Ethical leadership and creativity in employees with University education: The moderating effect of high intensity telework

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Abstract

**Purpose:** The main objective of this research is to determine if the number of days teleworked gradually influences the causal relationship between Ethical Leadership and Creativity among university-educated employees together with the aspect of their interaction.

**Design/methodology:** To decipher this question, a simple moderation scheme is chosen. The sample is 448 workers who are evaluated online.

**Findings:** Ethical Leadership and Creativity are related in a convex way; that is, the ethical extremes, low or high, negatively, or positively influence creative performance, in that order. In addition, the intensity of Teleworking favors the integration between Ethical Leadership and original ideas; On the other hand, when remote work is reduced to one day a week, the relationship between Ethical Leadership and Creativity is neutralized. Finally, the self-perception of Creativity is lower in the female gender.

**Research limitations/implications:** It is a cross-sectional study, but the results can be transferred to the entire Colombian energy industry since the sample was taken at different stages and obtained from various sources. Future research can delve into the e-ethics role of ethical leadership.

**Practical implications:** The transition from conventional to electronic leadership needs to be influenced by strong ethical values to avoid leadership styles such as intrusive or abusive leadership that do not consider employee welfare as a priority. In addition, hybrid work alternatives that combine remote days with on-site days make it essential to consider that very low-intensity Teleworking substantially reduces individual Creativity.

**Social implications:** The public energy industries in underdeveloped countries whose main mission is to serve the neediest social spheres cannot take their eyes off the common interest. When this happens, corruption proliferates, and inequalities widen.

**Originality/value:** This research presents a theoretical model that extends the existing literature on Ethical Leadership. The benefits of this management style are widely known, but it is of vital interest to know its impact within a virtual work environment, and even more so when Teleworking becomes an ideal habitat to capitalize on its potential.

**Keywords:** Ethical Leadership, Telecommuting, Teleworking, Creativity, Ethics, Curvilinear Relationship
1. Introduction

Colombia has historically been characterized by a global economy adapted to structured and sensible management. This has enabled uninterrupted growth for the last 22 years, in addition to tolerable inflation ranges (Jiménez, Saldarriaga-Isaza & Cicowiez, 2022). However, the Colombian territory faces a new scenario of political uncertainty, linked to an unusual increase in food prices. This will tend to slow down social equality and intensify extreme poverty. In fact, Colombia is one of the countries in the world with most social imbalances, which implies profound differences in its population (Rivillas-García, Cifuentes-Avellaneda, Ariza-Abril, Sánchez-Molano & Rivera-Montero, 2021). Therefore, in front of exceptional historical moments, economic survival has become the main concern of organizations, especially in underdeveloped economies. Certainly, the strength of the different business units, through financial resources, long-term development and innovations that guarantee competitive advantages, will result in an expanding organizational human capital, which is undoubtedly one of the main halts to inequality (Santiago-Torner, 2023a).

However, building a continuous boom scenario requires the collective effort of all stakeholders (Ogaga, Ezenwakwelu, Isichei & Olabosinde, 2022). In this sense, the role of leaders is crucial as they are responsible for designing coherent criteria to bring together resources, objectives and performance in addition to clear moral orientations (Esguerra, Jáuregui & Espinosa, 2022). Therefore, an ethical management style, in addition to inspiring reciprocal learning, sensitizes employees through good behaviors, which promotes voluntary behavior aimed towards superior performance (Santiago-Torner, 2023a).

In turn, current business environments, being subject to permanent changes, need creative responses to grow and to also guarantee the work stability of their employees (Wang, Kim & Kim, 2021). Consequently, Creativity becomes a core characteristic to achieve organizational objectives; especially for industries as focused on innovation as those of the Colombian electrical industry. In fact, Creativity describes individual cognitive processes to gather information, assess concepts and define a problem, which lead to the behavioral implementation of certain solutions through innovative behavior (Li, Lu, & Eliason, 2022). In this sense, Creativity is conditioned by individual traits and also by the most important factors defining the institutional context. Among these aspects, and based on suggestions from preliminary studies that determine the influence of management styles on Creativity, this research focuses on leadership. The effect of Ethical Leadership is analyzed, specifically and considering the main repercussions of corporate ethics, (Esguerra et al., 2022; Mo, Ling & Xie, 2019; Santiago Torner, 2023a). Ethical leaders, through personal actions and proactive behaviors anchored in moral conduct, build social relationships to facilitate good attitudes among employees. Actually, ethical leaders have a clear sense of social responsibility, which means that they are concerned with the behavior as well as with the well-being of their followers. This fosters a general self-perception of integrity which significantly influences business results (Wang et al., 2021).

The topic this article intends to develop somehow began to be considered in 2021, when the COVID-19 pandemic crisis was going through one of its most critical stages. In fact, the activity studied, the Colombian electrical activity, is going through a period of change that began in 2015. After deep reflections, this industrial activity promoted a collective initiative to guarantee its financial transparency through an Ethical Leadership style. In this sense, questions remain as the real impact of this management approach on individual Creativity, as a key element that has enabled its business lines to grow and expand throughout Latin America, is still unknown. Simultaneously, the health crisis gave rise to a drastic adaptive turn in the work model by including Teleworking as a measure to guarantee continuation of the active life of organizations. Therefore, being able to establish a
relationship between Ethical Leadership and Creativity is of paramount interest for the industrial activity in question. Likewise, determining whether Teleworking is useful or adverse for this possible link to progress is also an issue that can enable entire Colombian energy industry to make extremely important decisions. Lastly, the situation experienced by Colombia in closing 2022, - high political uncertainty leading to irrational increases in the cost of living and unprecedented currency devaluation, - forces the Colombian industrial fabric to evaluate different scenarios to continue developing permanently. This study aims to contribute from a theoretical and practical approach.

The incidence of Ethical Leadership on Creativity has been examined from different perspectives, but there are still gaps this research wishes to address. Firstly, the relationship between this management style and Creativity has led to contradictory conclusions. For instance, Tu, Lu, Choi and Guo (2019) establish a negative relationship between Ethical Leadership and the extent of Creativity. Other authors such as Feng, Zhang, Liu, Zhang and Han (2018); Mo et al. (2019) consider that individual Creativity intensifies according to a low or moderate perception of Ethical Leadership, and decreases when this management model insists on high supervision. Considering the non-confluence of many results, this problem may have its origin in the lack of studies of the principles, mechanisms or circumstances (mediators or moderators) justifying the relation and establishing the how, when or why of the effect. Furthermore, Ng and Feldman (2015) suggest that Ethical Leadership needs to be analyzed within its cultural context. Thus, the first objective of this research is to observe how Ethical Leadership and Creativity interact in a specific environment and country. From this perspective only (Santiago-Torner, 2023a), using three mediators – work autonomy, affective commitment and intrinsic motivation - establishes a curvilinear relationship between Ethical Leadership and Creativity. This research adheres to this curvilinear effect considering that the behavior of the benevolent and ethical leaders, when perceived as high, does not give rise to feelings of strict obedience to the norm on the part of followers, which represses creative behavior. In an almost opposite way, the authentic relationship between leaders and followers facilitates a free and honest interaction which encourages employees to produce unique ideas. Therefore, a high perception of Ethical Leadership does not necessarily become a stressor that decreases followers' originality. Actually, Creativity only decreases when autonomy is insufficient or when the relationship between supervisor and employee has a precarious status.

Furthermore, this research intends to broaden its scope by including number of Teleworking Days as an important factor that enhances individual Creativity.

Actually, the effect of Teleworking and its extent on Creativity is an area of study without much exploration. Only (Biron & van Veldhoven, 2016; Gajendran & Harrison, 2007; Naotunna & Priyankara, 2020; Sardeshmukh, Sharma & Golden, 2012; Vega, Anderson & Kaplan, 2015) identified relationships between both constructs. Consequently, this is the second major objective of this research, which aims to provide clarity to this question. In this sense Riva, Wiederhold and Mantovani (2021), amidst a context marked by the COVID-19 health crisis, consider that prolonged use of digital platforms can, ultimately, weaken corporate cultures; and that this particularly affects individual Creativity through progressive deterioration of certain cognitive mechanisms involved, including eye contact and interaction. However, and going beyond this clinical concept, this article subscribes to the premise that Teleworking and its extent provide greater control over the task and increased flexibility. Likewise, the beneficial effects of working from home are evident even in the face of high labor demands. Therefore, this work location tends to buffer the negative effects of high workloads on concentration and on the need for recovery. In other words, the number of Teleworking Days progressively has positive results on the emotional state and motivation that favor employees’ creative performance.

Lastly, the most important purpose of this analysis is to revise the moderating effect of Teleworking Days, in relation to the association between Ethical Leadership and Creativity. This represents a significant advance in the existing literature, as the bibliographical review did not find a similar model. This research subscribes to the theory that the greater the number of Teleworking Days, the higher the influence of Ethical Leadership on Creativity.
Teleworking can favor lack of clarity regarding position and its functions. Additionally, it is possible that it fosters feelings of psychological isolation, insecurity, anxiety and addiction to the task (Magnavita, Tripepi & Chiorri, 2021). In this sense, Ethical Leadership promotes a completely decentralized and autonomous type of work which benefits the followers' self-efficacy. In fact, empowerment and constant feedback prevent confusion regarding the work responsibilities assumed by employees. Likewise, the relationship between leaders and followers is not based on hierarchy, but seeks a same level interaction that facilitates the achievement of objectives. Consequently, ethical leaders avoid direct instructions and do seek consensus. This means that they flee from absolutist concepts.

On the other hand, ethical leaders have sincere and real interest in the well-being of their followers, which can limit any signs of psychological isolation. Actually, a person is distant when she/he does not feel enough support, understanding, or when social interaction is poor. Thus, the kindness conveyed by ethical leaders fosters a two-way exchange of resources giving rise to a balanced environment. Therefore, a work context of commitment and psychological connection is molded, which induces respect and optimistic attitudes. Followers specifically direct and increase their efforts to be more effective through original approaches. Finally, ethical leaders instill a series of moral and family values that enable redistribution of the followers' resources, which prevents work overloads and dependency (Madlock, 2018).

A quantitative, cross-correlational design is used to answer all these questions.

The article is divided as follows: An introduction and a theoretical framework; a methodological block which delimits participants, instruments, procedure and data analysis; and finally presented are independent sections of results, discussion, conclusions, practical implications and limitations.

2. Theoretical framework

2.1. Ethical leadership and creativity

Ethical Leadership promotes interindividual trust. Therefore, it fosters an environment where members can share information without any type of obstacle, which promotes risk management favored by a high perception of justice and impartiality. In fact, trust and the exchange of ideas are the main support points, where employees' psychological safety is held as the axis of a perceived well-being which induces elaboration of original ideas (Kim & Vandenberghe, 2021). Ethical leaders probably insist on the emotional protection of followers as a mechanism that supports expressions of personal uniqueness.

At the same time, ethical leaders develop a type of relationship with followers, under affective criteria, which articulates through mutual influence (Qian & Jian, 2020). Therefore, this interrelationship comes accompanied by a moral conduct with trust as key factor (Santiago-Torner, 2023b). Actually, the Leader-Member Exchange theory (LMX) reveals the essence of ethical leaders who seek shared loyalty with followers through feelings of respect and empathy. However, leaders hardly have capacity to have all their relationships follow the same pattern. Consequently, it is possible for the substantial variation of LMX to have a negative impact on the results, specifically in creative results (Santiago-Torner, 2023a). In this sense, Feng et al. (2018); Mo et al. (2019) suggest that when ethical leaders become excessively evident, the situation gives rise to a disproportionate torrent of norms and rules which attenuates individual Creativity. In other words, ethical leaders can become stressors that turn relationships with followers into concave ones, in the shape of an inverted U.

On the other hand, (Santiago-Torner, 2023a) suggests that when the LMX is in a phase of mature association, exchanges between ethical leaders and followers, far from constituting an obstacle, reduce any type of tension and encourage creative achievements. Consequently, the high degree of trust between leader and follower is transformed into a relationship between equals with a shared responsibility. Additionally, qualitative characteristics of the reciprocal action between leader and member define the quality of the exchange process. Among these characteristics, the ethical values associated with trust are decisive, as they require a special ability to deal with others’ interests and concerns of as a priority.
Thus, the aforementioned author proposes a curvilinear model identifying the relationship between Ethical Leadership and Creativity. Therefore, when the exchange between ethical leader and follower is insufficient, creative efficiency tends to be reduced. On the other hand, when the interaction between both parties stands out for its high quality and autonomy, it is reasonable for a joint scenario leading to superior creative performance to surge. In fact, high perceptions of equity and justice become open reasons for employees to do everything possible to correspond, in an original manner, to the trust bestowed upon them by ethical leaders. Consequently, the initially proposed curved design adopts a more specific convex shape where the depth and reciprocal action, between leaders and followers, prevent transition periods in which creative immobility is a separate state from the relationship, and linked to lack of interest in the work activity. Consequently, the following hypotheses are proposed:

H1. Ethical Leadership positively influences the Creativity of university-educated employees.

H1.1. The relationship between Ethical Leadership and the Creativity of university-educated employees is maintained through a convex pattern.

2.2. Ethical leadership and teleworking

Several studies have identified that high-intensity Teleworking impairs organizational commitment, increases the work-family conflict, and causes individuals to feel isolated, insecure, and excluded from the rest of the organization (Fay & Kline, 2012). However, Madlock (2018) states that a leadership style that is equally oriented towards relationships and tasks can act as a counterbalance, in virtual work environments, positively impacting both employee commitment and job satisfaction. Additionally, Sahai, Ciby and Dominic (2022) discover that psychological capital buffers the effects of isolation, preventing negative emotional states. In this sense, Ethical Leadership brings together a series of characteristics that focus both on the relationship and on the responsibility entailed by the task itself. In fact, this way of leading includes a combination of values, including altruism, honesty, empowerment, equity, and justice, which have been central aspects of various preeminent leadership theories for years (Mahsud, Yukl & Prussia, 2010). Besides, recent research such as that of Qasim, Irshad, Majeed and Rizvi (2022) concludes that Ethical Leadership has a positive effect on followers' self-efficacy, optimism, hope, and emotional resistance. In other words, it increases and strengthens their psychological capital. Thus, Ethical Leadership, per its nature, integrates a set of positive aspects that are essential for proper management of a virtual work environment. In fact, conservative leadership with low impact on change processes can become a risk when organizations flexibilize their structure through Teleworking (Contreras, Baykal & Abid, 2020). It follows then that Ethical Leadership is a key element to face the transition from an on-site context to a virtual one. It has the capacity to transform the pre-existing initial trust, through a series of interconnected progressions, into a genuine relationship between leader and follower (Figueiredo, Leal, Lopes, Cascão & Gomes, 2022). Simultaneously, the individual concern of the ethical supervisor keeps the psychological connection needed in a virtual work environment. Generally, a benevolent management style is interested in the personal activities of followers, prioritizes sharing resources, and fosters a social network of respect, commitment and support that directs its efforts towards optimistic attitudes and collective emotions. This prevents any indication of psychological isolation related to Teleworking (Saha, Shashi, Cerchione, Singh & Dahiya, 2020).

Lastly, Mayo, Gomez-Mejia, Firfiray, Berrone and Villena (2016) analyze Teleworking as a social initiative. Meaning that a virtual work environment becomes a practice of Corporate Social Responsibility (CSR) aimed at employees. Ethical Leadership contributes through inclusive programs and moral guidelines, seeking employees' well-being, through schedule flexibility and through a positive impact on the work-family axis. Therefore, Ethical Leadership does not promote Teleworking as a way to rationalize economics, but rather as part of the good management practices focusing on employees' emotional health (Bloom, Kretschmer & van Reenen, 2011).
2.3. Teleworking and creativity

Glenn Dutcher (2012) concludes that Teleworking can increase productivity in creative tasks by up to 20%. In this sense, he emphasizes that flexibility is the key factor stimulating creative performance. In fact, the low structure of tasks and of the environment where they are done, motivates individuals to search for optimal spaces where their capacity for divergent and dynamic thinking becomes an obstacle for the emergence of more repetitive reasoning (Dickinson & McElroy, 2012). Furthermore, the exclusion of certain distractors caused by on-site work - including the noise of the interaction itself, or interruptions leading to deficiencies in the ability to multiply activities, - prevent employees from going into a chain of distraction and being less creative (Ansah et al., 2022).

Nouri, Erez, Lee, Liang, Bannister and Chiu (2015) determine that when an employee works independently, the ideas she/he generates have a higher level of originality than when the context is conditioned by a supervisor. In fact, several studies have shown that both, the excessive control that leaders can exercise and the distance existing between leaders and employees, act to attenuate Creativity (Liu, Liao, & Loi, 2012).

Therefore, Creativity is linked to certain elements that stimulate it. Work autonomy stands out among these elements, above support perceived from the supervisor or from the work team itself (Amabile, 1997; Amabile & Pratt, 2016). As consequence, autonomy is a critical factor to improve Creativity which several meta-analyses relate to the experience provided by Teleworking (Naotunna & Priyankara, 2020; Naotunna & Zhou, 2022). Specifically, Naotunna and Priyankara (2020), Naotunna and Zhou (2022) and Sardeshmukh et al. (2012) discover a positive and significant correlation between the Teleworking extent and the autonomy of highly educated professional employees.

In addition, and considering the social cognitive theory (Bandura, Barbaranelli, Caprara & Pastorelli, 2001), self-efficacy plays a fundamental role as a self-regulation mechanism. Thus, it is expected that individuals who are confident in their abilities to successfully perform specific tasks, can benefit from virtual contexts to be more creative (Ma, Gong, Long & Zhang, 2021; Naotunna & Zhou, 2022). At the same time, Naotunna and Priyankara (2020) consider that creative self-efficacy, as a construct derived from self-efficacy itself, is another mechanism linked to Teleworking that employees with university studies can use to be more creative, as it accentuates their ability to generate original ideas. Actually, creative self-efficacy is a variable that fuels Creativity more than intrinsic motivation. This is why it is an important precursor of innovative approaches (Naotunna & Priyankara, 2020). Consequently, Teleworking, by limiting informal communication and social interaction, provides a framework of autonomy that frees employees' abilities to be more self-efficient. This leads to more flow and balance between divergent, convergent and new thinking (Naotunna & Zhou, 2022).

On the other hand, the proportion of Teleworking Days and its relationship with creative performance is still unknown. Authors such as Naotunna and Priyankara (2020) or Vega et al. (2015) establish positive links between Teleworking and Creativity with an extent ranging from one to two days per week. In a broader sense, Merisalo, Makkonen and Inkinen (2013) establish a relationship between the intensity of knowledge, Teleworking and creative activities. Therefore, Teleworking becomes one more feature of the job itself driving university-educated employees to be more creative.

At the same time, Sardeshmukh et al. (2012) identify that Teleworking and its extent entail a series of changes that influence the balance between resources and demands related to the nature of the task. From this perspective, Teleworking reduces work pressure, role conflict and offers more autonomy. Nevertheless, and as counterpart, virtual work environments tend to have more ambiguity in functions and less perceived support, with a clear reduction in the time invested in feedback.

Ethical Leadership, under this context, clarifies the roles and functions of followers, which mitigates work stress through a high notion of perceived help (Schwepker & Dimitriou, 2021). Likewise, leadership that acts under ethical criteria, through the theory of social exchange (LMX), turns relationships with followers into a constant exchange where feedback is a source of information feeding communication between both (Qian, Wang, Han &
Song, 2017). Therefore, Ethical Leadership may be able to neutralize the negative effects detected by Sardeshmukh et al. (2012) in Teleworking. In fact, Lee, An, Lim and Sohn (2021) specify that ethical leaders mitigate employees' emotional exhaustion. Thus, it is reasonable to think of ethical leaders as a resource for followers in remote work scenarios.

Lastly, (Gajendran & Harrison, 2007) a meta-analysis including nearly 13,000 employees identified that high-intensity Teleworking, in addition to improving autonomy and work-family conflict, also has beneficial effects on work satisfaction, performance, and role stress. Similarly, (Biron & van Veldhoven, 2016) deduce that high-intensity Teleworking boosts employees' ability to concentrate and lessens their recovery time. Based on all the above, it is sensible to conclude that Ethical Leadership, by exploiting all the benefits of a virtual work environment and reversing its disadvantages, relates more effectively to Creativity as the Teleworking extent increases. Consequently, the following hypotheses are proposed:

- **H2. The number of Teleworking Days has a positive effect on the Creativity of employees with a university education**
- **H3. The number of Teleworking Days moderates the positive relationship between Ethical Leadership and the Creativity of employees with a university education**
- **H3.1. The number of Teleworking Days progressively increases the positive influence of Ethical Leadership on the Creativity of employees with university education**

### 3. Methodology

#### 3.1. Participants

The research included 448 employees (273 men and 175 women) in the Colombian electricity industry in six organizations based in the main cities of Colombia, including Bogotá, Medellín, Pereira, Manizales and Cali. The sample was calculated by a probabilistically approach by conglomerates. The industrial activity analyzed is dispersed throughout the country. The main criterion was to include the most important cities which account for more than ninety percent of teleworkers. Considering the initial size of the study population, around 20,000 people, and a confidence level of 95%, the ideal number of participants obtained was just below 400. This number was widely exceeded by the research. STATS statistical software was used. The surveys were completed on different days and in specific spaces selected by each organization. The main criterion was to include people who represented the four groups analyzed: support staff, analysts, mid-level managers, and directors.

82% of those surveyed are under 50 years of age, 60% have postgraduate studies, 81% have permanent work contracts, and 63% have more than four years of seniority. Among the latter, almost 40% have more than ten years of seniority.

Per position: 69% are analysts, 17% support staff, 9% middle managers, and only 5% directors. 42% do not have children, and 39% have elderly people under their care. 69% own their home and 84% have acquired debt. 51% live in a high socioeconomic stratum. Lastly, 39% sleep less than six hours and 65% do not share the home with other people who also telework. Additionally, 64% prefer Teleworking over more conventional face-to-face options.

Six different ranges were used to measure respondents' age or seniority. Positions or daily rest times were defined through a range made up of four options. Some facts, for example having or not having children along with being responsible for elderly dependents, were determined though dichotomous questions. To specify stratum, a scale from one to six was used, the official country scale.

#### 3.2. Instruments

**Control variables:** Based on previous studies (Golden, 2006) seniority in the organization and gender are used as control variables. It is possible for employees with high adaptation to organizational idiosyncrasies to find it...
easier to work from home. To measure permanence, survey participants were asked to indicate how long they had been working using a minimum scale from 0 to 1 year. Gender was coded as 0 for men and 1 for women.

**Extent of Teleworking:** The number of Teleworking Days was measured through a single element based on the recommendations of previous research as Vander Elst, Verhoogen, Sercu, van den Broeck, Baillien and Godderis (2017). More specifically, through the following question: how many days a week, on average, do you work from home? response options were configured using a scale from 1 to 5.

**Ethical Leadership:** One-dimensional scale Brown, Treviño and Harrison (2005), formed by ten questions and a Cronbach's Alpha (α).94. It is initially used with a range of seven possibilities and includes a neutral option. Construct used by (Santiago-Torner, 2023a) through a Likert scale of six degrees and an α:.94. Evaluated is whether or not the existing corporate leadership adjusts to ethical behavior and bases its relationship with followers on trust.

**Creativity:** One-dimensional scale (Oldham & Cummings, 1996). Composed by three questions and an α:.90. Applied by Naotunna and Priyankara (2020) using a Likert scale of seven degrees and an α:.82. Revised are the benefits or corporate advantages generated by followers through original ideas that impact products or processes.

### 3.3. Procedure

The entire procedure was executed as shown in Figure 1. The approximate time needed to complete the survey was forty minutes. A person responsible for the research provided continuous assistance to solve any doubts. Additionally, in an initial phase, the researcher presented the objectives of the study for about ten minutes, and specified the importance of reading questions carefully to provide conscious answers. Finally, the voluntary withdrawal option and confidentiality of the data provided were emphasized.

![Research process](image)

**Figure 1. Research process**

### 3.4. Data analysis

Initially, statistical calculations were conducted at a descriptive level along with the different Pearson correlations (Table 1). Next, the convergent and discriminant validity of the constructs that form the proposed model were confirmed, and Cronbach's Alphas, were confirmed to test the plausibility of the measurement scales (Table 2). Subsequently (Table 3), multiple regression analyzes were done using the PROCESS 3.5 SPSS (Igartua & Hayes, 2021) macro to analyze the moderating function of the Teleworking extent variable, in the relationship determined between Ethical Leadership and Creativity. In this sense, model 1 (simple moderation) was chosen...
with a reliability interval of 95% and 10,000 bootstrapping samples. In order to prevent multicollinearity problems, the method of mean centering of the predictor variables was used. That is, the mean was subtracted from the score of each variable. Therefore, all VIF indices (Variance Inflation Factor) were below 10. In fact, this technique offers the possibility of restricting statistical inconveniences related to high concordance between predictor variables (Aguinis, Edwards & Bradley, 2017). Finally, the Johnson-Neyman technique was used to determine the areas of statistical relevance, revealing, in particular, the incidence of the independent variable (Ethical Leadership) on the dependent variable (Creativity) on three of the values (2, 3 and 5) of the mediating variable (Teleworking extent).

4. Results

Descriptive statistics and bivariate correlations.

Table 1 presents the number of items per scale, the means, the standard deviations, and the bivariate correlations. Gender is not related to years of seniority or to Ethical Leadership. However, it is associated with Teleworking extent and Creativity. In fact, negative Creativity ($r = -.246, p < .01$) suggests an imbalance in the self-perception of originality between men and women, which is detailed later. In addition, there is affinity between gender and number of Teleworking Days ($r = .104, p < .05$). On the other hand, years of seniority influence on individual Creativity ($r = .112, p < .05$), and also on Ethical Leadership ($r = .165, p < .01$). Additionally, they have a positive effect on the Teleworking extent ($r = .219, p < .01$). This confirms that seniority contributes to a greater self-perception of Ethical Leadership as the predominant management model and, in conjunction, the larger the number of Teleworking Days the more possible appreciation and conformity with the work model. Likewise, Ethical Leadership has a beneficial effect on the number of Teleworking Days ($r = .124, p < .05$) and on Creativity ($r = .249, p < .01$). Finally, Teleworking extent gradually influences individual Creativity ($r = .166, p < .01$). Actually, these last three results are the most important of this research.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>1</td>
<td>1.39</td>
<td>.488</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seniority</td>
<td>1</td>
<td>3.58</td>
<td>1.839</td>
<td>.037</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethical Leadership</td>
<td>10</td>
<td>51.62</td>
<td>4.230</td>
<td>-.049</td>
<td>.165*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teleworking Extent</td>
<td>1</td>
<td>29.81</td>
<td>3.82</td>
<td>.104*</td>
<td>.219**</td>
<td>.124**</td>
<td></td>
</tr>
<tr>
<td>Creativity</td>
<td>3</td>
<td>14.32</td>
<td>2.560</td>
<td>-.246**</td>
<td>.112*</td>
<td>.249**</td>
<td>.166**</td>
</tr>
</tbody>
</table>

General note. All correlations with an asterisk are significant ($p < 0.05$). The significance is ($p < 0.01$) with two asterisks. 

Table 1. Means, Standard Deviations and Correlations between Variables (n=448) CI (95%)

Table 2 shows the convergent and discriminant validity. Regarding composite reliability, the critical coefficients (CR) meet the recommended minimums of ($>1.96$; $p &lt; 05$) by Hair, Black, Babin, Anderson and Tatham (2006). The Composite Reliability Indices (CFC) are above .70, as are the different Cronbach's Alphas, which means they are adequate to measure the construct Hair et al., (2006). Likewise, the values of the Average Variance Extracted (AVE) are between .54 and .70, and explain from 54% to 70% of the variance. Therefore, the higher the AVE value, the more significant the latent variable indices. Discriminant Validity (DV), based on Fornell and Larcker (1981), depends on the square root of AVE being greater than the correlation value, which is widely applicable in this case.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>ALPHA¹</th>
<th>CR²</th>
<th>CFC³</th>
<th>AVE⁴</th>
<th>DV⁵</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethical Leadership</td>
<td>.91</td>
<td>&gt; 1.96</td>
<td>.880</td>
<td>.540</td>
<td>.730</td>
</tr>
<tr>
<td>Creativity</td>
<td>.88</td>
<td>&gt; 1.96</td>
<td>.920</td>
<td>.700</td>
<td>.840</td>
</tr>
</tbody>
</table>


Table 2. Reliability, Convergent and Discriminant Validity
Hierarchical multiple regression analyzes (moderation) were conducted to verify the different hypotheses. In order to limit the Creativity relationship with individual measures, regression models were designed including a first step with two control variables: gender and seniority. Afterwards, the main effects associated with Ethical Leadership were integrated into the second step, along with the incidence of Teleworking Days. The last step explains the interaction between Ethical Leadership (X) and the Teleworking extent (W).

Table 3 shows the results of the unstandardized regression coefficients calculated with the PROCESS macro, along with the corresponding confidence intervals. On the one hand, coefficient $R^2$ indicates the quality of the proposed regression model. In fact, it explains 22% of the variance of the criterion variable (Creativity) ($R^2:.215$, $F: 30.61, p <.01$). Estimates from each regression analysis considered the significance level defined by the p value and the limits (LLCI, ULCI) of the confidence interval (CI). If the value 0 is within this range, the regression analysis will not be significant.

The results obtained confirm the hypotheses proposed: (1) $H1$: Significant and positive effect of Ethical Leadership on Creativity ($b =.36, p <.001, 95\% CI [.32,.76]) (2) $H2$: The moderating variable (Teleworking Days) has a significant and positive effect on Creativity($b =.83, p <.008, 95\% CI [.16,.42]) (3) $H3$: Teleworking extent (W) significantly moderates the relationship between Ethical Leadership and Creativity ($b =.022, p <.002, CI 95\% [.01,.04]). Finally, for the interaction between the independent variable and the moderator $H3.1$: Significant and positive moderating effect of the Teleworking extent, low (2), medium (3) and high (5), on the relation between Ethical Leadership and Creativity. Therefore, Teleworking extent enables gradually increasing employees' individual Creativity, through an Ethical Leadership style. The last hypothesis $H1.1$: Convex relationship between Ethical Leadership and Creativity is ascertained through Figure 7 ($r^2 =.14, p <.001$). Therefore, when Ethical Leadership is perceived as high, it encourages individual Creativity through interactions based on trust, positive feedback and quality. This promotes common objectives and greater effort to be able to achieve them through original solutions.

![Figure 2. Study model: Conceptual scheme. PROCESS MODEL 1](image-url)
Figure 3. Study model: Statistical scheme. PROCESS MODEL 1

Figure 4. Results of regression analysis with the PROCESS macro (statistical diagram)

Figure 5 graphically represents the interaction effect (moderation) of the Teleworking extent variable in the relationship established between Ethical Leadership and Creativity. Using the pick a point method, PROCESS provides three different values for the moderating variable, calculated from the mean score±1 times its standard deviation. These values were labeled as (1) Low perception (value of -.96); (2) Medium perception (value of .00), and (3) High perception (value of .96). In conclusion, the number of Teleworking Days (low, medium and high) significantly and gradually increases individual Creativity with an Ethical Leadership style.

Figure 5. Graphic representation of the moderating effect of the Teleworking extent variable (low, medium and high perception) on the relationship between Ethical Leadership and Creativity
Using the Johnson-Neyman technique, Figure 6 defines the region of statistical significance where the conditional effect studied (W) affects the relationship between X and Y. This region is represented by the upper right quadrant. It is observed that the effect of Ethical Leadership on Creativity, represented by the Point estimate line, is statistically significant when W (Teleworking Days) is greater than 1.36, with 86.21% of the sample above that value. Therefore, the effect of Ethical Leadership on Creativity is conditioned by the Teleworking Days, in such a way that its intensity increases progressively as the number of Teleworking Days of increase. Figure 7 represents the convex relationship between Ethical Leadership and Creativity.

![Figure 6. Graphic representation of the conditional effect of Ethical Leadership on Creativity, as a function of the different values of the moderator variable (Teleworking extent)](image)

![Figure 7. Convex relationship between Ethical Leadership and Creativity](image)

Figures 8 and 9 clearly show three scenarios: (1) Self-perception of Creativity is higher in males and is even more evident as Teleworking extent increases, (2) Teleworking reduced to one day per week visibly limits individual Creativity, (3) Generally, Teleworking extent has a positive effect on Creativity.
Figure 8. Perception of Creativity by gender (male-female)

Figure 9. Perception of Creativity per Teleworking Days gender (male-female)

Figure 10 also has two readings. (1), Teleworking one day per week limits the positive effect of Ethical Leadership. Actually, a management style based on interaction and trust relationships takes time to be perceived. (2), The perception of Ethical Leadership is more stable in the male gender regardless of progression of Teleworking Days.
5. Results discussion

This paper contributes, in a new way, to the existing literature linking Ethical Leadership and Creativity, by verifying different hypotheses. The first one is that Ethical Leadership and Creativity are significantly related. This coincides with (Esguerra et al., 2022; Javed, Rawwas, Khandai, Shahid & Tayyeb, 2018; Liu, Baranichenko, An, Lin & Ma, 2020).

The findings of this research show that Ethical Leadership has a direct impact on individual Creativity. This verifies that behaviors associated with moral values, build organizational contexts that support creative performance. Consequently, Creativity is affected by the leader’s ethical behavior and also by the industrial environment climate, as it remains a circumstantial component that can foster open and creative ideas through an environment of integrity and trust (Esguerra et al., 2022). In fact, a balanced work environment makes it easier for followers to take risks, and ethical leaders transmit a positive and near image that activates social exchange as a mechanism of creative expression.

In this sense, Sammy (2021) suggests that Ethical Leadership becomes a crucial behavior model in virtual work environments where employees are subject to low supervision and where autonomy is built through bonds of trust. Actually, relying emotionally on individual goodwill represents a qualitative leap of such magnitude, in an organizational relationship, that it encourages a series of shared efforts that usually translate into original and creative concepts. In reality, followers trust their leaders when they perceive consistency between the observed behavior and the desired behavior. Additionally, open communication offered by ethical leaders is key in remote work environments, as it enables employees to partake in favorable spaces giving rise to innovative ideas (Javed et al., 2018). Finally, creative proposals are still behaviors that expose employees. Therefore, ethical leaders design inclusive habitats, free of threats, where followers feel autonomous and emotionally safe (Liu et al., 2020).

The second theory verified by this research is that Ethical Leadership and Creativity are related through a convex pattern (Figure 7). This partially coincides with (Santiago-Torner, 2023a), and differs from the concave standard proposed by Feng et al. (2018); Mo et al. (2019).

In this sense, the updated analysis of the Leader-Member Exchange theory (LMX) facilitates understanding this new model, and represents an advance regarding the results proposed by (Santiago-Torner, 2023a).

Initially, LMX seeks to establish a relationship between leaders and followers aimed primarily at achieving mutual goals. The result of this interaction leads to an LMX with different quality scales that can vary between low and high, depending on the degree of exchange (Graen & Uhl-Bien, 1995). From this angle, Ethical Leadership
establishes an unusual scheme of interrelation that is bidirectional. Meaning: it builds trust, and it trusts (Qian et al., 2017). Thus, this management style can build a high-quality LMX in two ways, exercising influence at individual level and at team level, with a low degree of differentiation (Martin, Thomas, Legood & dello Russo, 2018). In fact, organizations increasingly aim to a type of horizontal interaction, where feedback emerges in multiple directions and is received from various sources (supervisor-follower-peer-supervisor). From this perspective, a solid environment where constant feedback predominates, and where emotional connections are built through mutual support mechanisms, is the optimal space for multiple ideas to flow through a progressive social exchange (Santiago-Torner, 2023a).

Consequently, a high perception of Ethical Leadership, instead of generating a negative inflection point (Feng et al., 2018), with an excessive emphasis on unattainable moral norms and standards that diminish creative performance, builds upon the social aspects with honesty, dedication to service, justice and respect, under a trusted surface that stimulates individual Creativity (Santiago-Torner, 2023a). The nature of ethical leaders does not seek to limit followers’ divergent thinking. Instead, it offers psychological safety and credibility, with repeated positive experiences that create intimate connections among peers. Thus, the high expectations of ethical leaders, instead of having negative repercussions, integrate followers through common scenarios that facilitate achieving creative goals (Qu, Janssen & Shi, 2017).

However, and contradictory to part of the existing literature, rigid thinking and a lack of adaptation to change occurs when the LMX between ethical leader and follower is of low quality. In fact, Martin et al. (2018) refer the effect of an insufficient LMX as counterproductive performance. Therefore, followers may perceive lack of fairness or unfair treatment from the leader and restrict their creative capacity through a passive and conformist attitude. In this direction, Goncalo and Duguid (2012) conclude that dissatisfaction entails a level of pressure that goes beyond inability to fulfill duties or conformity with the status quo, and leads followers towards a context of psychological separation from the work group which in turn prevents the creation and expression of new ideas.

The third hypothesis confirmed by this article is that the number of Teleworking Days benefits individual Creativity. This fits, at least partially, with the results proposed by Gajendran and Harrison (2007); Merisalo et al. (2013); Sardeshmukh et al. (2012) and distances from Naotunna and Priyankara (2020); Naotunna and Zhou (2022), because these authors designed a model with only one Teleworking Day per week, and this study (Figure 6) does not find affinity between the low intensity Teleworking and Creativity.

Generally, employees with university education tend to be guided to activities that require multiple tasks or a rapid succession between them. Thus, Kapadia and Melwani (2021) suggest that multitasking can increase Creativity through a simultaneous activation of cognitive capacity and flexibility. Therefore, distractors are a significant drawback as these tend to hinder the processes involved in using and retaining information (Naotunna & Priyankara, 2020). Consequently, remote work shapes a specific ecosystem that limits distractors and increases work autonomy as essential characteristics for Creativity to improve (Ansah et al., 2022). Furthermore, Glenn Dutcher (2012) deduct those activities requiring high levels of concentration and supported by responses with certain degrees of novelty, turn out more productive when conducted in virtual work environments. Likewise, Sardeshmukh et al. (2012) conclude that Teleworking reduces time pressure and role conflict. Similarly, Baer and Oldham (2006) discover that intermediate time pressures relate to high Creativity. In turn, Usman and Xiao (2017) explain that lack of specificity in employees’ roles affects their creative expectations, as goals are an important factor and ambiguity thereof can induce low creative performance and increase work stress. Finally, Rodríguez-Madroño (2022) provide a more subtle understanding of the implications of high-intensity Teleworking. Included among them are adaptation and development of new skills, along with high work commitment. Additionally, the previously quoted author concludes that Teleworking mitigates the demands related to job position; therefore, it becomes a resource. In this sense, very recent research such as that of Jnaneswar and Ranjit (2022) proves a high correspondence between organizational commitment and Creativity. Extracted from all this is that there is a high association between Teleworking and its extent with respect to individual Creativity.
The fourth and fifth hypotheses validate the moderation of Teleworking Days, and that their extent progressively increases the positive influence of Ethical Leadership on Creativity. In fact, these findings fill an important knowledge gap as no contrasting studies using a similar model were found in this bibliographical revision.

Ethical Leadership breaks the historical paradigm that effective management depends on physical proximity. Actually, due to their characteristics, ethical leaders adapt to the new electronic leadership model proposed by Contreras et al. (2020) among others. Thus, remote work naturally projects a less hierarchical management style with capacity to build consistent and trustworthy relationships, while maintaining genuine concern for the well-being of followers.

In a broader sense, electronic leadership (e-Leadership) stimulates work performance in Teleworking by limiting the distance between the organization and the follower. To reach this objective it is essential for leaders, in remote work environments, to promote the exchange of ideas and to focus on trust, as an essential part of the permanent flow of information that generates creative solutions (Avolio, Sosik, Kahai & Baker, 2014). Therefore, an Ethical Leadership style is key, as its approach gives preference to personal interaction, as well as to specifying the importance of employees’ well-being through clarity of their institutional role (Saha et al., 2020; Schwepker and Dimitriou, 2021). Likewise, ethical leaders consider that trust is the priority mechanism for relationships with followers to be sincere and consolidated from a principle of shared psychological safety (Figueiredo et al., 2022). Thus, the ethical leader establishes itself as a resource that intensifies its value through the number of Teleworking Days (Figure 10), who can also counteract consequences related to Teleworking such as lack of feedback or emotional exhaustion, (Lee et al., 2021). This gradually leads to superior creative performance.

To conclude this discussion of results, and without including it in the proposed hypotheses, male gender self-perception of Creativity is higher than that of the female gender (Figures 8 and 9). Specifically, Stoltzfus, Nibbelink, Vredenburg and Hyrum (2011) concluded, in a study including university women in the United States, that the demands of the female social role have hindered development of their inclination towards what is unconventional, which defines highly creative people. Another perspective by Proudfoot, Kay ab¡nd Koval (2015) identifies that female managers are stereotyped as less creative when evaluated by their superiors. Additionally, characteristics linked to the male stereotype, such as audacity and self-sufficiency, can condition the creative self-perception of the female gender, which is linked more to cooperation and organizational support. The explanation of the differences found in this case is precisely that 56% of the women surveyed work in support areas, versus only 36% of the men. Possibly this knowledge-associated area of work with requires fewer creative solutions.

6. Conclusions

Ethical leaders promote a climate where trust and psychological safety activate basic aspects such as interpersonal communication and the exchange of perspectives. Consequently, this equitable approach stimulates a high interaction between the leader and the follower, which tends to build a strong relationship between the two. Naturally, this specific attention gives rise to a constant exchange of valuable information resulting in a sustained effort, and enabling the achievement of common objectives through original responses.

In fact, shared ethical standards, far from generating a rigid and impossible moral standard, give way to a perception of fairness and relationships without prejudices which, instead of frustrating creative performance, nourish it through a U-shaped convex design. Generally, the complexity of this relationships is hardly supported by a linear design. Thus, close supervision does not deter followers from undertaking activities that improve the resolution of complex tasks. Actually, frequent feedback acts as a moderating agent in two ways, avoiding unnecessary emotional pressures and preventing possible wear and tear of the relationship. Therefore, this mature bond produces a progressive influence that enhances Creativity. Additionally, this trust structure can be developed throughout the organization, through a common thread integrated by leadership scales at different levels.
On the other hand, sustained supervision devoid of affection can be considered a harmful and hostile factor that weakens employees' Creativity, and explains the inverted U shape found by previous authors, mainly in eastern cultures. Obviously, when large leader-member emotional distance is intentionally established, an ethical management style promoting the exact opposite is unfeasible. Consequently, proximity and quality interactions between human beings do not depend strictly on physical closeness.

In this sense, Teleworking and its extent amplify the positive effect of ethical direction on individual Creativity. In fact, virtual work environments become ideal habitats for employees with high academic training as they offer a series of benefits. These include increased autonomy and decreased number of distractors, which increases the authenticity of the exchange between leaders and followers in a scenario where mutual interest is prioritized. Finally, the tasks multiplicity required by a virtual work environment increases the Creativity level, through a series of parallel accelerations that impact employees' cognitive adaptation capacity.

7. Practical implications

Colombia is undergoing a deep transformation regarding the role of professional women in knowledge. However, there are still prejudices preventing their incorporation into the institutional areas of greatest value, including innovation. It is essential for selection processes to break gender paradigms. In fact, autonomy, self-confidence, persistence or boldness are individual traits and should be measured as such.

Organizational training plans aimed at promoting an Ethical Leadership style can represent a great competitive advantage from various angles. Firstly, the transition from conventional to electronic leadership needs the influence of strong ethical values to avoid leadership styles such as intrusive leadership or abusive leadership. These do not consider employees’ well-being as a priority. Moreover, Ethical Leadership is characterized for facilitating shared management with followers. This, in a virtual work environment, prevents exhaustion by means of more efficient meetings. In the same direction, ethical leaders encourage followers' participation through constant interaction and shared feedback, which in turn prevents isolation. Finally, the ethical management style promotes a culture of boundary management, which prevents the negative impact of remote work on personal and family life.

On the other hand, proper use of technological capacities is a priority to enhance Creativity through synchronous meetings, where the trust created by the ethical leader promotes brainstorming without any fear or anxiety of possible negative reactions. Similarly, technology, by breaking all territorial barriers, is a tool that facilitates collaboration between business sectors and the academia, hence environments aimed towards Creativity and innovation can be built together.

Finally, in case of looking for hybrid work alternatives that combine remote and on-site days it is essential to consider the results of this research, since very low-intensity Teleworking, one day a week, substantially reduces individual Creativity.

8. Limitations

The main limitation of this research is transversality as only one point in time is evidenced. However, the sample incorporates data from the most important cities in the country, which pluralizes the information and prevents the common bias of collecting evidence from a single source. In fact, this particular issue generalizes results even more, at least in the Colombian territory. Additionally, the social desirability bias is reduced in two ways: the survey is anonymous and the importance of answering the different questions honestly is emphasized initially. However, in order to contrast the different hypotheses presented, it is essential to reproduce and extend this analysis longitudinally. Besides, the differences in the self-perception of Creativity evidenced in this research between men and women, represent an opportunity for new research aiming to delve into this gender gap. To conclude, future research can expand the role e-ethics of Ethical Leadership.
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References


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