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Transformational school leadership: A systematic review of research in a centralized education system

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Abstract

Purpose – This study intends to systematically review empirical evidence on transformational school leadership (TSL) in a centralized educational context.

Design/methodology/approach – The study includes a topographical mapping and a narrative review of thirty-seven research articles published in Turkey between 2000 and 2021. The review strategy included systematically searching the Turkish Academic Network and Information Center (ULAKBIM) and Scopus. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow diagram guided the review and reporting process.

Findings – Three key themes emerged: (1) perceptions, attitudes, and behaviors; (2) psychological resources, learning, and innovation; and (3) school climate and culture. The results indicated that the research evidence on TSL in our review did not correspond well with the evidence on TSL in non-Western contexts. We also discussed the state of research narratively to provide an overview of the topical foci and methodological and conceptual trends.

Originality/value – Our review is part of an effort to demonstrate the importance of a culturally-situated understanding of transformational school leadership and to develop a globally validated knowledge base. It identifies and summarizes research in a non-Western school context defined by centrality, lack of autonomy, and accountability.

Keywords Transformational School Leadership, Systematic Review, Topographical Mapping

Paper type Research paper

Introduction

Effective school leadership is complex and multifaceted and is influenced by the combined effects of transformational, instructional, leadership for learning, and distributed leadership styles. TSL is viewed as a comprehensive model that offers a normative approach focused on transforming the processes by which leaders seek to influence school outcomes (Bush, 2011). Research shows that TSL is influential in reducing teachers' burnout (Tian *et al.*, 2022), increasing their autonomous motivation (Berkovich and Eyal, 2017), and changing practices during reforms (Geijsel *et al.*, 1999). It also prioritizes a culture of learning (Day *et al.*, 2016) and is effective in building a vision and setting goals, provides intellectual stimulation, offers individual support, models best practices and organizational values, sets high expectations,

creates a productive school culture and builds structures to encourage participation in school decision-making (Leithwood, 2006).

Kwan's (2020) recent study extends Marks and Printy's (2003) conception of integrated leadership by demonstrating the significant role of TSL in instructional leadership and student outcomes. She found that instructional leadership will not significantly improve student outcomes unless the school principal has already provided a school environment where teachers are competent and motivated. Similarly, Bellibas et al. (2021) showed that a combination of TSL and instructional leadership could maximize the impact of leadership on student performance by improving teacher learning. TSL in this research was considered necessary but insufficient to improve student outcomes. Harris (2004), who focuses on fostering staff and student agency to improve schools, adds distributed leadership to the debate by noting that leadership with both distributive and transformational principles enhances the quality of problem-solving, decisionmaking, and innovation capacity. Hallinger (2003) views TSL as a type of distributed leadership because it promotes bottom-up participation and as an "organisational entity rather than the property of a single individual, accounting for multiple sources of leadership" (p. 338). There is also empirical evidence on the effectiveness of TSLs in projecting hope, confidence, and trust during times of crises (Menon, 2023), improving teacher job satisfaction and performance (Maheshwari, 2022), and promoting ethical activism of critique and profession (Berkovich and Eyal, 2021).

A theory is intended to "provide a rationale for decision-making" (p. 25) and "is useful so long as it has relevance to practice in education" (Bush, 2011, p. 26). A leadership conceptualization that aims to inform practice must make generalized assumptions and be applicable in broader socio-cultural contexts. Such generalization contributes significantly to the expansion of their use. Despite increasing knowledge of TSL, its generalizability and ability to guide behavior and explain school phenomena remain controversial. Berkovic (2016) mentions the 'falsifiability' of TSL and argues that it does not fit well in education. Structural (rules, roles, relationships) and cultural (beliefs, assumptions, myths, conventions) qualities (Schlechty, 2005) of educational contexts can make the relevance of the TSL model inconsistent. "Much of the theory that is acknowledged is ethnocentric and tailored to Anglo-American, Anglo-Saxon contexts..." says Dimmock (2002, p. 34) and adds: "...those generating the theory make little attempt to bound or limit their work geographically or culturally, an aspect that is particularly disconcerting for those who work outside Anglo-American societies". Therefore, he recommends embracing international and cross-cultural perspectives as a crucial direction for educational administration.

The assumptions of TSL and the lack of contextually relevant evidence create difficulties in building a solid understanding. This challenge demands a search for refinement by studying existing empirical evidence. Therefore, the relevance of the TSL model needs to be tested and refined by examining research from non-Western contexts. This current study echoes the argument of Hallinger and Bryant (2013) that a systematic review of empirical evidence in non-Western countries supports the refinement of future scholarship and ensures "a more fine-grained understanding of patterns of knowledge production in educational leadership and management" (p. 621). Without a critical mass of empirical research generated from regions such as Turkey, scholars, educators, and policymakers will have a limited understanding of how TSL works outside the Western academic mainstream.

We found five reviews of TSL research published in the last fifteen years. For example, Li (2020) used the vote-counting method and narrative synthesis but only reviewed the evidence in

English and Chinese, extracting studies from Chinese dissertation databases and the Chinese National Knowledge Infrastructure. Leithwood and Sun (2012) used meta-analysis and narrative review of seventy-nine theses and dissertations. Chin (2007) conducted a quantitative meta-analysis of twenty theses in Taiwan. Using the vote-counting method, Leithwood and Jantzi (2005) reviewed thirty-two studies published between 1996 and 2005. Kılınç *et al.*'s (2020) study is the only systematic review of TSL in Turkey. However, their study is limited as it reviewed theses in the Turkish Higher Education Council database, indicating the lack of a comprehensive review of empirical knowledge.

The above reviews are limited for one or more reasons: a) their inability to capture research in Turkish, b) their use of meta-analysis and vote-counting, and c) their focus on graduate theses rather than empirical research articles. The lack of a review of the research in Turkish and English using the narrative review strategy limits cross-context comparison of the effects of TSL and complicates the development of a more robust knowledge base and understanding. In addition, it has been suggested that systematic reviews in the social sciences should be updated every three to four years (The Campbell Collaboration, 2019). Therefore, we limited our study to the Turkish context to understand how TSL influences school outcomes in centralized education systems where principals are expected to adhere to the mandates of a centrally determined framework. Therefore, the current study intends to examine the empirical basis of TSL in the Turkish K-12 school context. To achieve this goal, it has sought to answer the following questions:

Regarding TSL research in Turkey:

- What are general research trends?
- What are the major outcomes and themes?
- What are the commonalities and differences compared to other contexts?

We have chosen TSL in our study because of its evidence-supported impact on schools' learning and because it is one of the most cited frameworks (Berkhovic and Eyal, 2021; Kwan, 2020) and has a receptive audience (Hallinger, 2003). Furthermore, examining the related evidence base in Turkey helps broaden and enrich perspectives by bringing to light the differentiated impact of governance systems on the relevance of TSL. It also advances our understanding of the effects of sociocultural context on leadership practices outside of the Western world (Hallinger, 2015).

School leadership in Turkey

Turkey has an education system characterized mainly by centralized governance and bureaucratic management. A school principal directs and represents the school, ensuring that school, education, teaching, and management activities conform to the aims and principles of laws and regulations. Supervising instructional activities, conducting financial assessments, and managing social activities, human resources, safety, maintenance, order, and interpersonal relationships are other responsibilities of a principal (MEB, 2014).

These responsibilities broadly define the role expectations of principals in Turkish public schools. They require that principals spend most of their time on 'maintenance'. In contrast, 'development' activities remain sparse and confined to the boundaries and guidelines of central and local education authorities. The Ministry of Education hires teachers, and all public schools follow the centrally-determined curriculum and teaching materials. Autonomy, decentralized governance, and accountability remain less relevant as this centrally developed framework

mandates leadership and educational activities. It would not be wrong to argue that principals' primary responsibility is to ensure compliance, as they are expected to ensure that the school covers the activities set out in the central framework and is communicated to schools in bylaws and memos. This framework limits the principal's role to that of bookkeeping.

Method

We followed the guidelines of PRISMA, which is an instrument to "gauge the quality of a systematic review" and to improve the "thoroughness of the conduct of the systematic review" (Moher *et al.*, 2009, p. 1-3). Moreover, we adopted a systematic review approach (Plano-Clark and Creswell, 2015) to identify the knowledge base in TSL in the Turkish educational context. First, we examined the existing evidence through a topographical review to uncover the similarities and differences between the publications in the corpus. We then discussed the existing research landscape narratively to provide an overview of the thematic priorities and methodological-conceptual trends and to develop research recommendations.

Literature search

The study focused on articles published between 2000 and 2021. We chose this timeline because our initial search covering research before 2000 yielded little research. We also chose it to understand recent trends and research and to capture the evolution of trends and evidence. Since educational administration as a research field in Turkey has a relatively short history, we decided to limit our review to these years. Since we aimed to extract studies conducted in Turkey and to review the empirical base built on school TSL, we searched ULAKBIM. We chose this database because it indexes many local academic journals and research conducted in Turkish and English. Since our goal was to analyze existing research comprehensively, we selected the timeline from 2000 to 2021 in this database. To gather all the existing research, we also searched the SCOPUS database, which includes research conducted in Turkey and is a comprehensive database containing rigorous research records.

ULAKBIM database search

We used two keywords in Turkish, dönüşümcü liderlik and dönüşümsel liderlik, and transformational leadership and transformative leadership to extract research. ULAKBIM allowed researchers to search using keywords, title, author, full-text, and topics and we used the 'keywords' tab to prevent data loss and include indirectly related research. We narrowed our search by selecting 'academic journals' to get empirical research published. We also concentrated our search on education organizations by selecting keywords such as school administrators, principals, teachers, and educational leadership. Our initial keyword search returned only 160 studies in this database.

SCOPUS database search

We searched the SCOPUS using the keywords "transformational leadership/transformative leadership". We separately added the keywords "transformational leadership" and "transformative leadership" in the *search documents* part. We marked the article title, abstract, and keywords in each search in the *search within'* part. We then selected the subject area as social sciences, document type as article, country/territory as Turkey, and source type as a journal. Our initial search using keywords and filters only produced 38 studies.

We identified 198 studies in our initial search. After removing the duplicates, 193 records remained. We reviewed the titles and abstracts of these studies according to our inclusion and exclusion criteria and excluded 156 studies that did not meet our criteria. We further assessed the eligibility of the remaining 37 full-text studies and decided to include all these publications in the final corpus (Figure 1).

Inclusion and exclusion criteria

We considered outcome variables at organizational, teacher, and student levels. We screened the publications in our corpus by reading their titles, abstracts, and method parts and applied the following inclusion criteria to extract and identify the eligible studies. Our goal was to cover empirical research on TSL and its effects in a centralized education system to understand if the effects of TSL are different compared to existing research in self-governing school contexts. Therefore, we used the following inclusion criteria: (1) empirical research articles;(2) research on schools and other educational organizations in Turkey; (3) written in either Turkish or English; and (5) studied TSL with at least one outcome variable. To ensure we cover empirical research, we used the following three exclusion criteria: (1) meta-analysis or review studies; (2) survey/scale development studies; and (3) books, book chapters, proceedings, editorials, commentaries, news, and dissertations.

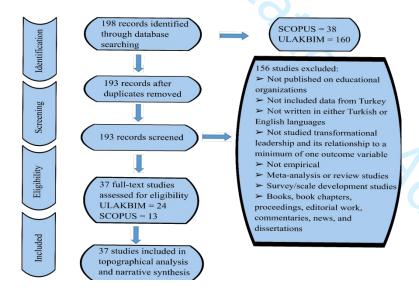


Figure 1. PRISMA Flowchart

Data analysis

We adopted a topographical analysis, which is described as an analysis to describe "the nature of topics and research methods" (Hallinger *et al.*, 2013, p. 256) and is focused on "revealing patterns of knowledge production, summarizing conceptual and methodological trends, and laying the foundation for future research" (Hallinger 2017, p. 4). Because this review analysis aims to review the research evidence critically, propose key implications for practitioners and policymakers, and recommend directions for future research, we adopted the narrative synthesis

approach "that relies primarily on the use of words and text to summarize and explain the findings of the synthesis... and a systematic approach to searching for and quality appraising research-based evidence as well as the synthesis of this evidence" (Popay *et al.*, 2006, p. 5).

First, we reviewed each article, summarized its main findings, and developed an initial analytical framework for each central theme. We then analyzed the existing studies and developed another analytical framework. We then reached a consensus on a final analytical framework consisting of (1) perceptions, attitudes, and behaviors; (2) psychological resources, learning, and change; and (3) school climate and culture. Next, we used this analytical framework to categorize the studies under relevant themes and critique the findings. In the interpretation phase, we revisited and critically read the findings of each article to "generate new interpretive constructs, explanations or hypotheses" (Thomas and Harden, 2008, p.1). Finally, we had another round of reading the main findings and refined the narrative synthesis.

Findings

Topographic review

This section includes general trends and answers the research question: What are general TSL-related research trends in Turkey?

Table 1 here

This topographical analysis highlights several key points:

- 1. Five studies used descriptive statistics, such as comparing means scores across different background variables rather than inquiring about their relationship to other concepts using inferential statistics.
- 2. Twenty-seven studies were conducted in the last ten years, showing increasing interest in this topic. We predict that more studies will examine the topic based on the current trends.
- 3. A well-established TSL-related knowledge base is far from reality in Turkey, and the current knowledge base is quantitatively insufficient. Also, studies randomly focus on different variables instead of building on one another, resulting in a fragmented knowledge base.
- 4. Only one study adopted qualitative methods. We can then argue that positivist research paradigms primarily guide researchers and that social-constructivist and advocacy paradigms are alien to many. Considering "...all methods have inherent biases and limitations, so the use of only one method to assess a given phenomenon will inevitably yield biased and limited results" (Greene *et al.*, 1989, p. 256), we believe that the use of qualitative and mixed-method research will mitigate the limitations of quantitative research and help develop a more robust knowledge base (Edmondson and McManus, 2007).
- 5. Researchers tended to overlook preschool and high school levels. While we acknowledge that this may be due to the underrepresentation of these school levels in the broader population, we should also note that this underrepresentation causes a lack of information about the dynamics and reality of these schools in the TSL empirical base. Also, the voices of teachers in special education organizations appear to have been unheard.

6. Studies focus on organizational and teacher-level variables, but some key concepts that have received increasing attention in the international literature seem to have been sidelined. For example, Turkish scholars were not interested in concepts such as changing teacher practices, planning and strategies for change, and pedagogical or instructional quality, which Leithwood and Jantzi (2005) have identified as trends in the TSL literature. Likewise, concepts identified in Li's Review (2000) (teacher work engagement, teacher leadership, stress, knowledge sharing, work team satisfaction, commitment to change, teacher work performance, burnout, teacher turnover intention, climate of equity, and affiliation) appear to evade the attention of the researchers. One explanation for this disinterest could be that they find the concepts irrelevant to the role expectations of school leaders in schools with little to no autonomy.

Thematic analysis

This section analyzes existing research based on the question: What are the common variables and main findings of TSL research in Turkey? Our narrative synthesis generated three main themes: a) perceptions, attitudes, and behaviors; b) psychological resources, learning, and innovation; and c) school climate and culture. Table 2 below shows the three main themes and outcome variables relevant to each theme.

Table 2 here

The effect of TSL on perceptions, attitudes, and behavior

This theme is about the relationships between TSL and perceptions of justice and trust, work-related attitudes and behavior such as job satisfaction, organizational commitment, organizational cynicism and silence, and organizational citizenship behaviors (OCBs). It concerns the relationships between TSL and school staff's perceptions and attitudes toward the school environment, events, applications, and individuals.

Perceptions are personal and cognitive structures defined as individual interpretations of a particular event (Luthans, 2011). On the other hand, attitudes are "evaluations of one's job that expresses one's feelings towards, beliefs about, and attachment to one's job" (Judge and Kammeyer-Mueller, 2012, p. 341). Attitudes have affective (emotions and moods about a person or an event), faith-based, cognitive, and behavioral components (Brooks, 2006). A person's environment, including physical objects, problems, ideas, events, and people, could be the object of an attitude, and evaluative and affective components are essential ingredients (Champoux, 2010). What makes attitudes important in organizational behavior is their function in controlling and shaping behavior (Lipnevich *et al.*, 2016).

Uludağ and Tepe (2018) showed the interplay between TSL and job satisfaction, defined as "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (Locke, 1976, p. 1304). Their results indicate significant relationships between TSL and personal development, social relationships, job security perceptions, and career satisfaction. TSL influences staff engagement, defined as psychological states that define staff's relationship with their organization and influence their decisions as active members to remain in the organization (Meyer and Allen, 1991). Buluç (2009) found that TSL does this by stimulating staff's motivation, influencing their ideals, stimulating their intellect, and providing individual support. Furthermore, this result underscores the influence of the administrators' inspirational motivation increases

organizational commitment when they share a vision by creating excitement and trust, inspiring positive energy and hope.

Güneş and Buluç (2012) confirm that TSLs seeking to meet individual needs inspire them to have a vision by acting as role models and setting valuable goals. They enhance the motivation and self-confidence of staff and provide continued support for learning, creativity, and innovation. As such, they are more likely to foster a positive perception of justice. Oğuz (2011) complemented this evidence by showing that the TSL explains almost half of the differences in teachers' justice perceptions.

TSLs' understanding and meeting of individual needs and support were cited in some studies as the key leadership behavior that transforms perceptions of equity. TSL explains much of the variance (73 %) in teachers' positive perceptions of support and justice. Also, when TSL intersects with positive perceptions of justice and organizational support, it critically influences teachers' quality of work-life (Akar and Üstüner, 2019). Because positive perceptions of support and justice mitigate teacher stress, TSL increases the quality of teachers' work lives. TSL also affects life outside of schools and increases teachers' life satisfaction (Şahin and Sarıdemir, 2017).

Çetin *et al.* (2012) found that by improving the quality of communication, TSL enriches teachers' OCBs by motivating them to go the extra mile. In other words, by promoting the quality of interactions between school leaders and teachers, TSL increases teachers' willingness to engage in constructive behavior. In our review, TSL explains 15% of the variance in OCBs (Oğuz, 2010).

Cemaloğlu (2009) found that TSL increases school health and decreases bullying. For him, teachers are less likely to be bullied in environments where TSL is displayed. Professional leadership, support for resources, teacher loyalty, academic focus, and organizational integrity, dimensions of organizational health developed by Hoy et al. (1991), can explain such evidence. TSL positively shapes these features of organizations, develops organizational health, and reduces the likelihood of bullying.

The effect of TSL, on psychological resources, learning, and innovation This theme is about the capacity of TSL to enhance individuals' psychological resources, schools' learning, and innovation. It presents the effects of TSL from these perspectives at the individual, group, and organizational levels.

Psychological resources are cognitive and affective traits (e.g., hope, optimism, self and collective efficacy, resilience, positive affect, and self-esteem) that individuals can rely on during difficult times and are important for their well-being (Hobfoll, 2002). School administrators' psychological resources increase their likelihood of exhibiting TSL. On the other hand, TSL also strengthens teachers' psychological resources (e.g., efficacy, optimism, positive affect, self-esteem) and makes them more open to learning and change. Çobanoğlu and Yürek (2018) pointed out the complexity of the interplay between TSL and efficacy, as it was found that school leaders with high self-efficacy are more likely to exhibit TSL styles. In other words, school leader self-efficacy beliefs and TSL styles emerge as complementary constructs that appear symbiotic. Similarly, school administrators with higher levels of well-being, characterized by higher levels of life satisfaction and positive affect, are more likely to display TSL style (Şahin and Yılmaz, 2016). Creating a positive social and academic environment is natural for TSLs. Börü and Bellibaş (2021) underscore that TSL increases academic optimism, defined as an "overarching construct to unite efficacy, trust, and academic emphasis" (p.145).

TSL influences efficacy in various ways and can affect both teachers' self- and collective efficacy (Demir, 2008). More specifically, TSL improves teachers' collective efficacy directly and indirectly by enhancing their self-efficacy (Demir, 2008). Another way TSL improves teachers' efficacy is by increasing their professional self-esteem, thereby making them more productive and happier (Kiriş and Aslan, 2019). A significant impact of TSL noted in the literature is its ability to bind the individual to the school by improving their motivation. It increases teachers' internal motivation to participate in and enjoy school activities and assignments (Aksel and Elma, 2018). This evidence underscores the impact of TSL on work as a glue that binds individuals to school and makes them more open to change and ready to perform better.

The impact of TSL on schools goes beyond an impact on learning and efficacy. It creates a harmonious work environment characterized by respect and understanding of diverse opinions. It has emerged as an effective leadership style for managing diversity and creating a culture that values and thrives on diversity. TSLs appear more adept and purposeful in dealing with differences based on culture, faith, and socio-economic status (Okçu, 2014). They are better at managing diversity because they perceive and appreciate differences, break down prejudices, and see differences as a source of learning.

One of the common themes in the TSL literature is its effect on vision-building and change (Leithwood *et al.*, 2006; Li, 2020). Our review found no evidence of such a role. Although our review shows that TSLs help teachers understand and support the school vision, they are reluctant to involve teachers and students in vision-building (Özdemir *et al.*, 2013). This evidence can be interpreted in the context of the role expectations of school principals in Turkey. This system's centralized governance and policy-making are features in which schools are expected to comply with the centrally developed frameworks. There is no expectation for school administrators in this context to create different visions according to the needs of their schools. Therefore, goal setting and vision building seem less relevant in such a context.

TSL, school climate, and culture

Under this theme, we discuss the role of TSL in building a positive school climate and a collaborative culture. We also present the effects of TSL in fostering and developing a risk-taking, collaborative, innovative school environment.

Ayık and Diş (2015) showed that although the inspirational motivation dimension of TSL has a relatively negligible effect on developing a strong school culture, the idealized influence, intellectual stimulation, and individualized interest dimensions are effective in developing a positive one by nurturing supportive principal behavior and genuine and cooperative teacher behavior. Additionally, TSLs are more adept at psychologically empowering individuals. Because psychologically empowered individuals tend to be more creative and risk-taking, see mistakes as sources of learning, and seek to acquire and use new learning, they contribute to developing an innovative school climate. TSL is also associated with an ethical school climate. Sağnak (2010) found that employees are more inclined to behave ethically when these dimensions exist. Sağnak's evidence showed that all dimensions of TSL (vision-building, instilling inspiration, modeling desired behavior, providing support, achieving group goals, intellectual stimulation, and having high expectations) positively influence the caring aspect of the ethical climate.

The effect of TSL in developing a collaborative school climate is through its impact on the self and collective efficacy of teachers (Demir, 2008), which contributes to enhancing student

achievement (Voelkel and Chrispeels, 2017). In addition, Şahin's (2004) study confirmed the link between TSL and collaborative school culture, adding professional growth and socio-educational culture to the type of culture promoted by TSL. This evidence points to the tendencies created by TSL, such as working in teams, developing shared responses to adverse external events and actions (collaborative school culture), working to improve professional learning by investing extra time and focusing on professional development (educational development culture), organizing academic, scientific, and social student activities to enhance student growth (socio-educational culture).

The research also confirms the effects of TSL on improving schools' change capacities. Schools led by TSLs are more receptive to community's demands, and teachers and administrators are more open to change and improvement. Ayık *et al.* (2015) found that these leaders are better at earning respect and trust because they are more open to change, act as role models, and are more successful at mobilizing teachers towards individual and organizational goals.

The intellectually stimulating behavior of these principals motivates teachers to generate new ideas and create a positive school environment where teachers express their thoughts freely. This genuine interest in the needs and problems of the individual contributes to a collegial work environment characterized by strong, trust-based relationships. TSLs, therefore, are more competent in shaping attitudes and behavior (Ayık *et al.*, 2015).

Discussion

Turkish researchers have chosen quantitative methods to study TSL. The TSL literature in Turkey is still in its infancy, and there is a strong need for experimental, longitudinal, qualitative, and mixed-method studies to better understand it in education systems with a centrally developed framework.

Our study confirms the established interactions between TSL and school outcomes, such as improving schools' change capacities, collaborative and innovative school climate, a culture of learning, teachers' self-efficacy and collective efficacy, professional learning, school change, positive attitudes such as commitment, job satisfaction, and self-efficacy, developing cooperative and trusting relationships, building cooperative organizational structures and cultures. Given that improved student performance results from enhanced collective efficacy (Voelkel and Chrispeels, 2017), we can argue that TSL effectively develops a climate and culture conducive to learning by improving teachers' self and collective efficacy and professional learning capacities. However, we agree with Evans's (2022) argument that the lack of experimental research reduces the quality of causality-seeking TSL research.

Despite these commonalities, no study in our review highlighted the role of TSL in vision-building and change, a relationship established by Leithwood *et al.* (2006) and Li (2020). The lack of research on these two well-researched outcomes of TSL could be because the researchers consider them less relevant to the Turkey context, characterized by a concentrated centrality and a lack of autonomy and accountability, which restrict school leaders' role in doing clerical work. TSL is then less functional, if not dysfunctional, in educational contexts where the critical role of administrators is to ensure maintenance. This finding from a non-Western context has farreaching global implications for TSL. First, it also restricts the global applicability of TSL Second; it shows that the school's cultural and national context in Turkey largely determines leadership, an understanding that requires that we approach global frameworks cautiously. We recognize that quantitative research offers relatively limited insights into the socio-cultural

environment of schools because they focus on generalization rather than specificity and that the heavy use of these research designs reveals the epistemological norms in educational administration in the Turkey context of our study.

Likewise, contrary to the findings of various reviews (Chin, 2007; Leithwood and Sun, 2012), the effects of TSL on student engagement and learning, shared decision-making, school effectiveness, and disciplinary practices were not examined in the research we reviewed. We found no empirical basis for TSL's relationship to student outcomes, which is established evidence (Leithwood and Sun, 2012). This result is similar to Li's (2020) finding that Chinese researchers had not studied classroom-level variables well. This is a potential area for further research to understand the global relevance of TSL. This could be due to a lack of interest in these concepts or a disbelief in the functionality of TSL regarding these outcomes in the Turkey context.

TSL and shared goals and shared decision-making, a topic investigated by scholars such as Leithwood and Sun (2012), is another uncharted territory in the context of our study. Also, teachers' work engagement, teacher leadership, stress, knowledge sharing, satisfaction in work teams, commitment to change, teachers' work performance, burnout, teachers' turnover intention, justice climate, and affiliation, outcomes reported in Li's review (2020), and TSL's effects on disciplinary practices (Leithwood and Sun, 2012) eluded the attention of Turkish researchers.

Our review also revealed some results of TSL (e.g., interactions between TSL and diversity management and intrinsic and extrinsic motivation, the teacher image) that have been studied in the context of Turkey but have received less attention in the international literature. The effect of TSL on the development of organizational virtue, life satisfaction, and voting behavior has yet to be explored in the international literature. Such similarities and differences require a renewed and context-specific focus on TSL.

Conclusion

Our review confirms the role of TSL in the international literature on promoting school improvement and change and developing a collaborative, innovative, and learning-oriented climate. TSL enhances teachers' self and collective efficacy by focusing on professional learning and helps staff become more committed and satisfied. Its role in developing trusting relationships and improving a cooperative work environment is also confirmed in the Turkey context of this study. Our study highlights that TSL effectively improves school members' job satisfaction and commitment to and trust in schools and their OCB. TSL helps develop a more positive perception of justice and encourages people to be more actively involved in school affairs by reducing organizational silence and mitigating cynicism and bullying. Second, TSL improves psychological resources and promotes schools' ability to learn and innovate. It creates academic optimism, improves self and collective efficiency, facilitates school learning and professional transformation, and empowers individuals to manage differences more effectively. Finally, TSL effectively builds an ethical and innovative climate, empowers individuals, and fosters a collaborative school culture.

Some outcomes of TSL widely reported in international literature, such as vision-building, change, instructional quality, student engagement, and learning, shared goals and decision-making, teacher engagement, teacher leadership, stress, knowledge sharing, commitment to change, teachers' work performance, burnout, teachers' turnover intention, justice climate, and affiliation have not attracted the attention of researchers in our context, or they were found

irrelevant in our review. TSL research in an education system characterized by centrality also confirms the role of TSL in facilitating diversity management and enhancing intrinsic and extrinsic motivation, improving teacher image, developing organizational virtue, and improving life satisfaction. These variables are not well explored in international contexts.

Our review points to issues in developing global leadership frameworks and highlights that governance structures that define the roles of school principals may also determine the applicability of the TSL. Our study also highlights the limited relevance of TSL in centralized, non-Western educational leadership contexts. TSL has proven effective in the Turkish context in developing positive perceptions, attitudes, and behaviors in teachers, improving their psychological resources and learning and innovation skills, and creating a school climate and culture conducive to innovation. However, because school leaders do not have much influence on school changes and vision formation in the Turkish context, TSL does not apply to these aspects. The differences in school governance between countries seem to make the applicability of TSL problematic, requiring a more nuanced understanding of TSL. Although previous research has found that TSL has a significant impact on learning, particularly when integrated into classroom instruction (Marks & Printy, 2003; Kwan, 2020; Bellibaş et al., 2021), this impact is limited in the Turkey context, where the primary task of school leaders is maintenance rather than improvement.

Limitations and future research directions

First, while it is claimed that our study's databases are regularly updated locally, these two search databases could inevitably have missed some journal articles relevant to the inclusion criteria. A possible solution is to include varied and multiple databases. Second, we have chosen to limit our examination of journal articles to peer-reviewed journal articles. As a result, we may have missed a wider range of insights in book chapters, books, research papers, dissertations, and grey literature. Third, since there were many levels of research focus, we did the coding of research focus and methods. However, our approach may not have allowed us to examine the relationships between research foci and method design. A possible solution is to do all the encoding in one file so that more complex analysis can follow. We agree that TSL is only one leadership style related to leadership effectiveness; however, we also agree that effective leadership is multifaceted and requires a combination of leadership styles. Accordingly, the evidence in our study sheds light on only one dimension of leadership effectiveness in Turkey.

These limitations call for further research. More comprehensive studies that include research in more databases, multiple types of research, research articles, and data from multiple countries with comparable governance structures can be conducted. We also recommend both singular and comparative experimental, qualitative, and mixed-method research to create more robust causality and to better capture the effects of education governance on the applicability of TSL. Future research must also focus on preschool and special education school contexts and the impact of TSL at the classroom level. We also recommend that researchers examine the relevance and impact of TSL in Western and non-Western countries with governance models similar to Turkey's.

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Table 1. Studies on TSL in Turkey (2000-2021)

Outcomes	Method/Analysis	Participants
School climate (Ayık and Diş, 2015; Ertuğrul and Töremen, 2017)	Quantitative	Public school teachers
Job satisfaction (Uludağ and Tepe, 2018), student satisfaction (Erdel and Takkaç, 2020)	Quantitative	School administrators (primary and secondary)
Academic optimism (Börü and Bellibaş, 2021)	Quantitative	Primary school administrators and teachers
Ethical climate (Sağnak, 2010)	Quantitative	Primary school teachers
Organizational justice (Güneş and Buluç, 2012; Oğuz, 2011)	Quantitative	Primary school teachers
Organizational justice, organizational support, life quality (Akar and Ustuner, 2019)	Quantitative	Pre-school, primary, and secondary school teachers
Organizational cynicism (Güçlü et al., 2017)	Quantitative	Secondary school teachers
Learning school (Özdemir <i>et al.</i> , 2013; Akan and Sezer, 2014) Participatory decision-making and learning school (Köse and Güçlü, 2017)	Qualitative	Primary school teachers
Contribution of European Union projects to schools (Bardakçı and Aksu, 2019)		
Teacher occupational self-esteem (Kiriş and Aslan, 2019)	Quantitative	Primary and secondary school teachers
Openness to change (Ayık et al., 2015)	Quantitative	Secondary school teachers
School culture (Şahin, 2004)	Quantitative	Primary school administrators and teachers
School culture, school image (Kalkan <i>et al.</i> , 2020), school culture (Avcı, 2016)	Quantitative	Teachers (not specified)

Life and marriage satisfaction (Şahin and Sarıdemir, 2017)	Quantitative	Primary and secondary school teachers
OCBs, leader-follower exchange (Çetin et al., 2012), OCBs (Oğuz, 2010)	Quantitative	Primary school teachers
Motivation (Aksel and Elma, 2018)	Quantitative	Secondary school teachers
Organizational health, bullying (Cemaloğlu, 2009)	Quantitative	Primary school teachers
Professional learning, trust, collective efficacy (Karacabey <i>et al.</i> , 2020)	Quantitative	Pre-school, primary, and secondary school teachers
Diversity management skills (Okçu, 2014)	Quantitative	Secondary school teachers
Entrepreneurship skills (Çelik, 2013)		
Managerial self-efficacy (Çobanoğlu and Yürek, 2018).	Quantitative	Primary and secondary school administrators
Organizational commitment (Buluç, 2009; Aydın <i>et al.</i> , 2013)	Quantitative	Primary school teachers
Organizational virtuousness (Nartgün and Dilekci, 2016)	Quantitative	Primary and secondary school teachers
Self-efficacy, collective efficacy, collective culture (Demir, 2008).	Quantitative	Primary school teachers
Innovative climate, psychological empowerment (Sağnak <i>et al.</i> , 2015)	Quantitative	Secondary school teachers
Psychological well-being (Yılmaz and Şahin, 2016), Positive psychological capital (Şengüllendi and Şehitoğlu, 2017)	Quantitative	Primary and secondary school administrators

Table 2.Main themes and outcomes

Theme 1. Perceptions, attitudes, and behaviors	Theme 2. Psychological resources, learning, and innovation	Theme 3. School climate and culture
Job satisfaction Organizational commitment Organizational citizenship behaviors Organizational justice Organizational trust Cynicism Organizational silence Bullying	Professional identity motivation Academic optimism Learning organization innovation Managing differences Self-efficacy Collective efficacy	Ethical climate Innovative climate Psychological empowerment School culture Organizational image