



TRANSFORMATIONAL LEADERSHIP AND EMOTIONAL INTELLIGENCE, AND THEIR CONNECTIONS IN MANAGEMENT AND INNOVATIVE PROJECTS MANAGEMENT

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Abstract

Objective of the study: This paper seeks to discuss identified points of connection between the theory of emotional intelligence and transformational leadership and their interplay in management and innovative projects.

Methodology/approach: The research method used comprises a systematic literature review, whose final corpus of studies was analyzed in its entirety, after searching the WOS and SCOPUS databases over the last ten years.

Originality/Relevance: This study's originality is twofold. The practical actions that demonstrate the presence of EI in individual and collective behavior affecting transformational leadership and in advancing research that seeks to understand EI in a collective rather than individually. Second, the potential controversial aspects related to the intersection of the topics, such as narcissism and Machiavellianism in leadership.

Main results: The study corroborated the interrelationship between EI and transformational leadership, identifying in the literature four main clusters as current and future fields of study. This study discusses these clusters and their implications for the management and innovative projects.

Theoretical/methodological contributions: The study contributes by pioneeringly connecting emotional intelligence with transformational leadership in management and innovative projects, highlighting the overview of the interrelationship between these concepts and fields of study and possible controversial aspects, in addition to the expected positive ones identified in the literature.

Keywords: Project management; Emotional intelligence; Transformational leadership; Social skills

LIDERANÇA TRANSFORMACIONAL, INTELIGÊNCIA EMOCIONAL E SUAS CONEXÕES COM A GESTÃO E GESTÃO DE PROJETOS INOVADORES

Resumo

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Objetivo do estudo: Este artigo busca discutir os pontos de conexão identificados entre a teoria da inteligência emocional e a liderança transformacional, e sua interação com o gerenciamento e a gestão de projetos inovadores.

Metodologia/abordagem: O método de pesquisa utilizado compreende uma revisão sistemática da literatura, cujo corpus final de estudos foi analisado em sua totalidade, após pesquisa nas bases de dados WOS e SCOPUS durante os últimos 10 anos.

Originalidade/Relevância: A originalidade deste estudo é dupla: as ações práticas que demonstram a presença do EI no comportamento individual e coletivo que afeta a liderança transformacional, no avanço da pesquisa que busca compreender o EI de forma coletiva e não individual, bem como os aspectos potencialmente controversos relacionados à intersecção dos tópicos, como o narcisismo e o maquiavélico na liderança.

Principais resultados: O estudo corroborou a inter-relação entre EI e liderança transformacional, identificando na literatura quatro clusters principais como campos de estudo atuais e futuros, discute esses clusters e suas implicações para o gerenciamento e a gestão de projetos inovadores.

Contribuições teóricas/metodológicas: O estudo contribui ao conectar pioneiramente a inteligência emocional com a liderança transformacional em gerenciamento e gestão de projetos inovadores, destacando a visão geral da inter-relação entre estes conceitos e campos de estudo, possíveis aspectos controversos, além dos positivos esperados identificados na literatura

Palavras-chave: Gestão de projetos; Inteligência emocional; Liderança transformacional; Habilidades sociais

LIDERAZGO TRANSFORMACIONAL, INTELIGENCIA EMOCIONAL Y SUS CONEXIONES EN LA GESTIÓN Y GESTIÓN DE PROYECTOS INNOVADORES

Resumen

Objetivo del estudio: Este artículo busca discutir los puntos de conexión identificados entre la teoría de la inteligencia emocional y el liderazgo transformacional, y su interacción con la gestión y la gestión de proyectos innovadores.

Metodología/enfoque: El método de investigación utilizado comprende una revisión sistemática de la literatura, cuyo corpus final de estudios fue analizado en su totalidad, tras la búsqueda en las bases de datos WOS y SCOPUS en los últimos 10 años.

Originalidad/Relevancia: La originalidad de este estudio son dos, las acciones prácticas que demuestran la presencia de la IE en el comportamiento individual y colectivo que afecta al liderazgo transformacional, en el avance de la investigación que busca comprender la IE de forma colectiva y no individual, así como los posibles aspectos controvertidos relacionados con la intersección de los temas, como el narcisismo y el maquiavelismo en el liderazgo.

Principales resultados: El estudio corroboró la interrelación entre IE y liderazgo transformacional, identificando en la literatura cuatro clusters principales como campos de estudio actuales y futuros, discute estos clusters y sus implicaciones para la gestión, y la gestión de proyectos innovadores.

Contribuciones teóricas y metodológicas: El estudio contribuye conectando de forma pionera la inteligencia emocional con el liderazgo transformacional en gestión, y la gestión de proyectos, destacando la visión general de la interrelación entre estos conceptos, y campos de estudio, posibles aspectos controvertidos, además de los esperados positivos identificados en la literatura.

Palabras clave: Gestión de proyectos; Inteligencia emocional; Liderazgo transformacional; Habilidades sociales.

Introduction

Emotional intelligence (EI) in the literature shares many similarities with transformational leadership. Transformational leadership is relational, collective, and purposeful and usually focused on achieving a goal (Burns, 2012). Dionne et al. (2004) further describe the transformational leader as one who can resolve conflict, facilitate communication, and establish trust within teams.

Leadership is the reciprocal process of mobilizing resources through people with certain motives and values, to accomplish independent or mutually maintained goals by leaders (Burns, 2012). Thus, we can describe the transformational leader as a leader who can enhance interpersonal relationships and create a mutually fulfilling relationship (Northouse, 2019). Another point of connection of transformational leadership with EI is that good leadership depends on good communication, as its effectiveness will result from the clarity of the leader's actions and goals, while also seeking the development of self and others (Avolio & Gardner, 2005).

Emotionally intelligent leaders develop trust and an emotional bond with their team and other project stakeholders, in the quest for the project's success (Rezvani et al., 2016). Emotional intelligence positively influences leadership actions in project management, resulting in better performance (Cavaletti, Bizarrias, Penha, & Silva, 2021).

Emotional intelligence can maintain positive work relationships by influencing personal interrelationships (Druskat & Druskat, 2006), helping to create the fabric that binds people in a relationship to get work done in an orderly and civilized manner (Lau & Rowlinson, 2011). In this way, emotional intelligence helps create a fruitful scenario for the project manager, the team, and sponsors by facilitating the exchange of information (Kermanshachi & Safapour, 2019).

Goleman (1998) defines emotional intelligence as the ability to induce emotions and desired behaviors in others, and a leader with this ability can reduce the path to organizational performance, avoiding personal conflicts within his team, thus facilitating the communication and positive exchange of information (Krén & Séllei, 2021).

The leader seeks to take his team beyond the essential deliverables, seeking to lead teams in innovation scenarios and adapting to the environment (Dionne et al., 2004). Tabassi et al. (2017) state that one of the main advantages of transformational leadership is its influence on team behavior, leading to performance improvement.

Aga (2016) demonstrated that transformational leadership influences success in projects, especially when it helps maintain clarity and stability of purpose. Transformational leadership develops specific aspects of the teamwork process, such as conflict resolution, team communication, and cohesion (Dionne et al., 2004); thus, we see that transformational leadership is a collective action that should be evaluated by meeting human needs and expectations (Burns, 2012).

Although emotional intelligence shares many similarities with transformational leadership, the literature is sparse in relating these concepts. Dionne et al. (2004) describe the transformational leader as one who can resolve conflict, facilitate communication, and establish trust within teams. Northouse (2019) characterized the transformational leader as a leader who can improve interpersonal relationships and create a fulfilling relationship.

There are synergies between EI and transformational leadership that are little explored in the current literature. Leaders seek to orient themselves to the desires, needs, and other motivations of followers, as well as their own, and thus bring about change through the discovery of purpose (Burns, 2012). Emotional intelligence facilitates this process as it can reduce barriers generated by conflict and facilitates communication, creativity, and knowledge exchange (Rezvani, Barrett, & Khosravi, 2018). In recognizing this similarity, through a systematic literature review, this paper aims to identify how emotional intelligence relates to transformational leadership.

A literature review is an essential part of any research project. In it, the researcher maps and evaluates the relevant intellectual territory (Tranfield, Denyer, & Smart, 2003) to conduct a literature review, often to allow the researcher to map and evaluate the existing intellectual territory and specify a research question to build on the existing body of additional knowledge (Tranfield et al., 2003). In this way, knowledge synthesis methods are useful when the researcher wants to introduce interpretive rigor to the subjective evaluation of the literature while still being able to provide evidence for theoretically derived categories from a review (Zupic & Cater, 2015). We divided this systematic literature review into four parts; the first is the introduction already presented, followed by materials and methods, results, and main conclusions.

Materials and methods

This study used the systematic literature review (SLR) method, following the protocol described by Pollock and Berge (2018). The objective was to identify how emotional

intelligence relates to adopting transformational leadership in project management. The search looked for scientific articles that have mapped these relationships. Given that leadership and emotional intelligence are established themes in the scientific literature, we limited the search to articles because conference proceedings show a short time between the conference date and publication, suggesting that these articles have undergone a light review process (González-Albo & Bordons, 2011).

As both topics have been established for more than 20 years, we limited the search to concepts and theories highlighted in the last 10 years, as the field of EI has had significant growth in validity and evidence in this period (Dasborough et al., 2021), and we could capture the trend of discussions. To this end, the systematic literature review attempted to identify all relevant primary research studies, published and unpublished, as working papers or articles in the press, conducted worldwide and written in English, Portuguese, and Spanish. We eliminated congress articles and used only articles from the last ten years, from 2013 to 2023.

Given the exploratory nature of this work, two of the most recommended databases in the social sciences, Web of Science (WOS) and Scopus, were used. Since a systematic literature review aims to evaluate concepts and their main works in scientific production, we will use co-word analysis, because the unit of analysis is a concept, not a document, author, or journal (Zupic & Cater, 2015). Table 1 summarizes the steps followed by this systematic literature review.

Table 1

Research plan

Phase	Step	Result
1- Clarify the target subject and the objective of the research	Define the research question	What is the connection between emotional intelligence and transformational leadership?
	Define the eligibility and characteristics of the studies	Scientific articles (published and preprint)
	Define possible secondary outputs	Finding out which characteristics of EI have a connection to transformational leadership.
2- Find relevant searches	Define and describe the search databases	Web of Science and Scopus
	Describe the search strategy in the selected databases	Co-word limited by a string
	Detail the process by which articles will be selected	String: ("Emotional intelligence" or "Social intelligence") AND ("leadership style"), within the title, abstract, or keyword.
3- Collecting data	Describe the data extraction method	Use of the above string within WOS (141) and Scopus (1600) databases, total articles 1741.
	List the variables for which data will be selected	Select articles from the last ten years, in Portuguese, English, and Spanish; within the areas of management, social sciences, economics, computing, and engineering.
4- Evaluate the quality of the studies	Define methods to avoid the risk of bias included in the studies	Articles were selected if the subject was present in the title, abstract, and keywords. It was included if it deals with the concepts of emotional or social intelligence and leadership, and excluded if the study topic is not management or dedicated to the medical area.
	Describe how the method will be used	All data will be loaded into Rayyan and evaluated systematically according to the inclusion and exclusion factors.
5- Synthesize the evidence	Describe which statistical analyses are planned	Author citation and co-citation analysis via VOSviewer to assess conceptual clusters, the seminal, most influential, and those at the frontier of knowledge.
	Describe the qualitative synthesizing method	The selected articles were grouped by Codes, representing the above clusters
	Plan the presentation of the results	The qualitative data were presented around the theme of clusters.
6- Interpreting Findings	How the information about the quality of the evidence will be used	Opinion articles from non-scientific journals and areas not related to management were excluded.
	Define how the results will be interpreted	Within the cluster were highlighted the works that studied the similarities and connections between emotional intelligence and transformational leadership.
	Explain how the findings will be summarized	If identified, it may open a path for the publication of a study on the relationship between the theories and provide theoretical support for an exploratory study to understand practitioners' views.

Source: The authors.

To validate the search string, we relied on two PhD specialists, one in the field of people management and the other in management. After defining the string ("Emotional intelligence" or "Social intelligence") and ("Leadership style"), we searched in all available fields (without filters), allowing all productions that matched the string to be presented. We obtained 141 results in the Web of Science database and 1600 articles in the Scopus database.

We included social intelligence in the search string as it captures the meaning of emotional intelligence in some studies. We added the "leadership style" concept in the search string due to the possibility of eliminating leadership aspects if we employed a narrow phrasing. We preferred a more comprehensive approach to better embrace all related concepts of leadership styles, such as transformational leadership.

Emotional Intelligence (EI) and Social Intelligence (SI) are closely related concepts, often intertwined in their application and impact (Crowne, 2009). Understanding and managing one's own emotions (a key aspect of EI) is crucial for effective social interactions, which are the domain of SI. Similarly, social awareness, a component of EI, directly feeds into SI. Being able to accurately read social cues, understand the emotions of others, and empathize are essential for successful social engagement.

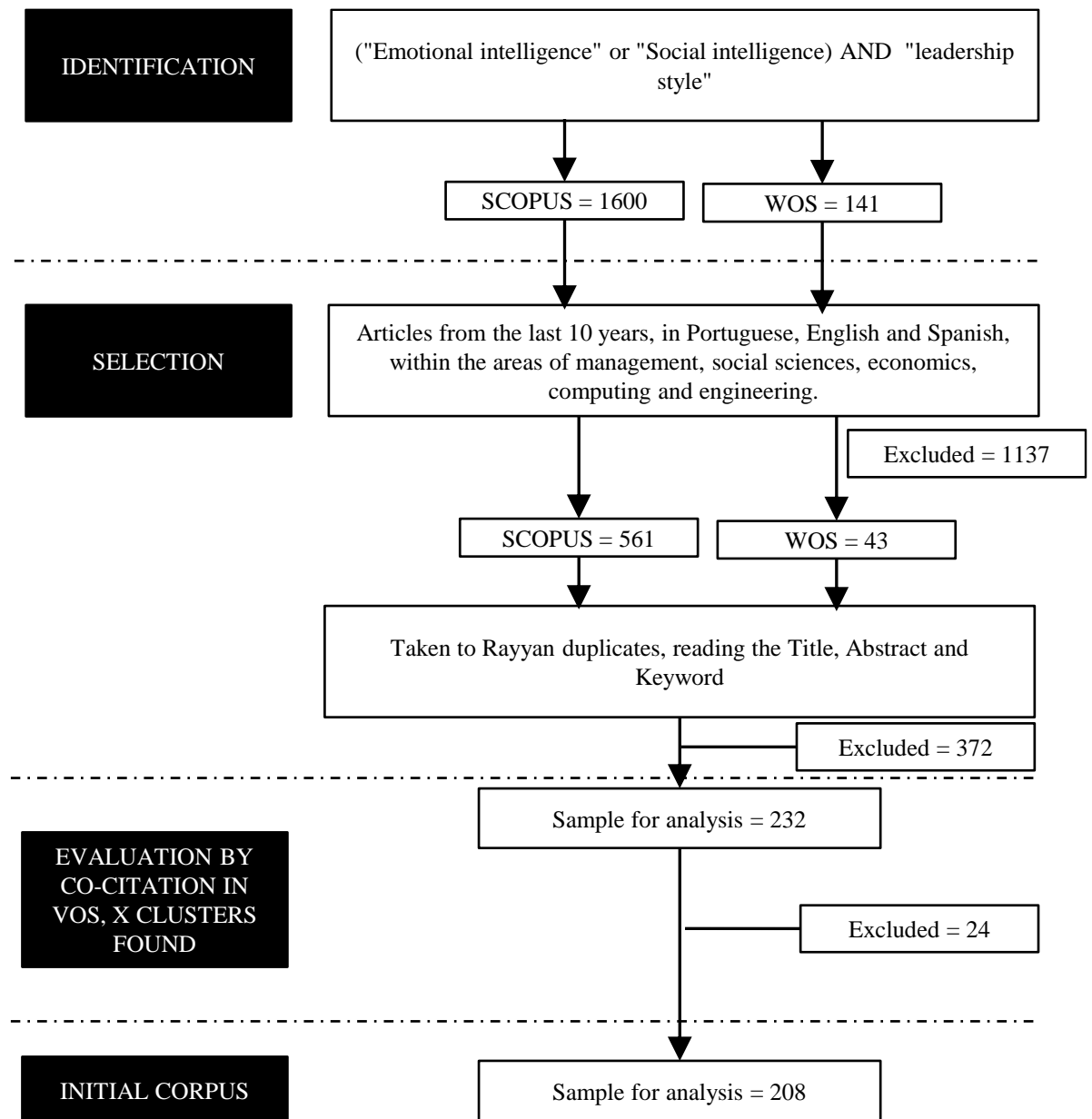
In the first screening, still within the platforms, we limited the articles to the last ten years, written in English, Spanish, and Portuguese, in the social sciences, psychology, business, economics, computing, and engineering. Of the 604 articles selected, 232 remained for full evaluation. The selected texts represent the corpus of analysis for this systematic literature review and include surveying pertinent research, obtaining the data, and qualifying the studies. The next phases are evidence synthesis and interpretation of results, respectively (Pollock & Berge, 2018). For qualitative evaluation of the texts and preparation of the evidence synthesis, we utilized AtlasTi software, which assists in grouping the analysis notes, comments, codings, and citations. The supporting software does not automate or perform the qualitative interpretation of the texts. During this process, 24 more articles were excluded for having their unit of analysis in medical areas (15 texts) or for being articles with low scientific quality (more precisely opinion articles) (9 texts); this process can be observed in Figure 1.

As described in the research plan, the collected evidence was distributed around the clusters. It also highlights within the clusters the main contributions identified in each relevant work identified, and the suggested research paths seeking to represent (in a balanced way) the findings for each cluster. Particularly important for the study's objective were the criteria that

only studies containing the works that investigated the similarities and connections between emotional intelligence and transformational leadership remained for further analysis.

Figure 1

Systematic review of the literature Steps



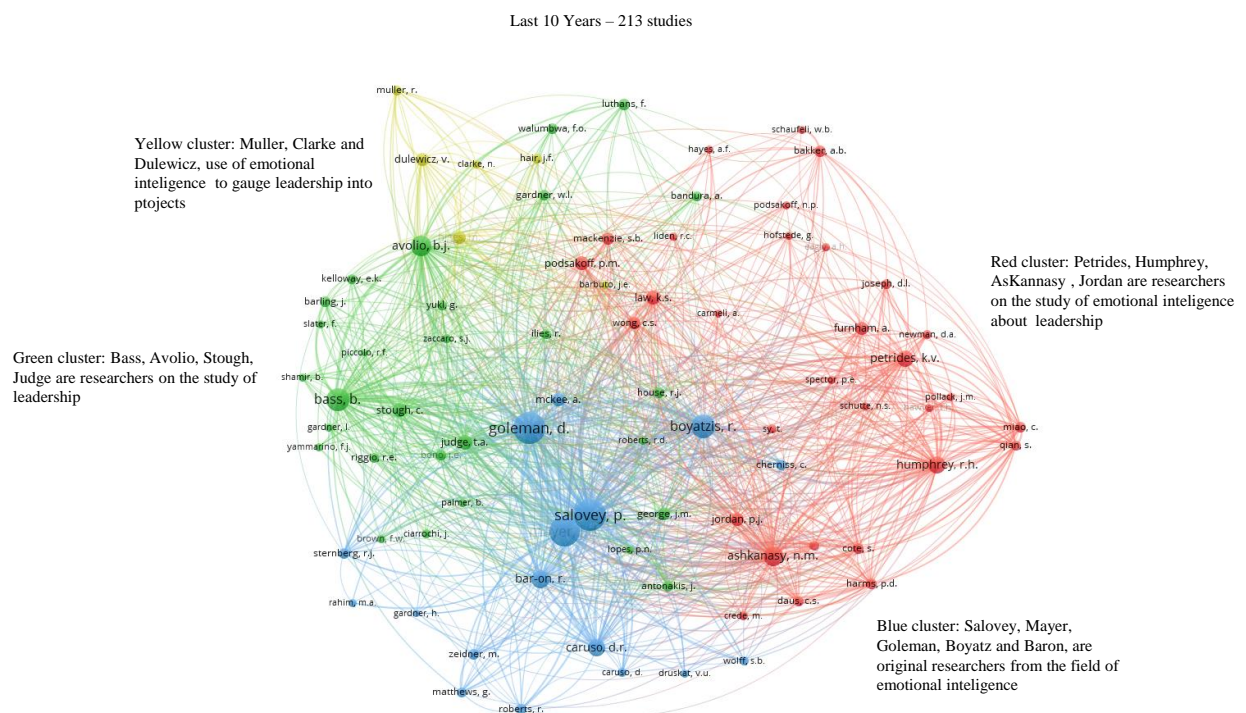
Source: The authors

Results

The co-citation data identified some of the most relevant authors for the theme and the similarity measure between the articles. We then evaluated parameters for the VOSviewer system, initially with 213 studies, prior to the Rayyan platform analysis, which allowed for a better understanding of the final 208 studies corpus of analysis, representing the final grouping of authors and their themes of interest. The knowledge corpus became better represented with three or more coincident references in the articles, considering the total count method and highlighting the link strengths between the citations; the image can be seen in Figure 2.

Figure 2

Clusters by authors and their themes



Source: The authors.

For a better formation of the clusters, the 89 authors identified had their names mapped and normalized, thus avoiding small distortions in identifying the authors that create distortions in forming the clusters. Grouping by authors identified four clusters, with discussions that consider using emotional intelligence to estimate leadership in the context of projects, the study

of leadership, the study of the connection between emotional intelligence and leadership, and studies more focused on emotional intelligence.

With the advancement of research on soft skills, there is an extensive list of behaviors expected of project managers. Among them, emotional intelligence stands out, along with leadership, communication, results orientation, ethics, creativity, and motivation, among other skills (Sampaio, Wu, Cormican, & Varajão, 2022). However, it is reasonable to assume that not all managers will possess these competencies to the same degree.

Leadership ability and soft skills are not the only requirements of today's project leaders. Other technical and procedural characteristics of project management require specific knowledge. Thus, a project leader must possess a balance between technical knowledge, management knowledge, leadership skills, and soft skills, where the importance of emotional intelligence to understand the individual contexts of project leaders and partners is presented (Fareed, Su, & Awan, 2021, Araujo et al., 2022).

Beyond personal contexts, authors Acheampong, Owusu-Manu, Kissi, and Tetteh (2021) identified that better utilization of emotions as a relationship tool and reducer of cross-cultural differences could improve project performance. Even if active management of emotions as a motivational tool is not presented, higher levels of emotional intelligence in leaders can reduce unproductive actions and improve job satisfaction (Zhang et al., 2020).

Therefore, project managers should be aware of the importance of emotional intelligence and commitment to successful management and project management. They also seek to use leadership that can inspire teams toward results, such as transformational leadership (Doan, Nguyen, & Nguyen, 2020). In a project context, transformational leadership will amplify the benefits in the relationships of emotional intelligence with performance, satisfaction, achievement, and motivation.

In this way, we can understand that project managers with higher levels of emotional intelligence and who exhibit transformational leadership behavior are effective leaders and ensure greater success in projects (Maqbool, Sudong, Manzoor, & Rashid, 2017). Identifying and recruiting project managers who exhibit these skills is a key factor in project development (Sunindijo & Zou, 2013).

This systematic literature review presents evidence in the project and management literature of how these two theories relate. We divided these relationships into groups that better the relationship between emotional intelligence, transformational leadership, and their consequences for project management.

Table 2

Clusters' characteristics

Cluster	Main authors
The controversial side of leadership	Segon & Booth, 2015, Dasborough et al., 2021 e Schreyer et al., 2021
The search for emotional intelligence, beyond personality traits	Petrides, K.V.; Humphrey, R.H.; AsKannasy N.M.; e Jordan P.J.
The additional skill of transformational leadership	Salovey, S.; Mayer, R.; Goleman, D.; Boyatz, R. e Bar-on
Studies that understand emotional intelligence as a precondition for transformational leadership	Bass, B.; Avolio, B.J.; Stough, C. e Judge C.A.

Source: The authors

Studying the controversial side of leadership

Transformational leadership and emotional intelligence are often cited as solutions to problems in management. However, it is important to remember that emotional intelligence is not exclusively pro-social or antisocial (Gardner, 1983). The application of these skills in the organization will determine their success.

It is agreed that the profile of more relational leaders generates concerns about the outcome of the business. In their book the "Managerial Grid", Blake and Mounon (1966) described a very condescending leader profile, with a high ability to recognize the emotions of others, but with low development of focus on outcome, as unproductive (Dasborough et al., 2021). Stein (2013) looks beyond the emotional abilities of leaders, seeking to relate it to the business environment; thus, leaders in a positive environment are able to inspire their teams to achieve better results; however, in unfavorable environments, due to the lack of emotional ability, can delay the perception of problems and reinforce the belief in the infallibility of the team.

With this, it is observed that some less desirable and controversial behaviors can be associated with transformational leadership, such as narcissism, Machiavellianism, and psychopathy (Schreyer, Plouffe, Wilson, & Saklofske, 2021). When individuals with high emotional perception show themselves to be narcissistic leaders, they can manage relationships

with great skill in pursuit of personal goals, which are not necessarily aligned with the organization (Segon & Booth, 2015).

The manipulation caused by narcissism can lead to a generalized feeling that the leader's shortcomings should be ignored and that they should be allowed - or even encouraged - to bask in the reflected glory of the organization (Stein, 2013). Greaves et. al. (2014) indicated that this behavior is related to low self-esteem in teams and it increases the chance of failure in dynamic environments because leaders are not properly warned of the problems ahead.

Therefore, it is important to consider that the transformational leader's recognition and use of emotions can border on manipulation (Segon & Booth, 2015) and that the darker profile of transformational leadership can lead leaders to encourage their teams to seek individual results at the expense of the organization's results (Schreyer et al., 2021).

Thus, we see that in addition to the leader's emotional intelligence, emotional intelligence, creativity, and ethics must be distributed among team members to positively impact business performance (Saini & Soni, 2016; Sampaio et al., 2022). Encouraging a mutual trusting relationship that positively impacts job satisfaction through emotional intelligence leads to a greater balance amongst the group (Gavin, Gavin, & Quick, 2017)

Emotional intelligence can influence the transformational leader's effectiveness in positive organizational behaviors, in preventing counterproductive behaviors (Supriyanto et al., 2020), and in manipulating their followers (Segon & Booth, 2015). Transformational leaders must exhibit emotional intelligence to welcome and respond positively to organizational problems (Mekpor & Dartey-Baah, 2020) without lacking ethics and empathy to mitigate dark traits (Schreyer et al., 2021).

The impact of EI on transformational leadership beyond personality traits

Based on Metcalf and Benn (2013), it is believed that emotionally engaging teams is essential to motivate them in the search for solutions to complex problems. This is possible through transformational leadership, which can transmit emotions and enhance positive feelings among its followers (Mindeguia et al., 2021). Emotional intelligence is directly related to transformational leadership and impacts not only the followers, but also top management (Neffe, Wilderom, & Lattuch, 2022). Leadership style can influence organizational culture in different ways (Tintoré, 2019).

Even in virtual teams, where there is less interaction and non-verbal communication signals may be unclear, EI is an important predictor of perceived effectiveness in

transformational leadership (Mysirlaki & Paraskeva, 2020). Emotion acts as a connection between complex cognition and motivation (Metcalf & Benn, 2013). However, EI is not an isolated action of the leader. It is crucial to identify concerns in the team, as following EI helps leaders guide their behavior toward results (Rajesh, Prikshat, Shum, & Suganthi, 2019). Coupled with transformational leadership, EI can achieve better levels of organizational citizenship (D'Souza, Irudayasamy, & Parayitam, 2022).

Critics of EI argue that measures of EI may owe their predictive power to this overlap, rather than to unique characteristics of EI (Dasborough et al., 2021). However, Funk (2014) argues that the ability to elicit and manage emotions is connected to complex problem solving. For sustainable leadership, leaders must have the skills to perceive and act objectively and systematically on complex problems. It is important to engage teams, maintain a certain dynamism in the organization, and manage emotions appropriately (Metcalf & Benn, 2013).

Benson, Fearon, McLaughlin, and Garratt (2014) described EI as a personality trait added to development. They identified that the presence of the trait helped position students at the youngest stage, but with advancing age and better development, those who better developed EI had a greater chance of promotion. Emotions are essential at each stage of the leader/member relationship (Cropanzano, Dasborough, & Weiss, 2017). Emotional intelligence underlies a leader's people or relationship skills (Caruso, Mayer, & Salovey, 2002).

Despite this accumulation of favorable evidence, Føllesdal and Hagtvet (2013) found that EI, as measured by the MSCEIT instrument, did not predict transformational leadership on any of the four dimensions. Furthermore, there was no significant variation in EI values by leadership position. Grunes, Gudmundsson, and Irmer (2014) argue that since the MSCEIT is an identifier of EI traits, the application and use of these skills are not recognized by the instrument or that the construct as demonstrated is not supported (Antonakis et al., 2009).

For future research, some avenues can be explored, such as comparing the results of the EI dimensions in the outcome of the projects and comparing and discounting the BIG 5 personality traits. A survey with a good sample, even if self-report, can demonstrate the EI dimensions acting in conjunction with the personality traits. Another point is that good research using Social Emotional Intelligence scales is scarce, with most relevant research predicting the use of the MSCEIT (Dasborough et al., 2021).

It is possible to compare the dimensions of transformational leadership with the dimensions of EI, where it involves "mixed" emotional competence measures that include a variety of emotion-related skills and competencies (e.g., Bar-On, (2006); Boyatzis & Sala,

(2004)), and this may bring insights into the conditions necessary for transformational leadership. Another connection identified in theory was creativity, as a consequence of EI in the organizational context, and this creativity is a predictor of transformational leader effectiveness (Suparjo & Sunarsih, 2019). Also, one can include perception of emotion, clarity with emotional thinking, understanding the emotions of others, and management of emotion as skills required for transformational leadership.

Finally, the effectiveness of transformational leaders can be verified through the strong personal relationships they develop with followers, using emotional intelligence as an influencing strategy (Waglay, Becker, & Du Plessis, 2020). This is reflected in lower team turnover, more well-being at work, and higher job satisfaction in teams.

Studying EI as an additional skill to transformational leadership and its potential mediators/moderators

Emotional intelligence is a theory used to understand job performance, job satisfaction, well-being, and quality of life. It relates to both the characteristics that build relationships and the quality of those relationships. To update this theory, researchers have been testing new scales and changing its direction, applying new concepts and different assumptions. This cluster brings together articles that seek to develop new psychometric self-report tests associating leadership and team.

Candeias, Galindo, and Rocha (2021) developed a new psychometric self-report test divided into five dimensions: general EI competence, self-management, adaptability, relationship management, and leadership. The research data shows a coherent factor structure and can be considered valid. Other authors, such as Aritzeta et al. (2020), seek to assess not only EI on an individual basis but also the EI of the team. This reinforces the need to look beyond the leaders' EI and seek balance with the subordinates' EI. Since EI is a pathway through which transformational leadership impacts the leader/leader relationship (Waglay et al., 2020), we should consider that transformational leaders will be more or less effective depending on how they recognize and interact with their subordinates' emotions.

The expected behaviors of leaders and teams that show high levels of EI are related to the behaviors expected of leaders who practice transformational leadership; even in virtual teams where there is less interaction and the signs of non-verbal communication may not be so clear, EI is an important predictor of perceived effectiveness in transformational leadership (Mysirlaki & Paraskeva, 2020).

Haricharan (2022) conducted a study to directly connect emotional intelligence factors with leadership performance. The study showed that of the twelve emotional intelligence factors studied, eleven proved statistically relevant to leader performance. Therefore, we can infer that effective leaders utilize the emotional states of their followers to ensure performance.

In another paper, Gorgens-Ekermans and Roux (2021) sought to connect emotional intelligence with transformational leadership in a multifactorial model. The results confirmed that three pathways among emotional intelligence competencies affect transformational leadership characteristics. Relationship management impacts idealized influence, self-management of emotions impacts inspiration and motivation, and social awareness impacts individualized consideration.

We can conclude that emotional intelligence has an important relationship with leadership performance and that it is possible to measure and assess this relationship through different psychometric scales and tests. Furthermore, the connection between emotional intelligence and transformational leadership can be used as a model to develop more effective leaders and positively impact the results of teams and organizations. Table 3 describes the characteristics that have the most impact.

Table 3

Emotional aspects versus EI, transformational leadership, and its intersections

Construct	Emotional competencies	Source
Emotional Intelligence	Emotional Self-Awareness	Haricharan, 2022
	Self-Management of Emotions	Haricharan, 2022
	Social Awareness	Haricharan, 2022
	Social Skills	Haricharan, 2022
	Empathy	Goleman, 1998b, p. 38
	Encouraging Creativity	Caruso, Mayer and Salovey (2002, p. 32)
	Conflict Management	Cavaletti et al. (2021)
Transformational Leadership + Emotional Intelligence	Communication Management	Doan et al 2020 and Cavaletti et al. 2021
	Establishing Trust	Doan et al 2020 and Cavaletti et al. 2021
	Teamwork	Maqbool et al., 2017
	Result Orientation	Rajesh, et al., 2019
	Conveying Emotions	Mindeguia et al., 2021
Leadership Transformational	Boost Positive Feelings	Mindeguia et al., 2021
	Inspire	Mindeguia et al., 2021
	Narcisism	Schreyer et al., 2021
	Machiavellianism	Schreyer et al., 2021
	Influence on Actions	Maqbool et al., 2017
	Consideration of Individuals	Maqbool et al., 2017
	Intellectual Stimulation	Maqbool et al., 2017

Source: The authors

Studies that point to EI as a precondition of transformational leadership

Transformational leadership is characterized by a leader who inspires and motivates his followers, demonstrating charisma and consideration for individual needs and group development (Müller & Turner, 2010). Such leadership establishes a relationship of trust and respect, and the leader must use communication competently to inspire, challenge the status quo, and stimulate creativity (Aga, 2016).

In the organizational environment, different leader behaviors result in different organizational cultures. Environments with a high presence of emotional intelligence in leadership promote engagement and a more democratic culture (Stanislavov & Ivanov, 2014). However, cognitive intelligence competencies are also important for employee motivation. Subordinates value the leader's fairness, especially in the division of tasks and positions, and admire a leader who sees the potential in his subordinates and helps them grow (Diskiene, Pauliene, & Ramanauskaite, 2019).

Through mechanisms of emotional contagion, transformational leaders can transmit their emotions and potentiate positive feelings among their followers (Mindeguia et al., 2021). This indicates that EI of leadership is directly related to transformational leadership since it impacts not only the leader, but also reflects on the top management (Neffe et al., 2022), so it is understood that depending on the leadership style, the organizational culture develops differently (Tintoré, 2019)

Social/emotional intelligence, engagement, and commitment to results are predictors of leadership effectiveness identified by Kabalina & Osipova (2022), characteristics that resemble transformational leadership. However, these characteristics are also found in other types of leadership, such as authentic or servant leadership (Conejero-Pérez, López-Verdugo, & Hidalgo, 2022).

We still have other predictors of leadership that include organizational commitment and empowerment of the leader, suggesting that even within transformational leadership, there is a need to advance studies to give more autonomy to the leader (Judeh, Al-Ghasawneh, Al-Zu'bi, & Ngah, 2022). Finally, transformational leadership is a unique combination of behavioral, temperamental, emotional, and cognitive attributes of a leader (Müller & Turner, 2010). Although it is a desired tool for leaders and organizations, the effectiveness of transformational leadership must be evaluated according to the context embedded, as indicated by seminal theories.

4 Conclusions

This systematic literature review (SLR) sought to identify the points of connection between theories of emotional intelligence (EI) and transformational leadership. The results highlight the importance of emotional intelligence in transformational leadership and the positive impact it can have on organizational culture and team performance. However, it is necessary to consider the shadow aspects of leadership, such as narcissism and manipulation, which can be stimulated by emotional intelligence. This finding advances previous studies by contributing to a better understanding of the relationship between EI and transformational leadership.

Furthermore, emotional intelligence is not an isolated action of the leader, and it is crucial to identify concerns in the team so that it can help guide the leader's behavior toward

results. EI may also be an important predictor of perceived effectiveness in transformational leadership, even in virtual teams.

Among the most relevant findings of this SLR, the first was that the darkest profile of transformational leadership was also a predictor and that narcissism, manipulation, and psychopathy may cause leaders to inspire or encourage their teams to seek individual results over organizational results.

Another point was the search not only for the leader's EI but also for the team's collective EI, thus we would have not only an individual construct but the formation of a team construct, where we could consider the items individually and their impact on the overall team. This conclusion opens an opportunity for future research, where we could identify the weight of each team member in the total contribution.

Third, the study also contributes by verifying a range of characteristics expected of emotionally intelligent leaders. These characteristics go beyond the initial propositions of Salovey and Mayer's (1990) theory (perceiving emotions, using emotions, recognizing emotion in others, and influencing) but also their practical consequences, such as creativity, welcoming, well-being, and self-control. The evolution and strength of these constructs also signals fields of research that can be conducted.

The connection between emotional intelligence and transformational leadership can be used as a model to develop more effective leaders and positively impact the results of teams and organizations. It is essential that leaders use communication competently to inspire, challenge the status quo, and stimulate creativity. Environments with a high presence of emotional intelligence in leadership promote engagement and a more democratic culture. However, transformational leadership is not the only effective form of leadership, and further study is needed to give more autonomy to those being led.

Finally, the results signaled that transformational leadership, despite being a desired behavior, still has gaps, such as the issues of empowerment and freedom of action that can be sought in other types of leader behavior. We can still observe that not all teams will benefit from transformational management. Younger and inexperienced teams may require another approach, and it is up to the leader to know the tools and apply those that best fit the context, thus opening up another field of future research on frameworks of different leadership styles.

As for the limitations, this study is restricted by using a search string that, regardless of bias mitigation strategies, represents the view of the researchers at the time of the initial review, for the choice of search terms. We should also consider that, despite the recognition of WOS and Scopus as the most significant databases for social science research, in future research other

databases may be considered, providing results that may expand or reduce the findings of this study.

AUTHORS' CONTRIBUTIONS

Contribution	Cavaletti, S.	Bizarrias, F. S.
Contextualization	x	x
Methodology	x	x
Software	x	
Validation	x	x
Formal analysis	x	
Investigation	x	
Resources	x	x
Data curation	x	x
Original	x	
Revision and editing	x	x
Viewing	x	x
Supervision	x	x
Project management	x	x
Obtaining funding	x	x

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[85111816084&doi=10.1080%2f15623599.2021.1958279&partnerID=40&md5=337d](https://www.scopus.com/inward/record.uri?eid=2-s2.0-85111816084&doi=10.1080%2f15623599.2021.1958279&partnerID=40&md5=337de1539a023a4c4187b7c68d93daf0)

[e1539a023a4c4187b7c68d93daf0](https://www.scopus.com/inward/record.uri?eid=2-s2.0-85111816084&doi=10.1080%2f15623599.2021.1958279&partnerID=40&md5=337de1539a023a4c4187b7c68d93daf0)

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