SciencePG

Science Publishing Group

A Study on Distributed Leadership Theory and Research by Gronn, Spillane & Harris

Lee Changsu

School of Education, Korea National University of Education, Cheongju, Republic of Korea

Email address:

noki_shoot@naver.com

Abstract: Distributed leadership theory is one of the theories representing the 21st century in the field of education, and numerous theoretical and empirical studies have been conducted in the UK and the US. The purpose of this study is to explore the implications of distributed leadership as a theory of educational administration and the simple principle that explosive quantitative growth must be achieved for the qualitative growth of a field. In addition, it aims to have an integrated perspective on the distributed leadership that is being implemented in a segmented manner. To this end, in this study, three scholars, Gronn, Spillane & Harris, who lead the theory of distributed leadership around the world, conducted a study on the theory and research of distributed leadership. Research materials that well contain their thoughts and ideas on their distributed leadership were selected, reviewed and organized. In addition, the task of distributed leadership research was explored, and the implications of distributed leadership to our education and our schools were derived. Through this, it was suggested that distributed leadership should be a useful tool to understand the complexity and uncertainty of the 21st century education field, and that it should be a meaningful criterion for finding variance optimization in the education field.

Keywords: Distributed Leadership, Hybrid, Leader Plus, Third School

1. Introduction

Distributed cognition is a theoretical framework proposed by Edwin Huchins, a professor of cognitive science at the University of California, as an alternative to the traditional theory of cognitive processes. A person's cognitive process is not a process that occurs in the individual's head, but is constructed through external interactions. In other words, from the perspective of distributed cognition, cognition is distributed among people, the environment, and artifacts and is an interaction among them [6] In interactions between people, the environment, and artifacts, they play equal cognitive roles. The concept of 'distributed cognition' provides insight into the way humans utilize various environments around them, and distributed cognition occurs to achieve a shared common goal [21], and the community of the 21st century solves problems. It is a socially distributed intelligence space that distributes information and decision-making processes as a team [18]. In particular, the development of the field of educational technology, where technology plays a cognitive

role equal to that of humans in cutting-edge learning environments, is a question of distributed cognition in that it provides a perspective on how educational administration should respond to changes in school organizations in the future society. Understanding is needed. For example, an 'electronic calculator' is an artifact that helps solve problems by distributing the mathematical calculation process [18], and a 'well-organized note' plays a role in reducing the cognitive burden in an individual's mental reasoning process. [21], and 'a blind man's cane, a biologist's microscope, an air traffic controller's radar, and a guitar player's artificial fingernails' also expand an individual's cognitive behavior as artifacts [9]. Distributed cognition, which includes this concept, provides the theoretical background for distributed leadership [38, 46]. In other words, since leadership situations that occur in education are distributed throughout the educational field and leadership situations that occur in schools are distributed throughout the school, analysis and consideration of all elements that make up the system must be done in the context surrounding education and schools.

Over the years, numerous empirical studies have been conducted exploring leadership from various perspectives, but they fail to explain that the effects of leadership may vary from organization to organization and that leadership may be perceived differently by members in various environments and contexts. [8]. While leadership in the 20th century was a leader-centered approach to overcome uncertainty and complexity, which are the limitations of organizations, leadership-related studies in the 21st century are emphasizing the leadership process. The general characteristic of such research defines leadership as 'the process by which one individual influences a group of individuals to achieve a common goal.' While existing leadership is linear or one-sided, leadership that emphasizes process emphasizes the aspect of interaction [51]. This provided a different perspective from the past way of understanding leadership in leadership research, and in particular, distributed leadership has received relatively more attention from scholars in the UK than in the US since 2000, and is being studied mainly in the field of school education. [30].

Distributed leadership theory is attracting attention in the Western academic community as a very influential leadership theoretical model representing the 21st century [10]. However, the formation of a theory of distributed leadership is still in its early stages, and understanding what distributed leadership is should be prioritized rather than measuring the effects of distributed leadership on teaching and learning [48], and schools and organizations in Western society Because their perspectives on culture, environment, and education are very different from ours, there is a need to redefine leadership theory to fit our educational situation and context [3]. However, given that attempts to provide a definitive definition can potentially prevent a desirable series of discussions about the complexities and inherent paradoxes of any field, distributed leadership must be supplemented from a descriptive and normative perspective. [30]. In addition, distributed leadership research needs to break away from standardized patterns that repeat similar research problems and temporary borrowing of theories from other fields [27]. Meanwhile, domestic research on teacher leadership [4, 25] is not a direct study on distributed leadership, but it is a study on distributed leadership for which the conceptual system is still immature. It can play a role in forming one axis of the theoretical concept.

This study starts from the three types of exploration related to the above distributed leadership. As a background to distributed leadership theory, it concerns understanding of distribution and cognition, changes in the flow of research on the concept of leadership and the current status of leadership research, the emergence of distributed leadership, and the direction of leadership research. Of course, educationist Park Seon-hyung's research on distributed leadership [8, 10], research on cognition [2, 9] provide insight to researchers who want to study distributed leadership. is giving However, considering the simple principle that qualitative growth in a field must be preceded by explosive quantitative growth, it is difficult to judge whether research on distributed leadership in Korea has grown. This is due to the fact that there were only 34 studies on distributed leadership between 2003 and 2016 [10], the research on the leadership types of school principals in Korea is focused on transformational leadership, and the research topic on school principal leadership is analysis of leadership effects. This can also be inferred from the fact that quantitative research is the main research method [3]. Meanwhile, papers by domestic researchers who studied distributed leadership [2, 5, 11, 20, 22] show that three foreign scholars mainly conducted research as a theoretical background for distributed leadership research. The three scholars are Peter Gronn, James P. Spillane & Alma Harris, who were mentioned by Park Seon-hyung [10] as representative scholars who played the most leading role in distributed leadership. However, through studying the research works of the above researchers, it was somewhat disappointing to understand the concerns and thoughts about distributed leadership advocated by these three scholars. This means that in the future, domestic researchers will need learning and reflection within the academic community regarding distributed leadership theory [12] and efforts to secure its identity as an educational administration theory [16].

Based on this awareness of the problem, this study finds the distributed leadership research works of the three scholars listed above, Peter Gronn, James P. Spillane & Alma Harris, and examines each of the three scholars' thoughts and ideas on the distributed leadership theory. I will organize this and explore the tasks of distributed leadership research, and draw a conclusion based on this by deriving the macro-perspective implications of distributed leadership on Korean education and the micro-perspective implications on schools.

2. Research Methods

As presented in the introduction, this study examines research materials containing the thoughts on distributed leadership of Peter Gronn, James P. Spillane & Alma Harris, three scholars who are leading the world's distributed leadership theory. The work of Gronn, the first author to clearly mention distributed leadership theoretically, will be examined first in that it has enriched the theoretical concept of distributed leadership for subsequent research, followed by discussions with several researchers on the leadership issue. Spillane, professor of education and social policy at Northwestern University's Institute for Policy Studies, who has conducted extensive empirical research through collaboration; and finally, professor of educational leadership at the Institute for Educational Leadership at the University of Malaya, who has actively applied distributed leadership theory to schools and educational settings. I would like to explore the research of Harris. The research works of the three scholars explored in depth in this study are shown in Table 1.

Research materials are diverse. I explore materials that allow us to look into their thoughts related to distributed leadership, such as academic materials, seminar presentations, and books. This can be classified as fundamental research among educational research, which is research that expands knowledge by identifying theories about certain facts and has the purpose of developing theories [13]. Although this study may have limitations in providing in-depth discussions on distributed leadership in Korean educational administration or providing deep insight into distributed leadership theory. However, at a time when research on educational administration theory is gradually decreasing [4], and the excessive rigidity of educational administration research that focuses only on specific values and perspectives is pointed out [12], distributed leadership is It can enrich educational administration theory by providing critical accounts that challenge traditional organizations and analyze the validity of researchers' claims that groups should participate [30]. As stated in the introduction, there is a need for quantitative growth in research on the concept of distributed leadership in Korea. I seek to explore their ideas by reading their writings repeatedly and organize their ideas appropriately in a way that is easy for researchers to understand. For researchers who want to study distributed leadership, the works of these three scholars are essential. I follow the study of distributed leadership by three scholars over time and look into their thoughts.

Table 1. *Gronn, Spillane & Harris' distributed leadership research materials and characteristics.*

Division	Research materials	Characteristic
Gronn. P	1. Distributed Properties: A New Architecture for Leadership (2000)	Presenting the origin and theoretical background of distributed leadership
	2. Distributed Leadership (2002a)	Expanding and deepening the theoretical background of distributed leadership
	3. Distributed Leadership as a Unit of Analysis (2002b)	Presenting distributed leadership as a unit (tool) of analysis on leadership
	4. The Future of Distributed Leadership (2008)	Presentation of hybrid leadership terminology
	5. From Distributed to Hybrid Leadership Practice (2009)	Presenting a hybrid idea of concentration and dispersion
Spillane J. P.	1. Towards a Theory of Leadership Practice: a distributed perspective (2004)	Present leadership components and interactions of leaders, members, and situations
	2. Distributed Leadership (2005)	Suggesting the need for empirical research on distributed leadership
	3. Conceptualizing School Leadership and Management form a Distributed Perspective (2010a)	Present ideas for expanding the scope of leaders (leader-plus)
	4. Distributed leadership: Leadership beyond the leader (2010b)	Book (translation), presenting distributed leadership model, presenting distributed leadership as an analysis tool for school improvement
	5. Opportunities and Challenges for taking a Distributed Perspective: Novice School Principals' Emerging Sense of their New Position (2015)	An empirical study with entry-level principals. Confirmation of dispersion and concentration in the work performance of elementary school principals.
Harris A.	1. Leading or Misleading? Distributed Leadership and School Improvement (2005)	Theoretical review of distributed leadership, confirmation of the possibility of distributed leadership in schools
	2. Distributed Leadership: According to the Evidence (2008)	Confirming the possibility of distributed leadership through empirical research. Presenting a third school idea
	3. Distributed Leadership: Implications for the Role of the Principal (2011a)	Empirical research confirms the role of principals. Proposal of the need for a distributed leadership model
	4. Distributed Leadership: Directions for School Leaders for the Future (2011b)	Book (translation), presenting a distributed leadership model based on leadership organization circulation.
	5. Distributed Leadership Friend or Foe?(2013)	Presenting the role of distributed leadership as a reconceptualization of organizational change and leadership

Gronn's ideas about leadership change over time. He started with research on distributed leadership [38-40] and then explored the literature that shifted his thinking toward hybrid leadership [42, 43]. Through this, you will be able to see where his thoughts began, where they were, why, and how they changed. Spillane's research on distributed leadership began to become known with the publication of a translation in Korea [49], and research data on his ideas on distributed leadership can be found in research from the period before the book [46-48], and an empirical study [50] conducted in collaboration with Harris on school principals after establishing a theoretical foundation. Through this, you will be able to understand his ideas and find the meaning of dispersion in recent research focusing on school principals. You'll also notice that I share some ideas about distributed leadership with Harris. Harris's research also became widely known after its translation [35] was published in Korea. Since Harris intended to apply distributed leadership to schools and educational settings rather than theoretically investigate it, he provided research data [32-34] that confirmed distributed leadership and organized the ideas through various empirical studies, and I recently selected research material [36] that provides insight into his thoughts on distributed leadership. Through this, you will be able to understand his perspective on distributed leadership. This study helps researchers who want to study distributed leadership learn existing research materials on distributed leadership through understanding the core ideas

of three scholars, and explores the field adaptability of distributed leadership theory through implications. There is significance in doing it.

3. Theory and Research Analysis of Distributed Leadership

3.1. Distributed Leadership by Peter Gronn

"I remain convinced of its continued potential for understanding, school-level decision-making practice... the potential for 'hybrid' as a more accurate representation of diverse patterns of practice which huse or coalesce hierarchical and heterarchical elements of emergent activities... there is still much to do both conceptually and emrirically with distributed leaderchip... it is not clear where distributed leadership goes form here. Whatever the future might hold for this particualr idea... at least to this point in time, distributed leadership's contribution to better understanding and appraisin. [42]."

Gronn [38] conducts research to establish the concept of distributed leadership. His research on distributed leadership began with social psychologist Gibb's [37] study on the view of distribution, followed by Lakomsky's [45] study on distributed cognition and organizational learning. and Engeström's [31] research on activity theory serves as the theoretical background. In his study, he raises fundamental questions about whether we still need leadership and addresses some of the perceptions we have about leadership. No one is born to lead, but we expect leadership from the person or leader who holds the highest authority in the organization. But most of us cannot clearly distinguish between power, influence, and leadership. Additionally, in the existing leader-follower dualistic leadership theory, the leader is superior to the followers, and the followers rely on the leader and leadership to work for others and do other tasks for them. However, not only are the results we achieve through collaboration greater than the sum of what each individual did independently, but the knowledge needed to solve complex problems is distributed throughout the organization. In other words, the explosive increase in diversity in all areas since the late 20th century has led to decentralization, and from the perspective of distributed cognition, what is important is the activities and social relationships performed jointly, and from the perspective of behavioral theory, what is important is the division of labor, so leaders -The need for organizational learning and learning organizations beyond the dualistic relationship of followers is required [38].

Gronn [39, 40] develops his research on distributed leadership in two directions. Although the two studies are similar in terms of timing, one seeks to solidify the theoretical background of distributed leadership, and the other focuses on forming a unit of analysis. The first mention in the literature of distributed leadership was in the field of social psychology in the 1950s, and distributed leadership has been studied primarily by social psychologists. Social psychologist Hutchins's [44] research on cognitive systems also serves as the background for distributed leadership theory. Gronn's theoretical work on decentralization and distributed leadership influenced his subsequent scholars, especially Harris and Spillane. Additionally, Gronn [40] seeks to develop the idea of distributed leadership as an analytical tool to understand collaborative behavior occurring in organizations.

Gronn [39] argues that distributed forms of leadership will play an important role in explaining and achieving good organizational practices and organizational forms. This is because the distributed perspective reflects the division of labor. If the total of concentrated leadership is 1, then the total of distributed leadership is more than 1, and even though organizational members actually experience dispersion every day in the organizational field, the organizational field is still leader-centered, focused, and emphasizes the actions of competent individuals. and is ignoring collective and shared forms of leadership. Leadership is not focused on one organizational role or level, but is shared among colleagues. All organizational members can become leaders, and in order for an organization to share roles across hierarchical boundaries, it must eliminate the hierarchical structure or create a competitive structure so that responsibilities can complement each other through interdependence [39].

Gronn [40] points out that previous research on leadership has been conducted in favor of leaders. Previous research on distribution and division of labor focuses on prescribing it rather than explaining what it is. However, the responsibilities of school administrators are increasing globally, and schools are increasingly relying on teams to cope. Additionally, dualistic distinctions (leader-follower, leadership-followership) cannot explain the reality of current school leadership, and recognition standards for school leaders are causing confusion in leadership and management. However, if distributed leadership becomes the unit of analysis, it will become a discourse that accurately reflects the division of labor that is evolving in the field and an analysis that is reasonably consistent with practice. As an alternative to centralized leadership, the unit of analysis that forms the basis of distributed leadership is centered on cooperative behaviors and attributes. There are four types of cooperative behavior. First, spontaneous cooperation. Second, intuitive working relationships. Third, institutionalized practice. Fourth, combined agency. In particular, combined subjectivity operates as the core of the three cooperative behaviors above, which are the basis of team leadership. It is a concept that individuals do not necessarily decide on actions through consensus to pursue common interests, but that their interests can be promoted by influencing each other through the efforts of synchronized individuals. There are two properties. One is interdependence. Interdependence occurs because individual responsibilities in an organization may overlap and complement each other, and the possibility of decision-making errors is reduced through interdependent

cooperation. The other is coordination. Coordination refers to the management of dependencies between activities and includes design, elaboration, allocation, supervision and monitoring [40].

Gronn [42] says that research on distributed leadership has gone beyond the initial stage of conceptual exploration and is now in the stage of empirical investigation. However, currently, leadership from a concentrated perspective and leadership from a distributed perspective each exist as stand-alone alternatives, and as polarized alternatives, they do not fit the various leadership patterns that are more prevalent in schools today. In addition, there is a tendency toward disorderly distributed leadership in which both teachers and administrators must take the lead as leaders, and the leadership of decentralization, distribution, and sharing is also praised as a solution to improving students' academic performance and solving school problems. Therefore, a hybrid perspective of leadership that encompasses both concentrated and distributed forms of leadership is needed. Hybrid is a mix of responsibilities and relationships in a hierarchical and hierarchical manner. In addition, although distributed leadership is not democratic leadership, it supports the theoretical possibility of the hybrid idea in that it expands the scope of member participation and lays the foundation for democratic leadership [42].

Gronn's [43] distributed leadership goes beyond distributed leadership and develops into hybrid leadership that fuses or integrates hierarchical elements of an organization. This is a mixture of focused-distributed where various degrees of leadership coexist, and it means that leadership is formed in various ways within the idea of decentralization. In organizational dynamics, when one individual's influence is dominant, concentrated leadership is applied, and when multiple people exercise influence, leadership can be distributed. In this way, distributed leadership revealed the limitations of leadership that was understood individually. In other words, the importance of hybrid is actual leadership in a specific context, and the typed specific brand leadership is not only unnecessary but also bogus. Nonetheless, distributed leadership will help us understand the reality of school-level decision-making, and whatever its future, distributed leadership is a very insightful and productive idea [43].

The meaning of Gronn's distributed leadership research is summarized as follows. First, a new paradigm for leadership research called distributed leadership is presented and a theoretical framework is established. It secures a unique position in terms of establishing the conceptual genealogy of distributed leadership theory. Second, the idea of hybrid leadership is presented from distributed leadership research. Because no particular type of leadership works well in all situations, a compromise is taken to appropriately use both centralized and distributed leadership when exercising leadership. In this study, Gronn establishes distributed leadership theory and argues that distributed leadership theory is a useful tool to help understand the field. However, since the complexity of the field cannot be explained by a single theory, there are focused and distributed leaders depending on the situation. This means choosing a hybrid leadership style that solves problems by mixing leadership styles.

3.2. Distributed Leadership by James P. Spillane

"My intent is not to provide a comprehensive review of different perspectives or identify the 'one best' definition of distributed leadership... form a distributed perspective, leadership practice that results from interactions among leaders, followers, and their situation is critical.. Leadership is a system of practice comprised of a collection of interacting components: leaders, followers, and situation. These interacting components must be understood together because the systim is more than the sum of the component parts or practices [47]."
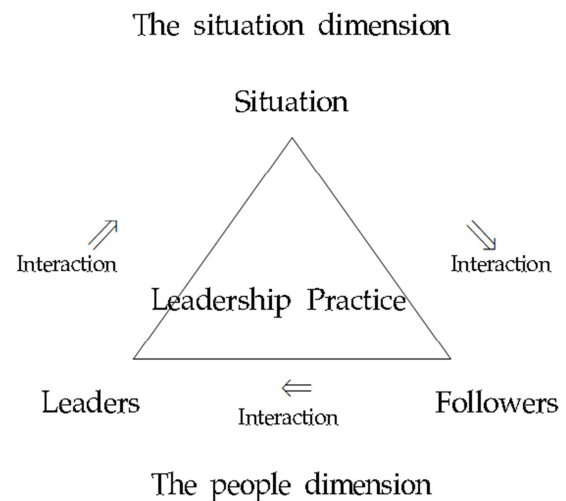

Figure 1. *Components and interactions of Spillane's leadership practice [46].*

Spillane, Halverson & Diamond [46] argue that from the perspective of activity theory and distributed cognition, situational factors are not external to leadership activities, but are one of the key components in leadership practice, so distributed leadership practice is influenced by leaders, members, and members. and that they should be understood as distributed practices in their context. Because cognition is distributed across contexts in the physical environment, completing complex tasks requires collaboration with others, leadership and leader cognition can only be understood in their embedded context. Leadership is an activity that leaders engage in while interacting with others in specific situations related to specific tasks. Investigating leadership practices in these activities is essential to understanding leadership and must be observed within a conceptual framework (Figure 1). In other words, distributed leadership is a tool that enables changes in leadership activities through analysis and case studies of leadership practices. Cognition is distributed or extended to materials and cultural artifacts, and designed artifacts of

leadership activities such as assessments, memos, and meeting agendas are influential tools that leaders can use. Additionally, individual cognition relies on social and cultural artifacts such as social tools, methods, and language, and the 'person-plus' perspective means that individual cognition is distributed across material and social situations. Therefore, it must be understood that the relationship between the leader and the social and material circumstances surrounding the leader and the tools the leader uses are central to the practice of leadership, and from a 'person-plus' perspective, the expertise of leadership goes beyond the individual leader. In other words, distributed leadership forms a knowledge base that can build a frame for understanding leadership [46].

Spillane [47] argues that distributed leadership is more about leadership practices than about leaders, roles, functions and structures, and organizes leadership practices in a specific way, which is seen as a product of the interaction of leaders, followers and situations. He argued that it is most important in understanding leadership practice. Such leadership presupposes several characteristics. First, leaders act in situations defined by the actions of others. Second, leadership practice is formed through interactions between leaders and members. Third, leadership practices can spread across two or more leaders working individually but interdependently. Fourth, leadership practices spread across the actions of two or more leaders and must be implemented in a specific order. However, distributed leadership does not necessarily have to be democratic, nor is it a blueprint for effective leadership or a prescription for leadership practice. A distributed perspective on leadership is an important step in actively activating leadership in organizations, but empirical evidence on the effectiveness of distributed leadership in promoting educational improvement and increasing student achievement is very limited [47].

Spillan and Healey [48] stated that the distributed perspective, as a conceptual framework, has the potential to generate new knowledge about school leadership and management, but more work is still needed to explore the conceptualization and academic implications of distributed leadership. In addition, it is necessary to systematically use frameworks for data collection and analysis in leadership research, and it is necessary to work on the design and validation of tools to measure distributed perspectives. The 'leader-plus' frame means that informal individuals as well as formally appointed leaders can be responsible for leading and managing, but this does not mean that everyone has to lead and manage. This encompasses the relationship between formal and informal aspects and between formal and informal aspects. If these aspects are not properly explained or the aspects are confused, the validity and reliability of the data obtained through the research will be lowered and the inferences from the research work will be invalid. It may not be possible. Existing research on distributed leadership focuses on developing analytical frameworks and relies on structured and semi-structured interviews, open-ended and closed-ended observations. In addition, in distributed leadership, behavior is important, but members' norms and trust are also important. Accordingly, in order to realize the potential of distributed leadership, it is important to examine the dialogue of members regarding the implementation of school leadership in distributed leadership research. In order to develop reliable and effective means, it is important to examine the different positions on school leadership and management. There is a need to triangulate by asking questions of individuals in. In order to build a theory of distributed leadership, it is necessary to develop a research operation based on qualitative and quantitative empirical work in school settings [48].

Spillan [49] states that the existence of leadership does not require results or evidence of effectiveness, nor does leadership exist only when there are positive results, so the distributed perspective on leadership is seen as an analytical framework to consider and analyze leadership. It is argued that this is valid. This analytical framework includes 'who is responsible for what responsibility, in what form leadership responsibilities are divided, what factors determine the division of responsibility, and how an influential leader is considered', through which an organization can be looked into.. In other words, distributed leadership is a lens through which to look at leadership practice, but from a distributed perspective, leadership practice and the behavior of individual leaders are not the same. The core of distributed leadership is about the leadership practice that results from the interaction of leaders, members, and aspects of the situation (Figure 2), and this refers to the three aspects of 'division of labor, joint performance, and parallel performance' that coexist in schools. This is achieved through the above coordination. 'Leader-plus', meaning that there are multiple leaders in addition to one leader, is an important perspective, but it is insufficient to explain the complexity of leadership practice. In addition, most empirical studies on leadership do not have a solid foundation, the quality of the resulting training and development programs is not high, and such leadership does not have an impact on the field. In this situation, distributed leadership should be used to improve leadership in school settings in two aspects. One is as a diagnostic tool and the other is as a design tool. Diagnostic tools are about how to understand the leadership phenomenon, and design tools are about what to consider when planning and modifying leadership practices. Implementing leadership is a process that changes over time, not determined by diagnosis and design at a single moment. Therefore, because developing leadership does not mean cultivating individual leaders, it is necessary to study distributed leadership as a tool for analyzing a new approach to school leadership, focusing on the implementation of school leadership [49].
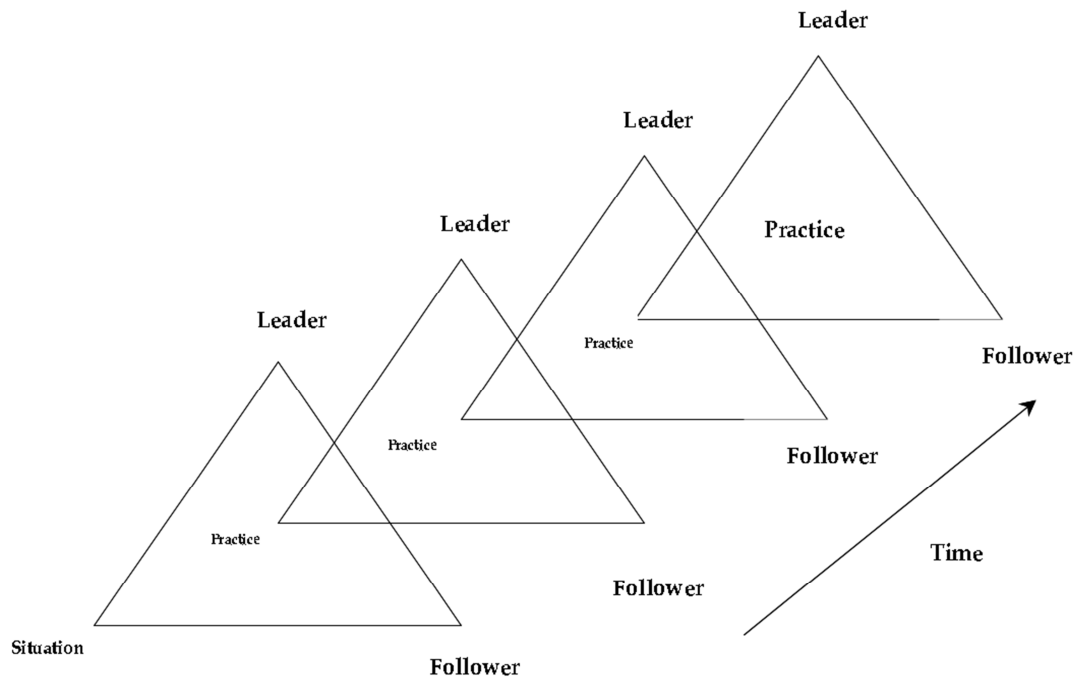
Figure 2. Leadership implementation from Spillane's distributed perspective [49].

Spillan, Harris, Jones & Mertz [50] conducted a mixed-methods study to explore the opportunities and challenges of novice principals' distributed leadership in school settings based on previously considered concepts regarding distributed leadership. do. This study analyzes the work of a beginning principal through an exploration of his or her first year as principal, and explains the leadership of two or more people (plural) from the perspective of the leadership of a single person (singular). This is a study on whether distributed leadership activates or limits the ability of beginning principals to demonstrate leadership through a new understanding of the principal's position and duties. In the new sense-making of the new principal's new position, conflicting signals emerge when the nature of the principal's work is taken from a distributed perspective. In terms of tasks and status, the results showed that the volume and variety of work actively encouraged distributed leadership, whereas school responsibility appeared to limit distributed leadership and encourage a heroic approach. In other words, the principal's work involves inherent tensions of multiple leadership qualities. Experienced principals may produce different results, and not everyone in a school organization is helpful in leading and managing the organization, and not everyone has to become a leader or manager. Policy makers and school reformers who advocate for school leaders to adopt distributed leadership must acknowledge these structural problems and provide ways in which the principal's position can be restructured to support plural leadership, which is critical for novice principals. This suggests the need for a leadership program tailored to the situation [50].

The meaning of Spillane's distributed leadership research is summarized as follows. First, in practicing leadership, the situational dimension is placed on an equal footing with the human dimension. In other words, in the interaction between the situational dimension and the human dimension, leadership is a tool, not an inherent competency of the individual. Second, distributed leadership is a tool for understanding leadership and practicing leadership. In other words, multiple leaders can use this tool in multiple situations simultaneously or over time. In this study, Spillane and several researchers conducted a variety of empirical studies on situations where distributed leadership takes place, emphasizing the exercise of multiple leadership in leadership situations. However, since plural leadership comes from formal leaders, formal leaders are still important. Research conducted with Harris [50] shows that distributed leadership is still in the testing phase.

3.3. Distributed Leadership by Alma Harris

"In an era of greater accountability and ever more stringent measures of performance those in formal leadership roles in schools face a demanding and some would argue daunting task... distribued leadership implies shifts in power, authority and control... Exceptional performance is achieved through careful planning, design and 'discipline'. It requires organizational alignment, mutual understanding and flexibility, rather than rigidity... the entire organization is working interdependently in the collective pursuit of better outcomes... Thoes in formal leadership positions have a substantial and integral role to play in making it happen [36]."

Harris [32] reviewed research on the concept of distributed leadership and sought to explore the implications between distributed leadership and school improvement. This is because although it is clear that a relationship exists between school leadership and school improvement, it is not clear how it affects it. Since

distributed leadership theory was studied by social psychologist Gibb [37], it was reexamined by organizational theorists in the 1970s, who recognized the importance of context in leadership practice. Gronn [38] and Spillane [46] are leading the research on distributed leadership theory. Gronn's distributed leadership is 'the emergence of a group or network of interacting individuals', and Spillane's distributed leadership is 'the emergence of a group or network of interacting individuals'. It is a 'practice that integrates the activities of several individuals and groups distributed in their context', and the core of the concept of distributed leadership is that leadership is not a fixed phenomenon but a fluid and emergent property. Meanwhile, empirical evidence for distributed leadership can be found in the field of school improvement and teacher leadership research, especially in the co-practice of routines related to school culture and learning communities that maximize the achievement ability of all members of the school organization. It appears that school and teacher leadership have a significant impact on student participation. Additionally, successful leaders who demonstrate distributed leadership recognize the importance of a 'connected, mutual learning process for the purpose of sharing' and are more connected to their people than traditional leaders. The success of distributed leadership lies in teachers' solidarity and participation in the development of the education system. However, there may be conflict between groups of teachers who do or do not practice leadership and may be hostile to distributed leadership. Therefore, in order to overcome these difficulties and succeed in distributed leadership, teacher leaders need strong interpersonal skills and a culture that encourages teachers' change and leadership [32].

Harris [33] argues that various interpretations of the term distributed have led to the misunderstanding that everyone in an organization must lead simultaneously, but what is important in distributed leadership is the way in which leadership is promoted and supported. Empirical research confirms the possibility of distributed leadership in the field of education, but the leadership potential of informal leaders is not being exercised in many schools. Because leadership capabilities are not fixed and can expand, formal leaders must provide opportunities for informal leaders to demonstrate leadership at appropriate times and provide the resources necessary to innovate leadership. In order for leadership to be successfully distributed, it must be distributed to people who have and can develop the knowledge or expertise necessary to perform leadership tasks, and this must be coordinated in a planned manner. However, there are still arguments that decentralized leadership is inefficient and that fewer informal leaders may be more effective, and because teacher leaders do not have formal authority, they may not be respected and may not realize their professional potential. Nevertheless, the decentralization of leadership is based on the practice of leadership rather than on any position or role, where

leadership activities take place at different points throughout the school and interconnections are formed and promoted. This concept of 'Third schools' means a new relationship based on cooperation and mutual identity beyond the leader-follower relationship. Accordingly, school members must actively form leadership connections and perform tasks jointly based on mutual trust and agreement [33].

Harris [34] states that distributed leadership is an idea of 'leadership shared within and between schools' and is being accepted by education officials around the world. Empirical studies on distributed leadership have demonstrated that widespread leadership dispersion has positive relationships and beneficial effects on organizations, that there is a positive relationship between teacher self-efficacy and student learning outcomes, and that distributed approaches can influence organizational development and change. It shows that it has a positive influence and that it gives greater responsibilities and obligations to each member. Meanwhile, in distributed leadership, the method by which leadership is distributed is important, and the principal plays an important element and key role in dispersing and establishing leadership. The principal must lay down authority and power and play the role of mediating, facilitating, and supporting people in leading innovation and change in the school. This is a fundamental change in the existing understanding of leadership and the way leadership roles are performed, and it means a change in the concept of the organization in which the school moves from a bureaucratic organization to a collaborative organization. However, it has been pointed out that decentralized leadership and student achievement may be separate, and that decentralization is only necessary to provide students with a more effective education. Nevertheless, future principals must be able to redesign and reinvent schools that have the potential to grow and develop in rapidly changing environments, and researchers must develop and foster a variety of distributed leadership models that can transform school systems [34].

Harris [35] states that from the perspective of distributed leadership, each member will help the group at some point, and each individual has the capacity to be a leader. However, the three obstacles that make it difficult to maintain distributed leadership and learning communities in schools are distance, culture, and structure. To solve these, a new form of communication is needed that breaks down the barrier of distance and solves problems through interaction between individuals. There is a need for a culture that solves the problem and brings about new development, and there is a need for improvement in the organizational structure and system that limits organizational learning. The most effective schools have created new leadership structures that demonstrate new roles, responsibilities, and ways of operating, and schools that do not pay attention to these will not improve. The direction of recent educational reform and policy is decentralization and individualization

of decision-making, which is based on cooperation and networks. The power of the network is strengthened through interconnection, and the form of leadership shown by such networks is distributed leadership. Accordingly, Harris [35] presents a model that explains the types of complexity and diversity of the practice of distributed leadership. The characteristic of this model is 'organizational circulation' in which distributed leadership circulates in a networked organizational structure between schools, between schools, and outside the school, and operates interdependently within the school organization, between school organizations, and among organizations outside the school.

Harris [36] argues that distributed leadership represents a fundamental reconceptualization of leadership and challenges conventional wisdom about the relationship between leadership and organizational performance. Distributed leadership represents a fundamental change in how formal leaders understand their leadership practices and how they view the leadership role, moving away from bureaucratic or traditional organizational models to an interconnected, dynamic approach that is called a hybrid

[43] is not part of the method. Decentralized leadership cannot effectively disperse, thrive, or be sustained without the active support of formal leaders. Therefore, the role of formal leaders is not to increase the number of leaders, but to increase the quality and capacity of leaders. The core task of formal leaders is to support people with the expertise to lead, and to work interdependently based on social interaction. It is about creating an environment. Official leaders must also take responsibility for regularly redesigning and reorganizing schools to respond to rapidly changing circumstances. However, because decentralization of leadership is a change in power, authority, and control, it can undermine the efforts of formal leaders and impede organizational change through the misuse and abuse of power, influence, and authority, as well as the weakening of formal authority and denial of influence. there is. Additionally, since distributed leadership is neither friend nor foe and does not necessarily guarantee better performance, formal leaders must ensure that leadership is successfully distributed based on building relational trust [37].
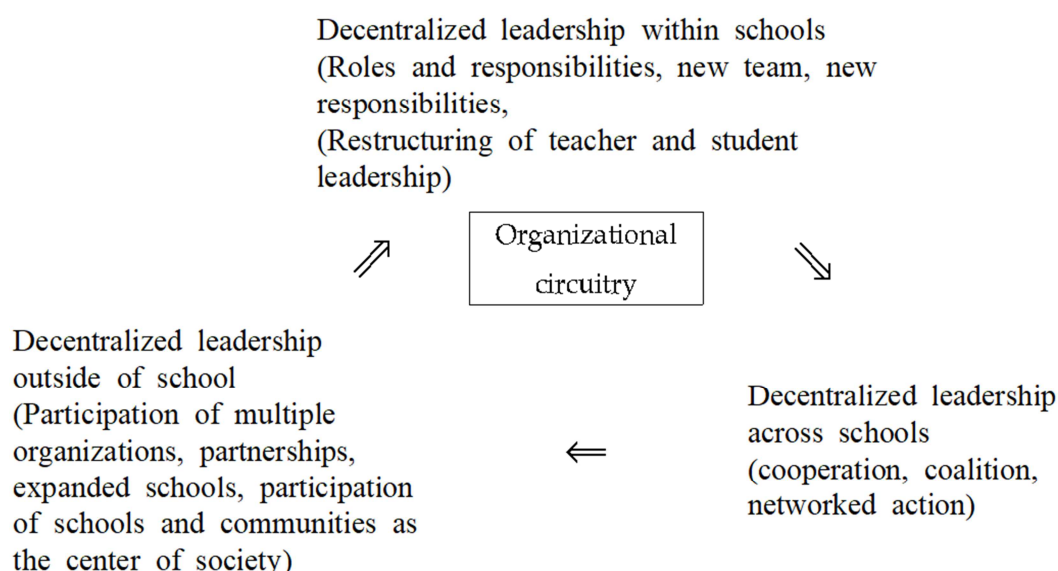
Decentralized leadership within schools
(Roles and responsibilities, new team, new responsibilities,
(Restructuring of teacher and student leadership)

Organizational circuitry

Decentralized leadership outside of school
(Participation of multiple organizations, partnerships, expanded schools, participation of schools and communities as the center of society)

Decentralized leadership across schools
(cooperation, coalition, networked action)

Figure 3. Harris' distributed leadership model [35].

The meaning of Harris' distributed leadership research is summarized as follows. First, it reminds us of the importance of the principal's role in implementing distributed leadership within the school. Second, consider distributed leadership from the perspective of organizational development and improvement. It goes beyond one aspect of leadership to improve organizational performance and provides a perspective on the entire organization through distributed leadership from the perspective of organizational circulation. In this study, Harris integrates the theories and empirical evidence of several researchers on distributed leadership, but explores the theory from a somewhat neutral and value-normative perspective, as he states that distributed leadership is neither a friend nor an enemy.

3.4. A review of the Theory and Research of Gronn, Spillane & Harris

3.4.1. Examining the Commonalities and Differences Between Distributed Leadership Theory and Research

Depending on the researchers who study leadership, some emphasize the leader's characteristics or capabilities, while others emphasize the relational aspect of leadership. Additionally, each person perceives the meaning of leadership differently due to various factors that follow the passage of time [51]. In this study, the three scholars studying distributed leadership live in the same era and conduct research centered on schools in the

Anglo-American culture, so their culturally based mindsets are similar, and their perceptions, attitudes, and thoughts toward distributed leadership are similar. There was a matching area. On the other hand, each of them had a different framework for viewing distributed leadership, and there were differences in the way they understood and interpreted the phenomenon. Table 2 shows this by categorizing and organizing it into the perspective of distributed leadership research, leadership development type, school field application, contribution, and limitation.

Table 2. *Comparison of distributed leadership theory and research.*

Division	Common ground	Difference
Aspect	1. Dispersion of cognition, division and sharing of work 2. Challenge to existing focused leadership 3. Contextual flexibility of theory	1. Gronn: theoretical perspective 2. Spillane: Empirical perspective 3. Harris: normative perspective
leadership Development type	1. Leadership to understand leadership 2. Distributed leadership is a system 3. Interdependent cooperation among members is required	1. Gronn: Interactive Network 2. Spillan: Implementing situational leadership 3. Harris: Shared Mutual Learning
school scene apply	1. Provides understanding and analysis of school practices 2. Multiple leadership is needed to create an effective school 3. The role of formal leaders is important 4. Teacher leadership is required	1. Gronn: Hybrid 2. Spillan: Leader Plus 3. Harris: Third School
Contribution points	1. Place each subject on a cognitively equal footing 2. Provide a basis for members to participate	
maximum	1. The concept of the theory is not yet clear 2. Terms similar to dispersion are mixed 3. More diverse empirical research is needed 4. It is still difficult to explain the justification for decentralized leadership	1. Gronn: Stagnation in the development of distributed leadership theory 2. Spillan: Approaching leadership as a tool 3. Harris: Lack of independent theory development

3.4.2. Challenges of Distributed Leadership Research

Educational scholar Joo Hyun-jun [27], through a reexamination of educational leadership research, points out three problems in educational leadership research: labeling phenomenon, identity confusion, research bias, and duality between academic research and the educational field. Research on distributed leadership cannot be free from this phenomenon. In other words, distributed leadership is a popular leadership style in the 21st century; a unique concept has not been established; different scholars have different opinions, causing confusion about its identity; and it is biased toward quantitative research based on predictions of leadership effects and member perceptions., it can be pointed out as a problem that the function (essence-means) and value (community-organization) of leadership pursued in academic research and education are different and dualized. Accordingly, based on the research analysis of three scholars, the tasks of distributed leadership research are examined as follows.

First, it is necessary to establish a Korean-style distributed leadership theory. The three scholars in this study are conducting research focusing on the United States, the United Kingdom, and Australia, but this cannot be directly applied to Korea. This is because the organizational form, operating method, and culture are different. In particular, foreign theories cannot be borrowed without considering the unique characteristics deeply embedded in Korean culture, such as society's perception of the division of labor, division of public and private affairs, age, seniority, etc. Therefore, in order to develop our perspective on distributed leadership theory in a way that can be used internationally, we must conduct multifaceted and three-dimensional research from theoretical, empirical, and normative perspectives in terms of mid-range theory [16].

Second, an educational leadership institute is needed. The three scholars in this study are systematically conducting leadership research in collaboration with or affiliated with the Leadership Research Institute. Of course, in Korea too, leadership research is conducted in the academic community centered on some scholars, and the National Leadership Research Center of Seoul National University publishes a national leadership series. In addition, programs for leadership training are being developed mainly at research institutes, and some universities are also operating master's courses in teacher leadership for current teachers. However, since it is time to establish the Korean concept of distributed leadership, an educational leadership research institute should be established and historical research should be conducted to clarify distributed leadership [27].

Third, future-oriented educational leadership research is needed. Even if researchers make efforts and research institutes are established to establish a Korean style distributed leadership theory, the development of distributed leadership research cannot be guaranteed if research methods only follow trends or if a gap between theory and practice still exists. Distributed leadership research is a long-term project and cannot be accomplished through academic inquiry alone. According to the grounded theoretical method [16], this can be achieved through the integration of theory and practice, collaboration between research and the field, and the participation of educational subjects and voices calling for change.

3.5. Implications of Distributed Leadership for Our Education and Schools

3.5.1. Implications of Distributed Leadership for Our Education

The current situation surrounding education regards

autonomy and cooperation as important values. However, educational issues have a wide range of interests and are complex, so there is no simple solution to them [14]. Moreover, as confrontation and conflict between interest groups are increasing, cooperation between various entities surrounding educational issues is necessary, but relative to other fields, active participation and cooperation of stakeholders is not taking place [17] The importance of collaborative governance has come to us as a social trend of the times [15]. In this situation, distributed leadership gives an important perspective to our education. Although the three scholars in this study have different expressions, their ideas can be summarized as 'construction of a distributed system that cooperates interdependently.' Expressing this in the context of education is 'realization of collaborative educational governance.' Accordingly, distributed leadership has three implications for our education.

First, the basis of Gronn's distributed leadership is an interactive network. This perspective refers to the establishment of an institutionalized organization to create a public forum for the educational community [17]. In other words, from the perspective of distributed cognition, each subject of educational governance plays an equal cognitive role, so it is necessary for each educational subject to participate and interact with the governance organization with independence.

Second, the basis of Spillane's distributed leadership is the practice of situational leadership. This perspective means constructing a system appropriate for the situations that will arise in the governance of our education. In other words, because governance situations are diverse and complex, there is a need to structure a network of collaborative educational governance that allows each educational entity to flexibly respond to and interact with the situation [15].

Third, the basis of Harris' distributed leadership is shared mutual learning. This perspective means establishing a practical cooperation system in the policy formation-execution-evaluation stage [17] and linking and cooperation with upper and lower-level governance [15]. In other words, since each educational entity in governance is interconnected and influences each other, policy efforts are needed to achieve mutual growth based on sharing.

3.5.2. Implications of Distributed Leadership for Our Schools

One of the most important things for schools and school principals today is for the educational community to establish a vision for what schools should have in this era, prepare a mission to implement this, and apply it to the operation of the school curriculum. There are two basic ways to develop a school's mission statement: the leadership team creates the mission and circulates it through dialogue and buy-in to staff, and collaborative development involves ongoing dialogue with as many people as possible. am. In both methods, leadership requires widespread communication and shared understanding [29]. Expressing

this from the perspective of the three scholars, it is 'mutual cooperation between concentration and dispersion.' Accordingly, distributed leadership has three implications for our school.

First, Gronn's core idea of distributed leadership is hybrid. This perspective states that in order for our school to become an effective school, it is necessary to determine whether leaders need to focus or disperse on various school tasks and exercise leadership appropriately accordingly. However, there is a need to clarify the scope and limits of responsibility in sharing and implementing leadership of concentration and decentralization [23].

Second, the core idea of Spillane's distributed leadership is to expand the scope of the leader. This perspective says that in order for our schools to be effective, we need to move beyond dependence on the principal and main team. The number of formal leaders must be expanded and informal leaders recognized. To achieve this, it is necessary to understand and create a climate in which school principals can recognize members as leaders [23].

Third, the core idea of Harris' distributed leadership is the third school. This perspective means that in order for our school to be an effective school, it must emphasize collective leadership through organizational learning that shares cooperation and professional knowledge [23]. In other words, it is necessary to go beyond the existing administrative work-centered school system and reorganize the organization to be team-centered, subject-centered, and student-centered, and effectively run the school through mutual cooperation within and between teams.

One of the most important things for teachers today is to enhance teacher leadership and build teaching expertise. To this end, research on teacher leadership should be expanded and practical models for teacher leadership development should be explored [26], and a system should be established in which teachers can be recognized for their expertise by giving them authority and autonomy [25]. What the three scholars in this study agree on is that multiple leaders are needed to be an effective school, and through distributed leadership, school leaders must understand the school's practices and systems. Accordingly, distributed leadership has three implications for teachers.

First, teachers must become agents of educational change. From the perspective of decentralization, each entity plays an equal role. Therefore, in order to create better schools and better education, we must become better teachers and demonstrate teacher leadership. In other words, teachers, as subjects of education, need to break away from their inertia and play a role in critically reflecting on educational policy discourse and restructuring the school curriculum operation.

Second, teachers must develop leadership skills expected in the context of the individual's school setting. Developing teacher leadership is possible through a specific program, but from the perspective of distributed leadership, the leadership situation is important. In other words, it is necessary to develop leadership based on the context of the individual teacher's school and apply it to that context.

Third, group expertise must be built based on teacher leadership. The values that distributed leadership requires from teachers are participation and communication, respect and consideration, sharing and cooperation. In order to realize this, it is necessary for individual teachers to practice leadership in groups such as teaching organizations and teacher learning communities, and for the teaching profession to have the status of a professional profession through the accumulation of group expertise.

4. Conclusion

In this study, I explore the theories and research on distributed leadership of Peter Gronn, James P. Spillane & Alma Harris, three world-renowned scholars who are leading the distributed leadership theory, and examine and organize their thoughts to provide advice for our schools and education. Implications were drawn. However, studying educational administration generally means understanding the phenomenon of educational organizations and finding solutions to given problems through this. However, real-life problems cannot be explained by the X → Y schema [1]. In addition, educational administration is a discipline in which both academic and practical aspects are important [12], and researchers' reflection and cooperation are necessary to improve the quality of educational administration [16]. Therefore, is distributed leadership a theory that truly solves the problems of our schools or educational communities, or is it not a study for the study of leadership, like old wine in a new bottle [47]? We still need more thoughts on it. Accordingly, this study seeks to draw two conclusions.

First, the distributed leadership theory is a 'useful tool' for understanding the complexity and uncertainty of the 21st century educational field more than any other theory. Distributed leadership theory is a context-specific theory that has a mid-range meaning between universal and specific in that it studies a series of interrelated elements in the practice of educational organizations surrounding schools, using other disciplines such as sociology, psychology, and engineering as a theoretical background [1]. This is characterized by flexibility in that it is not a definitive concept because it is conceptual and processual [1]. Since the late 1900s, social complexity and uncertainty have increased rapidly, and flexible theories are needed in this situation. However, if the study of distributed leadership is the same as the way leadership was studied in the past, we will end up only looking at a cross-section of this theory. This would be like a person in two dimensions looking at an apple in three dimensions and thinking it is a circle. Therefore, theoretical and normative research should be conducted on distributed leadership as a tool to explain the phenomenon and explore its value, with flexibility as its core element.

Second, distributed leadership is a networked distribution itself, so it is a meaningful standard for finding 'optimization of distribution' in the educational field. Intuitively, distributed leadership resembles an orchestra. And Descartes said that intuition is the way to truth. The orchestra is the pinnacle of harmony and coordination. The orchestra makes sound, but the conductor does not. The conductor decides the music the orchestra will play and adds color to it. The conductor harmonizes each unique instrument part under one goal. And they show their optimized side through concerts. Just as one conductor said that an orchestra conductor's ability is evaluated based on how well the members produce sound, schools and principals should be evaluated based on how effectively the school members perform educational activities. The path our education is taking will not be much different from this. It will be sustainable educational development through harmony and coordination between each educational entity within the framework of democracy [28]. Therefore, empirical and normative research should be conducted on distributed leadership as a standard for exploring the optimization of distribution in educational settings.

ORCID

https://orcid.org/0009-0000-5577-0764

References

[1] Kwon Hyang-won. (2017). Research methods and theorizing strategies for Koreanizing administrative theory: Overcoming the dichotomous black-and-white logic of universality and specificity. Korean Journal of Public Administration, 51 (2), 1-31.

[2] Kyu-Tae Kim, Young-Hyo Joo. (2009). Development of evaluation domains and criteria for distributed leadership practice. Journal of Educational Administration, 27 (3), 351-374.

[3] Minsu Kim, Hwanyoung Jang. (2018). Analysis of school principal leadership research trends. Korean Teacher Education Research, 35 (1), 261-288.

[4] Byeongchan Kim, Gyeonghoon Yoo. (2017). Analysis of research trend characteristics of papers published in 'Educational Administration Research': Focusing on research topics and research methods. Journal of Educational Administration, 35 (4). 173-200.

[5] Lee-Kyung Kim, Soobin Min, and Hyun-Jeong Kim. (2016). The moderating effects of teacher and school characteristics in the relationship between principal's distributed leadership and teacher satisfaction. Korean Teacher Education Research, 33 (2), 209-232.

[6] Hyunjin Kim. (2015). Exploring the applicability of distributed cognition for designing advanced learning environments. Korean Society for Educational Technology Conference Presentation Booklet, 1, 21.

[7] Hyun-jin Kim, Gwang-woo Nam, Han Jeong-hye, and Ok-kyung Yoon. (2015). Analysis of distributed cognition-based learning process in collaborative field trips in elementary schools using mobile devices. Educational Information Media Research, 21 (3), 361-387.

[8] Seonhyung Park. (2003). A critical examination of transformational leadership: Focusing on distributed leadership. Journal of Educational Administration, 21 (4), 179-196.

[9] Seonhyung Park. (2005). Cognitive scientific research for teacher professional development: Issues, theoretical mechanisms, and development practice challenges. Journal of Educational Administration, 23 (2), 91-116.

[10] Seonhyung Park. (2018). Distributed leadership: Academic foundation, concept definition, and analysis of domestic research trends. Journal of Educational Administration, 36 (3), 1-35.

[11] Seonhyung Park, Dasom Jang. (2018). Validation study on a diagnostic tool for distributed leadership in secondary schools. Korean Journal of Teacher Education, 35 (1), 289-320.

[12] Byeon Ki-yong. (2018). Critical reflection on the academic identity and research methodology of Korean educational administration: Focusing on the search for alternative points by overcoming dichotomous exclusivity. Journal of Educational Administration, 36 (4), 1-40.

[13] Seong Tae-je. (2018). Understanding educational research methods (4th ed.). Hakjisa.

[14] Shin Hyun-seok. (2010). Issues and challenges in educational governance conflict. Journal of Educational Administration, 28 (4), 351-380.

[15] Shin Hyun-seok. (2011). Analysis of issues and exploration of design directions for establishing cooperative governance in local education. Journal of Educational Administration, 29 (4), 99-124.

[16] Shin Hyun-seok. (2017). Identity of Korean educational administration: Significance and direction of theoretical exploration. Journal of Educational Administration, 35 (1), 195-232.

[17] Shin Hyun-seok, Jeong Yang-soon, Yoon Ki-hyun. (2018). Applying collaborative governance in national curriculum policy: Issues and challenges. Journal of Educational Administration, 36 (2), 31-62.

[18] Lee Geon-hyo, Kim Seong-il, Park Tae-jin. (2003). Proposing a community learning model as a socially distributed cognitive system. Journal of Educational Methods, 15 (1), 1-21.

[19] Seok-yeol Lee. (2013). A study on the design and analysis of university dean's job performance and distributed leadership implementation. Journal of Educational Administration, 31 (1), 1-29.

[20] Sang-Hoon Jeon, Il-Kwon Lee, and Hong-Soon Cho. (2016). A study on the impact of classroom leadership, distributed leadership, and school climate on the teacher professional community. Korean Teacher Education Research, 33 (1), 29-50.

[21] Jo Gyu-rak. (2003). Exploring learning theory based on constructivism. Educational Technology Research, 19 (3), 3-40.

[22] Cho Seong-gu, Han Yu-kyung, Min Yun-jeong, Kim Ae-shin, and Joo Cheol-an. (2011). The impact of distributed leadership on school organizational effectiveness. Teacher Education Research, 50 (3), 13-28.

[23] Younghyo Joo, Gyutae Kim. (2009). A theoretical exploration of distributed leadership. Journal of Educational Administration, 27 (2), 25-54.

[24] Hyunjun Joo. (2007). Analysis of the relative importance of school principal leadership capabilities. Journal of Educational Administration, 25 (3), 85-105.

[25] Hyunjun Joo, Taeyeon Kim, Nam Jiyoung. (2012). A meta-analysis on the relationship between teacher leadership and school effectiveness. Korean Teacher Education Research, 29 (1), 119-141.

[26] Hyunjun Joo, Gapseong Kim. (2015). Analysis of research trends based on teacher leadership characteristics. Korean Teacher Education Research, 32 (4), 199-217.

[27] Hyunjun Joo. (2016). Reexamination of educational leadership research. Journal of Educational Administration, 34 (1), 25-45.

[28] Heo Byeong-gi, Lee Jeong-hwa. (2016). Exploring the meaning and principles of 'sustainable educational development'. Journal of Educational Administration, 34 (5), 97-123.

[29] Ayers, M. B., Sommers, W. A. (2015). School principal's field leadership manual. (Translated by Na Il-ju and Park Gyeong-rok). GTI Korea.

[30] Bolden, R. (2011). Distributed leadership in organizations: A Review of theory and research. *International Journal of Management Reviews*. 13, 251-269.

[31] Engeström, Y. (1999). Activity theory and individual and social transformation. In Engeström, Y., Meittinen, R., Punamäki, R. L. (eds). *Perspectives on Activity Theory, Cambridge: Cambridge University Press*, 19-38.

[32] Harris, A. (2005). Leading or misleading? Distributed leadership and school improvement. *Journal of Curriculum Studies*. 37 (3), 255-265.

[33] Harris, A. (2008). Distributed ladership: According to the evidence. *The Journal of Educational Administration*. 46 (2), 172-188.

[34] Harris, A. (2011a). Distributed leadership: Implications for the role of the principal. *Journal of Management Development*. 31 (1), 7-17.

[35] Harris, A. (2011b). Distributed leadership: Directions for school leaders for the future. (Translated by Seok-yeol Lee, Gyu-tae Kim, Young-hyo Joo, and Bo-ra Son). Sigma Press.

[36] Harris, A. (2013). Distributed leadership friend or foe? *Education Management Administration & Leadership*. 41 (5), 545-554.

[37] Gibb, C. A. (1954). Leadership. In Lindzey, G. (ed). *Hand book of Social Psychology*. vol. 2. Reading, MA: Addison-Wetey, 877-917.

[38] Gronn, P. (2000). Distributed properties: A new architecture for leadership. *Education Management and Administration*. 28 (3), 317-338.

[39] Gronn, P. (2002a). Distributed leadership. Second international Handbook of Educational Leadership and Administration, 653-696.

[40] Gronn, P. (2002b). Distributed leadership as a unit of analysis. *Leadership Quarterly*. 13 (4), 423-451.

[41] Gronn, P. (2003). Leadership: Who needs it?. *School Leadership and Management*. 23 (3), 267-291.

[42] Gronn, P. (2008). The future of distributed leadership. *The Journal of Educational Administration*. 46 (2), 141-158.

[43] Gronn, P. (2009). From distributed to hybrid leadership practice. *Studies in Education Leadership book series*. Vol 7. 197-217.

[44] Hutchins, E. (1995). Cognition in the wild. *Cambridge, MA: MIT Press*.

[45] Lakomski, G (1998). Leadership, distributed cognition and the learning organisation. In Johnasson, O. and Lindberg, L. (eds). E*xploring New Horizons in School Leadership: Conference Proceedings*, March, 1998, Umeå universitet: Centrum för Skolledarutvecking, 98-111.

[46] Spillane, J. P., Halverson, R., Diamond, J. B. (2004). Towards a theory of leadership practice: a distributed perspective. *Journal of Curriculum Studies*. 36 (1), 3-34.

[47] Spillane, J. P. (2005). Distributed leadership. *The Educational Forum*. 69 (2), 143-150.

[48] Spillane, J. P., Healey, K. (2010a). Conceptualizing school leadership and management from a distributed perspective: An exploration of some study operations and measures. *The Elementary School Journral*. 111 (2), 253-181.

[49] Spillane, J. P. (2010b). Distributed leadership: Leadership beyond the leader. (Translated by Ra Yeon-jae, Eom Jun-yong, Jeong Woo-jin, Choi Sang-min). Hakjisa.

[50] Spillane, J. P., Harris, A., Jones, M., Mertz, K. (2015). Opportunities and challenges for takinga distributed perspective: Novice school principals' emerging sense of their new position. *Britich Educational Research Journal*. 41 (6), 1068-1085.

[51] Northouse, P. G. (2018). Leadership theory and practice. (Translated by Kim Nam-hyeon). (7th ed). Gyeongmun Publishing House.