.e. the *resonant* ones) have direct correlation with the performance, both at organizational and individual level. Finally, a fruitful area of research would consider the analysis of styles of leadership and the distinctive competencies possessed by leaders. For example, does an inspirational leader possesses more self-awareness, empathy, and integrity? On the other way around, does an authoritarian leader show more influence and achievement orientation? The answer to these questions would provide some beneficial insights to organizations in order to better comprehend the impacts of certain leaders over others.

4.2 Practical implications

This research has practical implications for organizations. In fact, our theoretical model and measure can serve as a practical means through which organizations seeking to provide resonant styles of leadership development and training can design programs and interventions, among both followers and leaders. It has been suggested how Emotional Intelligence can be learned and improved in adulthood by means of continuous reinforcement (Goleman, 1998; Boyatzis & Akrivou, 2006). Similarly, we suggest it is beneficial for a leader to understand which kind of style possesses and in which context to apply it. Given the increasing attention paid to how emotions affect the organizational environment and employees' performance (Boyatzis, 2009), our tool may be timely and relevant to practitioners. Its use could help organizations to identify those leaders that are dissonant and guide them to shift to a more resonant leadership style.

Tables

Table 1
The variables employed by other studies to measure different styles of leadership

Authors	Sample	Construct or dimension of styles of leadership	Variable that is significant correlated with the style of leadership
San Lam & O'Higgins, 2012.	Two large organisations in Shanghai, China, on a sample of 323 participants, including both managers and subordinate employees.	<i>Transformational leadership</i>	Employee Performance Organizational Commitment Job Stress Managers' Emotional Intelligence
Densten & Sarros, 2012.	635 Australian CEOs	<i>Articulates vision, fostering the acceptance of the group and intellectual stimulation</i> <i>Provides individual support</i> <i>High performance expectations</i> <i>Contingent reward</i>	Years in Position (Negative Correlated) Number of Employees Emphasis on Rewards Performance Orientation Innovation Self-Deception Impression Management Stability Years in Position Performance Orientation Self-Deception Age Years in Position Emphasis on Rewards
Neider & Schriesheim, 2011.	40 undergraduates (juniors and seniors) and 32 executive M.B.A	<i>Self-awareness</i> <i>Relational Transparency</i>	Relational Transparency Moral Perspective Balanced Processing General Satisfaction Supervision Satisfaction Organizational Commitment Moral Perspective and Supervision Satisfaction Balanced Processing Supervision Satisfaction

Wong & Law. 2002.	Students and nonteaching employees from a Hong Kong university	<i>Supervisor's emotional intelligence</i>	Job Perception Job Satisfaction Organizational commitment Citizenship Behaviour
Cavazotte, Moreno, Hickmann. 2012.	134 midlevel managers from a large Brazilian company that operates in the energy sector	<i>Transformational leadership</i>	Managerial Experience and Managerial Performance Extraversion Conscientiousness Openness Extroversion Neuroticism (Negative Correlated) Intelligence Emotional Intelligence
Gilbert, Horsman and Kelloway. 2016.	310 employees	<i>Transformational leadership</i>	Job Satisfaction
Alban-Metcalf & Alimo-Metcalf, 2000.	1,464 male and female managers, working in local government	<i>Transformational Leadership</i>	Job Satisfaction
Amundsen & Martinsen, 2014.	87 leaders, who worked in three different Norwegian municipalities, and 412 of their subordinates; a survey to 1,475 employees working in a large food company in Norway.	<i>Empowering Leadership</i>	Job Satisfaction
Aga, Noorderhaven, & Vallejo. 2016.	Survey of 200 development project managers in the Ethiopian Non-Governmental Organization (NGO)	<i>Transformational leadership</i>	Team-Building
de Vries. 2012.	81 leaders with 55 with more than one subordinate	<i>Subordinate-rated leadership</i> <i>Ethical leadership</i> <i>Subordinate-rated leadership</i> <i>Charismatic leadership</i> <i>Subordinate-rated leadership and Supportive leadership</i> <i>Subordinate-rated leadership</i> <i>Task-oriented leadership</i>	Honesty-Humility Extraversion Agreeableness Conscientiousness
Gardner & Stough. 2002.	Questionnaire to 110 senior level managers.	<i>Transformational leadership</i>	Emotional Intelligence

Kissi, Dainty, Tuuli. 2013.	Survey to 112 project managers in a UK project-based organization	<i>Transformational leadership</i>	Championing Behaviour Climate for Innovation Project Performance
Martin, Liao, & Campbell. 2013.	Field experiments in United Arab Emirates (95 leaders)	<i>Directive leadership</i> <i>Empowering leadership</i>	Satisfaction with Leader Task Proficiency Proactive Behaviours Satisfaction with Leader Task Proficiency
Palmer, Walls, Burgess, & Stough. 2001.	Questionnaire to 43 participants employed in management roles	<i>Total transformational</i>	Idealized Influence (Active) Idealized Influence (Behavior) Inspirational Motivation Intellectual Stimulation Individualized Consideration Contingent Reward

Table 2
Leadership Styles Scale: descriptive statistics and internal consistency reliabilities

Scale	M	SD	α
AG1	5.57	1.22	.86
AG2	5.64	1.22	
AG3	5.79	1.12	
AG4	5.72	1.19	
AG5	5.43	1.46	
AG6	5.89	1.11	
AUT1	5.11	1.41	.79
AUT2	4.14	1.40	
AUT3	2.94	1.60	
AUT4	5.04	1.37	
AUT5	3.97	1.48	
AUT6	4.36	1.61	
*DEM1	4.73	1.54	.83
DEM2	5.21	1.38	
DEM3	5.33	1.52	
DEM4	5.48	1.32	
DEM5	4.82	1.40	
DEM6	4.92	1.37	
S1	5.09	1.44	.88
S1	5.57	1.31	
S3	5.17	1.27	
S4	4.72	1.36	
S5	4.97	1.19	
S6	5.06	1.45	
D1	5.59	1.14	.83
D2	6.03	1.06	
D3	5.83	1.03	
D4	6.02	0.96	
D5	5.81	0.96	
D6	5.75	1.16	
I1	5.67	1.23	.81
I2	4.81	1.42	
I3	5.43	1.25	
I4	4.88	1.23	
I5	5.46	1.15	
I6	5.26	1.44	

* DEM as for Demanding
style of leadership

Table 3
Descriptives and correlations of study and control variables

Scale	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Aggregating	5.74	.89	-												
2. Authoritarian	4.37	1.23	.24**	-											
3. Demanding	5.28	1.01	.40**	.63**	-										
4. Supportive	5.19	1.09	.71**	.33**	.37**	-									
5. Democratic	5.95	0.78	.52**	-.18*	.22*	.47**	-								
6. Inspirational	5.27	.98	.55**	.41**	.52**	.55**	.36**	-							
7. Extroversion	53.91	9.49	.20*	.12	.32**	.23*	-.03	.49**	-						
8. Agreeableness	55.83	10.31	.14	-.41**	-.17	.12	.25*	-.03	.19	-					
9. Conscientiousness	55.97	9.36	.20*	.16	.32**	.22*	.18	.23*	.09	-.09	-				
10. Emotional stab.	49.72	9.76	-.04	-.10	-.20	.07	-.07	.04	.27**	.34**	-.28**	-			
11. Openness	56.36	7.81	.26*	-.15	.20	.34**	.22*	.27**	.42**	.26**	.15	.25*	-		
12. Gender			-.11	-.24*	.04	-.16	.05	-.07	.19	-.08	.06	.02	.21	-	
13. Age	31	10.18	-.28**	-.01	.07	-.33**	-.13	-.12	-.04	-.29*	-.02	-.25*	-.29*	.57**	-

* p < .05; ** p < .01.

Table 4
Leadership Styles Scale: Mann-Whitney *U* test

	Frequency average	z-values ¹	Sig.
<i>Profitability</i>			
Inspirational	5.37	-2.732	***
Supportive	5.43	-,109	
Aggregating	6.06	-1,213	
Democratic	5.96	-2,240	**
Demanding	4.94	-,764	
Authoritarian	4.71	-,109	
<i>Innovation</i>			
Inspirational	5.37	-,089	
Supportive	5.43	-1,430	*
Aggregating	6.06	-,810	
Democratic	5.96	-,491	
Demanding	4.94	-,715	
Authoritarian	4.71	-,180	
<i>Group satisfaction</i>			
Inspirational	5.37	-2,368	***
Supportive	5.43	-2,145	**
Aggregating	6.06	-2,384	***
Democratic	5.96	-,982	
Demanding	4.94	-1,563	*
Authoritarian	4.71	-1,439	*
<i>Deadline respect</i>			
Inspirational	5.37	-1,190	
Supportive	5.43	-,050	
Aggregating	6.06	-1,348	*
Democratic	5.96	-1,585	*
Demanding	4.94	-,347	
Authoritarian	4.71	-,349	
<i>Positive image of the company</i>			
Inspirational	5.37	-1,608	*
Supportive	5.43	-2,264	**
Aggregating	6.06	-1,260	
Democratic	5.96	-,953	
Demanding	4.94	-1,012	
Authoritarian	4.71	-,540	
<i>Client satisfaction</i>			
Inspirational	5.37	-1,309	*
Supportive	5.43	-,912	
Aggregating	6.06	-1,942	**
Democratic	5.96	-1,310	*
Demanding	4.94	-,114	
Authoritarian	4.71	-,689	

¹Notes: Z-values from Mann-Whitney *U* Test. * $p < 0.10$; ** $p < 0.05$ (one tailed)

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