

The impact of leadership preferences and personality traits on employees' motivation

Leadership and
personality
impact on
motivation

Cinzia Calluso and Maria Giovanna Devetag

Department of Business and Management, LUISS University, Rome, Italy

Received 27 January 2023
Revised 29 September 2023
24 January 2024
21 March 2024
Accepted 24 March 2024

Abstract

Purpose – The COVID-19 pandemic has contributed to making workers more uncompromising with respect to issues such as quality of workplace relations and work-life balance. Hence, motivation and leadership style assume a key relevance for keeping the workforce engaged. We hypothesize that individuals may exhibit different preferences for motivational drivers and for leadership style, and that these two sets of preferences might be correlated with each other and with employees' personality traits.

Design/methodology/approach – Here, we empirically investigate the relationship between leadership style and motivation, by also hypothesizing the possible contribution of personality traits. An online survey was developed and distributed to 150 employees or interns/trainees to collect measures related to their preference for leadership, their motivational drivers, as well as their personality traits. The data were analyzed by means of mediation and moderation analyses to disentangle the three-level relationship existing between these constructs.

Findings – Our results suggest that indeed there exists a relationship between preferences for leadership style and motivational drivers. Furthermore, one of these relationships appears to be critically mediated by specific personality traits.

Originality/value – This work is the first, to our knowledge, empirically testing the existence of a three-level relationship between leadership preferences, motivation and personality traits of employees and to contribute to disentangle their reciprocal influences.

Keywords Democratic leadership, Authoritarian leadership, Internal motivation, Personality traits, HRM, Organization

Paper type Research paper

Introduction

Nowadays, companies are facing an increasingly complex and unpredictable environment. Hyper competition, globalization, digital revolution and sustainability are amongst the major trends arising in the corporate scenario which, along with supply chain disruptions, increasing energy prices, high inflation rates and global health threats, are contributing to create considerably difficult challenges worldwide. The increased complexity has contributed to make human resources more and more demanding; hence, attracting and retaining talents has become a key source of strategic advantage as never before (Alghazo and Al-Anazi, 2016). Traditionally, companies have always attempted to attract and retain their talents by offering competitive salaries and benefits such as housing, health insurance, free gym and similar; however, especially in the post-COVID-19 scenario, such incentives appear to be no longer enough. A testimony of this change is represented by the so-called "Great Resignation" and "Quiet Quitting" phenomena. The first refers to the wave of work resignations that started in spring 2021; indeed, it has been reported that 47 million Americans voluntarily quit their jobs by the end of 2021 (Fuller and Kerr, 2022). Quiet



The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper. The authors received no financial support for the research, authorship and publication of this article. The authors thank Gian Luigi Cappuccio for his help in data collection. Data are available at: <https://www.doi.org/10.17632/dscr5n3jps.1>.

quitting, on the other hand, refers to the limited commitment of employees in performing their job duties, refraining from performing any activity that is not specified in their job description: it is estimated that 50% of the US workforce is currently represented by disengaged workers, and the numbers are rising considerably (Formica and Sfodera, 2022). Both phenomena are the aftermath of the profound dissatisfaction of workforce that has found in the COVID-19 pandemic a catalyst for change (Sull *et al.*, 2022).

In such a scenario, keeping employees engaged and motivated has assumed a never greater importance; indeed, human resources studies pretty much unanimously suggest that motivation remains a key driver to keep the workforce engaged. However, despite motivation being a paramount concept in human resource management, it is also an elusive and multifaceted construct, which researchers have approached from many perspectives (Alghazo and Al-Anazi, 2016). An increasing body of evidence has pointed to leadership as one of the elements that may contribute to increase employees' motivation. Indeed, literature suggests that leadership is a social activity that influences employees' voluntary participation to accomplish organizational goals (Khaliq *et al.*, 2021), crucially impacting upon employees intrinsic and extrinsic motivation (Li *et al.*, 2012). Importantly, literature has shown how both motivation and leadership appear to have a pivotal and consistent impact upon performances and the ability of an organization to achieve its specific goals (Hanifah *et al.*, 2014; Safitri and Patrisia, 2019), as well as in keeping the workforce engaged (Batista-Taran *et al.*, 2009; Popli and Rizvi, 2016; Ugaddan and Park, 2017).

In the current work, we contribute to this discussion by studying the relationship between employees' preferences for leadership style and their motivation by also considering the possible role played by employees' personality traits. In our view, in fact, previous literature has not paid sufficient attention to investigating how employees' heterogeneity (for example in goals, personality traits, family situation, career stage, etc.) may impact upon organizationally relevant variables such as motivation and preference for leadership styles. However, several empirical studies highlight that neglecting employees' specificities might be a mistake. For example, a recent work showed that despite empowerment has the highest influence on organizational climate, not every employee responds equally well to various work climate drivers, hence highlighting the importance of employees' profiles to customize HRM strategies (Lamberti *et al.*, 2022). Hence, here we focus on one important dimension of employees' heterogeneity which is given by their different personality traits, under the hypothesis that, due to such differences, employees may respond differently to motivational drivers and leadership styles. We do that under the working hypothesis that people displaying different personality traits may be motivated by different motivational drivers, which in turn can be differently influenced by preferences for leadership style. Indeed, personality traits have been shown to play a role in occupational choices: for example, John and Thomsen (2014) have shown that there exist occupational-specific patterns based on workers' personality profiles – namely, specific personality profiles tend to end up working in specific sectors – possibly because identical personality traits are differentially rewarded across different occupations, thus playing a motivational role. Along the same lines, Glomb and Welsh (2005) analyze the role of personality similarities/dissimilarities in the supervisor-subordinate dyads, showing that these features play a role in subordinates' satisfaction with their leaders. Thus, here we attempt to go one step further by studying the three-way relationship between employees' personality, motivational drivers and preferences for leadership; in particular, the study aims at disentangling whether individual dispositional differences may impact upon employees' motivational drivers, and preferences for leadership, hence mediating or moderating the link between these variables.

We believe that identifying the possible moderating role of employees' personality traits in influencing the relationship between motivational drivers and preferences for leadership may

fill an important gap in the literature on both leadership and motivation, as well as provide insight on how leadership styles can be tailored to the specific characteristics of each employee to maximize performance and engagement.

The rest of the paper is organized as follows: first, we provide a literature review related to the main concepts of leadership and motivation, then we provide the methods and results of our study, and we conclude with a discussion of our finding and their implication, along with limitations and directions for future research.

Literature review

Leadership

The concept of leadership has been subject to multiple interpretations. One way of describing leadership is to define it as a process of social influence, which maximizes the efforts of others toward the achievement of a goal (Bhugra *et al.*, 2013). Over the years research has produced a variety of leadership theories – from trait theory, to behavioral and contingency theory, until contemporary approaches such as transactional, transformational and others (Buble *et al.*, 2014).

Trait or dispositional theory of leadership – regarded as the most widely accepted theory until the 1940s to 1950s – stems from the famous “great man theory,” according to which history is the sum of all the actions of great men (Carlyle, 1840). This idea was further expanded by Galton (1869), who argued that great leaders are the results of specific immutable traits, thus affirming the belief that leaders are born, not done. Such an approach was subsequently challenged by Stogdill (1948), who suggested that a leader who is capable of leading in some specific circumstances, may be inappropriate in others, favoring the emergence of the new behavioral and situational theories of leadership, which soon dominated the scenario. Research on behavioral leadership stems from a line of work aimed at observing and categorizing, within a taxonomy, a series of relevant leaders’ behaviors (see, among many, the managerial grid model by Blake and Mouton, 1964). The situational and contingencies theories, on the other hand, support the idea that there is no “one best way” of being a leader, rather the best approach stems from the analysis of the specific circumstances or environment that the leader must face. Here, the most famous contributions are the Fiedler contingency model (Fiedler, 1964) and the Vroom-Yetton decision model (Vroom and Yetton, 1973). Finally, more contemporary approaches are those related to the transactional and transformational leadership (Avolio *et al.*, 1991). In summary, the question of what makes a good leader and which leader characteristics are better suited to enhance organizational performance is still a controversial one.

Importantly, looking at the plurality of models in the literature, it is possible to notice how the general features of leadership models appear extremely similar between one another, despite the different names used. See, for example, the dichotomy between directive/autocratic vs participatory/democratic (Heller and Yukl, 1969; Likert, 1967), relationship-oriented vs task-oriented (Fiedler, 1967), consideration vs initiating structure (Korman, 1966), theory X vs theory Y (McGregor, 1969), managers vs leaders (Kotter, 1988), transactional vs transformational (Bass, 1985); indeed, it has been suggested that all these models end-up describing styles whose similarities outweigh the differences (Den Hartog *et al.*, 1997; Quinn, 1988). Indeed, all of them are characterized by two major approaches to leading: one more authoritative and directive, and one more democratic and oriented to growth and vision. Nevertheless, these approaches represent the extreme of a continuum, rather than two fixed and extreme ways of leading. Hence, in the current paper we have decided to refrain from testing a specific model over the other, rather we have measured leadership across the authoritative vs democratic continuum – first theorized by Lewin (1939) – that, in our view, represent the point of convergence across the various existing theories. Furthermore, because

the analysis is fully centered on the employees' perspective, we assessed their preference for leadership – namely, how the ideal leader would behave to meet their needs – rather than investigating which style characterized their actual supervisor.

Motivation

Motivation is a multifaceted construct; hence, many different definitions have been formulated in the literature. Motivation is a concept that should explain why people initiate, continue or terminate a certain behavior. So, motivational states represent agents' inner forces determining engagement in goal-directed behavior. Such forces are generated by various mental states, as for example desire, belief, intention and so on ([Wasserman and Wasserman, 2020](#)). A broad distinction is the one related to the dualism between intrinsic and extrinsic motivation. Intrinsic motivation entails the internal driver that guides action, thus it is related to "doing something for its own sake." For example, I can read a book for the pure enjoyment of doing so. On the other hand, extrinsic motivation deals with the pursue of an instrumental goal: for example, if I am an editor, I will be paid for reading books, hence, reading books also has the instrumental goal of getting a salary ([Reiss, 2012](#)).

The obvious relevance of motivation in the context of work and organizational psychology has given rise to a multitude of theories and approaches. Content theories provide an explanatory approach to motivation attempting to describe why people act in certain ways. Among these theories, the famous Maslow's hierarchy of needs postulates that people are mostly driven by a series of hierarchical needs ([Maslow, 1943](#)). Herzberg's two-factor theory postulates that there exist two distinctive factors that can influence work satisfaction, the hygiene factors – necessary to avoid dissatisfaction – and the motivators – conditions that make a job intrinsically rewarding (i.e. recognition, responsibility etc.) ([Herzberg, 1959](#)). Alderfer's ERG theory expands the work of Maslow, dividing needs into three main groups (i.e. existence, relatedness and growth and introduces the concept of frustration-regression ([Alderfer, 1969](#)).

A second group of theories are process theories, which are aimed at explaining how motivation occurs in individuals. Among these theories, Skinner reinforcement theory has been used to understand how to modify people's behavior through positive/negative reinforcement and punishment ([Skinner, 1938](#)). The goal setting theory of motivation states that in order to achieve better performances it is necessary to set challenging and specific goals that will push employees to do their best, along with a system of feedbacks ([Locke, 1968](#)). Finally, the expectancy theory argues that every performance is linked with the expectations associated with its outcome, along with the appeal of such outcome; the latter in turn is influenced by three different parameters: expectancy, valence and instrumentality ([Vroom, 1964](#)).

In the current paper, motivation was investigated by adopting an integrative model, i.e. a metatheory, built on past research efforts, namely, the motivational sources theory ([Leonard et al., 1995, 1999](#)). Such model, by integrating literature from sociology and psychology fields, identified five major sources of motivation. The choice of this model comes from the idea that motivational drivers may show a stronger link with individuals' psychological characteristics, as this model is built by integrating traditional motivation theories with self-concept theory ([Leonard et al., 1995, 1999](#)).

Effect of leadership on motivation

The role of leaders in motivating employees has not always been the focus of attention, rather, for a long time, leaders' main objective was relegated to setting the firm strategic vision, while relationship building was deemed as less relevant ([Kuczmarski and Kuczmarski, 1995](#)). Nevertheless, any organization is unlikely to succeed when leaders are not able to motivate

their subordinates, hence leading researchers to investigate more thoroughly the link between these fundamental dimensions of the organization. Various studies have shown that different styles of leadership have a differential impact upon motivation; for example, [Alghazo and Al-Anazi \(2016\)](#) found that participative and transformational leadership has a better effect on employee motivation compared to the transactional style. Similar results have also been found in other studies ([Elzahiri, 2010](#); [Haywood, 2014](#); [Masi and Cooke, 2000](#); [Rawat, 2015](#)). Along the same lines, [Mengesha \(2015\)](#) found a positive relationship between employees' motivation and the transformational leadership, and to a lesser extent to transactional leadership, while a negative impact on employees' motivation was found for the laissez-faire approach. [Khaliq et al. \(2021\)](#) found that leadership has a positive impact on employees' motivation and work culture, and that this effect is more pronounced for charismatic leadership as compared to traditional and rational-legal style.

Rationale of the study

Based on the evidence revised above, in this study we aimed at contributing to the discussion about the relation between leadership and motivation, by also investigating the additional role of employees' personality traits. Indeed, despite earlier research having investigated these dimensions separately, to the best of our knowledge, this is the first study to investigate their joint interactions.

The studies revised above show a relationship between leadership style and motivation, which however varies according to the reference model used to investigate leadership and motivation. In order to investigate this relationship in a broader way, here we focused our efforts on the investigation of the ideal features of a leader, i.e. employees' preferences for leaders' approach, in a continuum between authoritarian and democratic leadership, which, in our view, provides the best synthesis across the various leadership models; further, we explored the link between such preferences and employees' motivational drivers.

This framework was adopted because, in our view, it is likely that certain leaders' features may be preferred based on the motivational driver that is more pronounced at the individual level. For example, an employee high on instrumental motivation (namely, by extrinsic tangible outcomes, i.e. monetary rewards, bonuses, promotions etc.) may be more motivated by a leader that has an authoritative approach, clearly directing people in the operational aspects of their job, and who uses rewards and punishments to direct people toward the expected outcomes. Conversely, employees high on internal self-concept-based motivation may prefer inspiring leaders that are able to create vision.

Finally, this investigation entails an additional element which is represented by personality traits. The rationale for including this dimension is rooted in the idea that individual characteristics, such as personality traits and employees' psychological features may affect the relationship between leadership preferences and motivation, for example mediating or moderating it. Hence, investigating the role played by personality traits on the inclination toward specific motivational drivers, as well as on their impact on the leadership-motivation relationship can help to further deepen our understanding of these fundamental organizational phenomena; furthermore, such understanding can also contribute to identify leverages that can help improving employees' motivation and engagement, especially in light of the current phenomena of great resignation and quiet quitting.

Methods

Participants

Data were collected between March and April 2022. A total of 173 participants took part in the study; however, 23 were excluded due to incomplete responses ($N = 14$) or based on the

screening questions ($N = 9$, see details below). Thus, the final sample was constituted by 150 participants (82 F; mean age: 26.75 ± 9.21 s.d.). Respondents provided their informed consent in accordance with the 1964 Declaration of Helsinki and the APA ethical standards in the treatment of our human sample prior participation. Furthermore, they were informed of their right to discontinue participation at any time. Participants were recruited through social media (i.e. LinkedIn, Facebook, Instagram) – by posting a message describing the general aim of the study and asking people to participate by filling the questionnaire provided in the link – and by means of direct/indirect contact – namely, by personal messages and emails with the same content of the social media posts. The questionnaire was administered via Google Forms.

To ensure that the sample was representative of the population under investigation – namely, employed people that worked under the supervision of a leader/manager/superior – at the beginning of the questionnaire two screening questions were included, asking (i) whether respondents were employed and (ii) whether they worked under a boss supervision. Hence, those who answered “no” to any of those questions were thanked for their willingness to participate and dismissed. Details of the characteristics of the final sample are provided in [Table 1](#).

Procedure

After providing the informed consent, participants were asked to provide some demographic information (i.e. age, gender, job position). Then, the brief HEXACO Inventory (BHI; [De Vries, 2013](#)) was administered to obtain a non-clinical assessment of participants’ personality traits. This scale was followed by the administration of the leadership preference scale (LPS; [Bhushan, 1995](#)) and finally, the motivation sources inventory (MSI; [Barbuto and Scholl, 1998](#)) was administered.

Questionnaires. The 24-item brief HEXACO inventory (BHI; [De Vries, 2013](#)) is a shorter version of the traditional HEXACO model ([Ashton and Lee, 2009](#)) that allows to measure the six dimensions (i.e. honesty-humility, emotionality, extraversion, agreeableness, conscientiousness and openness to experience) using four items per domain. The honesty-humility scale indicates a personality that avoids manipulating others for personal gain, feels little temptation to break rules, refrains from wealth and luxuries and feels no special entitlement to elevated social status. The emotionality scale is characterized by fear of physical dangers, anxiety in the face of life’s stresses, need for emotional support from others, high empathy and sentimental attachments with others. The extraversion scale displays features of positive feelings about oneself, confidence, enjoyment of social gatherings and interactions, enthusiasm and energy. The agreeableness indicates the tendency to forgive the wrongs, low inclination toward judging others, willingness to compromise and cooperate. The conscientiousness scale is characterized by the tendency to organize time and the physical surroundings, work in a disciplined way toward one’s goals, strive for accuracy and perfection, and careful deliberation in making decisions. Finally, the openness to experience scale displays features related to the enjoyment of the beauty of art and nature, curiosity

	N	Age	Gender
Middle-manager	3 (2%)	60.33 ± 7.85	2F, 1M
Employee	64 (43%)	30.43 ± 10.16	30F, 34M
Intern	83 (55%)	22.70 ± 2.26	50F, 33M

Table 1.
Sample description

Note(s): Number of participants, age and gender information per category
Source(s): Own production

toward various domains of knowledge, high use of imagination and interest in unusual ideas or people.

The Leadership Preference Scale (LPS; [Bhushan, 1995](#)) consists of thirty items to measure the individual preference for leadership style; higher score on the scale indicates greater preference for democratic leadership, while lower scores indicate a preference for authoritarian style ([Bhushan, 1971](#); [Bhushan and Verma, 1972](#)).

Finally, the Motivation Sources Inventory (MSI; [Barbuto and Scholl, 1998](#)) includes five subscales with six unique loading items per subscale that capture the domains of interest for each source of motivation, namely, intrinsic process, instrumental, external self-concept, internal self-concept and goal internalization. The intrinsic process motivation indicates that the work itself acts as the incentive because employees enjoy what they are doing. The instrumental motivation indicates that workers are motivated when they perceive that their behavior will lead to certain extrinsic tangible outcomes (i.e. monetary rewards, bonuses, promotions etc.). The external self-concept-based motivation indicates that people are rewarded by external contingencies, hence, they behave in a way that satisfies the reference group member with the goal of achieving acceptance, status or approval. The internal self-concept-based motivation indicates that workers are rewarded by the ability to comply with certain internal standards of traits, competencies and values that become the basis for the ideal self, hence, the person is then motivated to engage in behaviors that reinforce these standards and achieve higher levels of competency. Finally, the goal internalization motivation is when the individuals adopt attitudes and behaviors because they are congruent with their personal value systems; hence, they believe in the organizational goals and are motivated towards reaching them.

Leadership and
personality
impact on
motivation

Analyses

Questionnaires were scored to determine, for each participant, measures of personality, preference for leadership style and motivation. For the MSI, the ratio analysis method was employed ([Barbuto, 2001](#)). Then, the scores obtained for each scale and subscale were z-transformed prior to statistical testing. Furthermore, a reliability analysis (Fleiss's Kappa) was conducted across the various scales and subscales.

As a first step, a series of Pearson's correlations were computed across the measures of interest, to explore the possible relationships existing between motivation and leadership and personality facets. Correlations were FDR corrected for multiple testing ([Benjamini et al., 2006](#)).

Secondly, based on the results of these correlational analyses, a series of mediation and moderations analyses were conducted using the package PROCESS ([Hayes, 2015](#)) for SPSS ([IBM SPSS, 2021](#)). In particular, the different measures of motivation (i.e. intrinsic process, instrumental, external self-concept, internal self-concept and goal internalization) were used as dependent variables, the leadership score was used as independent variable, while the personality dimensions of interest were treated either as mediators or moderators in the analyses. Further, in all the analyses, participants' age was included as a covariate.

Results

[Table 2](#) displays the means and standard deviations of the raw scores collected across all the scales and subscales, the comprehensive results of the Pearson's correlations along with the results of the reliability analyses of the scales. This latter analysis indicates that all scales appeared to be internally valid ($p < 0.001$), with the only exception of the subscales emotionality ($p = 0.30$) and openness to experience ($p = 0.90$) of the HEXACO.

The first step of the analysis was aimed at exploring the relationships between the various sources of motivation and leadership preference and personality traits. With respect to

Table 2.
Descriptive statistics

	Mean	SD	z	1	2	3	4	5	6	7	8	9	10	11	12
1. Intrinsic motivation	0.17	0.03	10.90***	–											
2. Instrumental motivation	0.20	0.03	13.80***	-0.16†	–										
3. External self-concept motivation	0.18	0.03	15.32***	0.06	-0.18†	–									
4. Internal self-concept motivation	0.24	0.03	16.18***	-0.50***	-0.20*	-0.40**	–								
5. Goal internalization motivation	0.21	0.04	20.91***	-0.34***	-0.39***	-0.42***	0.03	–							
6. Leadership preference	96.89	6.61	35.92***	-0.27***	-0.08	-0.09	0.33***	0.09	–						
7. Honesty-humility	13.70	2.81	2.11*	-0.20*	-0.08	-0.28***	0.12	0.39***	0.12	–					
8. Emotionality	11.04	2.43	1.04	-0.13	-0.06	0.08	0.05	0.04	0.09	0.08	–				
9. Extraversion	15.50	2.74	4.47***	-0.01	-0.07	-0.26***	0.25**	0.07	0.25***	0.13	-0.33***	–			
10. Agreeableness	12.63	2.40	3.29***	-0.03	-0.08	0.14	0.05	-0.07	0.10	-0.12	-0.18*	0.15	–		
11. Conscientiousness	12.56	2.45	2.62***	-0.16	0.11	0.05	0.10	-0.10	-0.00	0.02	0.04	0.04	-0.08	–	
12. Openness to experience	13.17	2.07	0.07	0.12	0.11	-0.136	-0.04	-0.04	0.05	-0.17	-0.16	0.10	-0.06	0.02	–

Note(s): Means, standard deviations, standard score (z-score) for Fleiss's Kappa and correlations across all the variable of interest. Asterisks indicate the level of statistical significance FDR corrected for multiple testing *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, † $p < 0.1$

Source(s): Own production

motivation, the results showed that the intrinsic process dimension of the scale was negatively associated with the leadership preference ($r = -0.20, p < 0.001, p\text{-adj} < 0.01$) indicating that a higher preference toward democratic leadership is associated with a lower intrinsic reward derived from the job. Secondly, with respect to personality measures, results show that intrinsic motivation is negatively associated with honesty-humility ($r = -0.20, p < 0.05, p\text{-adj} = 0.06$) and conscientiousness ($r = -0.16, p < 0.05, p\text{-adj} = 0.13$); however, these correlations did not survive the correction for multiple testing (i.e. see $p\text{-adj}$). Instrumental motivation was not significantly associated with any of the personality traits, nor with leadership preference (see [Table 1](#) for detailed results). The external self-concept motivations appeared to be negatively correlated with the honesty-humility ($r = -0.28, p < 0.001, p\text{-adj} < 0.001$) and extroversion ($r = -0.26, p < 0.001, p\text{-adj} < 0.001$) personality traits, hence indicating that people low in these traits are highly motivated by the chance of gaining status and external approval. The internal self-concept motivation, on the other hand, shows a positive correlation with the extraversion ($r = 0.25, p < 0.001, p\text{-adj} < 0.01$), and with the leadership preference ($r = 0.33, p < 0.001, p\text{-adj} < 0.001$) indicating that extrovert people and people with a high preference for democratic leadership are highly motivated by the chance of gaining competencies and reach internal goals and expectations. Finally, the goal internalization motivation was positively correlated with the honesty-humility trait ($r = 0.39, p < 0.001, p\text{-adj} < 0.001$), suggesting that people with these personality characteristics feel motivated by internalizing and aligning with organizational goals.

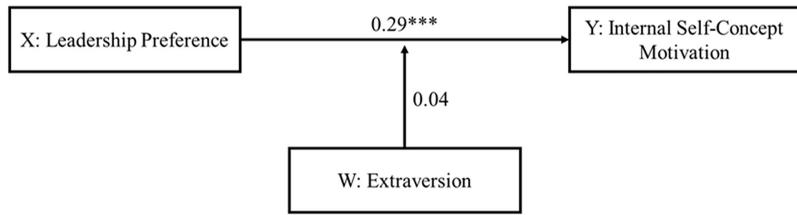
With respect to the leadership preference, along with the correlations with the sources of motivation, already presented above (i.e. intrinsic motivation and internal self-concept motivation), the leadership preference scale also showed a positive correlation with the extraversion personality trait ($r = 0.25, p < 0.001; p\text{-adj} < 0.01$); this result suggests that people higher in extraversion also showed a more pronounced preference for democratic leadership.

Moderation and mediation results

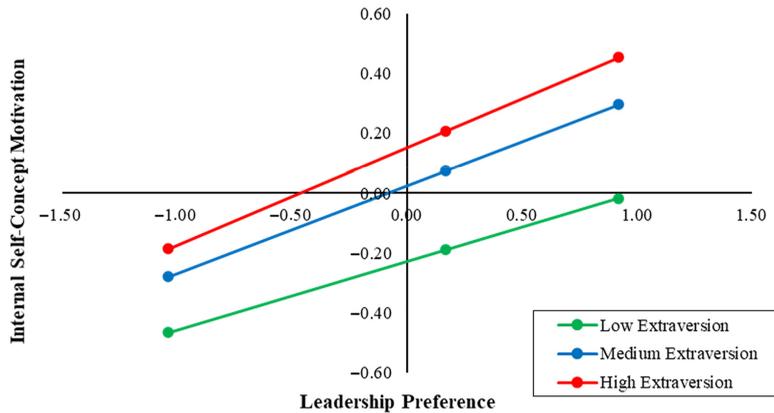
Based on the results of the exploratory correlational analysis, in a second step, we aimed at further characterizing the relationship between motivation, leadership preference and personality by conducting some moderation and mediation analysis. The results of the correlational analyses showed that the only measures that appeared to be significantly correlated with one another were the internal self-concept motivation, leadership preference and the extraversion personality trait. Hence, these measures represented the starting point for both the moderation and mediation approach.

Firstly, a moderation was conducted using the internal self-concept motivation as dependent variable, the leadership preference as independent variable and the extraversion personality trait as moderator; further, age was included as covariate in the analysis ([Figure 1](#)). The model was overall significant ($R = 0.37, R^2 = 0.14, F = 5.73, p < 0.001, f^2 = 0.16$) and has a medium effect size. In particular, the main effect of the leadership preference was found significant ($\beta = 0.29, t = 35228.00, p < 0.001, LLCI = 0.13, ULCI = 0.45, \eta^2 = 0.12$) with a medium effect size; the main effect of the extraversion personality trait was also significant ($\beta = 0.17, t = 21580.00, p < 0.05, LLCI = 0.01, ULCI = 0.34, \eta^2 = 0.05$) but with a small effect size. More importantly, the interaction effect failed to reach statistical significance ($\beta = 0.04, t = 0.58, p = 0.56, LLCI = -0.11, ULCI = 0.20, \eta^2 = 0.01$), hence indicating that the extraversion personality trait did not exert a modulatory effect of the relationship between leadership and internal self-concept motivation ([Figure 2](#)). Finally, the effect of age (covariate) was not statistically significant ($\beta = -0.01, t = -0.94, p = 0.35, LLCI = -0.03, ULCI = 0.01$) (see [Table 3](#)).

As a second step, we tested whether the extraversion personality trait could instead exert a mediation effect in the relationship between leadership preference and internal self-concept



(a)



(b)

Figure 1. Moderation model (a) and results of the interaction effect of leadership preference and extraversion personality on the internal self-concept motivation (b)

Note(s): *** $p < 0.001$

Source(s): Own production

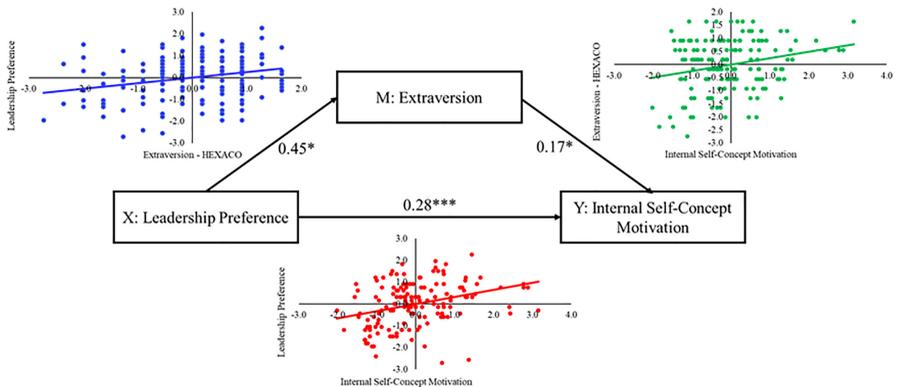


Figure 2. Mediation model run with internal self-concept motivation as a dependent variable, leadership preference as an independent variable and the extraversion personality trait as mediator

Note(s): * $p < 0.05$, *** $p < 0.001$

Source(s): Own production

motivation. Thus, a mediation analysis with internal self-concept motivation as dependent variable, the leadership preference as independent variable, the extraversion personality trait as mediator and age as covariate was computed. The results indicated that the model is overall significant ($R = 0.37$, $R^2 = 0.14$, $F = 75.66$, $p < 0.001$, $f^2 = 0.16$) and has a medium effect size. Specifically, the main effect on the leadership preference was significant ($\beta = 0.28$, $t = 34840.00$, $p < 0.001$, $LLCI = 0.12$, $ULCI = 0.44$, $\eta^2 = 0.11$), and displayed a medium effect size. The main effect of the extraversion personality trait was also found significant ($\beta = 0.17$, $t = 21032.00$, $p < 0.05$, $LLCI = 0.01$, $ULCI = 0.33$, $\eta^2 = 0.05$), but it only had a small effect size, while the effect of age was found non-significant ($\beta = -0.01$, $t = -0.85$, $p = 0.40$, $LLCI = -0.02$, $ULCI = 0.01$, $\eta^2 = 0.00$). Furthermore, the results of direct and indirect effects of the leadership preference on the internal self-concept motivation indicated that the total effect was indeed significant and bearing a medium effect size ($\beta = 0.32$, $t = 41.39$, $p < 0.001$, $LLCI = 0.17$, $ULCI = 0.48$, $\eta^2 = 0.14$), as well as the direct ($\beta = 0.28$, $t = 34.84$, $p < 0.001$, $LLCI = 0.12$, $ULCI = 0.44$, $\eta^2 = 0.11$). The indirect effect was also significant ($\beta = 0.045$, $SE = 0.027$, $LLCI = 0.002$, $ULCI = 0.10$, $\eta^2 = 0.01$); however, the effect size was found to be small. These results suggest that the relationship between leadership preference and internal self-concept motivation is indeed mediated by the indirect effect of the extraversion personality trait (see Table 4).

Model summary						
<i>R</i>	<i>R</i> ²	<i>f</i> ²	<i>MSE</i>	<i>F</i>	<i>df</i> 1	<i>df</i> 2
0.37	0.14	0.16	0.88	5.73***	4	144

Detailed results						
	β	<i>se</i>	<i>t</i>	<i>LLCI</i>	<i>ULCI</i>	η^2
Leadership preference	0.29	0.08	35228.00***	0.13	0.45	0.12
Extraversion	0.17	0.08	21580.00*	0.01	0.34	0.05
Leadership preference * extraversion	0.04	0.08	0.58	-0.11	0.20	0.01
Age	-0.01	0.01	-0.94	-0.03	0.01	0.00

Note(s): The leadership preference as independent variable, the extraversion personality trait as moderator, and age as covariate *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$
Source(s): Own production

Table 3.
Results of the moderation analysis conducted using the internal self-concept motivation as dependent variable

Model summary						
<i>R</i>	<i>R</i> ²	<i>f</i> ²	<i>MSE</i>	<i>F</i>	<i>df</i> 1	<i>df</i> 2
0.37	0.14	0.16	0.88	75.66***	30.00	1450.00

Detailed results						
	β	<i>SE</i>	<i>t</i>	<i>LLCI</i>	<i>ULCI</i>	η^2
Leadership preference	0.28	0.08	34840.00***	0.12	0.44	0.11
Extraversion (direct)	0.17	0.08	21032.00*	0.01	0.33	0.05
Age	-0.01	0.01	-0.85	-0.02	0.01	0.00
Extraversion (indirect)	0.04	0.03	-	0.00	0.10	0.01

Note(s): Leadership preference as independent variable, the extraversion as mediator, and age as covariate *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$
Source(s): Own production

Table 4.
Results of the mediation analysis conducted using the internal self-concept motivation as dependent variable

Discussion

The results of our study bear significant implications both for further research and theory development, and for management practice.

Firstly, our results show that there indeed exists a three-way relationship between the three constructs of leadership, motivation and personality traits, which, to the best of our knowledge, has never been investigated in previous literature. Our findings, hence, point to the need to consider employees' heterogeneity in personality traits when investigating motivation and preference for leadership.

More specifically, we found that leadership preference is significantly correlated with two specific dimensions of employees' motivation. First, preference for democratic leadership is negatively correlated with intrinsic motivation. This result, albeit appearing odd, may suggest that democratic leadership, thanks to its inherent characteristics, diminishes the relative importance of the intrinsic reward of the job itself; in other words, democratic leaders may be capable of motivating employees even when the job is not itself fundamentally motivating. Furthermore, leadership preference appears to be positively correlated with the internal self-concept motivation. Thus, democratic leadership – because of its emphasis on diffuse participation in decision making activities, free exchange of ideas and discussion, while still offering guidance and support – has the potential of motivating people by empowering them and facilitating the pursue of internal goals and standards. These results are in line with previous findings. For example, a qualitative study in public service has shown that transformational leaders – who share many characteristics with democratic leaders, (i.e. emphasis on growth and on instilling confidence in group members) by clarifying, sharing and maintaining an organizational vision, are able to better motivate their employees to do good for society and others ([Andersen et al., 2018](#)).

Hence, a first important implication is that, with respect to the previous literature wherein the superiority of a specific leadership style over the other in motivating employees was tested regardless of the specific features of employees, our findings allow to better clarify which categories of workers are more likely to benefit from a democratic leadership; specifically, here we found that those who benefit the most from this style are employees who don't derive intrinsic rewards from performing their job (e.g. job tasks that are inherently dull and repetitive) and employees who are highly motivated by goals related with one's inner personal growth. Hence, here we show that democratic leadership – despite being overall more convenient, as shown by previous literature, is likely to have a differential and potentially deeper impact depending on the type of job and on employees' main motivational drivers.

On the side of personality traits, leadership preference positively correlates only with extraversion, hence indicating that extroverts display a much higher preference for democratic vs autocratic leaders. Indeed, extraverts are usually positive, energetic, enthusiastic people, thus sharing many features of democratic leaders themselves. These results are also in line with previous findings; indeed, [Moss and Ngu \(2006\)](#) found that extraverts show a preference for transformational leadership, which as mentioned before has many characteristics in common with democratic leadership. Along the same lines, [Breevaart and de Vries \(2021\)](#) found a positive association between extraversion and charismatic leadership; again, charismatic leadership shares many features with democratic leadership (i.e. strong communication skills, persuasiveness and the ability to get the most out of every employee).

Hence, overall, our results contribute to theory by providing further empirical evidence in favor of the relationship between certain personality traits – specifically, extraversion – and preferences for leadership styles that focus on empowering employees, emphasis on growth and diffuse participation.

Furthermore, we found that people with specific personality traits appear to be motivated by different sources of motivation. For example, we found negative correlations between the honesty-humility personality trait and intrinsic process and external self-concept motivation, while a positive correlation was observed with goal internalization. In other words, people with high honesty-humility traits appear to be less motivated by the job itself, or by the desire or need for external approval. For example, they typically refrain from pursuing personal gain, wealth, luxury goods and social status. Rather, they are mostly motivated by a sense of duty, hence, by a strong alignment of personal values with the organizational ones, as suggested by the relationship with the goal internalization motivation. Furthermore, we also found that the extraversion personality trait was negatively correlated with the external self-concept motivation, and positively correlated with the internal self-concept motivation. Hence, these results suggest that extroverts are not interested in gaining social status, acceptance and recognition, but they are rather motivated by the fulfillment of internal goals and standards, in a perspective of change and individual growth. Extraversion has been found to be a significant element of motivation also in some other previous studies; for example, [Jugović *et al.* \(2012\)](#) investigated the relationship between personality and motivation in a cohort of teachers, and found that extraversion, along with agreeableness, was a significant predictor of intrinsic career value, satisfaction and perceived ability in the teaching profession. [Clark and Schroth \(2010\)](#), investigating the role of personality in the motivation of university students, found that extroverted people were motivated by the intrinsic value of learning and accomplishment, as well as by extrinsic introjected regulations regarding the value and the obligation of attending college. Despite the fact that these studies have found mostly intrinsic and extrinsic motivations to be associated with extroverted personality – also because of the differences in terms of models of motivation used in the design – in line with our results, they highlight the relevance of extraversion in building individual motivation. Overall, these findings contribute to theories on motivation by highlighting that it is not a universal or monolithic concept; rather, people – based on their inherent psychological characteristics – tend to find motivation by means of different drivers. Hence, recognizing such features may provide a beneficial advantage in keeping employees engaged and motivated, in turn, benefiting organizational performance.

A final important result of this investigation lies in the three-way relationship between leadership, personality and motivation. Indeed, we found that the positive relationship between preference for democratic leadership and internal self-concept motivation was both direct and indirect; specifically, with respect to the indirect relationship, it appeared to be mediated by the extraversion personality trait. In other words, democratic leadership appears to be capable of inspiring and motivating the pursuit of internal goals, standards and expectations (i.e. the ideal self), both directly and by leveraging on the individual extraversion propensity.

Thus, these results contribute to theory on both leadership and motivation by providing the underlying mechanism of the observed association between motivation and leadership preferences, showing that the link is mediated by employees' psychological features. Indeed, personality features can greatly vary among an otherwise similar population, and they describe stable patterns of behavior that can have broad-ranging consequences for many domains of life ([Roberts *et al.*, 2007](#)); here we show that they play a role also in shaping motivation and preferences for leadership.

Our results bear some straightforward managerial implications as far as the relative effectiveness of different leadership styles are concerned. Both the “Great Resignation” and “Quiet Quitting” phenomena previously mentioned, which appear to be strictly related with one another and both stemming from the highly unusual experience occurred to millions of workers worldwide during the COVID-19 pandemic, have revealed a worrisome and widespread dissatisfaction and lack of motivation among the workforces. The unprecedented

opportunity to spend more quality time within the family, the extra hours gained thanks to not having to commute to work daily, have determined a global shift in priorities among workers which is likely to last. What the “Great Resignation” phenomenon also reveals is that economic incentives are likely to have only limited effects in restoring workforce motivation. Hence, while assuring employees the possibility to achieve a better work-life balance must continue to be a priority for managers, we argue that leadership style, and more specifically, a democratic leadership style, can greatly contribute to restore motivation in those employees who do not find inner gratification in the job itself anymore (category which is likely to include several “quiet quitters”), as well as those employees whose experience during the pandemic has made them revalue the importance of personal growth and personal self-development. Additionally, these results, by focusing on employees’ psychological characteristics and motivational drivers, contribute to a further understanding of the variables that shape good managerial practices in the workplace; for example, leaders may employ personality and motivational assessments to better recognize how to keep employees engaged, and to identify which leverages are better suited for each worker, hence targeting individualized interventions to boost motivation and engagement. Along these lines, a better understanding of employees’ personality features and motivational drives may even contribute to the development of more effective and – up to a certain extent – individualized incentive systems which may help to connect personal and organizational interest, creating a virtuous cycle between employers and employees. Furthermore, we also suggest that leaders themselves should engage in the process of self-development, as such practices may enable them to engage in a democratic leadership attitude which, in turn, may allow them to effectively empower their employees and engage them on a psychological level.

From a theoretical standpoint, on the other hand, these results contribute to reinforce the idea that there is not an absolute one-fits-all leadership model that can work well in every situation and with every individual, in line with the suggestions by [Van Der Wagen \(2008\)](#), on the contrary, motivation appears to be a multifaced construct that may change dramatically as a function of the individual characteristics of employees, and which is also differentially influenced by leadership style. Thus, overall, these results contribute to obtaining a deeper understanding of the micro-foundations of motivation and its relationship with leadership, highlighting the relevance of individuals’ heterogeneous psychological characteristics. Moreover, it is our conjecture that democratic leaders may be better able to compensate for the lack of inner motivation which may occur to workers because of either personal or collective crises like the one the world recently experienced. We leave this conjecture for future research.

Limitations

The current study also bears some limitations. Firstly, the current findings provide evidence of second and third level association that is limited to some personality traits, motivational drivers and leadership styles. Hence, future research should try to further investigate which leadership approaches are better suited for people not falling into the categories of workers identified in the current study, i.e. those motivated by different drivers or displaying other personality traits. Furthermore, as not every motivational driver has been found to display a link with the personality traits investigated in the current study, future research may try to disentangle which variables shape such motivational sources, in order to better understand how to promote employees’ motivation.

Secondly, the current study has a limitation related to the convenience sample employed, which may limit the generalizability of the findings. Indeed, half of participants are interns or trainees, namely, people at the very beginning of their career, and overall, the sample displays a low average age (i.e. ~27); while we argue that this does not affect the measure of the various

personality traits, as these appear to be relatively stable over a large time span, on the other hand, the still limited job experience of these participants may have impacted upon the evaluation of motivational drivers and leadership preferences. Indeed, it is possible that people at the beginning of their careers have a more “idealized” view of their job – for example, emphasizing motivational features related to the internal self-concept driver, such as growth and the pursuit of values in line with the ideal self as well as leadership features that focus on empowerment and growth – which may become less relevant in the following stages of one’s career, leaving space for other motivational drivers and preferences in leadership. For example, in later stages of their careers as well as private life (e.g. marriage, children etc.), people may find higher motivation in instrumental drivers, i.e. monetary rewards, bonuses, promotions, etc. or in external self-concept drivers, such as acceptance, status, or approval. Similarly, older or more experienced workers may end up appreciating a more directive leadership style, which clearly sets standards and expectations of the job. Future research should try to disentangle whether the relationship between personality traits, motivational drivers and leadership preferences may change as a function of different career stages and/or age ranges.

References

- Alderfer, C.P. (1969), “An empirical test of a new theory of human needs”, *Organizational Behavior and Human Performance*, Vol. 4 No. 2, pp. 142-175, doi: [10.1016/0030-5073\(69\)90004-X](https://doi.org/10.1016/0030-5073(69)90004-X).
- Alghazo, A.M. and Al-Anazi, M. (2016), “The impact of leadership style on employee’s motivation”, *International Journal of Economics and Business Administration*, Vol. 2 No. 5, pp. 37-44.
- Andersen, L.B., Bjørnholt, B., Bro, L.L. and Holm-Petersen, C. (2018), “Leadership and motivation: a qualitative study of transformational leadership and public service motivation”, *International Review of Administrative Sciences*, Vol. 84 No. 4, pp. 675-691, doi: [10.1177/0020852316654747](https://doi.org/10.1177/0020852316654747).
- Ashton, M.C. and Lee, K. (2009), “The HEXACO-60: a short measure of the major dimensions of personality”, *Journal of Personality Assessment*, Vol. 91 No. 4, pp. 340-345, doi: [10.1080/00223890902935878](https://doi.org/10.1080/00223890902935878).
- Avolio, B.J., Yammarino, F.J. and Bass, B.M. (1991), “Identifying common methods variance with data collected from A single source: an unresolved sticky issue”, *Journal of Management*, Vol. 17 No. 3, pp. 571-587, doi: [10.1177/014920639101700303](https://doi.org/10.1177/014920639101700303).
- Barbuto, J.E. (2001), “An alternative scoring method for the motivation sources inventory: a case for ratio analysis”, *Psychological Reports*, Vol. 88 No. 2, pp. 385-386, doi: [10.2466/pr0.2001.88.2.385](https://doi.org/10.2466/pr0.2001.88.2.385).
- Barbuto, J.E. and Scholl, R.W. (1998), “Motivation sources inventory: development and validation of new scales to measure an integrative taxonomy of motivation”, *Psychological Reports*, Vol. 82 No. 3 PART 1, pp. 1011-1022, doi: [10.2466/pr0.1998.82.3.1011](https://doi.org/10.2466/pr0.1998.82.3.1011).
- Bass, B.M. (1985), *Leadership and Performance Beyond Expectations*, Free Press, New York.
- Batista-Taran, L., Shuck, M., Gutierrez, C. and Baralt, S. (2009), “The role of leadership style in employee engagement”, in Nielsen, S.M. and Pane, D.M. (Eds), *Proceedings of the Eighth Annual College of Education & GSN Research Conference*, Florida International University, Miami, pp. 15-20.
- Benjamini, Y., Krieger, A.M. and Yekutieli, D. (2006), “Adaptive linear step-up procedures that control the false discovery rate”, *Biometrika*, Vol. 93 No. 3, pp. 491-507, doi: [10.1093/biomet/93.3.491](https://doi.org/10.1093/biomet/93.3.491).
- Bhugra, D., Gupta, S. and Ruiz, P. (2013), “What is leadership?”, in Bhugra, D., Ruiz, P. and Gupta, S. (Eds), *Leadership in Psychiatry*, Wiley, Chichester, pp. 3-12.
- Bhushan (1971), “A study of leadership preference in relation to authoritarianism and intolerance of ambiguity”, *Journal of the Indian Academy of Applied Psychology*, Vol. 8 Nos 1-2, pp. 34-38.

- Bhushan, L.I. (1995), "Manual for leadership preference scale", *Agra National Psychological Corporation*.
- Bhushan, R. and Verma, N.K. (1972), "A study of social determinants of leadership preference", *Journal of the Indian Academy of Applied Psychology*, Vol. 9 No. 3, pp. 81-84.
- Blake, R. and Mouton, J. (1964), *The Managerial Grid: the Key to Leadership Excellence*, Houston, TX Gulf Publishing Company. – References – Scientific Research Publishing, Gulf Publishing Company, Houston, TX.
- Breevaart, K. and de Vries, R.E. (2021), "Followers' HEXACO personality traits and preference for charismatic, relationship-oriented, and task-oriented leadership", *Journal of Business and Psychology*, Vol. 36 No. 2, pp. 253-265, doi: [10.1007/s10869-019-09671-6](https://doi.org/10.1007/s10869-019-09671-6).
- Buble, M., Juras, A. and Matic, I. (2014), "The relationship between managers' leadership styles and motivation", *Management*, Vol. 19 No. 1, pp. 161-193.
- Carlyle, T. (1840), *On Heroes, Hero-Worship and the Heroic in History*, Chapman & Hall, London.
- Clark, M.H. and Schroth, C.A. (2010), "Examining relationships between academic motivation and personality among college students", *Learning and Individual Differences*, Vol. 20 No. 1, pp. 19-24, doi: [10.1016/j.lindif.2009.10.002](https://doi.org/10.1016/j.lindif.2009.10.002).
- De Vries, R.E. (2013), "The 24-item brief HEXACO inventory (BHI)", *Journal of Research in Personality*, Vol. 47 No. 6, pp. 871-880, doi: [10.1016/j.jrp.2013.09.003](https://doi.org/10.1016/j.jrp.2013.09.003).
- Den Hartog, D.N., Van Muijen, J.J. and Koopman, P.L. (1997), "Transactional versus transformational leadership: an analysis of the MLQ", *Journal of Occupational and Organizational Psychology*, Vol. 70 No. 1, pp. 19-34, doi: [10.1111/j.2044-8325.1997.tb00628.x](https://doi.org/10.1111/j.2044-8325.1997.tb00628.x).
- Elzahiri, S. (2010), "Impact of principal's leadership style on teacher motivation", Masters ProQuest Dissertations and Theses.
- Fiedler, F.E. (1964), "A contingency model of leadership effectiveness", *Advances in Experimental Social Psychology*, Vol. 1 C, pp. 149-190, doi: [10.1016/S0065-2601\(08\)60051-9](https://doi.org/10.1016/S0065-2601(08)60051-9).
- Fiedler, F.E. (1967), *A Theory of Leadership Effectiveness*, McGraw-Hill, New York.
- Formica, S. and Sfodera, F. (2022), "The Great Resignation and Quiet Quitting paradigm shifts: an overview of current situation and future research directions", *Journal of Hospitality Marketing and Management*, Vol. 31 No. 8, pp. 899-907, doi: [10.1080/19368623.2022.2136601](https://doi.org/10.1080/19368623.2022.2136601).
- Fuller, J. and Kerr, W. (2022), "The great resignation didn't start with the pandemic", *Harvard Business Review*, March.
- Galton, F. (1869), *Hereditary Genius*, 1st ed., Macmillan, London.
- Glomb, T.M. and Welsh, E.T. (2005), "Can opposites attract? Personality heterogeneity in supervisor-subordinate dyads as a predictor of subordinate outcomes", *Journal of Applied Psychology*, Vol. 90 No. 4, pp. 749-757, doi: [10.1037/0021-9010.90.4.749](https://doi.org/10.1037/0021-9010.90.4.749).
- Hanifah, I., Susanthi, N. and Setiawan, A. (2014), "The effect of leadership style on motivation to improve the employee performance", *Jurnal Manajemen Transportasi and Logistik (JMTransLog)*, Vol. 1 No. 3, pp. 221-226, doi: [10.54324/j.mtl.v1i3.20](https://doi.org/10.54324/j.mtl.v1i3.20).
- Hayes, A.F. (2015), "Hacking PROCESS for estimation and probing of linear moderation of quadratic effects and quadratic moderation of linear effects", Unpublished White Paper, Ohio State University.
- Haywood, D.J. (2014), "Effects of leadership strategies on employee motivation and job performance (Order No. 3643501)", *ProQuest Central*, ProQuest Dissertations and Theses Global, ProQuest One Academic, Psychology Database. (1627154548), available at: <https://www.proquest.com/dissertations-theses/effects-leadership-strategies-on-employee/docview/1627154548/se-2>
- Heller, F.A. and Yukl, G. (1969), "Participation, managerial decision-making, and situational variables", *Organizational Behavior and Human Performance*, Vol. 4, pp. 227-2241, doi: [10.4324/9780429432569-14](https://doi.org/10.4324/9780429432569-14).

-
- Herzberg, F. (1959), *The Motivation to Work*, 2nd ed., Wiley, New York.
- IBM SPSS (2021), "SPSS statistics 28".
- John, K. and Thomsen, S.L. (2014), "Heterogeneous returns to personality: the role of occupational choice", *Empirical Economics*, Vol. 47 No. 2, pp. 553-592, doi: [10.1007/s00181-013-0756-8](https://doi.org/10.1007/s00181-013-0756-8).
- Jugović, I., Marušić, I., Pavin Ivanec, T. and Vizek Vidović, V. (2012), "Motivation and personality of preservice teachers in Croatia", *Asia-Pacific Journal of Teacher Education*, Vol. 40 No. 3, pp. 271-287, doi: [10.1080/1359866X.2012.700044](https://doi.org/10.1080/1359866X.2012.700044).
- Khaliq, M., Usman, A. and Ahmed, A. (2021), "Effect of leadership style on working culture and employees motivation", *The Journal of Educational Paradigms*, Vol. 3 No. 1, pp. 166-170, doi: [10.47609/0301052021](https://doi.org/10.47609/0301052021).
- Korman, A.K. (1966), "'Consideration', 'initiating structure', and organizational criteria – a review", *Personnel Psychology*, Vol. 19 No. 4, pp. 349-361, doi: [10.1111/j.1744-6570.1966.tb00310.x](https://doi.org/10.1111/j.1744-6570.1966.tb00310.x).
- Kotter, J.P. (1988), *The Leadership Factor*, The Free Press, New York.
- Kuczumarski, S.S. and Kuczumarski, T.D. (1995), "Values-based leadership", Prentice Hall.
- Lamberti, G., Aluja Banet, T. and Rialp Criado, J. (2022), "Work climate drivers and employee heterogeneity", *The International Journal of Human Resource Management*, Vol. 33 No. 3, pp. 472-504, doi: [10.1080/09585192.2020.1711798](https://doi.org/10.1080/09585192.2020.1711798).
- Leonard, N.H., Beauvais, L.L. and Scholl, R.W. (1995), "A self concept-based model of work motivation", *Academy of Management Proceedings, Academy of Management Briarcliff Manor, NY 10510*, No. 1, pp. 322-326, doi: [10.5465/AMBPP.1995.17536607](https://doi.org/10.5465/AMBPP.1995.17536607).
- Leonard, N.H., Beauvais, L.L. and Scholl, R.W. (1999), "Work motivation: the incorporation of self-concept-based processes. – PsycNET", *Human Relations*, Vol. 52 No. 1, pp. 969-998, doi: [10.1177/001872679905200801](https://doi.org/10.1177/001872679905200801).
- Lewin, K. (1939), "Patterns of aggressive behavior in experimentally created 'social climates'", *The Journal of Social Psychology*, Vol. 10, pp. 271-299, doi: [10.1037/10319-008](https://doi.org/10.1037/10319-008).
- Li, Y., Tan, C.H. and Teo, H.H. (2012), "Leadership characteristics and developers' motivation in open source software development", *Information and Management*, Vol. 49 No. 5, pp. 257-267, doi: [10.1016/j.im.2012.05.005](https://doi.org/10.1016/j.im.2012.05.005).
- Likert, R. (1967), *The Human Organization: its Management and Values*, McGraw-Hill, Madison.
- Locke, E.A. (1968), "Toward a theory of task motivation and incentives", *Organizational Behavior and Human Performance*, Vol. 3 No. 2, pp. 157-189, doi: [10.1016/0030-5073\(68\)90004-4](https://doi.org/10.1016/0030-5073(68)90004-4).
- Masi, R.J. and Cooke, R.A. (2000), "Effects of transformational leadership on subordinate motivation, empowering norms and organizational productivity", *The International Journal of Organizational Analysis*, Vol. 8 No. 1, pp. 16-47, doi: [10.1108/eb028909](https://doi.org/10.1108/eb028909).
- Maslow, A.H. (1943), "A theory of human motivation", *Psychological Review*, Vol. 50 No. 4, pp. 370-396, doi: [10.1037/H0054346](https://doi.org/10.1037/H0054346).
- McGregor, D. (1969), *The Human Side of Enterprise*, McGraw Hill, New York.
- Mengesha, A.H. (2015), "Impact of leadership approaches on employee motivation: an empirical investigation in Haramaya University", *AshEse Journal of Business Management*, Vol. 1 No. 3, pp. 28-038.
- Moss, S.A. and Ngu, S. (2006), "The relationship between personality and leadership preferences", *Current Research in Social Psychology*, Vol. 11 No. 6, pp. 70-91.
- Popli, S. and Rizvi, I.A. (2016), "Drivers of employee engagement: the role of leadership style", *Global Business Review*, Vol. 17 No. 4, pp. 965-979, doi: [10.1177/0972150916645701](https://doi.org/10.1177/0972150916645701).
- Quinn, R.E. (1988), *Beyond Rational Management: Mastering the Paradoxes and Competing Demands of High Performance*, Jossey-Bass, San Francisco.

-
- Rawat, S.R. (2015), "Impact of transformational leadership over employee morale and motivation", *Indian Journal of Science and Technology*, Vol. 8 March, pp. 25-34, doi: [10.17485/ijst/2015/v8iS6/62118](https://doi.org/10.17485/ijst/2015/v8iS6/62118).
- Reiss, S. (2012), "Intrinsic and extrinsic motivation", *Teaching of Psychology*, Vol. 39 No. 2, pp. 152-156, doi: [10.1177/0098628312437704](https://doi.org/10.1177/0098628312437704).
- Roberts, B.W., Kuncel, N.R., Shiner, R., Caspi, A. and Goldberg, L.R. (2007), "The power of personality. The comparative validity of personality traits, socioeconomic status, and cognitive ability for predicting important life outcomes", *Perspectives on Psychological Science*, Vol. 2 No. 4, pp. 313-345, doi: [10.1136/bmj.2.3584.509](https://doi.org/10.1136/bmj.2.3584.509).
- Safitri, S.R. and Patrisia, D. (2019), "The effect of leadership, communication, and motivation on employee performance: a literature review", *2nd Padang International Conference on Education, Economics, Business and Accounting*, Vol. 64, pp. 533-537, doi: [10.2991/piceeba2-18.2019.33](https://doi.org/10.2991/piceeba2-18.2019.33).
- Skinner, B.F. (1938), *The Behavior of Organisms: an Experimental Analysis*, Appleton-Century, New York.
- Stogdill, R.M. (1948), "Personal factors associated with leadership: a survey of the literature", *The Journal of Psychology*, Vol. 25 No. 1, pp. 35-71, doi: [10.1080/00223980.1948.9917362](https://doi.org/10.1080/00223980.1948.9917362).
- Sull, D., Sull, C. and Zweig, B. (2022), "Toxic culture is driving the great resignation", *MIT Sloan Management Review*.
- Ugaddan, R.G. and Park, S.M. (2017), "Quality of leadership and public service motivation: a social exchange perspective on employee engagement", *International Journal of Public Sector Management*, Vol. 30 No. 3, pp. 270-285, doi: [10.1108/IJPSM-08-2016-0133](https://doi.org/10.1108/IJPSM-08-2016-0133).
- Van Der Wagen, M. (2008), "Leadership and motivation", *Supervision*, February, pp. 89-102, doi: [10.4324/9780080554297-11](https://doi.org/10.4324/9780080554297-11).
- Vroom, V.H. (1964), "Work and Motivation", Wiley.
- Vroom, V. and Yetton, P. (1973), *Leadership and Decision-Making*, Pittsburgh University Press, Pittsburgh.
- Wasserman, T. and Wasserman, L. (2020), "Motivation: state, trait, or both", in *Motivation, Effort, and the Neural Network Model*, Springer, Cham, pp. 93-101, doi: [10.1007/978-3-030-58724-6_8](https://doi.org/10.1007/978-3-030-58724-6_8).

About the authors

Cinzia Calluso is assistant professor tenure-track of organization studies in the Department of Business and Management of the LUISS University in Rome. She holds an MSc in cognitive psychology and PhD in functional neuroimaging both received at the Gabriele D'Annunzio University of Chieti-Pescara. She also owns a second-level professional master's degree in clinical neuropsychology from Skinner Institute of Rome, and a postgraduate degree in cognitive psychotherapy from the Italian School of Clinical Cognitivism of Rome. Her main research interest lies in the fields of organizational behavior, organizational neuroscience, neuroeconomics and psychology. Cinzia Calluso is the corresponding author and can be contacted at: ccalluso@luiss.it

Maria Giovanna Devetag is associate professor in the Department of Business and Management at Luiss University. She received her PhD in economics and management from the Sant'Anna School of Advanced Studies in Pisa. She has been visiting scholar at Princeton University, Columbia University and Université Paris 1 – Pantheon-Sorbonne. Her research interests include behavioral and experimental decision making, coordination problems in organization, routine formation and human resource management. She has published, among others, in *Experimental Economics*, *Journal of Economic Behavior and Organization*, *Journal of Economic Psychology*, *Games and Economic Behavior*, *Economics Letters*, *Journal of Evolutionary Economics* and *Industrial and Corporate Change*.

For instructions on how to order reprints of this article, please visit our website:

www.emeraldgroupublishing.com/licensing/reprints.htm

Or contact us for further details: permissions@emeraldinsight.com