



# Leadership influence on job satisfaction and communication satisfaction in SMEs under computer-mediated-communication environments\*

Ever Bedoya<sup>a</sup>

**Abstract:** Organizational investments in ICTs have made computer-mediated communication an active agent in organizations that impact how employees perceive leadership's influence on job satisfaction and communication satisfaction. This study aims to determine whether there is a significant and positive relationship between transactional, transformational, and level 5 leadership styles on job satisfaction and communication satisfaction. The sample included 103 employees from Colombian small and medium-sized enterprises (SMEs) in the tertiary sector. Linear regressions evidenced a significant and positive influence of the three leadership styles on job satisfaction and communication satisfaction. These regressions also showed a more substantial level 5 leadership effect on communication satisfaction when the three variables interact within the organization. Similarly, transformational leadership positively impacted job satisfaction. In conclusion, leadership has a positive impact on SMEs under computer-mediated communication (CMC) environments.

**Keywords:** Computer-Mediated-Communication (CMC); Communication Satisfaction; Job satisfaction; Leadership

**Recibido:** 30/09/2020 **Aprobado:** 16/12/2020

**Disponible en línea:** 30/03/2021

**Cómo citar:** Bedoya, E. (2021). Leadership influence on job satisfaction and communication satisfaction in SMEs under computer-mediated-communication environments. *Revista Facultad De Ciencias Económicas*, 29(1), 115-126. <https://doi.org/10.18359/rfce.5298>

**JEL:** M12, M54.

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- \* Artículo de investigación derivado del proyecto "Leadership influence on the relationship between communication satisfaction and job satisfaction in CMC environments", University of Pécs, Pécs, Hungría.
  - a Candidato a Doctor en Administración, Magíster en GHT, Administrador de Empresas, Profesional en Idiomas. University of Pécs, Pécs, Hungría. Correo electrónico: [bedoyaeve@gmail.com](mailto:bedoyaeve@gmail.com) ORCID: <https://orcid.org/0000-0002-7981-1732>

## *Influencia del liderazgo en la satisfacción laboral y la satisfacción comunicativa en las PYMES en entornos de comunicación mediada por computadora*

**Resumen:** Las inversiones organizacionales en las TIC han hecho de la comunicación por computadora un agente activo en las organizaciones que impacta la manera en que los empleados perciben la influencia del liderazgo en la satisfacción laboral y la satisfacción con la comunicación. El objetivo de este estudio es determinar si existe una relación significativa y positiva entre los estilos de liderazgo transaccional, transformacional y de nivel 5 sobre la satisfacción laboral y la satisfacción comunicativa. La muestra incluyó a 103 empleados de pequeñas y medianas empresas (PYMES) colombianas del sector terciario. Las regresiones lineales evidenciaron una influencia significativa y positiva de los tres estilos de liderazgo en la satisfacción laboral y la satisfacción comunicativa. Estas regresiones también mostraron un efecto del liderazgo de nivel 5 más sustancial en la satisfacción de la comunicación cuando las tres variables interactúan dentro de la organización. De manera similar, el liderazgo transformacional tuvo un impacto positivo en la satisfacción laboral. En conclusión, el liderazgo tiene un impacto positivo en las PYMES en entornos de comunicación mediada por computadora (CMC)

**Palabras clave:** Comunicación Mediada por Computadora (CMC); Satisfacción con la Comunicación; Satisfacción Laboral; Liderazgo

## *Influência da liderança na satisfação no trabalho e na satisfação comunicativa nas PMEs em ambientes de comunicação mediada por computador*

**Resumo:** Os investimentos organizacionais nas TIC têm feito da comunicação por computador um agente ativo nas organizações que impacta a maneira em que os empregados percebem a influência da liderança na satisfação no trabalho e na satisfação com a comunicação. O objetivo deste estudo é determinar se existe uma relação significativa e positiva entre os estilos de liderança transaccional, transformacional e de nível 5 sobre a satisfação no trabalho e a satisfação comunicativa. A amostra incluiu 103 empregados de pequenas e médias empresas (PMEs) colombianas do setor terciário. As regressões lineares evidenciaram uma influência significativa e positiva dos três estilos de liderança na satisfação no trabalho e na satisfação comunicativa. Essas regressões também mostraram um efeito da liderança de nível 5 mais substancial na satisfação da comunicação quando as três variáveis interagem dentro da organização. De maneira similar, a liderança transformacional teve um impacto positivo na satisfação no trabalho. Em conclusão, a liderança tem um impacto positivo nas PMEs em ambientes de comunicação mediada por computador (CMC).

**Palavras-chave:** Comunicação Mediada por Computador (CMC); Satisfação com a Comunicação; Satisfação no Trabalho; Liderança

## Introduction

Scientific literature has widely evidenced the positive relationship between communication satisfaction and employees' job satisfaction. Hence, -especially under the current circumstances - Internet-based communication has become a real and undeniable useful resource that can positively impact all types of industry (Stanko & Sena 2019); however, some studies have demonstrated a negative impact on the employees' health (Stich et al. 2017; Stich et al. 2018). Some other studies have also shown how Internet technology has improved job satisfaction regarding access to data and information, creating new activities, and simplifying communication and social interactions. Yet, since job satisfaction is closely related to communication technology, the positive effects may be distorted considering that the use of information and communication technology (ICTs) relies on occupations, income, and educational level (Castellacci & Viñas-Bardolet 2019). Similarly, the growing use of ICTs at work and their impact on employee job satisfaction (Eurofound and the International Labour Office 2017) brings considerable challenges to modern leadership styles to effectively communicate instructions, feedback, and ideas.

## Literature review and hypotheses

For Holladay and Coombs (1993), leadership is a behavior performed through means of communication. For them, communication outlines perceptions of charismatic leaders. It should be noted that this study considered a tight relationship between the conceptual approach between charismatic and transformational leadership. According to Bass (1990; 2013), the conceptual proximity of charismatic and transformational leadership definitions can be considered as a whole for research purposes.

In terms of communication, the concept of leadership has received different definitions. This research defines leadership as "human (symbolic) communication that modifies the attitudes and behaviors of others to meet shared group goals and needs" (Hackman & Johnson 2018, p. 26), which,

in turn, is close to the definition by Tannenbaum et al. (1961, p. 21). They stated that leadership is an "interpersonal influence exercised in a situation and directed through the communication process, toward attaining a specific goal or goals." Faris (1981, p. 150) sees leadership as "communication and other forms of behavior which elicit among peers or subordinates voluntaristic behaviors which are consonant with the intent of the leader and congruent with the manifest goals of the organization and which otherwise would not have occurred"- Additionally, "leadership is first, and foremost, a communication-based activity" (Hackman & Johnson 2018, p. 21).

For the research purposes of this study, three contemporary leadership styles will be assessed: transactional, transformational, and level 5 leadership. Transactional leadership (Bass, 1985) is an exchange of benefits between a leader and his/her followers, where rewards play a key role in the staff's motivation (Burns, 1978). Transformational leadership results from employees' genuine involvement in organizational aims; in other words, individual goals are aligned with the collective purposes (Bass & Avolio, 1990). Finally, Level 5 leadership is one of the most contemporary leadership styles that has drawn the attention of scholars. This leadership resulted from initial comprehensive research on 1435 all size-firms and ended up in a sample of 500 successful organizations in the US. Researchers found that level 5 leaders have a combination of humility and will (Humility + Will = level 5) (Collins, 2001).

Regarding the relationship between leadership and job satisfaction, a study conducted with a sample of 200 nurses and medical assistants from large public and private hospitals in Malaysia, where the mediating role of job empowerment on the relationship between transformational leadership and job satisfaction was assessed, found that employee empowerment mediates the relationship between transformational leadership and job satisfaction. Likewise, the researchers found a significant association between transformational leadership and job satisfaction. They used a partial least squares-structural equation modeling

(Choi et al., 2016) to obtain the mediating effect. Additionally, researchers from ISM University of Management and Economics in Vilnius, Lithuania, examined the impact of leadership styles on job satisfaction in higher education institutions (HEI) in Lithuania. After analyzing the data from a sample of 72 staff members, including faculty members and supervisors, a significant positive impact of leadership style on job satisfaction (Alonderiene & Majauskaite 2016) was found. Some researchers have compared the effect that transactional and transformational have on job satisfaction individually. As an example, a study conducted on 270 employees from selected retail outlets in Slough, United Kingdom, examined the impact of transformational and transactional leadership styles on job satisfaction. It concluded that transactional leadership does not significantly influence job satisfaction, whereas transformational leadership showed a significant positive impact on job satisfaction (Asgar & Oino 2018). Similarly, to examine the influence of leadership styles on job satisfaction, a study conducted with 121 participants, both staff members and managers, from 16 local Vietnamese organizations in Hanoi, Da Nang, and HoChiMinh City found that transformational leaders had a more substantial influence on job satisfaction than transactional leaders (Ho et al., 2016).

On the other hand, only a few results have been found in scientific journals about the relationship between leadership and job satisfaction in the virtual environments (Computer-Mediated Communication environment). A study conducted on 375 professional-level employees found that employees with lower quality relationships with the leaders showed lower job satisfaction. This trend indicates that leadership positively impacted its relationship with job satisfaction (Hoyt & Blascovich 2003)

As a consequence of the previous literature review, it can be assumed that there is a positive correlation between leadership and job satisfaction in Computer-Mediated Communication environments (*CMC environments*). Therefore, the following hypotheses have been drawn:

*H1.a. There is a significant, positive relationship between transactional leadership and job satisfaction in CMC environments*

*H1. b. There is a significant, positive relationship between transformational leadership and job satisfaction in CMC environments*

*H1. c. There is a significant, positive relationship between level 5 leadership and job satisfaction in CMC environments*

One of the strengths of this study relies on the assumption that the CMC involving new applications, devices, and social networking tools has dramatically increased in Latin America, specifically in Colombia. Hence, technology has become an unavoidable tool to ease communication within organizations. A recent study conducted on 362 primary school teachers in Serbia to determine the relationship between communication satisfaction and leadership showed a very high positive relationship between leadership and communication satisfaction (Terek et al., 2015). Likewise, while investigating the correlation between transformational leadership, interpersonal communication, organizational conflict, and organizational effectiveness, researchers conducted a study on 90 Indonesian teachers from the province of Aceh. By applying a path analysis, the researchers concluded a positive influence of transformational leadership, interpersonal communication, and organizational conflict towards organizational effectiveness. Regarding the relationship between communication and leadership variables, the study found a strong positive correlation between interpersonal communication and transformational leadership (Mukhtar et al., 2020).

In terms of the relationship in a CMC work environment, a study of 157 sample full-time telecommuters from American companies suggested that leaders engaged more in task-oriented than relational-oriented leadership style. Additionally, task-oriented leadership showed to be the most significant predictor of communication satisfaction, among other variables (Madlock 2012). Scholars suggest that task-oriented leaders focus on production, task clarification, and efficiency,

while relationship-oriented leaders are interested in trust-building, enhancing cooperation by team members, and increasing commitment (Manyak & Mujtaba 2013). For the current study, transactional leadership characteristics have to do with task-oriented leadership, and transformational leadership characteristics are similar to relationship-oriented leadership.

Subsequently, based on the previous literature review, the following hypotheses arise:

*H2.a. There is a significant, positive relationship between transactional leadership and communication satisfaction in CMC environments*

*H2.b. There is a significant, positive relationship between transformational leadership and communication satisfaction in CMC environments*

*H2.c. There is a significant, positive relationship between level 5 leadership and communication satisfaction in CMC environments*

## Methodology

### Sample

The study sample consisted of 103 employees (55 women, 48 men) from tertiary SMEs in Colombia. Regarding the sample academic qualifications, 29% of employees (n=30) have a specialization or certificate degree; 22.3% (n=23) have a bachelor degree; 19.4% (n=20) a technology degree; 13.6% (n=14) have a technical degree; 7.8% (n=8) have a high-school degree; 5.9% of participants (6) have a master degree; only 0.98% (n=1) have a Ph.D. degree, and 0.98% (n=1) do not have any academic qualification.

## Questionnaires

The 36-item JSS (Spector 1985) was used to measure job satisfaction, Cronbach’s Alpha coefficient of .87 (M=69.17; SD=12.09). Communication satisfaction was measured by the 8-dimensions Communication Satisfaction Questionnaire (Downs & Hazen 1977), Cronbach’s Alpha coefficient of .98 (M=179.78; SD=40.55). The administration of 2 instruments measured leadership styles; The MLQ (Bass & Avolio 1997) was used to measure transactional and transformational leaderships; the dimensions tested were CR/MBEA, II/IM/IS/IC, Cronbach’s Alpha of .94 (M=81.93; DS=19.24). Finally, level 5 leadership was measured by using the 2-dimension L5LS instrument (Collins 2005), Cronbach’s Alpha of .91 (M = 41.16; SD = 8.52).

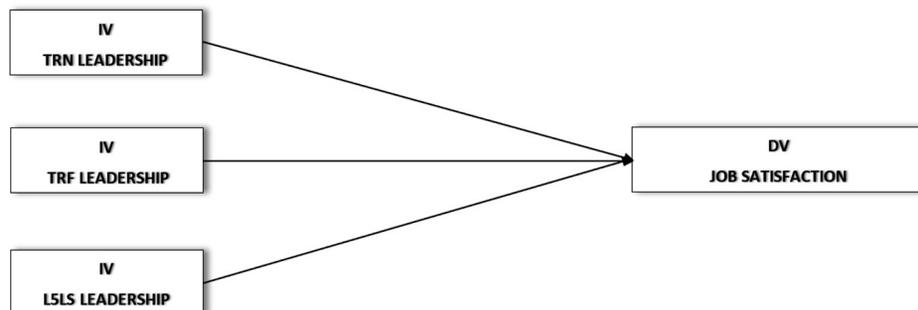
## Procedure

Pearson’s correlation coefficient was used to test hypotheses. Subsequently, linear regressions were implemented to indicate the direction and size effect of every relationship. IBM SPSS Statistics 22 was used to test hypotheses.

## Results

For research purposes, it was necessary to determine whether the sample interacted in a CMC environment. As a result, 64.5% of organizational communication was completed online. The percentage is adequate to agree that the organizations use CMC as the primary source to communicate at work.

*Hypotheses 1*



**Figure 1: H1 model**

Source: Own elaboration

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*Pearson’s correlations H1*

Results of Pearson’s correlations indicate that hypotheses H1. a., H1. b., and H1. c. have statistically significant positive relationships between the dependent and independent variables.

*Linear regressions*

H1.a. There is a significant, positive relationship between transactional leadership and job satisfaction in CMC environments.

The constant-coefficient (b=110.999, t=11.421) and the transactional leadership coefficient (b=14.741, t=4.267) are significant at p<.001. Additionally, the independent variable coefficient (b<sub>1</sub>=14.741, p<.001) shows a positive relationship between job satisfaction and transactional leadership. As a result, the H1.a. is supported.

*H1. b. There is a significant, positive relationship between transformational leadership and job satisfaction in CMC environments.*

The constant-coefficient (b=92.564, t=9.819) and the predictor coefficient (b=19.898, t=6.394) are significant at p<.001. Additionally, the

independent variable coefficient (b<sub>1</sub>=19.898, p<.001) demonstrates a positive relationship between job satisfaction and transformational leadership. As a result, the H1. b. is not rejected.

*H1.c. There is a significant, positive relationship between level 5 leadership and job satisfaction in CMC environments.*

The constant-coefficient (b=91.482, t=9.162) and the predictor coefficient (b=7.515, t=6.133) are significant at p<.001. Additionally, the independent variable coefficient (b<sub>1</sub>=7.515, p<.001) shows a positive relationship between job satisfaction and level 5 leadership; as a result, the H1. c. is supported.

In conclusion, the analysis of Pearson’s correlation and the linear regression have demonstrated that H1.a., H1.b., and H1.c. can be supported.

*Research Question 1*

Which leadership style – transactional, transformational, and level 5 – has a more significant effect on job satisfaction when interacting in organizations under CMC environments?

**Table 1: Coefficients H.1**

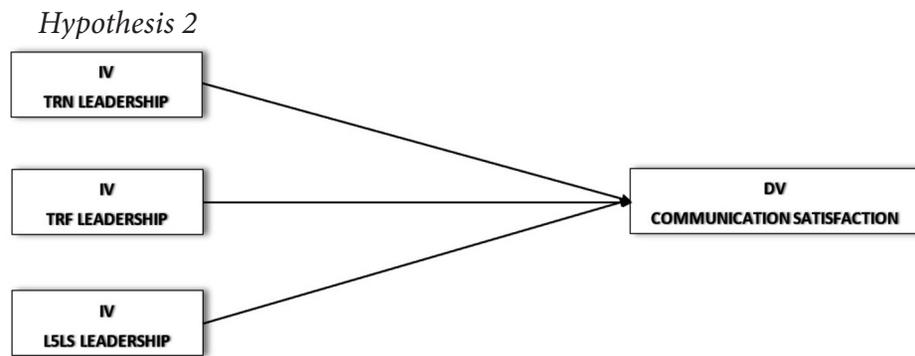
Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
1 (Constant)	87.065	10.221		8.518	.000
TRANSACTIONAL	-4.892	5.204	-.130	-.940	.349
TRANSFORMATIONAL	15.770	6.224	.425	2.534	.013
LEVEL 5	3.902	1.979	.270	1.972	.051

a. Dependent Variable: JOB SATISFACTION

Source: Own elaboration

The transactional leadership vector is not statistically significant in the model b=-4.892, p>.05; therefore, transactional leadership did not significantly affect job satisfaction when the three leadership styles interacted. The transformational leadership style has a positive and significant value of coefficient b=15.770, p<.05; hence, there is a considerable effect on job satisfaction when the three leadership

variables are aggregated. Finally, the relationship of level 5 leadership with job communication showed a coefficient that is not statistically significant when the three leadership styles interact b=3.902, p >.05. Subsequently, it is concluded that transformational leadership is the style that has a more significant effect on job satisfaction in the organization when the three variables interact within the organization.



**Figure 2: H2 model**

Source: Own elaboration

To test hypotheses H2 a., H2. b., and H2. c. Pearson’s correlation coefficient was determined, and then the relationships were observed using simple linear regressions.

*Pearson’s correlation coefficient H2*

Pearson’s correlation coefficient identified that there is a significant and positive relationship between the independent variable and the independent variables.

*Linear Regression*

*H2.a. There is a significant, positive relationship between transactional leadership and communication satisfaction in CMC environments.*

Regarding the statistical significance, it is found a significant difference between  $b_0$  ( $b=2.400$ ,  $t=6.353$ ) and  $b_1$  ( $b=1.003$ ,  $t=7.469$ ) at  $p<.001$ . About the coefficient, it is found that the independent vector coefficient ( $b_1=1.003$ ,  $p<.001$ ) indicates a significant and positive relationship between communication satisfaction and transactional leadership. Consequently, the hypothesis H2.a. is not rejected.

*H2.b. There is a significant, positive relationship between transformational leadership and communication satisfaction in CMC environments.*

A high significance was observed from the model where  $b_0$  ( $b=1.773$ ,  $t=4.922$ ) and  $b_1$  ( $b=1.141$ ,  $t=9.592$ ) at  $p<.001$ . About the coefficient, it is found that the independent coefficient ( $b_1=1.141$ ,  $p<.001$ ) shows a significant and positive relationship between communication satisfaction and transformational leadership. Consequently, the hypothesis H2. b. is not rejected.

*H2.c. There is a significant, positive relationship between level 5 leadership and communication satisfaction in CMC environments.*

The constant-coefficient ( $b=1.431$ ,  $t=3,985$ ) and the predictor coefficient ( $b=.466$ ,  $t=10,572$ ) are significant at  $p<.001$ . Additionally, the independent variable coefficient ( $b_1=.466$ ,  $p<.001$ ) shows a positive relationship between communication satisfaction and 5 level leadership; as a result of the linear regression, the hypothesis H2.c. is supported.

*Research question 2*

Which leadership style – transactional, transformational, and level 5 – has a more significant effect on communication satisfaction when interacting in organizations under CMC environments?

**Table 2: Coefficients H2**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.134	.365		3.109	.002
TRANSACTIONAL	.128	.186	.076	.691	.491
TRANSFORMATIONAL	.425	.222	.257	1.913	.059
LEVEL 5	.302	.071	.469	4.276	.000

a. Dependent Variable: COMMUNICATION SATISFACTION

Source: Own elaboration

The transactional leadership vector coefficient showed the lowest positive effect of the three variables with communication satisfaction; however, that result was not significantly influential in the model ( $b=.128, p>.05$ ); therefore, transactional leadership was not found to have a significant effect on communication satisfaction when the three leadership styles interact. Similarly, regarding the transformational leadership style, it can be observed that the variable did not have a positive and significant value of the beta coefficient ( $b=.425, p>.05$ ). Therefore, it was concluded that it did not significantly affect the relationship with communication satisfaction when the three leadership variables are aggregated. Finally, it was observed that the effect on the relationship between level 5 leadership and communication satisfaction showed a beta coefficient that is statistically significant when the three leadership styles interact ( $b=.302, p <.05$ ). Consequently, it was concluded that level 5 leadership was the style with a more significant effect on communication satisfaction in an organization when the three variables interact.

## Discussion

### Discussion 1: Hypothesis 1

Job satisfaction was regressed on a simple linear regression with each of the three leadership predictors. Regarding the relationship between leadership styles and job satisfaction, the study validates previous research findings that demonstrated a

positive relationship between leadership and job satisfaction (Choi et al., 2016; Alonderiene & Majauskaite, 2016). The current study found that the three leadership styles, when evaluated individually, showed a significant and positive relationship with job satisfaction.

Another important finding of the current study arises from comparing the influence of transactional, transformational, and level 5 leadership styles on job satisfaction. Results showed that the individual relationships between job satisfaction and transactional and transformational leadership styles were weak, whereas the relationship between job satisfaction and level 5 leadership style was moderate. Finding positive and weak relationship by the predictor reinforces Bass’s argument (1985), which states that transactional leadership style is based on achieving objectives in exchange for rewards where leader’s role is focused on the task, that is, designing strategies that guarantee the completion of the task, performance, and persuasion against possible resistance from the followers. The weak level of influence on behavior may respond to the fact that job satisfaction does not depend only on the rewards people expect to obtain but also on other dimensions contained in the instruments.

Results also evidence that transformational leadership style has a more significant influence on improving job satisfaction than transactional leadership, which may be due to the transformational leadership’s constant efforts to achieve institutional goals differently from the transactional leadership style.

Transformational leadership empowers and engages followers to align their individual goals with the organizational goals; hence, their skills are developed (Bass & Riggio 2006 p. 4). This study's finding validates the results presented by Asghar & Oino (2018) and Ho et al. (2016). They concluded that transformational leadership has a more significant effect on job satisfaction than transactional leadership. In other words, a leader who motivates followers to align their personal goals with the organizational goals is more suitable for leading SMEs than a leader who focuses exclusively on rewards-based motivational maneuvers.

Similarly, the findings show that leaders' influence on job satisfaction has a positive impact on the dimensions of the study. However, this leadership's effect on improving the employees' perceptions of job satisfaction is weak. Consequently, it is concluded that more than transactional or transformational leaders' strategies are necessary to make followers increase their job satisfaction.

On the other hand, results prove that level 5 leaders had a moderate influence on job satisfaction. This leadership style may have a greater impact on job satisfaction than transactional and transformational styles due to the way leaders establish lasting and strong bonds with their followers through a blending of personal humility and professional will (Collins 2001). One question that remains unanswered -which could be part of further studies- regarding the behaviors and distinctive characteristics of level 5 leaders that make followers feel more satisfied in their work environment.

Transformational leadership with a more significant impact than transactional leadership and level 5 leadership with the most significant impact (out of the three styles assessed) on communication satisfaction is consistent with the authors' theoretical constructs. Therefore, it is possible, on the one hand, to validate the descriptive categories of each of the three leadership styles. Furthermore, the finding resulting from this comparative exercise can be considered an important theoretical input to help organizations create differentiated strategies to improve employee job satisfaction.

Additionally, the tested hypothesis enabled the authors to answer the following research question:

Which leadership style - transactional, transformational, and level 5 - has a more significant effect on job satisfaction when interacting in organizations?

Job satisfaction was regressed on multiple linear combinations of the three leadership predictors to answer the research question. In other words, the three leadership styles were interacting, just as it daily happens in organizations. The finding is an entirely new contribution to the study of the three leadership styles in terms of their interaction analysis and their effect on employees' perception of job satisfaction.

It is important to state that the significance level is not relevant to the transactional leadership variable's coefficient  $b = -4,892$ .  $p > .05$ ; however, as a resource to enrich the discussion and contrast the theory, it should be noted that by observing the interaction of the three leadership styles, the  $b$  value becomes negative, which means that in the presence of other leadership styles, transactional leadership would adversely affect job satisfaction.

The three leadership styles' interaction showed that the transactional and level 5 leadership styles' influence was not statistically significant on job satisfaction. In comparison, transformational leadership turned out to be the only one of the three styles that can improve employees' perception of job satisfaction. Hence, it can be concluded that these organizations interpret better leaders who can motivate employees by the way they treat, value, and encourage followers to achieve that personal goals get aligned with institutional goals, rather than by leadership strategies aiming at obtaining rewards, or by typical actions of leaders who arise admiration for their characteristics of knowledge and humility. This finding is quite interesting since it is evident how leaders with transformational traits become a more significant influence. This means that transformational leaders can deliver a more motivating leadership message in SMEs to increase job satisfaction.

## Discussion 2: Hypothesis 2

Communication satisfaction was regressed on a simple linear regression with each of the three leadership predictors. Regarding the relationship between leadership styles and internet-based communication satisfaction, the study validates the research findings conducted by Terek et al. (2015) and Mukhtar et al. (2020), who proved a positive relationship between leadership and communication satisfaction. The current study showed that, when tested individually, the predictors of each of the leadership styles showed a positive and significant relationship with communication satisfaction in internet-based environments.

Interestingly enough, when studying leadership styles individually and then comparing them among themselves, employees perceive a weak influence by transactional and transformational leadership on communication satisfaction. In contrast, level 5 leadership has a moderate effect. It is necessary to highlight that the three leadership styles impact communication satisfaction. However, the way employees perceive communication may indicate that transactional and transformational leaders require more training to take better advantage of Internet-based channels. Likewise, even though level 5 leaders exhibited a more significant impact on communication satisfaction, this impact was supposed to be higher since level 5 leaders are the ones to take the organization to higher levels and keep them on top, which should require more rigorous motivation, control, and management exercises that involve communication.

Similarly, when observing the leadership variables' findings individually, it was found that transformational leadership was a better predictor than transactional leadership in terms of communication satisfaction. Hence, this finding does not validate the results by Madlock (2012), who concluded that transactional leadership (more centered on the task than any other thing) has a greater influence than transformational leadership (more centered on the relationship than the task) in CMC environments.

The communication satisfaction criterion was regressed on multiple linear combinations of the three leadership predictors to answer the research

question. It means that the interaction of the three predictors was observed within the organizations in CMC environments. The results proved that transactional and transformational leadership do not influence communication satisfaction, whereas the level 5 leadership predictor does impact this kind of satisfaction. This finding is unique in leadership research. It shows that level 5 leadership is the only one that influences Internet-based communication satisfaction and also has the most significant influence on communication outcomes.

The finding is important because when the predictors were both individually and aggregated tested, it was observed that level 5 leaders had a greater influence on communication satisfaction in CMC environments. This finding may result from level 5 leaders having a better knowledge of using internet-based communication channels to interact with their employees and create empathic bonds that make followers feel supported. Additionally, level 5 leaders can take on responsibilities with humility, accept and correct their mistakes, which would indicate that their abilities to learn how to deal with new challenges, such as technological ones, can lead to adapting to new forms of internet-based communication faster.

## Conclusions

The increasing investment of organizations in networking tools has opened the way to Internet-based communication tools at work. From this virtual communication logic, new leadership styles play a key role in employees' perception of job satisfaction. Within this context, leadership styles respond to a positive relationship with job satisfaction. Hence, leadership styles may improve employees' perception of their job and work environment. This study assessed three leadership styles, out of which leaders with transformational leadership traits proved to have a more significant influence on improving the perception that employees have about job satisfaction. Likewise, this study concluded that leadership positively impacts employees' perception of communication satisfaction. The greater the transactional, transformational, and level 5 leadership, the greater the perceived communication satisfaction is. However,

when the three leadership styles interact in an organization, level 5 leaders greatly influence job satisfaction perception.

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