



Ethical Climate and Creativity: The Moderating Role of Work Autonomy and the Mediator Role of Intrinsic Motivation

Clima ético y creatividad: el papel moderador de la autonomía laboral y el papel mediador de la motivación intrínseca

Carlos Santiago-Torner*

* **Corresponding author:** Universidad de Vic - Universidad Central de Cataluña. Department of Economics and Business. Calle de la Sagrada Familia, 7, 08500 Vic, Barcelona, Spain – carlos.santiago@uvic.cat – <https://orcid.org/0000-0002-0852-1578>

ARTICLE INFO

Received 14 April 2022,
Accepted 24 August 2022

Available online 19 January 2023

DOI: 10.5295/cdg.221729cs

ABSTRACT

The current business context needs trust as a continuous mechanism of relationship with employees, because along with responsibility and moral standards, they configure a climate where the main perception is that the way of operating adjusts to ethical guidelines. Thus, establishing an ethical climate is of vital importance because it builds an interpersonal habitat that develops close ties based on positive emotional states. Such climate is a propitious scenario for other relevant variables such as work autonomy, intrinsic motivation or creativity to be related in a systemic way. Therefore, this study aims at analyzing how an ethical climate relates to employee creativity, considering the moderating capacity of work autonomy and the mediating role of intrinsic motivation in a primary sector, such as the Colombian electrical sector. In this sense, the research uses a quantitative, non-experimental, cross-sectional and correlational-causal design. The sample is formed by 448 employees who were evaluated through an online survey. Regarding the results, an ethical climate promotes organizational creativity resulting from high levels of autonomy. When the latter is significantly reduced, the relationship between ethical climate and creativity becomes negative. In turn autonomy, in the medium levels, does not influence the relationship between both variables. Furthermore, ethical climate links with creativity through Benevolent and Principles criteria, but not selfish criteria. Finally, ethical climate and creativity are consistently mediated by intrinsic motivation. In conclusion, both the moderating effect of work autonomy and the mediating effect of intrinsic motivation largely explain how ethical climate links to creativity.

Keywords: Ethical Climate; Creativity; Work Autonomy; Intrinsic motivation; Colombian Electricity Sector; Ethics

RESUMEN

El contexto empresarial actual necesita servirse de la confianza como un mecanismo continuo de relación con el empleado, dado que junto con la responsabilidad y los estándares morales configuran un clima donde la percepción principal es que el modo de proceder está ajustado a lineamientos éticos. Por ese motivo el establecer un clima ético es de vital importancia pues construye un hábitat interpersonal que desarrolla vínculos de cercanía basados en estados emocionales positivos; un escenario propicio para que otras variables relevantes como la autonomía laboral, la motivación intrínseca o la creatividad se puedan relacionar de forma sistémica. Por lo tanto, este estudio tiene como objetivo analizar cómo un clima ético se relaciona con la creatividad del empleado teniendo en cuenta la capacidad moderadora de la autonomía laboral y el papel mediador de la motivación intrínseca dentro de un sector primordial en Colombia como es el eléctrico. En ese sentido, la investigación emplea un diseño cuantitativo, no experimental, transversal y correlacional-causal. La muestra está compuesta por 448 trabajadores que se evalúan a través de una encuesta online. En cuanto a los resultados un clima ético promueve la creatividad organizacional en virtud de índices altos de autonomía. Cuando esta se reduce significativamente la relación entre clima ético y creatividad se torna negativa; a su vez en rangos medios la autonomía no influye en la asociación entre ambas variables. Además, el clima ético se asocia con la creatividad a través de criterios benevolentes y de principios, pero no egoístas. Por último, el clima ético y la creatividad están mediados de un modo consistente por la motivación intrínseca. En conclusión, tanto el efecto moderador de la autonomía laboral como el mediador de la motivación intrínseca explican en gran parte cómo un clima ético se vincula con la creatividad.

Palabras clave: Clima Ético; Creatividad; Autonomía Laboral; Motivación Intrínseca; Sector Eléctrico Colombiano; Ética

1. INTRODUCTION

The current business context faces great challenges that include persuading new clients through a good reputation, which also helps attract unusual talent (Schaarschmidt *et al.*, 2021). Likewise, crucial interest is placed on preventing desertion of hired employees, through a work environment that encourages appropriate intrinsic motivation and improves their life quality through greater work autonomy. A critical factor of today's business reality must be addressed before this could happen, and this factor is the quality of the relationship between leader and subordinate (Fein *et al.*, 2013). In this sense, an ethical climate creates an interpersonal context that builds bonds of trust based on positive emotional states (Decoster *et al.*, 2021; Haldorai *et al.*, 2020) that influences work satisfaction, turn-around intentions, as well as intrinsic motivation and work autonomy, which generates the desired freedom and tranquility (Rivai *et al.*, 2019). Therefore, trust relationships become a critical skill for organizational advancement (Strutton *et al.*, 1993). Similarly, authors such as Dysvik and Kuvaas (2011) highlight the reach of work autonomy and intrinsic motivation, as in all modern theories it is of vital importance to be able to structure work and to keep employee motivation. Therefore, labor autonomy integrates independence and the power to make decisions and discretionally choose the best method to perform a task. Consequently, work autonomy acquires an ethical status as it depends on how it is managed by the employee, through her/his personal good sense and responsibility (Caesens *et al.*, 2017). Hence, the importance of an ethical climate because it helps to understand how organizations are internally regulated, and it also addresses employee behavior from their ethical responsibility (Cullen *et al.*, 2003). Simultaneously, creativity is another component of business progress gaining relevance as of the year 2020 (Liu *et al.*, 2020). This happened not only as a result of the Covid-19 pandemic health and economic crisis, but also due to the constant instability human beings are subjected to, along with the organizations to which they belong, due to the fragility of the trust relationships of the leaders of the great world powers.

The suitability of this research is extracted from all the latter. It seeks to understand how ethical climate articulates with creativity through work autonomy and intrinsic motivation. In other words, this study aims to analyze variables that have been observed independently but not through a systemic lens.

Regarding previous studies, Li *et al.* (2021) uses ethical climate as mediator between ethical leadership and creativity. On the other hand, no research was found linking ethical climate to creativity, much less using moderating or mediating variables such as work autonomy or intrinsic motivation. However, there are analyzes that relate ethical climate to intrinsic motivation, such as works by Khaltar and Moon (2020), or ethical climate and work autonomy, among others, Rivai *et al.* (2019). Therefore, the results obtained can represent a theoretical and empirical advance in knowing how the studied variables improve through their interaction.

Regarding the scope of the study, it is placed in Colombia, specifically in its electricity sector. In fact, the country's ener-

gy organizations are drawing up strategies to avoid deviation of public funds, or favoritism, in the allocation of large exploitation projects. The ETHICS FORUM OF THE COLOMBIAN ELECTRICITY SECTOR was born in 2015 for this purpose, a community action formed by the 35 most important organizations in the country. This entity aims at establishing policies for analysis, monitoring and standardization of processes with indicators that activate significant improvements and control in strategic planning. The ethical leadership style, promoted in recent years, also seeks to influence employees through shared values and objectives, which configure an ethical climate that also becomes an implicit source of motivation. Creativity and innovation are simultaneously the growth axes of all energy segments, mainly of the electricity sector, due to the orographic difficulties in the national territory. Therefore, this research aims to answer questions raised in different annual congresses, including: how can an ethical climate enhance work creativity? and what variables explain the why (mediation) and the when (moderation) of this relationship?

At the same time, this study hopes to contribute novel results to the existing literature, as there are great knowledge gaps about the relevance of ethical climates regarding creative processes. On the other hand, understanding the mediating and moderating effect in work satisfaction and performance of such decisive variables in intrinsic motivation and work autonomy, will bring clarity to be able to provide employees with the means and the environment needed to be more creative, using regulated and institutionally accepted ethical criteria. Finally, the proposed theoretical model can be transferred to other sectors in the country, or even to new territories with similar characteristics.

2. LITERATURE REVIEW

2.1. Ethical Climate and Creativity

Many organizations have the objective of transmitting and promoting professional norms and standards, that nurture employee behavior towards a climate of morality and ethics (Decoster *et al.*, 2021). In fact, authors such as Victor and Cullen (1988) refer to ethical climate as a reflection, organizationally shared, of what is conducive to building a common culture from an ethical approach. Therefore, ethical climate creates an appropriate organizational setting for trust to proliferate as a bond that, besides uniting the relationship between supervisors and employees, also strengthens bonds of friendship and interest among all its members (Haldorai *et al.*, 2020).

Consequently, ethical climate aims at addressing organizational issues from a moral integrity perspective. Thus, when employees identify with this type of climate, they are able to face ethical dilemmas with sufficient tools to be able to solve them (Kwon Choi *et al.*, 2013).

Similarly, creativity depends on the context where it develops, and being able to manage it depends on understanding the social complexity that organizations represent (Auger & Woodman, 2016). From this point of view, ethical climate considers that relationships of trust supported by respect are crucial for employees to be more efficient and creative. That is, ethical climate in-

teracts and tries to get to know its social capital or to know more about the context where it operates (Sözbilir, 2018). At the same time, ethical climate develops values and competencies such as Friendship, team interests, or Social Responsibility, which are creative indicators (Chaudhary & Akhouri, 2018; McKay *et al.*, 2017). Similarly, Kern (2006) reflects on the role of the norm, as the essence of ethical climate, regarding employee creativity, and concludes that both are adjusted in a joint improvement of creative performance. Consequently, ethical climate is adequate for creativity to proliferate because it does not generate a restrictive framework where originality is an excessively controlled effect and distorted (Feldman, 1999).

Therefore, the following hypothesis is proposed:

Hypothesis 1. Ethical climate is positively related to creativity.

2.2. Ethical Climate, Intrinsic Motivation and Creativity

Intrinsic motivation deals with the way how employees experience a strong inclination towards a task, due to their nature, without considering external causes (Santiago-Torner & Rojas-Espinosa, 2021). To this end, authors such as Shareef *et al.* (2019), based on the Cognitive Evaluation Theory (CET), explain that intrinsically motivated behaviors depend on high work autonomy, since intrinsic motivation is based on performing an activity for the sole purpose of enjoying it. This implies curiosity coupled with independence, which are only possible with a high level of work freedom. In this sense, ethical climate provides employees with a moral value and a social meaning for the work being done. This, in addition to developing and allowing them greater autonomy, adheres them ideologically and motivates them intrinsically (Jiang *et al.*, 2021). In fact, ethical climate tends to inspire employees, who feel valued and safe, and instills a state of mind and a particular enthusiasm to create new and useful ideas (Fischer *et al.*, 2019). Undoubtedly, the responsibility transfer linked to ethical climate acts as an emotional reward providing employees motivation and curiosity to examine and adapt creative thinking towards innovative results (Tan *et al.*, 2019). Simultaneously, ethical climate facilitates the relationship between intrinsic motivation and creativity through different assumptions. In first place, it helps to readjust and balance possible individual inequalities (Fischer *et al.*, 2019). Additionally, it commits the creative agent with the scenario where she/he operates, intrinsically motivating her/him (Auger & Woodman, 2016). Finally, it removes the focus of creative behavior centered on others of the egocentric, prioritizing it (Fischer *et al.*, 2019; Santiago-Torner, 2021a).

Likewise, intrinsic motivation plays a very important role in depersonalization as it prevents employees from losing interest in the work they do (Benita *et al.*, 2019). Finally, other authors such as Khaltar and Moon, (2020) relate intrinsic motivation to ethical behavior and climate, given that an equal treatment and a climate based on ethical values effectively influence work satisfaction and adequately predict intrinsic motivation (Gheitani *et al.*, 2019).

Therefore, the following hypothesis is proposed:

Hypothesis 2. The effect of ethical climate on employee creativity will be significantly mediated by intrinsic motivation.

2.3. Ethical Climate, Work Autonomy and Creativity

Authors as Guerci *et al.* (2015) state that ethical climate seeks for employees to adhere, without further ado, to rules and regulations, and also to be aware of them when making decisions. This fosters a climate of proactivity and work autonomy as part of their concerns for well-being. Similarly, Fein *et al.* (2013) think that ethical climate perseveres in employees' work autonomy by considering it a relevant component of their emotional health. Similarly, Anand *et al.* (2012) interpret that work autonomy is part of an adequate design of the job position, which intrinsically empowers and motivates employees through a continuous improvement process, which also includes spaces for feedback.

In the same sequential sense, Auger and Woodman (2016) propose that intrinsic motivation, work autonomy and creative personality come together as they are related to openness to the experience, self-efficacy and perseverance (Federici, 2013; Prabhu *et al.*, 2008; Zhang *et al.*, 2020). Therefore, employees with high intrinsic motivation and work autonomy are likely to be involved in creative processes within their activities. In addition, a perception of high work autonomy gives employees the necessary conditions for their work to have creative connotations, by being able to decide independently (Pattnaik & Sahoo, 2021). On the other hand, an environment of low autonomy provides little freedom and this hinders the creative performance of employees, who depend excessively on external opinions that avoid risk as an inherent component of creativity (Llopis & Foss, 2016). Likewise, employees in situations with a medium level of awareness of work autonomy may cling to what is known, and avoid new perspectives and challenges (Maric *et al.*, 2021). Thus, a conformist work approach is based on less personal confidence which avoids breaking the established status quo. In other words, it prevents originality, giving way to what is familiar, avoiding any links to a creative exercise (Walia, 2019).

Consequently, and based on the literature review, the following hypothesis is proposed:

Hypothesis 3. Ethical climate will stimulate employees' creativity in a negative way with low levels of work autonomy, it will act positively when work autonomy is perceived at high levels, and it will not have any impact when perceived in medium levels.

3. METHOD

3.1. Participants

The total sample for the study was 448 professional employees in six different organizations in the Colombian electricity sector, 273 men and 175 women, with an age range from 20 to 69 years. 82% of the participants are under 50 years old. Regarding distribution by departments, 44% is located in Antioquia, 26% in Caldas and the remaining 30% is equally distributed in departments as Cundinamarca, Risaralda and Valle del Cauca.

Distribution by education: 100% have university studies, and 57% have graduate studies. It is worth to highlight that 63% of the sample participants have more than 4 years in the organization, indicating strong professional stability. Additionally, 58% have children, and 39% have elderly dependents. It is relevant

to mention that 76% of the people surveyed live in a socio-economic stratum from 1 to 4, which evidences inequality in the country, regardless of education level. Finally, only 10% suffer from chronic diseases, and 32% rest from 3 to 6 hours daily, on average.

3.2. Instruments

All the items used in this study were measured with a Likert scale ranging from 1 (“totally agree”) to 6 (“totally disagree”). The model is distributed as follows:

A multidimensional scale composed of 36 items was used to measure ethical climate, suggested by Victor and Cullen (1988). It is formed by two dimensions that interact with each other to form 9 possible ethical climates. Three forces coexist in the first dimension, the Analysis Center (CA for its acronym in Spanish): Individual, Local and Cosmopolitan. Three essential moral criteria coexist in the second dimension, Ethical Criteria (CET for its acronym in Spanish): Selfish, Benevolent and Principles. Confluence of the two dimensions leads to nine proposals in the form of indicators: three of Principles (11 questions), three of Benevolent (11 questions) and three of Selfish (14 questions). These are: Own interest: (CET: Selfish; CA: Individual. 7 items). Business Beneficial: (CET: Selfish; CA: Local. 3 items). Efficiency: (CET: Selfish; CA: Cosmopolitan. 4 items). Friendship (CET: Benevolent; CA: Individual. 3 items). Group or Team Interest: (CET: Benevolent; CA: Local. 4 items). Social Responsibility (CET: Benevolent; CA: Cosmopolitan. 4 items). Personal Morality: (CET: Principles; CA: Individual. 3 items). Rules and Procedures: (CET: Principles; CA: Local. 4 items). Laws and Professional Codes: (CET: Principles; CA: Cosmopolitan. 4 items). Coincident perception is measured to address an ethical issue. This scale was used by Cullen *et al.* (2003) among others. The reliability indices established in this study are between .58 and .86, except for the ethical climate of Principles-individual which only reaches a Cronbach's Alpha (α) of .192 (see Tables 1 and 2).

The one-dimensional scale developed by George and Zhou (2001) was used to measure creativity. It evaluates, through 13, items the creative traits that a supervisor can recognize when employees perform their duties. Ten of these 10 traits are the authors' own, and three are adapted from a scale proposed by Scott and Bruce (1994). The Cronbach's alpha obtained in the original scale is .96, and it is applied through a 5-point Likert scale, used by Salazar-Carvajal *et al.* (2014) among others. This study achieves an $\alpha=.93$ (see Table 1).

The one-dimensional scale suggested by Spreitzer (1995) was used to measure work autonomy. It evaluates work autonomy through three items. The initial internal consistency of the scale scores a Cronbach's alpha of .72. It assessed if employees have enough independence to be able to make decisions while carrying out their work and to exercise some control over it. The construct is used by Boxall *et al.* (2011). This study obtains an $\alpha=.87$ (see Table 1).

Finally, the standard suggested by Tierney *et al.* (1999) is used to measure intrinsic motivation, which contains five questions, through a six-point scale, and an $\alpha=.74$. Used by Messmann and Mulder (2014) through a 7-point Likert scale. The causes driving employees to carry out a task without external

incentives are analyzed. This study scores a Cronbach's alpha of .90 (see Table 1).

3.3. Procedure

All the proposed research passed the Ethics Committee of University of Vic - Central University of Catalonia in July/2021 with codes 2021 and 170. The information was collected in the last quarter of 2021. The different privacy agreements were agreed in an initial phase, and all the study material was also sent to the organizations: objectives, data protection security, participation description, voluntary withdrawal option with its corresponding document to complete, among others. The project began in April 2021 with its presentation to almost 40 companies in the sector, at an annual event aimed at promoting ethical leadership and climate as buffers against possible irregularities. The Colombian electricity sector is characterized by a constant desire to generate transparency in its results, agreements, associations, etc. The six companies participating in the study represent the sector as they are subsidiaries of large multinational companies that form the Colombian electricity sector community. Microsoft Forms was used for the questionnaire and the average time taken to complete the form was about twenty-five minutes.

3.4. Data Analysis

The descriptive statistics and the different correlations between the 4 variables studied (see Tables 1 and 2) are initially quantified through the statistical program Spss v.25. Secondly, the model relevance is evaluated through convergent and discriminant validity (Appendices 1 and 2; Tables A1.1 and A1.2) using the Amos v.26 macro. Afterwards, and through macro Process v.3.5 for Spss (Hayes, 2018), the moderating role of work autonomy, regarding the relationship between ethical climate and creativity, is analyzed, in addition to the mediating role of intrinsic motivation in the link between climate ethics and creativity. Model 5 (mediation and moderation) proposed by Hayes (2018) is used for this complex function, with a confidence interval (CI) of 95% and a total of 10,000 bootstrapping samples. Likewise, —through multicollinearity indices, Variance Inflation Factor (VIF), between 1.13 and 1.19, along with tolerance values between .834 and .871,— it is determined that there is no collinearity and it is possible to deduce that there are no high correlations between variables. In turn, the Durbin-Watson value (1.599), being between 1.5 and 2.5, confirms independence between the residuals. Figure 1 shows the mediation and moderation model used with non-standardized coefficients, with the help of the Amos v.26 macro for Spss (Hayes, 2018). This analysis is configured through Table 3. It represents the mediation of intrinsic motivation in the relationship between ethical climate and creativity, and also the moderation of work autonomy with reference to ethical climate and creativity, conditioned by three direct effects (low, medium and high), represented in Figure 2. To conclude, Figure 3 represents the Johnson-Neyman technique where the statistical value of the independent variable (ethical climate) over the dependent variable (creativity) can be seen, with the different values of the moderating variable (work autonomy).

4. RESULTS

4.1. Reliability

First, the reliability of the four general scales used in this research is tested (see Table 1). The Cronbach's alpha (α) obtained reaches values between .86 and .93, which show an acceptable internal consistency, as indicated by Streiner (2003). All the correlations of the nine indicators and subscales that form ethical climate with respect to the rest of the variables are also attached (Table 2).

In turn, Table 1 indicates the number of questions per scale, means, standard deviations and Pearson's correlation coefficients. Ethical climate is significantly related to work autonomy, intrinsic motivation and creativity; however, the Selfish ethical climate subscale is not associated to work autonomy or creativity ($r=.074$; $p>.05$); ($r=.056$; $p>.05$). Likewise, work autonomy, intrinsic motivation and creativity are adequately linked among them. Table 2 similarly relates the 9 indicators of ethical climate with the variables of work autonomy, intrinsic motivation and creativity. To this end, the Individual Selfish ethical climate and Local Selfish ethical climate indicators are not linked to any variable, just like the Principles Individual ethical climate.

Table 1
Reliability, Means, Standard Deviations, Correlations Between Variables (n=448) IC (95%)

Variables	α	N	M	SD	1	2	3	4	5	6
Ethical Climate	.86	36	160.5	17						
Selfish Ethical Climate	.77	14	55.6	2.5	.745***					
Benevolent Ethical Climate	.88	11	55	12.1	.696***	.129**				
Ethical Climate Principles	.74	11	49.9	4.8	.843***	.438***	.564***			
Work Autonomy	.87	3	14.91	2.5	.237***	.074	.262***	.236***		
Intrinsic Motivation	.90	5	27.08	3.1	.330***	.145**	.363***	.273***	.309***	
Creativity	.93	12	64.89	7.9	.226***	.056	.286***	.205***	.304***	.579***

Overall note. * $p<.05$; ** $p<.01$; *** $p<.001$; $p>.05$. Source: Own elaboration.

Table 2
Correlations Between Variables and Ethical Climate Indicators (n=448) IC (95%)

Variable	α	N			
			1	2	3
			Creativity	Intrinsic Motivation	Work Autonomy
Global Ethical Climate	.860	36	.226***	.330***	.237***
Selfish Ethical Climate (CEE)	.770	14	.060	.145**	.074
C.E.E.I ¹	.610	7	.005	.074	.078
C.E.E.L ²	.600	3	.014	.060	-.01
C.E.E.C ³	.633	4	.142**	.243***	.106*
Benevolent Ethical Climate (CEB)	.880	11	.286***	.363***	.262***
C.E.B.I ⁴	.581	3	.241***	.261***	.217***
C.E.B.L ⁵	.750	4	.250***	.306***	.259***
C.E.B.C ⁶	.839	4	.268***	.394***	.214***
Principles Ethical Climate (CEP)	.740	11	.205***	.273***	.236***
C.E.PI ⁷	.192	3	.064	.041	.039
C.E.PL ⁸	.715	4	.217***	.308***	.208***
C.E.PC ⁹	.708	4	.179***	.251***	.266***

General note. * $p<.05$; ** $p<.01$; *** $p<.001$; $p>.05$. 1. Individual Selfish Ethical Climate. 2. Local Selfish Ethical Climate. 3. Cosmopolitan Selfish Ethical Climate. 4. Individual Benevolent Ethical Climate. 5. Local Benevolent Ethical Climate. 6. Benevolent Cosmopolitan Ethical Climate. 7. Ethical Climate Individual Principles. 8. Ethical Climate Local Principles. 9. Ethical Climate Cosmopolitan Principles. Source: Own elaboration.

Next, for more reliability of the proposed model, the convergent and discriminant validity of the measurement scales is evaluated. First, the statistical relevance of the standardized factor loadings, of all the indicators of each latent construct, is assessed through the macro Amos v.26. Hair *et al.* (2006) specify in this regard, that the standardized loadings must be greater than .5, and the T values must be greater than 1.96. The 57 items studied in this case meet these conditions (Supplementary file; Table S1). Second, the Average Variance Extracted (AVE) is revised with the Composite Reliability Coefficients (CFC). For this purpose, the higher the AVE values, the more relevant the indicators of the latent variable involved. It is generally recommended for the AVE value to be greater than .5, but this is not an excluding condition (Hair *et al.*, 2006). Regarding the previous, all the scales and subscales analyzed are between .35 and .79. This means that they capture between 35 and 79 percent of the variance. Furthermore, all composite reliability coefficients are above .7 and, according to Nunally (1978), are appropriate indices (Supplementary file; Table S1). (3). Finally, the discriminant validity is analyzed (Supplementary file; Table S2). The square root of the AVE is compared with the correlations between constructs to meet this condition. According to Fornell and Larcker (1981), the square root of AVE must be greater than the different correlations for discriminant validity to exist. It is concluded, based on the results, that there is discriminant validity between constructs (Supplementary file; Table S2).

4.2. Validity Analysis

Simultaneously, Table 3 shows the mediation and moderation analysis with non-standardized regression coefficients and appropriate confidence intervals (CI) (95%), with the number of bootstrapping samples at 10,000. Likewise, the coefficient of determination R^2 helps to understand the regression model and its relevance, as it explains 36.8% of the variance of the creativity dependent variable. Its f^2 (statistical strength) is high at .582. Additionally, two control variables, gender and age range, are used to confirm the different associations in the regression models. Regarding the analyzes developed, it is worth mentioning that they are done with non-standardized coefficients, indicators of significance at 95%, and lower limit confidence interval and upper limit confidence interval (LLCI and ULCI) as boundaries. The regression analysis is irrelevant if 0 appears in the space delimited by the ranges. In first place, ethical climate (independent variable X) is significantly related to intrinsic motivation (mediating variable) through the route ai ($\beta = .069$; $p < .05$; [.046, .095]) (see Table 3 and Figure 3). On the other hand, intrinsic motivation is positively associated with creativity (dependent variable Y) through the route bi ($\beta = .416$; $p < .05$; [.018, .684]) (see Table 3 and Figure 3). Additionally, the indirect effect of intrinsic motivation on the link between ethical climate and creativity is positive ($\beta = .093$; $p < .05$; [.044, .217]) (see Ta-

Table 3
Results Analysis Moderation and Mediation Ethical Climate vs. Creativity 95% (IC)($R^2 = .368$) ($f^2 = .582$; Large)

Effect	Route	β	p	t	ES	LLCI	ULCI
Effect Ethical Climate (CE) on Intrinsic Motivation (MI)	ai	.069	.001	7.390	.008	.046	.095
Effect Intrinsic Motivation on Creativity (C)	bi	.416	.001	13.126	.107	.018	.684
Effect Ethical Climate on Creativity	c1'	.106	.001	3.156	.092	.006	.355
Effect Work Autonomy (WA) on Creativity	c2'	.148	.001	3.353	.083	.121	.664
Effect Ethical Climate X Work Autonomy on Creativity	c3'	.021	.001	3.016	.006	.005	.431
Sex (control variable 1) MI	---	.607	.130	1.174	.279	-.155	.658
Age range (control variable 2) MI	---	.144	.275	1.093	.132	-.115	.403
Sex - C	---	.807	.113	1.570	.608	-.002	.611
Age range - C	---	.388	.180	1.343	.289	-.180	.955
Conditional direct effect (xy)	Low (12)	-.051	.016	-1.928	.026	-.102	-.001
CE-C (moderator WA).	Medium (15)	.007	.712	.370	.019	-.030	.044
X on Y=c1'+c3'W	High (17)	.064	.012	2.521	.026	.014	.115
Indirect effect (xy)							
CE-MI-C (mediator MI).		.093	<.05	----	.016	.044	.217
X on Y through $M_i = aibi$							

General Note: $f^2 = .02$ (small), $f^2 = .15$ (medium), $f^2 = .35$ (large).

Source: Own elaboration.

ble 3 and Figure 3). Concluded from this first part of the analysis is that intrinsic motivation fulfills its mediating function, therefore **Hypothesis 2** is supported.

The second part of the analysis corresponds to the moderation process. In other words, when work autonomy influences the link between ethical climate and creativity. The Process macro provides three figures for the mediator variable considering the mean value +/- once the standard deviation (SD) (see Table 3 and Figure 3). In this sense, the first direct conditional effect shows that ethical climate negatively affects creativity under low levels of work autonomy ($\beta = -.051$; $p = .016$ [-.102, -.001]) (see Table 3 and Figures 4-5). Likewise, the second direct conditional effect shows that ethical climate does not influence creativity significantly under average work autonomy indices ($\beta = .007$; $p = .712$ [-.030, .044]) (see Table 3 and Figures 4-5). Finally, the third direct conditional effect confirms that ethical climate has a positive impact on creativity under high levels of work autonomy ($\beta = .064$; $p = .012$ [.014, .115]) (see Table 3 and Figures 4-5). Therefore, the three results support **Hypothesis 3**. Simultaneously, route $c3'$ (see Table 3 and Figure 3), the interaction between ethical climate and work autonomy over creativity, reinforces the three direct conditional effects because it is significant, and consequently reinforces this last hypothesis.

Finally, the third part of the analysis corresponds to the direct effect of ethical climate on creativity. To this effect, route $c1'$ ($\beta = .106$; $p < .05$; [.006, .355]) (see Table 3 and Figure 3) confirms **Hypothesis 1**. Additionally, a complementary route $c2'$ analysis is done (see Table 3 and Figure 3), which reveals the positive relationship between work autonomy and creativity.

Figure 1 includes the regression coefficients value for each one of the variables studied.

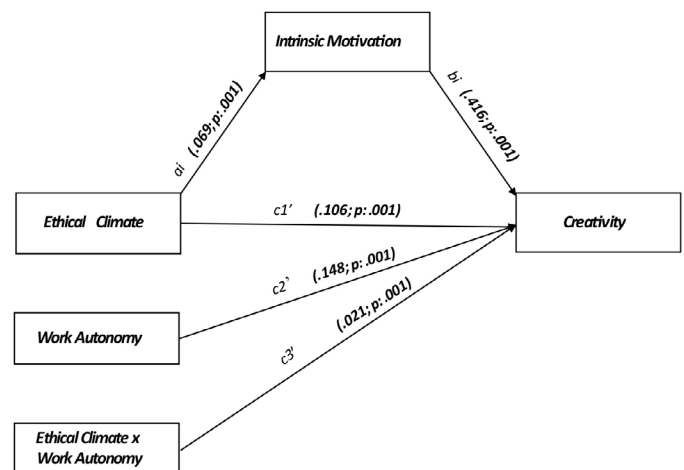


Figure 1
Results of the regression analysis with the PROCESS macro (statistical diagram). Unstandardized coefficients

Source: Figure made through the AMOS macro.

Figure 2 represents the moderation of Work Autonomy (W) based on the relationship between Ethical Climate (X) and Creativity (Y). The Process macro provides three ranges for the moderating variable, taken from the mean score +/- 1 times its standard deviation. These values are (1). Low (12). (2). Medium (15) and (3). High (17). In conclusion, Ethical Climate does not affect Creativity at a medium level of Work Autonomy. On the other hand, it has a negative impact when the perception of Work Autonomy is low and finally, it has a positive impact only when the degree of Work Autonomy is high.

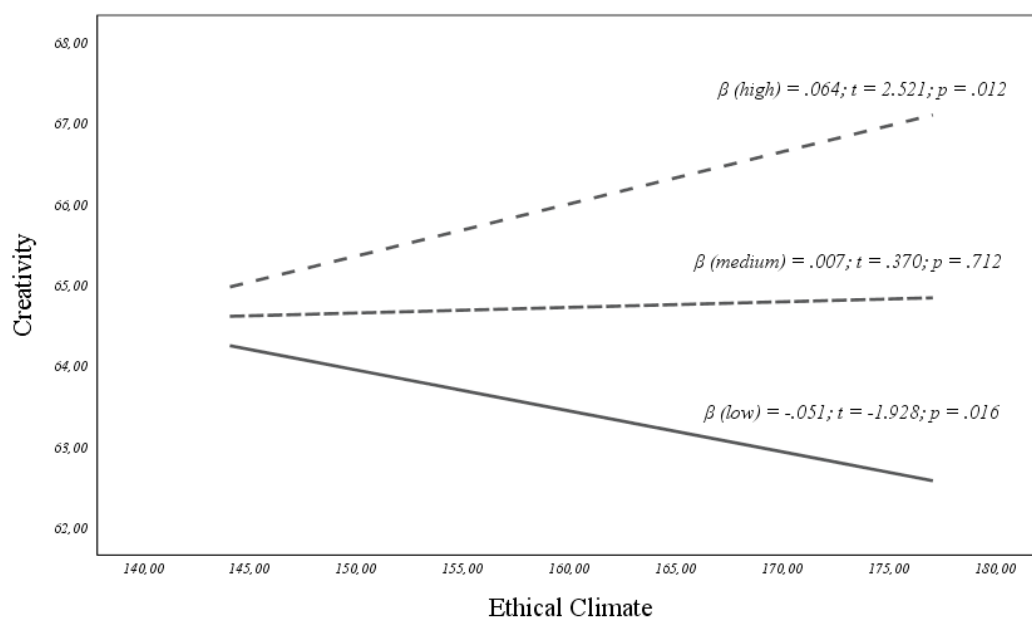


Figure 2
Graphic representation of the moderating effect of the Work Autonomy variable (low, medium, and high perception) on the relationship between Ethical Climate and Creativity

Source: Figure made through the Macro PROCESS.

Lastly, Figure 3 represents the conditional effect of Ethical Climate on Creativity with the different values admitted by W (Work Autonomy), using the Johnson-Neyman technique. Shown in the lower left quadrant and in the upper right quadrant is the impact of Ethical Climate on Creativity.

This means that the point estimate is significant at low or high values of W (Work Autonomy), and is not significant at medium values (mid upper and lower quadrant), from 11,910 to 16,838. Therefore, 69.1% of the sample is included, and 30.9% is not.

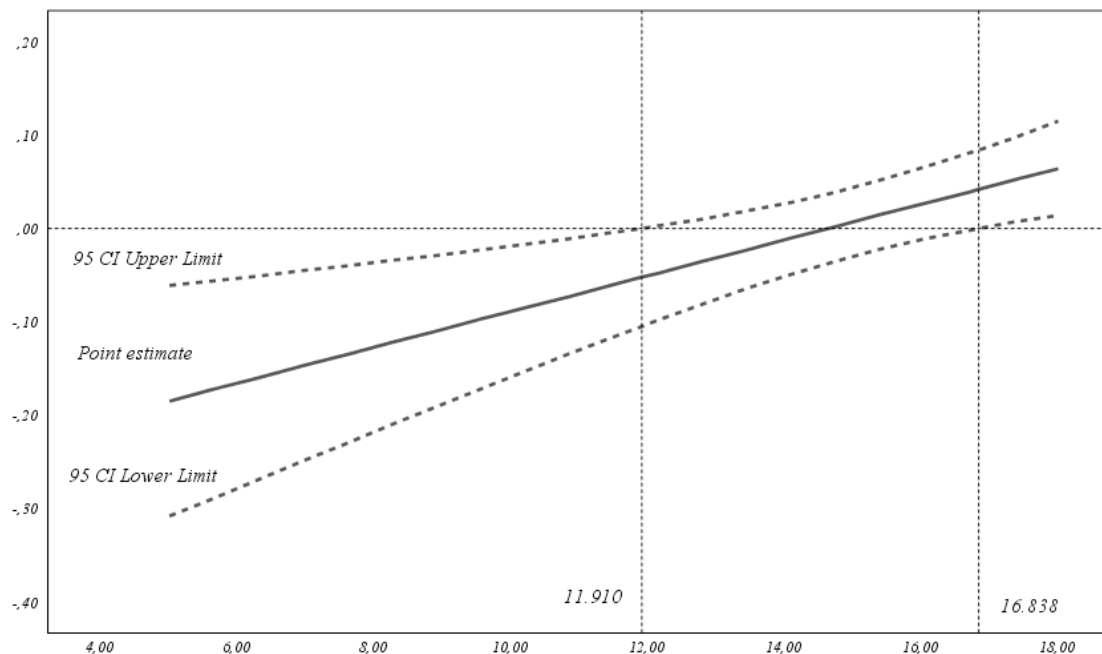


Figure 3
Graphic representation of the conditional effect of Ethical Climate on Creativity based on the different values of the moderating variable (Work Autonomy)

Source: Figure made through the *Macro PROCESS*.

5. DISCUSSION OF RESULTS

plenty of attention has independently been paid to the variables that compose this research (ethical climate, work autonomy, intrinsic motivation and creativity) but, surprisingly, no studies have been found that directly relate ethical climate with creativity, at least in this bibliographic review. There were no findings either of research in which intrinsic motivation or creativity mediate or moderate, in this order, the link between ethical climate and creativity, so this study represents an important scientific advance.

Ethical climate and creativity are significantly linked. However, indicators 1 and 2 of a Selfish ethical climate are not associated with creative behavior. McMullan (1976) explains, regarding the latter, that one of the characteristics of a creative person is selfless selfishness. This means a turning away from own interests as part of a creative solution. Therefore, a creative person tends towards empathic altruism that rejects profitable but socially harmful formulas (Weitzel *et al.*, 2010). This is far from Baumol's theory (1996), which assumes that both entrepreneurial and creative talent are prone to personal or organizational benefit. On the other hand, efficiency as the third indicator of a Selfish ethical climate is related to creativity, and around this Sözbilir (2018) establishes an explanatory link between creativity

and efficiency, considering that social capital is basic in this union, as relationships of trust between employees and respectful treatment foster higher levels of efficiency and creativity.

In a similar sense, Benevolent ethical climate and its three indicators (Friendship, Team Interest and Social Responsibility) are related to creative behavior. McKay *et al.* (2017), under this perspective, deduce that employees with a high creative level generate friendship relationships with others who have similar typologies, because it is easier for them to share ideas without feeling censored (Mueller *et al.*, 2012). Likewise, social ties within the organization drive creativity through mechanics such as trust or ease of communication, which are aspects linked to friendship (McKay *et al.*, 2017). Authors such as Reiter-Palmon *et al.* (2012) also maintain that cognitive evolution, in relation to the creative ideas of a work team, develops gradually and is affected by social processes, including interest in the work team itself. Finally, Chaudhary and Akhouri (2018) conclude that Social Responsibility is linked to creativity through intrinsic perceptions such as organizational commitment and work satisfaction, or an altruistic personality (Bierhoff and Rohmann, 2004), which benefits the collective through cooperation and shared responsibility linked to a Benevolent ethical climate through trust as the main strength (Leung, 2008).

Personal Morality, within the same context, as the first indicator of an ethical climate of Principles is not linked to creativity. Liu *et al.* (2020), in this regard, argue that people with high moral expectations assume a greater commitment to their convictions, which makes them lean towards a rigidity that is not compatible with creativity. In contrast, indicators 2 and 3 (professional rules, laws and codes) do have a significant relationship with creativity. Kern (2006) considers, in this regard, that both creativity and rules are essentially related to the work activity as such, therefore they do not enter into confrontation but rather come together in a creative development.

Work autonomy moderates the approximation between ethical climate and creativity, based on three different measures. Fein *et al.* (2013), in this direction, reveal that ethical climate fosters a high sense of work autonomy as part of adequate emotional well-being. Therefore, ethical climate is negatively associated with creativity when work autonomy moderates this relationship at low levels. In other words, when freedom to make decisions decreases, the employee feels a limited degree of self-determination which weakens the motivation and potential effort to be creative (Liu *et al.*, 2016). On the other hand, work autonomy does not affect creativity at average values, but it is significantly related to it when perceived in high values. Organizations, consequently, in order to have creative achievements, require that their employees be adjusted to the job position so it provides them with high work autonomy, as creativity needs independence to be able to choose strategies that help work performance along with a certain degree of time freedom (Sia & Apu, 2015). Similarly, ethical climate transfers trust and sincere concern for the employees' emotional state, which, together with adequate work autonomy, can lead to better creative performance (Kwon Choi *et al.*, 2013). Suire (2013), regarding moderate ranges of work autonomy, indicates that creativity does not correspond to conformism, and average levels of work autonomy can lead to a certain comfort that prevents employees from taking risks required by creativity (Kwon Choi *et al.*, 2013).

Ethical climate and intrinsic motivation associate through the same explanatory perspective. In this regard, it is worth to highlight the cognitive evaluation theory (CET). It seeks to define factors that originate and strengthen intrinsic motivation, versus those that weaken it, (Efendi & Rahardja, 2021). The CET is developed for this purpose under three main requirements: a sense of competence, autonomy and the need to form relationships (Shareef & Atan, 2019), linked by studies such as those of Guay *et al.*, (2001), which specify that the perception of competence by itself does not improve intrinsic motivation unless it is associated with a context of conscious autonomy. To this end, ethical climate provides the opportunity for employees to delve into ethical concepts and values that tend to influence their performance, and their perception of individual and work competence (Manroop *et al.*, 2014). This allows an autonomous and flexible environment that increases intrinsic motivation (Efendi & Rahardja, 2021). Ethical climate in addition provides a practical way for personal relationships to be supported, inside and outside the organization. This means that the third edge that configures intrinsic motivation is also achieved (Newman *et al.*, 2017). In this sense, Guerci *et al.*, (2015) emphasize the importance of intrinsic motivators in an ethical climate, as an

employee who is only extrinsically motivated may conflict with her/his own ethical behavior by expecting an external incentive in return of moral attitude. This could imply that their objectives are only individual and not collective and can clarify results obtained in this research. This is that the Selfish ethical climate is strongly linked to intrinsic motivation through efficiency, but not in its indicators 1 and 2 (Selfish and company profit). Renninger (2000), based on this perspective, explains that efficiency and intrinsic motivation can overlap, because both seek focused and constant enjoyment by participating in a task in which the challenge is the work itself.

On the other hand, links are generated among the three indicators of Benevolent ethical climate (Friendship, Team Interest and Social Responsibility) with the employee's intrinsic motivation. In reference to these results, Guedes and Missaka (2015) highlight that both friendship and Group Benefit, above the Individual, are factors that encourage intrinsic motivation because being appreciated and valued leads to a positive emotional state. Additionally, authors as Kim and Beehr (2018) state that Social Responsibility is a powerful driver of employee attitudes, such as intrinsic motivation.

Finally, significant links are established between ethical climate of Principles and intrinsic motivation through indicators 2 and 3 (professional rules, laws and codes), but not established with factor 1 (Personal Morality). From an explanation perspective, in a climate of Principles the expectation is to do the right thing regardless of other interests. In this sense, Hayati and Cangiago (2012) conclude that a job framed under ethical codes leads to greater work satisfaction and, consequently, to intrinsically motivated employees. On the other hand, Halla (2011) does not find a causal relationship between Personal Morality and intrinsic motivation either, since morality tends to be linked to a norm that intrinsic motivation, as individual behavior, has difficulty to explain.

Therefore, the relationship between ethical climate and intrinsic motivation is theoretically and empirically ascertained. This represents a finding as other research, such as that of Rivai *et al.*, (2019), does not find an explanatory dependence between both variables.

Finally, intrinsic motivation and creativity are significantly linked (Tables 1 and 3). This coincides with, among others, Fischer *et al.* (2019) or Tan *et al.* (2019). Amabile (1988) in this regard establishes that creative behavior is constituted through three basic factors: experience, creativity-oriented personality, and intrinsic adjustment. In this sense, Auger and Woodman (2016) indicate that intrinsic motivation is related to openness to new experiences, self-efficacy, persistence and active response to complex problems, characteristics related to creativity (Mathisen & Bronnick, 2009). Therefore, an employee with high intrinsic motivation is more likely to be linked to creative solutions.

Additionally, intrinsic motivation has a cognitive aspect related to the perspective of the employee of how she/he can act freely within her/his work environment (Auger & Woodman, 2016). In this area, 86% of the people participating in this analysis are not afraid to take risks in their job position, which denotes work autonomy adjusted to job position, alongside with intrinsic motivation directed towards creative achievements. In other words, the mediation of intrinsic motivation in the rela-

tionship between ethical climate and creativity is fully proven (Table 3; Figure 3).

In short, the results obtained show that there is good adaptation of the employee to the role, to the commitments derived from the job position, and to the organizational scheme together with the guiding rules (Dysvik & Kuvaas, 2011), through the good levels of work autonomy, intrinsic motivation and creativity obtained under an ethical context. In this sense, only 16% of those surveyed consider that their level of work autonomy is low and, in contrast to 97% who consider their intrinsic motivation as medium or high. This means that there is full awareness and alignment between what the organization expects and the individual contribution of each of its members, which balances the relationship between the variables studied.

6. CONCLUSIONS

In first place, this paper contributes to the literature on ethical climate by integrating creativity, intrinsic motivation and work autonomy in the same relational framework. Previous studies have associated ethical climate with psychological safety, ethical leadership, perceived organizational support, and corruption among other issues, but no attention has been paid to the positive impact that ethical climates can have on employees' creative performance. This research provides solid empirical support of how ethical climate and creativity relate mostly through the Benevolent and Principles criteria. It represents a valuable contribution to the state of the art on the importance of assessing creativity through a normative approach, as ethics and innovative behavior do not always go together. Additionally, based on these results, it will be possible to understand the type of ethical climate conducive to fostering creative behaviour. This may have important practical implications, not only in the sector studied but also in other sectors with human capital with high academic training. Secondly, it validates that trust is the key element that joins indicators such as efficiency, Friendship, Team Interest or Social Responsibility, and influences the rules and procedures and the laws and professional codes as it paves the way to be able to believe in organizational management (Agrawal, 2017). Likewise, trust remains as a strong conviction that a near environment will not act opportunistically or selfishly (Hall *et al.*, 2004). Moreover, trust acts as an indicator of the level of intrinsic motivation as it is based on positive assumptions of the person trusted (Conchie, 2013). In an almost equal sense, Anand *et al.* (2012) describe that the relationship between work autonomy and responsibility is mediated by trust, as the organization believes in the employee's balance when making decisions. Lastly, Mulki *et al.* (2006) conclude that ethical climate predicts employees' trust of their supervisor, and improves work satisfaction along with turnover intentions. Therefore, trust acts in an integrating way and is an important explanatory element in all this research. Likewise, Santiago-Torner (2021b) identifies a high level of leader/employee trust in a recent study of the Colombian electricity sector, which consolidates the results obtained in this research. In fact, organizational trust and trust among members

has attracted increasing interest in organizational literature as a potential mechanism for enhancing performance. However, trust, being an essential condition, due to its inductive nature becomes something fickle that has to be constantly stimulated and, identification with ethical climate, may be that nutrient necessary to cultivate it. This also represents an advance within the state of the art.

Thirdly, creativity moves away from Selfish or Company Profit when it stops being socially beneficial, meaning that it moves away from a climate based on Selfish behavior. This represents another contribution to the most recent scientific state. Furthermore, creativity is not linked to Personal Morality either, as it prevents flexibility in behavior (Liu *et al.*, 2020). Personal Morality in reality reduces cooperation because each employee has its own sense of what is fair, and this prevents reaching shared agreements (Agrawal, 2017).

Lastly, the perception of work autonomy at high levels is a prerequisite for creativity to flow properly (Sia and Apu, 2015), because at medium levels it can generate conformism and prevent risk taking as a necessary element in any creative development. (Kwon Choi *et al.*, 2013). Indeed, low levels of work autonomy obstruct creativity because employees excessively depend on other people to take creative decisions (Liu *et al.*, 2016). In fact, knowing that work autonomy within an ethical climate has to be high at all times represents another practical advance for leaders to reassess, together with followers, the design of the job position, and for both to be confident that the level of empowerment is sufficient to autonomously develop innovative ideas.

Likewise, the following limitations must be considered when analyzing the results. First, a self-assessed survey is used, which may pose a social desirability bias (De Campos & Marín Rueda, 2017). However, anonymity was guaranteed and the researcher requested honest answers before beginning. Based on detailed reading and personal understanding of each item, it is possible that the reality of this study is closer to the approach proposed by Podsakoff *et al.* (2003). This means that this bias does not exist because participants feel that they can express their opinion freely. On the other hand, by having six organizations as sample sources, the limitation of causal inference due to having a single data collection point, found by Fischer *et al.* (2019) among others, is not present in this study and therefore its results are more generalizable.

In relation to future research, it would be important to revise how the feeling of ethical climate influences the general well-being of employees, especially the levels of perceived stress (Haldorai *et al.*, 2020). In this area, researchers as Dzen and Curtis (2018) focus on the medical field, specifically on the relationship between an ethical climate and decision-making about when a life should be terminated unnaturally.

Similarly, ethical climate is linked to positive emotional states (Mulki *et al.*, 2006). Thus, it would be of great interest to see how it affects telecommuting, which has become a booming work activity with associated negative effects such as depersonalization, loneliness, possible isolation, emotional exhaustion, or the opinion of competence itself (Hunton & Norman, 2010). Also analyzed could be whether or not an ethical leadership style plays a role (moderator or mediator) in this relationship.

7. SUPPLEMENTARY FILE

A supplementary file with information contained in Table S1 and Table S2 can be accessed at this URL: <https://www.ehu.es/cuadernosdegestion/documentos/Supplementary-File-221729cs.pdf>

8. BIBLIOGRAPHY

- Agrawal, R. K. (2017). Do ethical climates impact trust in management? A study in Indian context. *International Journal of Organizational Analysis*, 25(5), 804-824. <https://doi.org/10.1108/IJOA-08-2016-1053>
- Amabile, T. M. (1988). A model of creativity and innovation in organizations. In B. M. Staw, & L. L. Cummings (Eds.), *Research in organizational behavior* (Vol. 10, pp. 123-167). Greenwich, CT: JAI Press.
- Anand, G., Chhahed, D., & Delfin, L. (2012). Job autonomy, trust in leadership, and continuous improvement: An empirical study in health care. *Operations Management Research*, 5(3), 70-80. <https://doi.org/10.1007/s12063-012-0068-8>
- Auger, P., & Woodman, R. W. (2016). Creativity and intrinsic motivation: Exploring a complex relationship. *The journal of applied behavioral science*, 52(3), 342-366. <https://doi.org/10.1177/0021886316656973>
- Baumol, W. J. (1996). Entrepreneurship: Productive, unproductive, and destructive. *Journal of business venturing*, 11(1), 3-22. [https://doi.org/10.1016/0883-9026\(94\)00014-X](https://doi.org/10.1016/0883-9026(94)00014-X)
- Benita, M., Butler, R., & Shibaz, L. (2019). Outcomes and antecedents of teacher depersonalization: The role of intrinsic orientation for teaching. *Journal of Educational Psychology*, 111(6), 1103-1118. <https://doi.org/10.1037/edu0000328>
- Bierhoff, H. W., & Rohmann, E. (2004). Altruistic personality in the context of the empathy-altruism hypothesis. *European Journal of Personality*, 18(4), 351-365. <https://doi.org/10.1002/per.523>
- Boxall, P., Ang, S. H., & Bartram, T. (2011). Analysing the 'black box' of HRM: Uncovering HR goals, mediators, and outcomes in a standardized service environment. *Journal of Management Studies*, 48(7), 1504-1532. <https://doi.org/10.1111/j.1467-6486.2010.00973.x>
- Caesens, G., Stinglhamber, F., Demoulin, S., & De Wilde, M. (2017). Perceived organizational support and employees' well-being: The mediating role of organizational dehumanization. *European Journal of Work and Organizational Psychology*, 26(4), 527-540. <https://doi.org/10.1080/1359432X.2017.1319817>
- Chaudhary, R., & Akhouri, A. (2018). Linking corporate Social Responsibility attributions and creativity: Modeling work engagement as a mediator. *Journal of cleaner production*, 190, 809-821. <https://doi.org/10.1016/j.tsc.2017.12.006>
- Conchie, S. M. (2013). Transformational leadership, intrinsic motivation, and trust: A moderated-mediated model of workplace safety. *Journal of Occupational Health Psychology*, 18(2), 198-210. <https://doi.org/10.1037/a0031805>
- Cullen, J. B., Parboteeah, K. P., & Victor, B. (2003). The effects of ethical climates on organizational commitment: A two-study analysis. *Journal of business ethics*, 46(2), 127-141. <https://doi.org/10.1023/A:1025089819456>
- De Campos, M. I., & Marin Rueda, F. J. (2017). Sesgo de deseabilidad social en medidas de valores organizacionales. *Universitas Psychologica*, 16(2), 206-216. <https://doi.org/10.11144/Javeriana.upsy16-2.sdsms>
- Decoster, S., Stouten, J., & Tripp, T. M. (2021). When employees retaliate against self-serving leaders: The influence of the ethical climate. *Journal of Business Ethics*, 168(1), 195-213. <https://doi.org/10.1007/s10551-019-04218-4>
- Dysvik, A., & Kuvaas, B. (2011). Intrinsic motivation as a moderator on the relationship between perceived work autonomy and work performance. *European journal of work and organizational psychology*, 20(3), 367-387. <https://doi.org/10.1080/13594321003590630>
- Dzeng, E., & Curtis, J. R. (2018). Understanding ethical climate, moral distress, and burnout: a novel tool and a conceptual framework. *BMJ quality & safety*, 27(10), 766-770. <https://dx.doi.org/10.1136/bmjqs-2018-007905>
- Efendi, S., & Rahardja, E. (2021). The role of intellectual capital, intrinsic motivation, and competence on service performance: Empirical Studies at Jakarta private universities. *International Journal of Science and Society*, 3(3), 170-185. <https://doi.org/10.54783/ijssoc.v3i3.363>
- Federici, R. A. (2013). Principals' self-efficacy: Relations with job autonomy, job satisfaction, and contextual constraints. *European journal of psychology of education*, 28(1), 73-86. <https://doi.org/10.1007/s10212-011-0102-5>
- Fein, E.C., Tziner, A., Lusky, L. & Palachy, O. (2013). Relationships between ethical climate, justice perceptions, and LMX. *Leadership & Organization Development Journal*, 34(2), 147-163. <https://doi.org/10.1108/01437731311321913>
- Feldman, D. H. (1999). The development of creativity. In R. J. Sternberg (Ed.), *Handbook of creativity* (pp. 169 - 188). Cambridge, England: Cambridge Univ. Press.
- Fischer, C., Malycha, C. P., & Schafmann, E. (2019). The influence of intrinsic motivation and synergistic extrinsic motivators on creativity and innovation. *Frontiers in psychology*, 10, 137, 1-15. <https://doi.org/10.3389/fpsyg.2019.00137>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 18(1), 39-50. <https://doi.org/10.1177/002224378101800104>
- George, J. M., & Zhou, J. (2001). When openness to experience and conscientiousness are related to creative behavior: An interactional approach. *Journal of Applied Psychology*, 86(3), 513-524. <https://doi.org/10.1037/0021-9010.86.3.513>
- Gheitani, A., Imani, S., Seyyedamiri, N. & Foroudi, P. (2019). Mediating effect of intrinsic motivation on the relationship between Islamic work ethic, job satisfaction, and organizational commitment in banking sector. *International Journal of Islamic and Middle Eastern Finance and Management*, 12 (1), 76-95. <https://doi.org/10.1108/IMEFM-01-2018-0029>
- Guay, F., Boggiano, A. K., & Vallerand, R. J. (2001). Autonomy support, intrinsic motivation, and perceived competence: Conceptual and empirical linkages. *Personality and Social Psychology Bulletin*, 27(6), 643-650. <https://doi.org/10.1177/0146167201276001>
- Guedes, D. P., & Missaka, M. S. (2015). Sport participation motives of young Brazilian judo athletes. *Motriz: Revista de Educação Física*, 21, 84-91. <https://doi.org/10.1590/S1980-65742015000100011>
- Guerci, M., Radaelli, G., Siletti, E., Cirella, S., & Rami Shani, A. B. (2015). The impact of human resource management practices and corporate sustainability on organizational ethical climates: An employee perspective. *Journal of Business Ethics*, 126(2), 325-342. <https://doi.org/10.1007/s10551-013-1946-1>
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E. & Tatham, R. L. (2006). *Multivariate data analysis* (6a. ed.). New Jersey: Pearson.
- Haldorai, K., Kim, W. G., Chang, H. S., & Li, J. J. (2020). Workplace spirituality as a mediator between ethical climate and workplace deviant behavior. *International Journal of Hospitality Management*, 86, 102372. <https://doi.org/10.1016/j.ijhm.2019.102372>
- Hall, A. T., Blass, F. R., Ferris, G. R., & Massengale, R. (2004). Leader reputation and accountability in organizations: Implications for dysfunctional leader behavior. *The Leadership Quarterly*, 15(4), 515-536. <https://doi.org/10.1016/j.leaqua.2004.05.005>

- Halla, M. (2011). The Link Between the Intrinsic Motivation to Comply and Compliance Behaviour: a Critical Appraisal of Existing Evidence. In *Handbook on the Shadow Economy*. Edward Elgar Publishing. <https://doi.org/10.4337/9780857930880>
- Hayati, K., & Caniogo, I. (2012). Islamic work ethic: The role of intrinsic motivation, job satisfaction, organizational commitment and job performance. *Procedia-Social and Behavioral Sciences*, 65, 1102-1106. <https://doi.org/10.1016/j.sbspro.2014.05.148>
- Hayes, A. F. (2018). Partial, conditional, and moderated, moderated mediation: Quantification, inference, and interpretation. *Communication monographs*, 85(1), 4-40. <https://doi.org/10.1080/03637751.2017.1352100>
- Hunton, J. E., & Norman, C. S. (2010). The impact of alternative telework arrangements on organizational commitment: insights from a longitudinal field experiment (retracted). *Journal of Information Systems*, 24(1), 67-90. <https://doi.org/10.2308/jis.2010.24.1.67>
- Jiang, W., Jiang, J., Zhou, Q., Yang, J., Chen, Y., Goldsamt, L., ... & Li, X. (2021). Hospital ethical climate associated with the professional quality of life among nurses during the early stage of COVID-19 pandemic in Wuhan, China: A cross-sectional study. *International journal of nursing sciences*, 8(3), 310-317. <https://doi.org/10.1016/j.ijnss.2021.05.002>
- Kern, A. (2006). Exploring the relation between creativity and rules: the case of the performing arts. *International Studies of Management & Organization*, 36(1), 63-80. <https://doi.org/10.2753/IMO0020-8825360104>
- Khaltar, O., & Moon, M. J. (2020). Effects of ethics and performance management on organizational performance in the public sector. *Public Integrity*, 22(4), 372-394. <https://doi.org/10.1080/10999922.2019.1615163>
- Kim, M., & Beehr, T. A. (2018). Challenge and hindrance demand lead to employees' health and behaviours through intrinsic motivation. *Stress and Health*, 34(3), 367-378. <https://doi.org/10.1002/smi.2796>
- Kwon Choi, B., Koo Moon, H. & Ko, W. (2013). An organization's ethical climate, innovation, and performance: Effects of support for innovation and performance evaluation. *Management Decision*, 51(6), 1250-1275. <https://doi.org/10.1108/MD-Sep-2011-0334>
- Leung, A. S. (2008). Matching ethical work climate to in-role and extra-role behaviors in a collectivist work setting. *Journal of business ethics*, 79(1), 43-55. <https://doi.org/10.1007/s10551-007-9392-6>
- Li, G., Lu, Y., & Eliason, R. G. (2021). How does ethical leadership enhance employee creativity during the COVID-19 Pandemic in China?. *Ethics & Behavior*, 1-17. <https://doi.org/10.1080/10508422.2021.1932502>
- Liu, D., Jiang, K., Shalley, C. E., Keem, S., & Zhou, J. (2016). Motivational mechanisms of employee creativity: A meta-analytic examination and theoretical extension of the creativity literature. *Organizational behavior and human decision processes*, 137, 236-263. <https://doi.org/10.1016/j.obhdp.2016.08.001>
- Liu, X., Liao, H., Derfler-Rozin, R., Zheng, X., Wee, E. X. M., & Qiu, F. (2020). In line and out of the box: How ethical leaders help offset the negative effect of morality on creativity. *Journal of Applied Psychology*, 105(12), 1447-1465. <https://doi.org/10.1037/apl0000489>
- Llopis, O., & Foss, N. J. (2016). Understanding the climate-knowledge sharing relation: The moderating roles of intrinsic motivation and job autonomy. *European Management Journal*, 34(2), 135-144. <https://doi.org/10.1016/j.emj.2015.11.009>
- Manroop, L., Singh, P., & Ezzedeen, S. (2014). Human resource systems and ethical climates: A resource-based perspective. *Human resource management*, 53(5), 795-816. <https://doi.org/10.1002/hrm.21593>
- Maric, M., Subotic, M., Dudic, B., Melovic, B., Brankovic, N., & Milisavljevic, S. (2021). Evaluating Relations between Originality, Efficiency, Conformism and Entrepreneurial Potential of Students in a Fast-Changing Business Environment. *Sustainability*, 13(4), 1593, 1-14. <https://doi.org/10.3390/su13041593>
- Mathisen, G. E., & Bronnick, K. S. (2009). Creative self-efficacy: An intervention study. *International Journal of Educational Research*, 48(1), 21-29. <https://doi.org/10.1016/j.ijer.2009.02.009>
- McKay, A. S., Grygiel, P., & Karwowski, M. (2017). Connected to create: A social network analysis of friendship ties and creativity. *Psychology of Aesthetics, Creativity, and the Arts*, 11(3), 284-294. <https://doi.org/10.1037/aca0000117>
- McMullan, W. E. (1976). Creative individuals: Paradoxical personalities. *The Journal of Creative Behavior*, 10(4), 265-275. <https://doi.org/10.1002/j.2162-6057.1976.tb00148.x>
- Messmann, G., & Mulder, R. H. (2014). Exploring the role of target specificity in the facilitation of vocational teachers' innovative work behaviour. *Journal of occupational and organizational psychology*, 87(1), 80-101. <https://doi.org/10.1111/joop.12035>
- Mueller, J. S., Melwani, S., & Goncalo, J. A. (2012). The bias against creativity: Why people desire but reject creative ideas. *Psychological science*, 23(1), 13-17. <https://doi.org/10.1177/0956797611421018>
- Mulki, J. P., Jaramillo, F., & Locander, W. B. (2006). Effects of ethical climate and supervisory trust on salesperson's job attitudes and intentions to quit. *Journal of Personal Selling & Sales Management*, 26(1), 19-26. <https://doi.org/10.2753/PSS0885-3134260102>
- Newman, A., Round, H., Bhattacharya, S., & Roy, A. (2017). Ethical climates in organizations: A review and research agenda. *Business Ethics Quarterly*, 27(4), 475-512. <https://doi.org/10.1017/beq.2017.23>
- Nunnally, J. C. (1978). *Psychometric theory*. New York: McGraw-Hill.
- Pattnaik, S.C. & Sahoo, R. (2021). Employee engagement, creativity and task performance: role of perceived workplace autonomy. *South Asian Journal of Business Studies*, 10(2), 227-241. <https://doi.org/10.1108/SAJBS-11-2019-0196>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Prabhu, V., Sutton, C., & Sauser, W. (2008). Creativity and certain personality traits: Understanding the mediating effect of intrinsic motivation. *Creativity Research Journal*, 20(1), 53-66. <https://doi.org/10.1080/10400410701841955>
- Reiter-Palmon, R., Wigert, B., & de Vreede, T. (2012). Team creativity and innovation: The effect of group composition, social processes, and cognition. In *Handbook of organizational creativity* (pp. 295-326). Academic Press. <https://doi.org/10.1016/B978-0-12-374714-3.00013-6>
- Renninger, K. A. (2000). Individual interest and its implications for understanding intrinsic motivation. In *Intrinsic and extrinsic motivation* (pp. 373-404). Academic Press. <https://doi.org/10.1016/B978-012619070-0/50035-0>
- Rivai, R., Gani, M. U., & Murfat, M. Z. (2019). Organizational culture and organizational climate as a determinant of motivation and teacher performance. *Advances in Social Sciences Research Journal*, 6(2), 555-566. <https://doi.org/10.14738/assrj.62.6267>
- Salazar-Carvajal, P. F., Herrera-Sánchez, I. M., Rueda-Méndez, S., & León-Rubio, J. M. (2014). El efecto de la conservación de recursos sobre la intención emprendedora en el contexto de crisis económica: el rol moderador de la autoeficacia y la creatividad. *Anales de Psicología/Annals of Psychology*, 30(2), 549-559. <https://doi.org/10.6018/analesps.30.2.159281>
- Santiago Torner, C. (2021a). Pandemia Covid 19 y Liderazgo Adaptativo. Reciprocidad e importancia de esta relación en una organización del sector eléctrico colombiano. *Cuadernos Latinoamericanos*

- De Administración*, 16(31), 1-19 <https://doi.org/10.18270/cuaderlam.v16i31.3209>
- Santiago-Torner, C. (2021b). Calidad de vida laboral en un entorno COVID-19. Relación e impacto con respecto al desempeño organizacional. *Revista Escuela De Administración De Negocios*, (91). <https://doi.org/10.21158/01208160.n91.2021.3050>
- Santiago-Torner, C., & Rojas-Espinosa, S. R. (2021). Pandemia COVID-19 y compromiso laboral: relación dentro de una organización del sector eléctrico colombiano. *Revista de Investigación, Desarrollo e Innovación*, 11(3), 437-450. <https://doi.org/10.19053/20278306.v11.n3.2021.13342>
- Schaarschmidt, M., Walsh, G., & Ivens, S. (2021). Digital war for talent: How profile reputations on company rating platforms drive job seekers' application intentions. *Journal of Vocational Behavior*, 131, 103644. <https://doi.org/10.1016/j.jvb.2021.103644>
- Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of management journal*, 37(3), 580-607. <https://doi.org/10.5465/256701>
- Shareef, R.A., & Atan, T. (2019). The influence of ethical leadership on academic employees' organizational citizenship behavior and turnover intention: Mediating role of intrinsic motivation. *Management Decision*, 57(3), 583-605. <https://doi.org/10.1108/MD-08-2017-0721>
- Sia, S. K., & Appu, A. V. (2015). Work autonomy and workplace creativity: Moderating role of task complexity. *Global Business Review*, 16(5), 772-784. <https://doi.org/10.1177/0972150915591435>
- Sözbilir, F. (2018). The interaction between social capital, creativity and efficiency in organizations. *Thinking Skills and Creativity*, 27, 92-100. <https://doi.org/10.1016/j.tsc.2017.12.006>
- Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of management Journal*, 38(5), 1442-1465. <https://doi.org/10.5465/256865>
- Streiner, D. L. (2003). Starting at the beginning: an introduction to coefficient alpha and internal consistency. *Journal of personality assessment*, 80(1), 99-103. https://doi.org/10.1207/S15327752JPA8001_18
- Strutton, D., Pelton, L. E., & Lumpkin, J. R. (1993). The relationship between psychological climate and salesperson-sales manager trust in sales organizations. *Journal of Personal Selling & Sales Management*, 13(4), 1-14. <https://doi.org/10.1080/08853134.1993.10753963>
- Suire, R. (2013). Innovation, espaces de co-working et tiers-lieux: entre conformisme et créativité (Innovation, Co-Working and Third Places: Between Conformism and Creativity). Available at SSRN 2210127, 1-14 <https://dx.doi.org/10.2139/ssrn.2210127>
- Tan, C. S., Lau, X. S., Kung, Y. T., & Kailsan, R. A. L. (2019). Openness to experience enhances creativity: The mediating role of intrinsic motivation and the creative process engagement. *The Journal of Creative Behavior*, 53(1), 109-119. <https://doi.org/10.1002/jocb.170>
- Tierney, P., Farmer, S. M., & Graen, G. B. (1999). An examination of leadership and employee creativity: The relevance of traits and relationships. *Personnel psychology*, 52(3), 591-620. <https://doi.org/10.1111/j.1744-6570.1999.tb00173.x>
- Victor, B., & Cullen, J. B. (1988). The Organizational Bases of Ethical Work Climates. *Administrative Science Quarterly*, 33(2), 101-125. <https://doi.org/10.2307/2392857>
- Walia, C. (2019). A dynamic definition of creativity. *Creativity Research Journal*, 31(3), 237-247. <https://doi.org/10.1080/10400419.2019.1641787>
- Weitzel, U., Urbig, D., Desai, S., Sanders, M., & Acs, Z. (2010). The good, the bad, and the talented: Entrepreneurial talent and Selfish behavior. *Journal of Economic Behavior & Organization*, 76(1), 64-81. <https://doi.org/10.1016/j.jebo.2010.02.013>
- Zhang, W., Xu, F., & Sun, B. (2020). Openness to experience, job characteristics, and employee creativity: An interactionist perspective. *Social Behavior and Personality: an international journal*, 48(4), 1-12. <https://doi.org/10.2224/sbp.9047>

