# A Review of the Empirical Research on Teacher Leadership (2003 - 2017): Evidence, Patterns and Implications

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## *Evidence, Patterns and Implications*

## Abstract

**Purpose** – This article outlines key findings from a contemporary review of the international empirical literature focused upon teacher leadership. It synthesises what is currently known about the nature, practice, conditions and impact of teacher leadership and to outline patterns in the contemporary empirical research base.

**Design/methodology/approach** – This review is based on an analysis of 150 empirical articles published in Scopus/SSCI - indexed journals between January 2003 and December 2017.

**Findings** – The article draws upon this contemporary knowledge base to explore: a) contextual and methodological patterns of teacher leadership research; b) definitions of teacher leadership; and c) evidence on the enactment of teacher leadership, factors influencing teacher leadership and impacts of teacher leadership.

**Originality/value** – This article highlights the progress and issues of the empirical research on teacher leadership since 2003 and identifies gaps in the knowledge base as well as areas for future scholarly enquiry.

**Keywords**: Educational Leadership, Professional Development, Review, Teacher Leader, Teacher Leadership

## Introduction

Since the early 1980s scholarly interest in teacher leadership has steadily increased and the knowledge base has grown significantly (York-Barr and Duke, 2004). During the early part of the second millennium more scholars, in the field, turned their empirical attention to collective, shared, or distributed forms of leadership (e.g., Gronn, 2000; Harris, 2003). As a result, teacher leadership research expanded and writing about shared or distributed leadership (Harris and DeFlaminis, 2016) dominated much of the contemporary writing in the field.

Between 1980 and 2000, several reviews and syntheses of the teacher leadership literature were undertaken, of various scope and scale. Each offered critical insights into the nature, enactment, and outcomes of teacher leadership practices (e.g., Harris, 2005; York-Barr and Duke, 2004). The most influential review of the literature concerning teacher leadership, however, remains the seminal work published by York-Barr and Duke (2004). This has been widely cited and is an important reference point within the teacher leadership research base. More recently, Wenner and Campbell (2017) produced a review of the teacher leadership literature. This review of the literature examined 54 outputs (articles, book chapters, and doctoral theses) relevant to teacher leadership in the K-12 setting. The review considered theories informing teacher leadership. It looked at teacher leadership within subject contexts, and considered the roles of teacher leaders with respect to social justice and equity issues.

As the Wenner and Campbell (2017) review is a recent and an important addition to the knowledge base on teacher leadership, it is important to demonstrate how the literature review, that is the central focus of this article, is different but also complimentary. Table I highlights the main similarities and differences between both reviews. Wenner and Campbell (2017) and the current review share a common aim, i.e., to interrogate the contemporary teacher leadership literature. There are, however, five main differences between the reviews.

**Table I.** Comparison between Wenner and Campbell (2017) and the current review

| Comparison criteria | Wenner & Campbell (2017) | The current review |
|---|---|---|
| **(1) Overall aim** | To continue York-Barr and Duke's (2004) review | To continue York-Barr and Duke's (2004) review |
| **(2) Specific objectives** | To examine: <br>• Teacher leadership within disciplinary contexts; <br>• How teacher leadership is defined; <br>• How teacher leaders are prepared; <br>• Factors influencing teacher leadership; <br>• Effects of teacher leadership; <br>• Theories informing teacher leadership; <br>• Teacher leadership for equity and diversity. | To examine: <br>• Patterns of teacher leadership research; <br>• How teacher leadership is defined; <br>• Evidence on the roles of teacher leaders and how they are enacted; <br>• Evidence on the factors influencing teacher leadership; <br>• Evidence on the impacts of teacher leadership. |
| **(3) Time frame** | January 2004 – December 2013 | January 2003 – December 2017 |
| **(4) Language** | English | English |
| **(5) Type of publication** | Peer-reviewed journal articles and doctoral dissertations | Scopus or SSCI (Social Sciences Citation Index) - indexed journal articles |
| **(6) Nature of teacher leadership** | Teachers maintaining K-12 classroom based-teaching responsibilities and concurrently taking on leadership responsibilities outside of the classroom | • Within and beyond classroom <br>• Teaching and leadership are integrated. |
| **(7) Research settings** | K-12 | PreK-12, K-12, and Post-Secondary |
| **(8) Geographical location** | Any | Any |
| **(9) Data sources** | Excluding studies which utilised one single source of data | Any sources of data |
| **(10) Sample size** | Excluding studies where the number of teacher-leader participants was five or below | Not applying this criterion |
| **(11) Content** | Excluding studies in which teacher leadership is peripherally included | Including studies which explicitly address (an) aspects of teacher leadership |
| **(12) Number of reviewed studies** | Total 54 articles, book chapters, & dissertations | Total 150 articles |

*Firstly*, there are differences in the definition of teacher leadership used in both reviews. Wenner and Campbell (2017) defined teacher leadership in terms of teachers who take on leadership responsibilities outside the classroom. In contrast, the current review adopted a broader conceptualisation of teacher leadership that teacher leaders: *'lead within and beyond the classroom, identify with and contribute to a community of teacher learners and leaders, and influence others toward improved educational practice; and accept responsibility for achieving the outcomes of that leadership"* (Katzenmeyer and Moller, 2001, p. 6). From this definition, it is posited that teacher leadership can happen within and beyond the classroom, and that teaching and leadership are integrated.

*Secondly*, in their review Wenner and Campbell (2017) excluded all studies that relied on one single source of data (e.g., quantitative survey data) or had five or fewer teacher-leader participants. The current review did not apply these criteria. It included studies using one data source that reported key findings, for example, on the effects of teacher leadership (e.g., Devos *et al.*, 2014; Supovitz *et al.*, 2010). It also included longitudinal or ethnographic studies with five or fewer than five teacher-leader participants (e.g., Woodhouse and Pedder, 2017).

*Thirdly*, in their review, Wenner and Campbell (2017) excluded sources in which teacher leadership was not the central focus. In contrast, the current review took a more eclectic view of teacher leadership and included a wide range of literature, where teacher leadership is not the only focus of the narrative or analysis, albeit providing potentially rich insights (e.g., Devos *et al.*, 2014; Supovitz *et al.*, 2010). For example, Supovitz, Sirinides, and May (2010) examined the effects of principal leadership and teacher peer influence on teachers' instructional practices and student learning. This empirical study did not focus on teacher leadership as the only and central topic of investigation, but its findings provide noticeable claims on the effects of teacher leadership.

*Fourthly*, the two reviews differ in terms of their specific objectives. Wenner and Campbell (2017) stated that their main objective was 'to examine how teacher leadership is defined, how teacher leaders are prepared, their impact, and those factors that facilitate or inhibit teacher leaders' work' (1).

Beyond this, 'the review considered theories informing teacher leadership, teacher leadership within disciplinary contexts, and the roles of teacher leaders in social justice and equity issues' (1). In contrast, the current review focused on identifying the contextual methodological patterns of teacher leadership research, the evidence emerging from this empirical base, the main themes that emanate from the selected studies and the implications for future work in the field. *Finally*, the two reviews differ in their review approaches. Wenner and Campbell (2017) reviewed 54 pieces, namely 43 journal articles, 8 doctoral theses, and 3 book chapters. The current review examined 150 Scopus/SSCI-indexed journal articles, 25 of which were also reviewed in Wenner and Campbell (2017).

The next section of this article outlines the review process.

## Review Process

This review of the literature is based on an analysis of 150 published works concerning teacher leadership in the period from 2003 – 2017. The purpose of this review was two-fold: firstly, to highlight some patterns of research on teacher leadership and secondly, to summarise and synthesise the contemporary empirical evidence on important aspects of teacher leadership. At the outset of the literature review, eight key criteria were established to shortlist works that were appropriate for review. These criteria are elaborated in Appendix 1.

The search and selection process comprised four iterative stages. *In the first stage*, keywords entered in the search databases were "teacher leadership" and "teacher leader(s)". 'EBSCOhost Research Databases' was chosen as a starting point due to its comprehensive coverage. All databases in EBSCOhost Research Databases' were utilised. The optional default function in the search engine was set such that a publication, any part (title, abstract, list of keywords, or the entire body) of which contains any of these key phrases was shortlisted in the first round. In this stage, we delimited the search to peer-review journal articles, English language and time frame from January 2003 to December 2019 (*see* Criteria 1 & 7 in Appendix 1). The search accordingly yielded 1,512 hits that were identified after automatically removing exact duplicates from the results by the search system as potentially relevant journal articles.

*In the second stage*, the titles and abstracts, where they existed, of all 1,512 hits were scanned for immediate relevance. Publications that were clearly irrelevant were excluded. For example, the search system included an article by Sanchez *et al.* (2015) because this publication has the phrase "teacher leaders". However, the abstract clearly shows that Sanchez *et al.* (2015) predominantly discusses teachers' various views on mathematical processes and therefore was excluded from the review in this stage. Accordingly, a group of 778 articles that appeared to meet the established criteria were exported from EBSCOhost to Endnote for storage. We then downloaded the full texts of these articles for reading.

*In the third stage*, the full texts of all 778 articles were scanned to double check whether these publications fit the category of empirical articles and whether these were directly relevant to teacher leadership. This practice identified 293 empirical articles, after excluding all editorials, commentaries, book-review articles, articles based on their author(s)' own stories, and all empirical articles clearly irrelevant to teacher leadership.

*Finally*, the authors decided to include only SSCI/Scopus-indexed journal articles that have been examined through a clear external review process. This selection practice is also aligned with the recent reviews in the field of educational leadership (e.g., Gumus *et al.*, 2018; Hallinger and Kovačević, 2019). A manual check of the websites of journals, the Web of Science, and Scopus database was conducted to see which of these 293 publications were Scopus or SSCI – indexed articles. As a result, 150 Scopus/SSCI-indexed articles that met all inclusion criteria were shortlisted for the final review. All of these 150 articles were analysed (*see* Appendix 2 for example) and these provide the data for the findings on the patterns of empirical research on teacher leadership (*see* the section of Findings a)). A total of 63 articles are cited in this article because they provide evidence to support themes in the sections of Findings b & c). These cited articles are marked asterisk (*) in the reference list.

An MS Excel spreadsheet was developed to collect the details of each of 150 Scopus/SSCI-indexed articles. The spreadsheet comprised four main groups of data, with separate categories. Appendix 2 shows an example of articles analysed in the abbreviated form of the spreadsheet.

**Group 1. Basic specifics** - Author(s), year of publication, and journal;

**Group 2. Research contexts** - Country, region, and school level;

**Group 3. Research Methods -** Research approach, sampling, type of data, and analysis methods;

**Group 4. Findings & Discussion** - Specified definition, nature of teacher leadership, key relevant findings & discussion, and impact of teacher leadership.

Descriptive statistics and graphing of trends were deployed to analyse the data in groups (1), (2), and (3). Key and relevant findings, plus all methodological details of the articles, were recorded. An open-coded approach was used to analyse the data in Group (4) and these codes were arranged into meaningful categories (and sub-categories). To aid the process of labelling and categorisation, each publication was revisited several times to fully understand the nature of the data or arguments that were represented.

## Findings

The next section of this article focuses on the main findings from the review. The article draws upon the selected 150 articles to examine a) contextual and methodological patterns of teacher leadership research, b) definitions of teacher leadership, and c) evidence on the enactment of teacher leadership, factors influencing teacher leadership and impacts of teacher leadership.

**a) Patterns of empirical research on teacher leadership**

*Knowledge production of teacher leadership across years*

The review period was equally divided into three 5-year periods to observe patterns of the empirical research of teacher leadership. It is accepted that this division is somewhat arbitrary but was used simply to identify trends (Figure 1). The review revealed a notable increase in the number of articles published about teacher leadership, after 2007. The number of articles published in the second period

(2008 – 2012) was double that of the first period (2003 – 2007). Looking at the number of articles per year in the entire review period (2003 – 2017), an upward trend is visible (*see* Appendix 3).
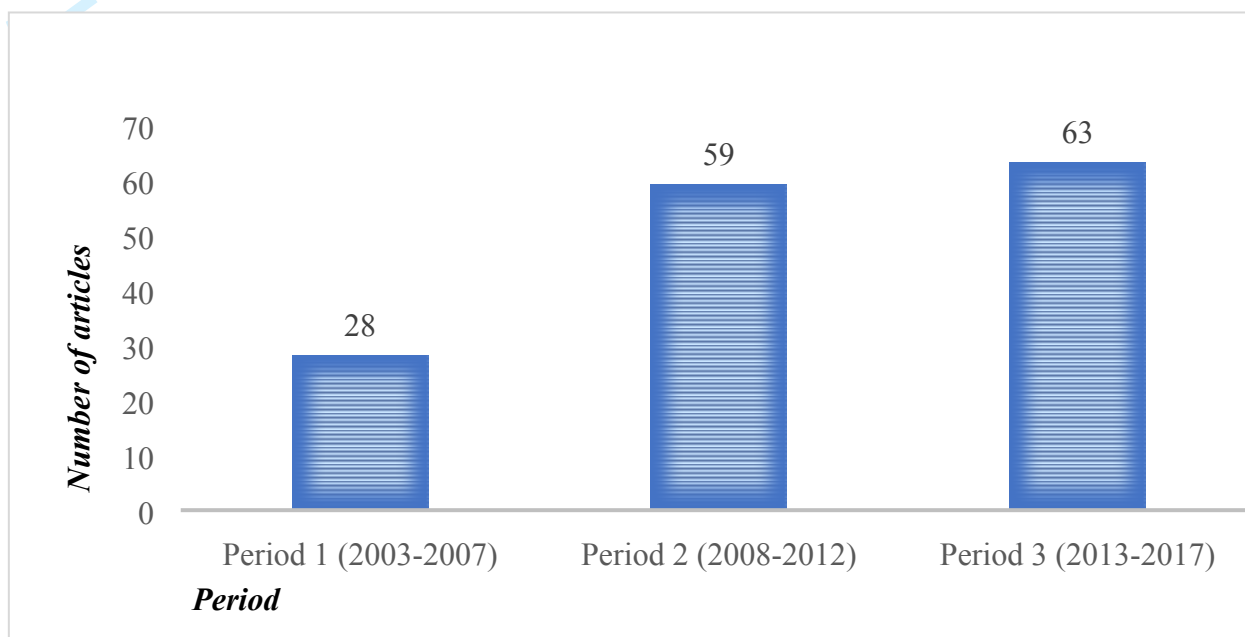


**Figure 1.** Number of articles across review periods

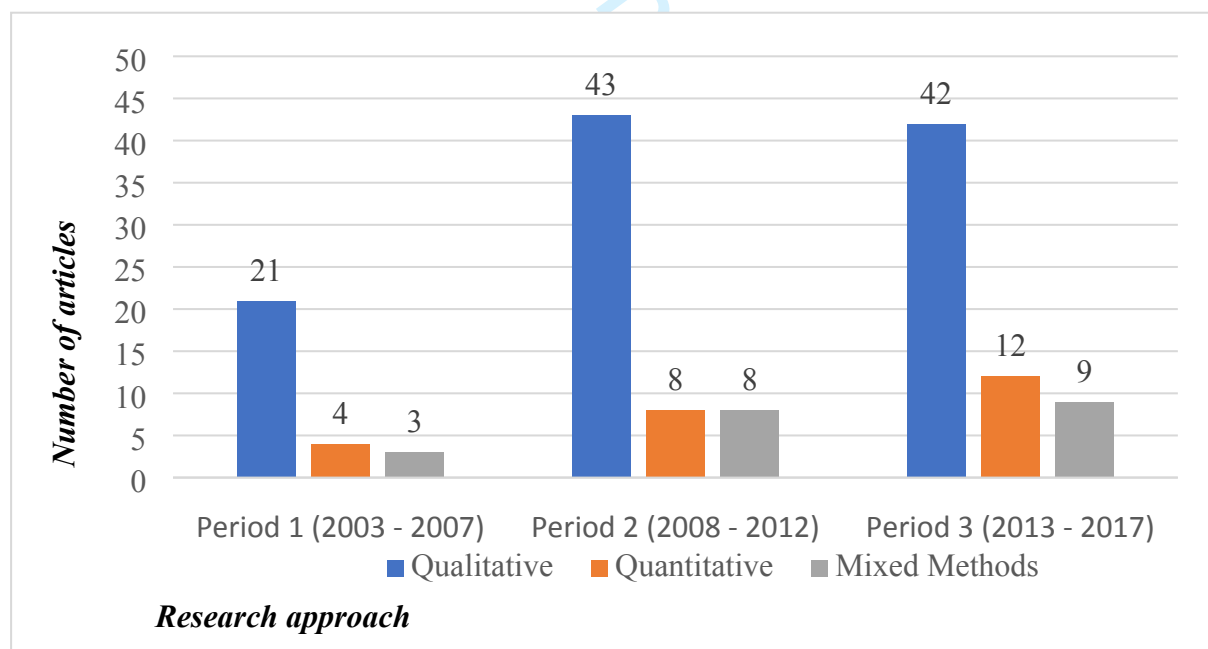*Methodological patterns of teacher leadership research*



**Figure 2.** Comparison of research approaches across review periods

Turning next to the nature of the research methods adopted by the empirical investigations of teacher leadership (*see* Figure 2). All 150 empirical articles were categorised into quantitative, qualitative, or mixed-methods approaches. Of these publications, 106 articles (approx. 71%) drew on

qualitative data only; 24 articles (16%) employed a quantitative research design; and 20 articles (13%)

utilised both qualitative and quantitative data. There was a minimal increase in the proportion of

quantitative and mixed-methods design studies across three review periods. Notably, only two cross-

national studies of teacher leadership were identified in the entire review period (i.e., Chew and

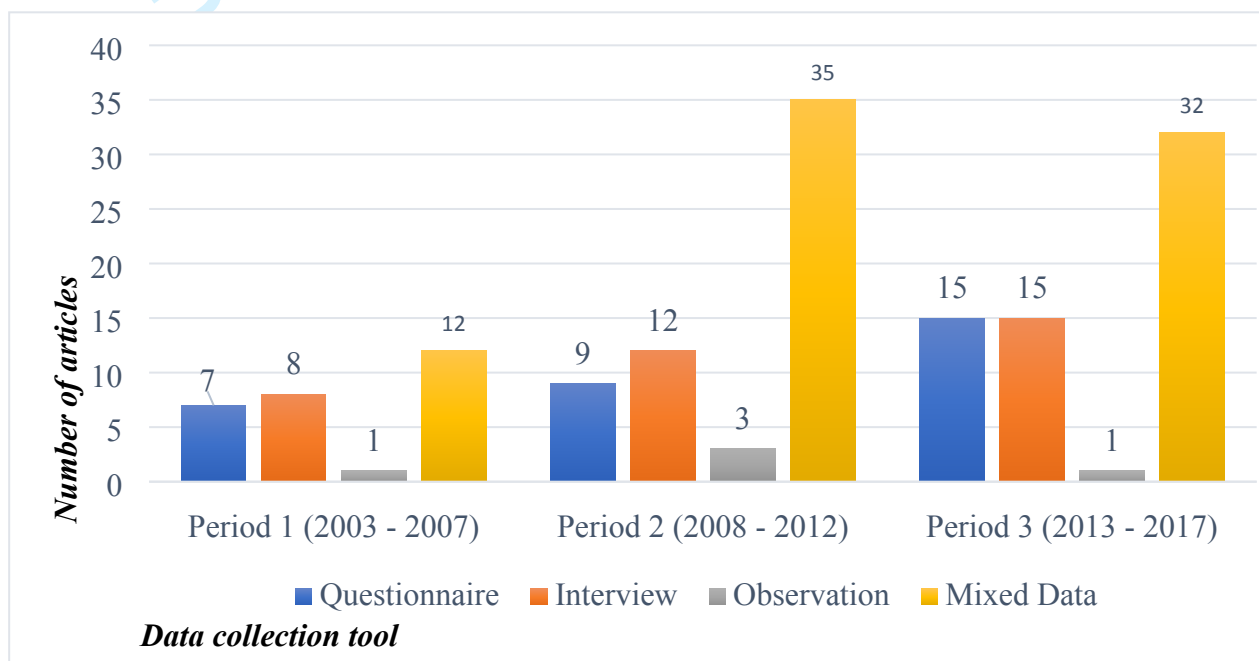Andrew, 2010; Poekert *et al.*, 2016).



**Figure 3.** Comparison of data collection tools across review periods

Data collection methods are summarised in Figure 3. More specifically, seventy one (47%)

out of the 150 reviewed articles used one single tool (i.e., interview, questionnaire, or observation) to

gather data. Seventy nine (53%) out of the 150 reviewed articles, listed in the Mixed Data category,

utilised more than one data collection tools. Noticeably, out of these 79 articles, there were 68 (86%)

employing interviews as a method to gather data (*see* Appendix 4).

These analyses have three main implications. Firstly, that while the volume of quantitative and

mixed-methods studies have slightly increased across fifteen years, qualitative research continues to

be dominant in the field of teacher leadership. The preference for a qualitative approach to researching

different types of teacher leadership, and leadership more generally, has been recognised in previous

reviews and syntheses of the literature and noted as a limitation in this field of study (e.g., Gumus *et

al.*, 2018; Wenner and Campbell, 2017). Secondly, that more quantitative and cross-national

comparative studies are needed, within this field of enquiry, to produce a wider range of evidence and deeper insights into teacher leadership across various contexts and cultures (*see* Harris *et al.*, 2019). Thirdly, that the research on teacher leadership has tended to rely on interviews as the most predominant method of data collection.

*Contextual patterns of teacher leadership research*

This section of the article considers the contexts of teacher leadership research.

*School levels* Figure 4 highlights that most of the reviewed publications (122 articles) discuss teacher leadership within K-12 school contexts. Only three empirical studies have explored teacher leadership in early childhood settings (i.e., Ryan and Hornbeck, 2004; Li, 2015; Bøe and Hognestad, 2017). A group of 23 articles address teacher leadership in post-secondary school settings, only four of which focus on discussing University faculty teacher leadership in the context of higher education. Two articles that investigated teacher leadership across school levels were listed in the 'Mixed Settings' category.
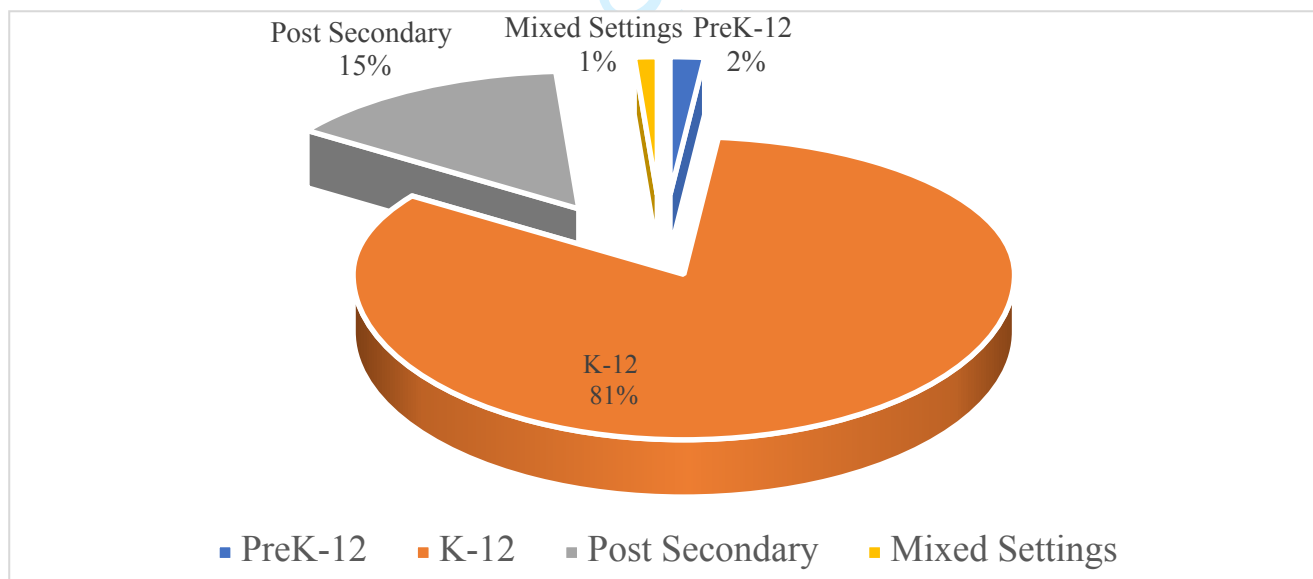


**Figure 4.** School-level-based classification of articles

*Geographical contexts* Overall, Northern America (mostly the United States) produced more than half of the articles in this review, followed by Asia, Europe, and Oceania. Africa and Latin America & Caribbean published the least research on teacher leadership. In total, 77 (approx. 51%) articles discuss teacher leadership in Northern America, with 58 from the United States and 19 from Canada.

A group of 28 articles (18%) and 23 articles (15%) were drawn from research in Asia and Europe, respectively; 15 articles (approx. 10%) focus on teacher leadership in Oceania; and only 6% touch upon teacher leadership in the areas of Africa (6 articles) and Latin & Caribbean (3 articles). Figure 5 reveals similar patterns showing the dominance of empirical studies in the United States and other Western and English-speaking countries. While research on teacher leadership in Asia is underway, the volume of empirical studies in the other non-Western societies generally remains modest.
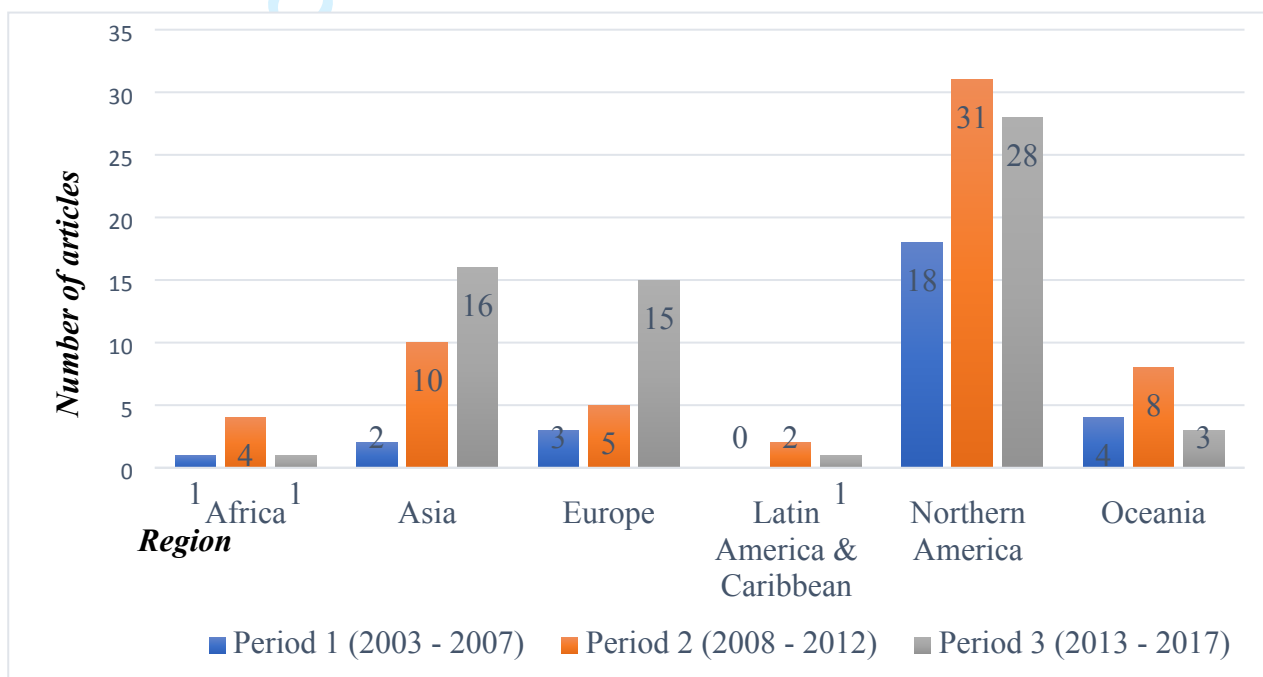


**Figure 5[1].** Region-based classification of articles

Wenner and Campbell (2017) note: "most of the research occurred in the United States, but 13 (24%) took place outside of the United States, with multiple studies coming from Australia, Canada, Israel, and the United Kingdom" (p. 145). In the current review, a group of studies outside Western countries in Asia, Europe, and Africa have made some contributions to the evidence base of the field and are referred to in the following sections of this article: definitions, enactment, conditions, and impacts of teacher leadership (e.g., Cheng and Szeto, 2016; Hairon *et al.*, 2015; Huang, 2016; Montecinos *et al.*, 2014).

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[1] *Chew and Andrew (2010) were undertaken in Asia and Oceania and therefore counted for both regions. Poekert et al. (2016) were conducted in Europe and Northern America and therefore counted for both regions.*

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**b) Definitions of teacher leadership**

Turning to the issue of definition, it remains the case that interpretations of teacher leadership vary quite considerably (Muijs and Harris, 2006). Many of the studies featured in this review fully acknowledge the fact that there are different definitions and interpretations of teacher leadership. Many writers support a view, that despite different interpretations, the key characteristics or features of teacher leadership remain the same. For example, Cooper et al., (2016, p. 87) state:

> *"The role of the teacher leader - what it is and how it is defined - is varied, depending on the school context and the research. Yet, most scholars agree that teacher leadership occurs within and outside classrooms to influence school-wide instructional practice."*

Only six articles in the review explicitly stated their chosen definition of teacher leadership (e.g., Hairon *et al.*, 2015; Leonard *et al.*, 2012; Snoek *et al.*, 2017). In contrast, eleven articles proposed their own definition of teacher leadership to guide their respective empirical studies (e.g., Anderson, 2004; Chew and Andrew, 2010).

In all, the review found that there were seventeen different definitions of teacher leadership reflected across the selected empirical articles. Looking at these definitions, there was, however, clear convergence around four key characteristics.

*Firstly*, most definitions referred to teacher leadership as *influence* rather than a role or *formal authority* (e.g., *see* Anderson, 2004; Smith *et al.*, 2017; Snoek *et al.*, 2017). Teacher leadership was conceptualised as a process of change where teachers were the key change agents and sources of innovation (e.g., *see* Anderson, 2004; Chew and Andrew, 2010; Snoek *et al.*, 2017). *Secondly*, definitions of teacher leadership focused on *actions* that went beyond the formally assigned roles of a classroom teacher, such as sharing practices and initiating changes (e.g., *see* Baker-Doyle, 2017; Smeets and Ponte, 2009). Teacher leadership was associated with peer collaboration (e.g. meetings of professional learning communities) or informal interactions (e.g., daily interactions, sharing and communication with other teachers) (*see* Nolan and Palazzolo, 2011) based on mutual benefit, respect, and trust (*see* Grant, 2006; Leonard *et al.*, 2012; Nolan and Palazzolo, 2011). It was argued that teacher

leaders demonstrated their leadership through initiating and facilitating the process of change, during

which their colleagues were encouraged to collaborate and to contribute (*see* Chew and Andrew, 2010;

Smeets and Ponte, 2009).

*Thirdly*, teacher leaders are influential at several levels. The reviewed definitions

emphasized that not only do teacher leaders seek "pedagogical excellence" within their classroom but

can also expand their impact to the school level and beyond (e.g., *see* Chew and Andrew, 2010; Grant,

2006). The idea of the teacher as the instigator of change at the school and system level has been the

focus of much contemporary analysis and discussion (Harris *et al.*, 2017). *Fourthly*, the most common

interpretation of teacher leadership, within the literature reviewed, is that associated with *influence,*

*impact, and outcomes*. Some authors proposed that teacher leadership is intended to improve

instructional practices (Rutherford, 2006; Smith *et al.*, 2017; Taylor *et al.*, 2011), to promote school

effectiveness (Angelle and Teague, 2014; Chew and Andrew, 2010; Smeets and Ponte, 2009), and to

improve student learning (e.g., *see* Eckert et al., 2016; Smith *et al.*, 2017).

Four common hallmarks of teacher leadership were identified in the review: (a) *Teacher*

*leadership is a process of influence;* (b) *teacher leadership is exercised on the basis of reciprocal*

*collaboration and trust;* (c) *teacher leadership operates within and beyond the classroom;* and (d)

*teacher leadership aims to improve instructional quality, school effectiveness, and student learning*.

The current review highlights the nature (i.e., process of influence) and mode (i.e., through

establishing collaboration) of teacher leadership, while Wenner and Campbell (2017) emphasise the

roles of teacher leaders in promoting professional learning communities and policy making. Both

reviews illuminate the scope (i.e., beyond classroom level) and desirable outcomes (i.e., enhanced

teaching and learning) of teacher leadership. The next section of the current article focuses on

synthesising and analysing the evidence on three critical issues of teacher leadership which are

enactment, conditions and impact.

**c) Evidence on enactment, conditions and impact of teacher leadership**

Since there is limited research on teacher leadership in pre-school and post-secondary contexts, this section discusses evidence, mostly drawn from studies undertaken in K–12 settings, on the enactment, and conditions and impacts of teacher leadership.

*Enactment of Teacher Leadership*

York-Barr and Duke (2004) stated that, "teacher leadership is practiced through a variety of formal and informal positions, roles, and channels of communication in the daily work of schools" (p. 263). They documented how teacher leaders exercise their leadership beyond the classroom level. York-Barr and Duke (2004) proposed seven key dimensions of teacher leadership practice: *coordination and management; school or district curriculum work; professional development of colleagues; participation in school change; parent and community involvement; contributions to the profession; and pre-service teacher education* (p. 266). The empirical studies in this current review affirm the active involvement of teachers in those areas of practice and highlight two more areas (i.e., action research and promotion of social justice) in which teachers play important roles, as exemplified in Table II.

The main finding regarding the enactment or realisation of teacher leadership is that it centrally concerned with *influence* on teachers' professional development, school change and improvement and beyond (e.g., Cheng and Szeto, 2016; Collinson, 2012; Fairman and Mackenzie, 2015; Liljenberg, 2016; Nicholson *et al.*, 2017). More specifically, the current review revealed two central themes, from the empirical findings about teacher leadership, which were *sources of influence*, and *methods of influence*.

Sources of influence can be grouped into two broad categories: *human capital* and *social capital*. The former includes a teacher leader's expertise and experience (e.g., Allen, 2016; Avidov-Ungar and Tamar, 2017; Hatch et al., 2005), whereas the latter places an emphasis on the teacher leader's professional relationships with peers including social networks (e.g., Firestone and Martinez, 2007; Fairman and Mackenzie, 2015).

**Table II.** Empirical evidence on Teacher Leadership practices

| Dimensions of practice | Selected examples of supporting literature |
|---|---|
| Coordination and management | Avidov-Ungar and Tamar (2017); Cheng and Szeto (2016); Hofstein *et al.* (2004) |
| School or district curriculum work | Firestone and Martinez (2007); Grant *et al.* (2010); Lai and Cheung (2015) |
| Professional development of colleagues | Allen (2016); Baecher (2012); Yost *et al.* (2009) |
| Participation in school change/reform/improvement | Baecher (2012); Cooper *et al.* (2016); Conway and Andrews (2016); Lai and Cheung (2015); Yager *et al.* (2013) |
| Parent and community involvement | Beachum and Dentith (2004); Frost (2012) |
| Pre-service teacher education | Sinha and Hanuscin (2017); White (2014) |
| Action research | Feldman et al. (2015); Margolis (2008); Smeets and Ponte (2009) |
| Promoting social justice | Baker-Doyle (2017); Feldman et al. (2015) |

Regarding the methods of influence, York-Barr and Duke (2004) concluded that teacher leaders primarily influence others through '*developing trusting relationships*' and '*establishing professional collaboration*'. This is also echoed in many of the more contemporary empirical pieces (e.g., Fairman and Mackenzie, 2015; Huang, 2016; Yow and Lotter, 2016). Furthermore, the contemporary literature highlights that teacher leaders utilise '*supporting others*' as an effective way to influence their colleagues (e.g., Collinson, 2012; Fairman and Mackenzie, 2015; Gigante and Firestone, 2008; Hunzicker, 2012; Nicholson et al., 2017). Studies provided evidence of teacher leaders supporting their colleagues by sharing innovative ideas and resources (e.g., Collinson, 2012; Fairman and Mackenzie, 2015), modelling new practices (e.g., Fairman and Mackenzie, 2015; Nicholson *et al.*, 2017), and encouraging colleagues (e.g., Nicholson *et al.*, 2017).

In short, the contemporary empirical findings reinforce that teacher leaders enact and exercise their leadership role through influencing others. They do this by *developing relationships, establishing collaboration,* and *supporting others*. But what factors affect the quality and enactment of teacher leadership? The next section of this article focuses upon this issue.

*Factors Influencing Teacher Leadership*

From the review, the key factors that influence the nature, quality and effectiveness of teacher leadership practice fall into five main categories: *(a) school culture, (b) school structure, (c) principal leadership, (d) peer relationships, and (f) person-specific factors*. Each of these will be briefly discussed.

*a) School Culture* The reviewed studies revealed that certain key attributes of school culture were conducive to teacher leadership development (e.g., Beachum and Dentith, 2004; Ghamrawi, 2010; Muijs and Harris, 2006). These included a shared sense of purpose, a shared commitment to student learning, purposeful collaboration and collegiality, a desire for lifelong learning, and teacher empowerment (e.g., Cooper *et al.*, 2016; Ghamrawi, 2010). For instance, Muijs and Harris (2006) suggested that authentic teacher leadership could only be only fostered in a supportive and collaborative school culture where the interpersonal relationships are mutually reinforcing and positive. Furthermore, Muijs and Harris (2006) contended that a fundamental shift in the vision and values of schools towards more collegial ways of working is a prerequisite in sustaining authentic teacher leadership. Ghamrawi (2010, p. 314) similarly reinforced that a culture with strong teacher leadership is the one that encourages teacher engagement in professional conversations with colleagues, sharing ideas, knowledge and techniques and participation in collaborative problem-solving.

In contrast, a disconnected school culture with the opposite characteristics (e.g., blame and coercion cultures) and a personal stake was shown to be a major barrier to genuine teacher leadership (Cooper *et al.*, 2016; Muijs and Harris, 2006; Poekert *et al.*, 2016; Woodhouse and Pedder, 2017). Woodhouse and Pedder (2017) conducted a three-year, longitudinal study of five early career teachers

in English secondary schools and provided another clear piece of evidence. It was found that three

teachers felt supported and empowered to assume leadership responsibilities in the culture of care

while the other two teachers felt "pressured, unsupported and blamed" in the contexts underpinned by

"suspicion, surveillance, metricity and blame" (Woodhouse and Pedder, 2017, p. 561).

*b) School structure* has been shown to be a factor that significantly influences or restricts the exercise

of teacher leadership (e.g., Beachum and Dentith, 2004; Muijs and Harris, 2006). A supportive,

transparent and flexible structure, this review suggests, is an important condition that fosters teacher

leadership and allows innovation to flourish and grow because teachers' contribution is recognized

and valued (e.g., Foster, 2005; Muijs and Harris, 2006; Rutherford, 2006; Woodhouse and Pedder,

2017). On the contrary, a heavily top-down, rigid, and opaque structure, it is suggested, may act as a

hindrance to teacher leadership (e.g., Foster, 2005; Little, 2003; Muijs and Harris, 2006;).

*c) Principal Leadership* Research has identified principal leadership as an important enabling factor

for teacher leadership. A range of studies have suggested ways in which school leaders support teacher

leadership, for example, through giving teachers space, time, and opportunities to get deeply engaged

in curricular decisions and other school matters (e.g., Cheng and Szeto, 2016; Chew and Andrews,

2010; Smith *et al.*, 2017; Woodhouse and Pedder, 2017); getting actively involved in identifying,

encouraging, and developing teacher leaders (Cheng and Szeto, 2016); and fostering a climate

conducive to peer collaboration (Beachum and Dentith, 2004; Hunzicker, 2012; Supovitz *et al.*, 2010).

The degree of principal advocacy for the work of teacher leaders, the review suggests, depends on the

factors such as principals' leadership beliefs (e.g., whether they believe in shared leadership);

principals' knowledge of teacher leadership; and principals' frequency of interactions with teacher

leaders (Mangin, 2007).

*d) Peer Relationships* The current review affirms the finding of York-Barr and Duke (2004) that the

quality of teacher leadership depends on the nature of the relationship between teacher leaders and

their peers. At least three empirical studies (Fairman and Mackenzie, 2015; Margolis, 2008; Margolis,

2012) have explicitly provided evidence on peer relationships as a critical factor influencing teacher

leadership. Margolis (2008) suggested that teacher leaders feel encouraged and motivated to lead professional development of peers because they receive direct collegial support (e.g., verbal encouragement) from the other teachers. Fairman and Mackenzie (2015) similarly suggested that teachers would tend to accept the "messiness and ambiguity" of teacher leaders' reform efforts if their relationships are strong (p. 78).

Conversely, Margolis (2012) argues that weak peer relationships would reduce the impact of teacher leaders on their peers' professional learning. Wenner and Campbell (2017) similarly note that that poor relationships with colleagues would hinder teacher leadership. In summary, the review reinforces that mutually supportive peer relationships are an important enabling factor for authentic leadership while unsupportive relationships make teacher leadership more demanding work.

*e) Person Specific Factors* Within the review, the success of teacher leadership tends to be associated with certain personal factors or features which can be broadly divided into two main categories. The first category comprises *teachers' content and procedural knowledge* (Firestone and Martinez, 2007) plus teacher leaders' motivation (Margolis and Deuel, 2009). The evidence suggests that teachers' content and procedural knowledge plus their degree of self-motivation positively affect their leadership ability to lead effectively. The second category of *person specific factors* is derived from a group of empirical studies that investigated the relationship between certain personal variables (*see* Appendix 5). These studies yielded some mixed findings. For example, Angelle and DeHart (2011) found a positive relationship between the length of teaching experience and the effective enactment of teacher leadership. In contrast, Aliakbari and Sadeghi (2014) found no such relationship.

Overall, the findings concerning the relationship between certain personal characteristics and teacher leadership practice are mixed. Conversely, there is substantial evidence underlining how the support of the principal and the quality of peer to peer relationships influence the enactment and quality of teacher leadership. The next section explores the evidence base concerning the impact of teacher leadership at the individual, group, organisational, and student level.

*Impact of Teacher Leadership*

It has been argued that early studies tend to be replete with normative claims about the beneficial effects and impacts of teacher leadership, often with relatively little empirical evidence or support (York-Barr and Duke, 2004). This section of the article, therefore, outlines evidence from this review regarding the impact(s) of teacher leadership at four levels: *individual*, *group*, *school*, and *student level*.

*a) Individual Level* At the individual level, York-Barr and Duke (2004) asserted: "the strongest effects of teacher leadership have been on teacher leaders themselves" (p. 282). The findings from this contemporary review concur with York-Barr and Duke (2004) and further specifies that teacher leadership has positive impacts on teacher leaders' competences and psychological dispositions. The review findings show that by engaging in leadership activities, teacher leaders benefit from growth in their leadership knowledge and skills (e.g., Avidov-Ungar and Shamir-Inbal, 2017; Wenner and Campbell, 2017; White, 2014), and that they demonstrate positive changes in their instructional practices (e.g., Margolis and Deuel, 2009; Yager *et al.*, 2013).

There has been evidence concerning the positive relationship between teacher leadership and teacher leaders' psychological dispositions. Positive benefits of teacher leadership have been associated with increased teachers' commitment and motivation (Muijs and Harris, 2006), enhanced intellectual stimulation and self-efficacy (Hunzicker, 2012), and increased sense of professional and leadership identity and growth (Allen, 2016; Sinha and Hanuscin, 2017; Wenner and Campbell, 2017; White, 2014)..

The current review found some evidence on the inherent tensions and issues around teacher leadership. For example, studies suggest that teachers could experience discomfort and stresses in leading colleagues for change and professional development (Baecher, 2012; Reeves and Drew, 2012). Wenner and Campbell (2017) highlighted the pressure on teacher leaders in balancing between teaching and their teacher leadership roles. It is argued from this current review that this conflict results from internal and external factors. Internal factors include balancing the "leader versus teacher"

role, uncertainty about expectations for leadership roles, and unpreparedness for leadership roles (Baecher, 2012; Reeves and Drew, 2012). External factors involve shifting from teacher to teacher leader (Smith *et al.*, 2017), colleagues' attitudes and capacity (Avidov-Ungar and Shamir-Inbal, 2017; Montecinos *et al.*, 2014), and the shifting nature and structure of peer relationships as a challenge to typical egalitarianism among teachers in schools (Margolis, 2012; Smith *et al.*, 2017; Wenner and Campbell, 2017).

*b) Group Level* The literature on teacher leadership highlights impacts and effects of teacher leadership at group level in terms of: a) *teacher competences*, b) *teacher psychological dispositions*, and c) *peer relationships*. As for a) *teacher competences*, Gigante and Firestone (2008) suggested that formal teacher leaders who provided developmental support to others, actively contributed to the advancement of other teachers' pedagogical knowledge and skills. The mixed-methods study of Yost, Vogel, and Liang (2009) documented the positive impact of the mentoring undertaken by teacher leaders on subject teachers' instructional capacity inclusive of research-based use. Supovitz, Sirinides, and May (2010) utilised survey data from 721 teachers from 38 primary and secondary schools and student achievement data in a district of the United States to investigate the effects of three dimensions (i.e., instructional conversation, interaction around teaching & learning, and advice networks) of teacher peer influence. Supovitz, Sirinides, and May (2010) found that teacher peer influence was a positive and strong predictor of teachers' instructional change in the subjects of English Language and Mathematics.

Moving to b) *psychological dispositions*, the current review identified some positive effects of teacher leadership on teacher self-efficacy and collective efficacy. Angelle and Teague (2014) surveyed the perceptions of 363 teachers in three school districts in a southern US state regarding the relationship between teacher leadership and collective efficacy. Angelle and Teague (2014) demonstrated a significant correlation between teacher leadership and collective efficacy (i.e., teachers' beliefs in the abilities of their peers to organize and implement school tasks). Formal teacher leaders in Friedman (2011) acted as motivational resources for peers' self-efficacy and self-esteem

through clear communication of expectations, role modelling, shared leadership, encouragement, and appreciation.

The literature has yielded mixed evidence concerning the impacts of teacher leadership on c) *peer relationships*. For example, teacher leaders in Hofstein, Carmeli, and Shore (2004), who received training in a coordination chemistry programme, had improved their leadership skills and therefore managed to develop positive professional relationships with their colleagues. On the contrary, teachers in Margolis (2012) experienced "tenuous relationships" with their peers when exercising leadership roles of professional development. Indeed, Wenner and Campbell (2017) found some evidence of both positive and negative effects of teacher leadership on peer relationships.

*c) Organisational Level* At the organizational level, this review highlights the positive impacts of teacher leadership on school-level factors such as: supporting positive culture (e.g., Beachum and Dentith, 2004); promoting professional learning communities (e.g., Friedman, 2011; Hairon *et al.*, 2015); and supporting curriculum reforms (e.g., Hofstein *et al.*, 2004; Lai and Cheung, 2015). A group of five quantitative articles specified the link between teacher leadership and school variables. Silins and Mulford (2004) suggested that teacher leadership makes a significant contribution to promoting the school as a learning organization in the context of Australian schools. Similarly, two quantitative articles affirmed the positive effects of teacher leadership and school learning climate and professional community in elementary [primary] schools (Sebastian *et al.*, 2016) and high schools [upper secondary] (Sebastian et al., 2017) in Chicago, United States.

Moving to the effects on organisational commitment, Devos, Tuytens, and Hulpia (2014) found that teachers felt more committed to the school when they perceived more support from formal teacher leaders and school leaders, more influential voice in decision-making, and higher degree of team collaboration. These findings suggest a direct and positive relationship between teacher leadership and levels of organizational commitment. Cannata *et al*. (2010) surveyed National Board Certified Teachers (NBCTs) at 47 primary schools in two states of the United States. The study, nevertheless, suggested that NBCTs participated in more leadership activities at school level and

beyond, but these teachers perceived no significantly greater influence over school wide policy as compared with their colleagues.

*d) Student Level* Regarding the impacts and effects of teacher leadership upon student outcomes, there have been two major research lines. *The initial line of research* focused on the indirect effects of teacher leadership beyond the classroom on student learning. A group of four articles (Sebastian *et al.*, 2016; Sebastian *et al.*, 2017; Supovitz *et al.*, 2010; Yost *et al.* 2009) in the current review reported positive and indirect student-level effects of teacher leadership in the United States contexts. Supovitz, Sirinides, and May (2010) revealed two paths through which teachers influence upon peers affects students' learning outcomes: a) teacher-peer influence has a significant effect on student learning through the mediating variable of teacher classroom instruction; and b) teacher peer influence functions as a mediator of principal leadership and teacher instruction, that in turn, positively affects student learning outcomes.

Utilising across-year data from teacher and student surveys from 2006 to 2013 in Chicago Public Schools, the articles by Sebastian *et al.*, 2016; Sebastian *et al.*, 2017 mapped out the effects of leadership on student learning (i.e., academic growth and student engagement) in the contexts of elementary [primary] schools and high [upper secondary] schools. Two key, consistent findings drawn from these two articles are: that *teacher leaders support principals in indirectly affecting student learning*; and that *teacher leadership exert indirect effects on student learning through two main factors – school learning climate and teacher classroom instructio*n. Yost, Vogel, and Liang (2009) provided further evidence that teacher leaders positively impacted upon other teachers' instructional capacity, which, in turn, influenced student learning.

*The second line of research* addressing the relationship between teacher leadership and student learning outcomes focused on investigating the direct effects of teacher leadership. York-Barr and Duke (2004) identified three quantitative studies that directly investigated the relationship between teacher leadership and student learning. On balance, however, both Wenner and Campbell (2017) and the current review found no studies investigating the direct impacts and effects of teacher leadership

on student learning and therefore highlights a need of further empirical attention on the impact of

teacher leadership.

## Conclusion

The final section of this article considers some implications from this review and makes some

suggestions for further enquiry in the field. It is also important to highlight some limitations to this

review. *Firstly*, all the articles that mention one of the three key terminologies/phrases (i.e., "teacher

leadership", "teacher leader" or "teacher leaders") in any parts of the publications and listed in any

databases of the 'EBSCOhost Research Databases' system were shortlisted for scanning for relevance

in the first round. It is possible that articles that did not mention any of the three key phrases but offer

relevant perspectives of teacher leadership were excluded from this review.

Secondly, this review included only SSCI/Scopus-indexed empirical articles. It is feasible

therefore that a review with a broader focus might generate different patterns and conclusions. *Thirdly*,

this review considers articles written in English only and therefore potentially missed a hidden

literature concerning teacher leadership written in other languages. This potential 'missing literature'

is also recognised in other international reviews (e.g., Gumus *et al.*, 2018).

The next part of the conclusion discusses key implications and suggestions of the current

review for future research. This review, in alignment with the others (i.e., Harris, 2005; Wenner and

Campbell, 2017; York Barr and Duke, 2004) has shown, definitions of teacher leadership are prone

to variability and differences of interpretation. Therefore, it is suggested that future studies in this field

should aim to consolidate, rather than diversify, the term 'teacher leadership' by providing a coherent

and consistent operational definition. In addition, the current review has identified a noticeable lack

of agreement in defining the core theoretical dimensions of teacher leadership (*see* Angelle and

Teague, 2014; Devos et al., 2014; Sebastian et al., 2017; Supovitz et al., 2010). For example, Angelle

and Teague (2014) delineated teacher leadership into four factors (i.e., *sharing expertise, shared

leadership, supra-practitioner,* and *principal selection*) while Sebastian, Allensworth and Huang

(2017) referred teacher leadership to teacher influence in school decision making. Consequently,

future empirical studies on this topic would benefit from focusing on the theoretical dimensions of teacher leadership to a much greater extent to enrich in order to build the knowledge base.

The majority of studies in this review (e.g., Collinson, 2012; Fairman and Mackenzie, 2015) underline the importance of teacher leadership as influence. There have been a handful of studies that describe and outline the way in which teacher leadership is enacted. Too many of these studies, however, lean towards normative description rather than robust empirical, analyses of the patterns and directions of influence. Moreover, most of these studies list teachers' strategies or tactics of influence while leading through influence is a process. Consequently, it is posited that the current empirical base on teacher leadership would benefit from more empirical studies that explore exactly how teacher leadership, as a process of influence, is exerted and with what effect.

The empirical evidence from this review suggests that there can be positive impacts and effects of teacher leadership on the teacher leaders themselves, their colleagues, and some organisational aspects such as learning climate, democracy, and organisational commitment. While Wenner and Campbell (2017) found no studies demonstrating a relationship between teacher leadership and student learning, York-Barr and Duke (2004) and this current review was able to identify a group of correlational studies (e.g., Sebastian *et al.*, 2017; Supovitz *et al.*, 2010) documenting the indirect relationships between teacher leadership and student learning. Although the nature of these correlational studies does not allow for any firm conclusions on causality, the findings point towards some indirect effects and impacts of teacher leadership on student learning.

The evidence from this review shows that methodological approaches to researching teacher leadership have not changed dramatically from the early studies of the 1980s. Basically, the studies in this review reflect small-scale, qualitative methodologies. While the volume of research activity on teacher leadership seems to have increased, significant gaps still appear in the literature, particularly, as noted already, that pertaining to the outcomes and impact of teacher leadership. Consequently, this review reiterates the conclusion of York-Barr and Duke (2004) and Wenner and Campbell (2017), that more rigorous, integrated and methodologically sophisticated empirical research is needed on the

effects of teacher leadership on student outcomes. Indeed, a group of studies that investigated teacher leadership, in a holistic, integrated framework alongside the other leadership models such as principalship, have advanced some understanding on the impacts and effects of teacher leadership (e.g., *see* Jackson and Marriot, 2012; Sebastian *et al.*, 2016; Supovitz *et al.*, 2010).

In addition, since contexts matter (*see* Hallinger, 2018), more empirical research on teacher leadership in pre-school and post-secondary school levels would seem to be essential. Plus, the current literature on teacher leadership seems to be predominantly Western in definition, orientation, and interpretation. Consequently, empirical study into teacher leadership would benefit greatly from more studies uncovering indigenous features of teacher leadership in non-Western countries, societies, and cultures (Harris and Jones, 2015).

In summary, the idea of teacher leadership continues to influence research, policy, and practice in important ways (Harris *et al*., 2017). Going forward, the central challenge for those researching in this field, therefore, is to extend and strengthen the empirical evidence base in order to provide more in-depth accounts of the enactment, effects and impact of teacher leadership.

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## Appendix 1. Summary of inclusion criteria

| Criteria | Inclusion Criteria | Elaboration |
|---|---|---|
| 1. Language | • English | This review only captured articles in English, which means an exclusion of works published in any other national languages. |
| 2. Type of Publication | • Scopus/SSCI-indexed journal articles | This review focused on Scopus/SSCI-indexed journal articles. |
| 3. Type of Article | • Empirical article | An empirical article refers to the one that is drawn from empirical data and offers the specifics of data sources and explains how these were analysed. |
| 4. Content | • Explicitly addressing a certain aspect of teacher leadership | A reviewed article would explicitly address a certain aspect pertaining to teacher leadership such as factors influencing teacher leadership, enactment or impacts of teacher leadership. |
| 5. Characteristics of Teacher Leadership | • Within and beyond classroom | Teacher leaders lead within and beyond their classrooms; teaching and leadership are integrated (Katzenmeyer and Moller, 2001). |
| 6. Research Settings | • PreK-12<br>• K-12<br>• Post-Secondary | Teacher leadership occurs in any levels of educational context. This review took an open approach to include articles in different research settings. |
| 7. Time Frame | • Published between 2003 and 2017 | York-Barr and Duke (2004) reviewed the works from 1980 to 2002. As a continuity of York-Barr and Duke (2004), this review shortlisted the articles published from 2003 onwards. |
| 8. Geographical Location | • Any | The review included studies undertaken in a range of countries or societies. |

## Appendix 2. Instance of data extraction

| Authors | Year | Geographical Locus | Research Approach | Specified Definition | Key & Relevant Findings or Discussion | School Level |
|---|---|---|---|---|---|---|
| Devos et al. | 2014 | Belgium | Quantitative | No | The effect of principal leadership on teachers' organizational commitment is mediated by the leadership of teacher leaders, cooperation within the leadership team, and participative decision making of teachers. | K12 |
| Firestone & Martinez | 2007 | USA | Qualitative | No | Teacher leaders complement the district efforts. Teacher leaders and districts contribute to the same leadership tasks: procuring and distributing materials, monitoring the improvement effort, and developing people. | K12 |
| Silins & Mulford | 2004 | Australia | Quantitative | No | Teacher leadership (TL) contributes significantly to organizational learning (OL). The school structures and leadership processes that promote OL also promote TL, but indirectly. | K12 |

## Appendix 3. Number of articles across 15 years
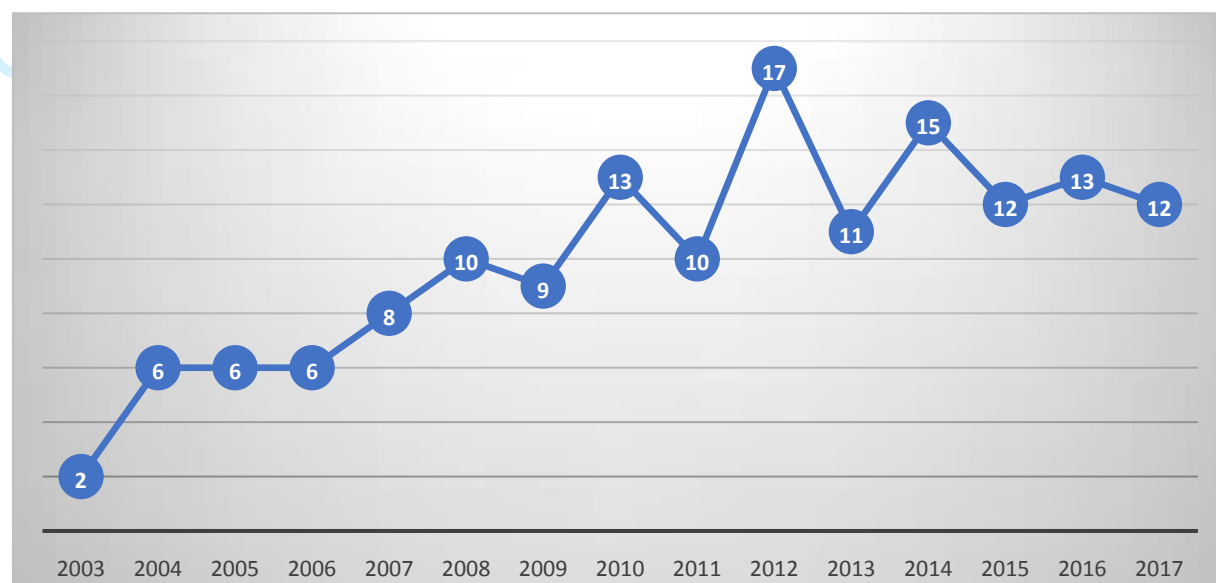


## Appendix 4. Combination of data collection tools

| Combination of data collection tools | Number of articles |
| --- | --- |
| Questionnaire + Interview + Observation + Other tools | 0/79 |
| Questionnaire + Interview + Observation | 4/79 |
| Questionnaire + Interview + Other tools | 3/79 |
| Questionnaire + Observation + Other tools | 1/79 |
| Questionnaire + Interview | 19/79 |
| Questionnaire + Observation | 0/79 |
| Questionnaire + Other tools | 2/79 |
| Interview + Observation + Other tools | 12/79 |
| Interview + Observation | 17/79 |
| Interview + Other tools | 13/79 |
| Observation + Other tools | 3/79 |
| Other tools | 5/79 |
| **Total number of articles employing questionnaire plus any other tools** | **29/79** |
| **Total number of articles employing interview tool plus any other tools** | **68/79** |
| **Total number of articles employing observation plus any other tools** | **37/79** |

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**Appendix 5. Summary of the findings concerning personal variables and teacher leadership**

| Personal variables | Perception and enactment of teacher leadership |
|---|---|
| **(i) Age and gender** | No relationship found (Grant et al., 2010; Aliakbari and Sadeghi, 2014) |
| **(ii) Educational qualifications** | Relationship found (Angelle and DeHart, 2011; Aliakbari and Sadeghi, 2014) <br> No Relationship found (Grant et al., 2010) |
| **(iii) Teaching experience** | Relationship found (Angelle and DeHart, 2011) <br> No relationship found (Aliakbari and Sadeghi, 2014) |
| **(iv) Formal leadership position** | Relationship found (Angelle and DeHart, 2011) |