Differentiation of Teachers' and Principals' Engagement in Distributed Leadership according to Their Demographic Characteristics

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Abstract

The role of leadership in the educational process has come to the forefront of international research through the establishment of new organizations and the number of studies that have been conducted. New concepts and types of leadership enter the educational arena in order to meet the contemporary needs of principals and students. Styles of leadership that encourage the principal to share responsibilities and distribute authority have been examined by scholars. The present study provides an examination of the application of distributed leadership practice and its effects on the Greek primary, secondary and high schools. It will also contribute to the empirical research on distributed leadership by advancing the understanding of the relationship between this leadership practice and teachers’ engagement. As far as the demographic characteristics are concerned, this research showed that the age and the teaching experience are those which affect mostly the engagement of teachers. Finally, the study concluded that there is a difference between the teachers’ and the principals’ engagement with the leadership practices at schools.

Keywords: leadership, distributed leadership, dimensions of leadership, mission, vision, goals, school culture, shared responsibility, leadership practices.

1. Introduction

The role of leadership in the educational process is apparent worldwide through the establishment of new organisations and the number of studies that have been conducted.

“In the US, Canada and Australia there has been renewed interest in school leadership chiefly fuelled by a widespread belief in the potential of headteachers or principals to deliver improved educational outcomes. In England, the establishment of a ‘National College for School Leadership’ in 2001 not only signalled a major and unprecedented investment in leadership development and training but also subsequently generated a leadership epidemic across the school system” (Harris, 2005, p. 87).

New concepts and types of leadership enter the educational arena in order to meet the contemporary needs of principals and students. Styles of leadership that encourage the principal to share responsibilities and distribute authority have been examined by scholars.

As the OECD (2008) suggests

“there is conceptual support for the practice of distributed leadership and some encouraging, if limited, empirical research evidence. There is not much formal research on how best to staff and distribute school leadership roles and responsibilities, but some evidence that allows for the analysis of particular patterns of staff roles across countries” (p. 38).

Because distributed leadership is an emerging concept and few quantitative studies have been conducted, this leadership paradigm lacks a widely accepted definition and it is often “used interchangeably with ‘shared leadership’, ‘team leadership’ and ‘democratic leadership’” (Spillane, 2005).

This study provides an examination of the application of distributed leadership practice and its effects on the Greek primary, secondary and high schools and it can be a stimulus for researchers to conduct further research since “the principal and assistant principal of the Greek modern school cannot meet the demands of school
leadership as they do not obtain the appropriate power/responsibility and they have not been trained for managing and leading in education” (Saitis, 2007, p. 273). This study will contribute to the empirical research on distributed leadership by advancing the understanding of the relationship between this leadership practice and teachers’ engagement.

1.1 Review of the Literature

There are many different perceptions among the researchers regarding what school leadership is and how it can be effective. Davis (2003) agreed that there are many differing views of effective leadership, yet, when considering effective leadership for schools, Davis contended school leadership is distinguished by its correlation with change. Effective school leadership moves the school leadership, the school and its stakeholders “forward in some positive way”. This is also depicted by “large scale studies of schooling which conclude that the effects of leadership on student learning are small but educationally significant” (Leithwood & Riehl, 2003: 3, cited in Harris, 2004).

Thus, the need for effective school leadership in the educational environment is a prerequisite as it can ensure the improvement of quality in schools. “Within each individual school, leadership can contribute to improve student learning by shaping the conditions and climate in which teaching and learning occur” (OECD, 2008).

Reviewing the literature Leithwood, Harris and Hopkins (2008) conclude that leadership and the quality of school organisation and pupils’ learning are closely linked.

“As far as we are aware, there is not a single documented case of a school successfully turning around its pupil achievement trajectory in the absence of talented leadership. One explanation for this is that leadership serves as a catalyst for unleashing the potential capacities that already exist in the organisation” (p. 29).

Teacher leadership and distributed leadership are two concepts that are sometimes used interchangeably by scholars and practitioners in international bibliography. Both types of leadership decrease the need for one leader and members have to look at leadership functions and how those functions are carried out. “Teacher leadership is centrally concerned with forms of empowerment and agency which are also at the core of distributed leadership theory... it is suggested that the literature and associated empirical work on teacher leadership provides an important starting point in understanding and illuminating how distributed leadership actually works in schools” (Harris, 2003). Harris (2003) supports that the central idea of teacher leadership is that all organisational members can lead and therefore, leadership should be shared and distributed.

Although teacher leadership is a term with various meanings, it is internationally common the fact that its aim is the improvement and the quality of the education offered. York-Barr and Duke (2004) reviewing the existing bibliography on the definitions of teacher leadership, conclude that “teacher leadership involves leading among colleagues with a focus on instructional practice, as well as working at the organisational level to align personnel, fiscal, and material resources to improve teaching and learning”. This means that teacher leadership is not only connected to the teaching and learning practices in a school but it also involves some of the organisational aspects of it.

There are different forms of teacher leadership and teachers can be engaged in different tasks as “they can also serve as teacher educators in teacher preparation programs, as organizational leaders, and even as “principal teachers” who oversee the instructional programs in small schools or schools-within-a-school” (Urbanski & Nickolaou, 1997, p. 5). Teacher leadership can be either formal or informal. According to Leithwood and Jantzi (1999, p. 680) “formal teacher leadership is exercised by those in positions such as lead teacher, master teacher, department head, union representative, member of the school’s governance council, and mentor, ....whereas examples of informal teacher-leadership practices include sharing expertise, volunteering for new projects, and bringing new ideas to the school (Smylie, 1990; Wasley, 1991)”. Despite the distinction between formal and informal teacher leadership, both of them engage teachers in meaningful decisions about their schools and classrooms.

There are certain characteristics and attributes that compose the teacher leader profile as they have been presented by Krisko (2001) based on the findings of her study. “The teacher leader profile identifies individuals who are creative, efficacious, flexible and life-long learners and who find humor, are willing to take responsible risks and have good intrapersonal sense and strong interpersonal skills”.

This means that being a teacher leader is not only based on personal characteristics and being a charismatic person but it is also closely related to the collaboration between the members of an educational community. “Teacher leadership is premised upon a power re-distribution within the school, moving from hierarchical control to peer control. In this leadership model the power base is diffuse and the authority dispersed within the
teaching community. An important dimension of this leadership approach is the emphasis upon collegial ways of working” (Harris & Muijs, 2003).

1.2 The Four Dimensions of Distributed Leadership

Elmore was the first to develop a conceptual framework for studying distributed leadership. According to this framework, there are certain dimensions related to the distribution of leadership. For Elmore (2004), distributed leadership does not mean that nobody is responsible for the overall performance of the organisation and the leaders must create a common culture of expectations regarding skills and knowledge, whilst individuals are held accountable for their contributions to the collective result. Elmore and the Connecticut Department of Education developed a tool in order to measure these dimensions. The DLRS (Distributed Leadership Readiness Scale) incorporated the dimensions that Elmore had identified which were: mission, vision and goals; school culture; decision-making; evaluation and professional development; and leadership practices.

However, through a factor analysis in order to justify its validity and reliability, Gordon reduced them to four as he merged the decision-making and evaluation/professional development into one – the shared responsibility dimension.

The four dimensions of distributed leadership as used in the DLRS are:

1. Mission, vision and goals
2. School culture
3. Shared responsibility
4. Leadership practices.

1.2.1 Mission, Vision and Goals

Distributed leadership requires shared mission, vision and goals. “Mission, vision and goals are considered the building block of the professional learning community (DuFour & Eaker)” (Smith, 2007). Vision has been characterised as an education platform that incorporates the school’s beliefs about preferred aims, methods, and climate. This creates a community of mind that establishes behavioural norms for the organization (Gordon, 2005). Despite their importance, “the mission, vision, and goals of a school can only be effective if all school members are aware of them and they are clear, meaningful, useful, and current and reflect important educational values that support the educational direction of the district” (Gordon, 2005). Thus, conflicting visions or goals that may hinder organisational change are a disadvantage for the application of distributed leadership. This lack of shared mission, vision and goals in Storey’s (2004) study led the school to demotivated students and teachers with conflicting priorities.

1.2.2 School Culture

Second, distributed leadership requires a common school culture. Elmore (2000) explains how important a common culture is in distributing leadership:

“In a knowledge-intensive enterprise like teaching and learning, there is no way to perform these complex tasks without widely distributing the responsibility for leadership among roles in the organization, and without working hard at creating a common culture, or set of values, symbols, and rituals” (p. 25).

This set of values, symbols and rituals that Elmore refers to can be seen as the cornerstone of distributing leadership in an organisation and each school should pay particular attention to the features of its culture. As Harris puts it, “distributed leadership means multiple sources of guidance and direction, following the contours of expertise in an organisation, made coherent through a common culture” (Harris, 2005, p. 67 cited in Robinson, 2009).

1.2.3 Shared Responsibility

Third, distributed leadership also encourages shared responsibility among staff members. Sharing responsibility reinforces the idea that there is not one leader and the responsibility should be shared between the staff members (Storey, 2004). As Elmore (2000) proposes, this should be formed according to the interests, skills, experience and areas of expertise of each member. It is therefore important to organise individuals in the suitable positions so that they can complement each other.

1.2.4 Leadership Practices

Fourth, distributed leadership practices organise staff to be more productive. The way the leaders interact with the others and the practices involved are closely linked to the artifacts – the ideas and intentions of the leader. “A
distributed perspective on leadership seeks to both articulate the range of these artifacts as they constitute leadership practice and to characterize the ways in which such artifacts define and are defined by leadership activity” (Spillane et al., 2004). Leadership practices provide insights into how school leaders act and the leadership routines within the structure of the school (Spillane et al., 2004). However, when skills and ideas within the organisation cannot solve the problem, then effective distributed leadership practices require seeking knowledge and skill outside the organisation (Christy, 2008).

2. Analysis of the Data

In the following section, the analysis of research questions is presented as well as the factors that were taken into consideration for the statistical analysis of the results.

2.1 Research Question 3: To What Extent Do the Teacher Demographic Characteristics, including Gender, Age, Degree, Years of Teaching Experience, Years of Experience Working at The School, Their Primary Responsibility, and Their Position in the School Vary in Relation to the Distributed Leadership Model Dimensions?

For the third research question the Levene test was conducted and the scores for dimensions 1 (mission, vision and goals), 3 (shared responsibility) and 4 (leadership practices) were greater than 0.05 and consequently, one-way ANOVA could be done to test these dimensions. For dimension 2 (school culture) which scored 0.021 and this is lower than 0.05, one-way ANOVA could not be conducted and another test must be used, such as a t-test which was used to compare two groups.

2.1.1 Gender

The one-way ANOVA conducted for the dimensions 1, 3 and 4 found no significant differences between men and women in their engagement in these dimensions of distributed leadership. The ANOVA’s score for dimension 1 was 0.838, for dimension 3 the score was 0.883 and finally for the fourth dimension it was 0.370. All of them were greater than 0.05 which showed that there were no differences spotted concerning the gender. As far as the second dimension is concerned, a t-test was done in order to find out whether there were differences between men and women in their engagement in the dimension of school culture. When applying the t-test, the Levene test score was 0.021< 0.05, so it was significant and the researcher had to read the test statistics from the row labelled ‘equal variances not assumed’. The score (0.922>0.05) proved that there were no significant differences between males and females in this dimension as well.

Therefore, the gender did not differentiate the engagement of teachers in the dimensions of distributed leadership as it is shown by the results of the ANOVA tests and the t-test. Both men and women are equally engaged with the dimensions of distributed leadership.

2.1.2 Age

The age of the respondents was divided into five groups: 21-25 years old, 26-35 years old, 36-45 years old, 46-54 years old and more than 55 years old. Each group was analysed in order to examine if any of them presented significant differences in the way they viewed distributed leadership and the extent to which the age group was engaged in any of the dimensions. The scores from the Levene test for dimensions 2 and 3 were greater than 0.05, so one-way ANOVA was done revealing that there were no significant differences between the age groups. More specifically, the score for dimension 2 was 0.941>0.05 and for the third dimension it was 0.196>0.05.

After conducting various t-tests, the researcher found significant differences between the age group ‘26-35’ and ‘46-54’ in their engagement within the ‘leadership practices’ dimension and the ‘mission, vision and goals’ dimension of distributed leadership. Younger teachers agreed with the leadership practices and they believed that they were engaged in this dimension as the 61.5% of them agreed (Figure 1). On the other hand, the age group ‘36-45’ was less engaged in leadership practices at school as 48.9% of them disagreed (Figure 2).
Another t-test was conducted resulting in significant differences between the two age groups: ‘26-35’ and ‘46-54’ (Appendix E – Table E 4.7). The age group ‘26-35’ seemed to be engaged in the leadership practices as 3.8% of them disagreed, whereas 42.1% of the teachers 46-54 years old disagreed and they were not engaged in leadership practices (Graph 3).
As shown below (Figure 4), the participants of the ‘26-35’ age group felt highly engaged with the mission, vision and goals dimension as the vast majority of them (90.9%) agreed whereas none of them disagreed.

On the other hand, the 39.2% of the age group ‘36-45’ felt neutral or not engaged within the mission, vision and goals of the school (Figure 5).
2.1.3 Degree

The degree possessed by the participants of this research did not play a role in their distributed leadership engagement as no differences were found in the four dimensions. The Levene test scores led to a one-way ANOVA test whose sig. values were greater than 0.05.

2.1.4 Total Years in This School

There were no differences found concerning the years that teachers have been in the same school as the ANOVA scores for the four dimensions were greater than 0.05. Teachers were not influenced by their teaching experience in the same school in the way they were engaged in distributed leadership.

2.1.5 Total Years in Education

The total years that the participants have worked in education were divided into 4 groups: 1-9 years, 10-15 years, 16-23 years and 24-34 years. The researcher in order to find out the differences between the groups and the dimensions conducted the Levene test which produced a low score for the ‘shared responsibility’ dimension (0.09<0.05). The other three dimensions (mission, vision and goals; school culture and leadership practices) were tested by ANOVA whose scores revealed that there were no significant differences and that the way teachers were engaged in these dimensions was not influenced by the total years they have been in education.

The researcher, thus, did a post hoc test to examine the differences in the relationships between the groups. A Dunnett T3 post hoc test found no significant differences for the ‘shared responsibility’ dimension, so the researcher did the Games-Howell test to confirm the result of the first test. The Games-Howell also found no differences between the different age groups and the third dimension. The score for the age group ‘10-15’ and ‘24-34’ was low (0.117), so the researcher decided to do a t-test to examine these two groups and whether there was a significant difference or not. The t-test showed that there were significant differences (0.025<0.05) in the shared responsibility dimension.

More specifically, as it is presented in the graph below (Figure 6), teachers who have worked in education for 10-15 years, did not feel that they were highly engaged in shared responsibility practices as 51.8% of them disagreed or were neutral. However, as their teaching experience increases, the participants felt more engaged in shared responsibility practices as those who have worked for 16-23 years in education, 69.3% of them agreed (Figure 7) and 78.8% of those with 24-34 years of teaching experience agreed (Figure 8).
Figure 6. Teachers’ answers with ‘10-15 years in education’ experience for dimension 3

Figure 7. Teachers’ answers with ‘16-23 years in education’ experience for dimension 3

Figure 8. Teachers’ answers with ‘24-34 years in education’ experience for dimension 3
2.1.6 Position in this School

When examining the role of the teachers’ position at school in relation to their engagement in the four dimensions, the researcher started with the Levene test, which scored more than 0.05 for every dimension, and then moved to ANOVA. The ANOVA’s results were above 0.05 for every dimension except for the ‘leadership practices’ one that received 0.048. This score is really close to the sig. value so the researcher decided to do a post hoc test in order to confirm that there were no significant differences. Among several post hoc tests, the LSD test revealed that there are significant differences between permanent and deputy teachers in their engagement in the ‘leadership practices’ dimension.

The differences are presented graphically below (Figures 9, 10); however, due to the fact that the sample size of the deputy teachers is really small, the researcher believes that these differences should not be taken into account as they are not comparable. There are 115 permanent teachers and 9 deputy teachers, which is a very small number. However, the researcher feels that it is ethically correct to present all the findings.

![Figure 9. Permanent teachers’ answers for dimension 4](image)

![Figure 10. Deputy Teachers’ answers for dimension 4](image)
2.2 Research Question 4: To What Extent Does the Teachers’ Engagement with the Dimensions of Distributed Leadership Vary in Relation to Principals’?

Firstly, the Levene test for the four dimensions was done and then the researcher moved on to ANOVA. The ANOVA’s test score for the ‘leadership practices’ dimension was low and in order to confirm that there were no significant differences the researcher conducted a t-test for the ‘leadership practices’ dimension. According to the t-test there were significant differences, so teachers and administrators were differently engaged in the ‘leadership practices’ dimension.

The teachers had various answers for their ‘leadership practices’ as they almost equally ranged from ‘disagree’ to ‘agree’ (Figure 11). On the other hand, the majority of administrators (75%) agreed (Figure 9).

3. Discussion

The third research question aims at identifying how the demographic characteristics of the respondents influence their engagement and participation in distributed leadership according to its dimensions. The researcher found that the gender does not play an important role and both men and women are engaged in the same way. These
findings contradict another research which has examined the role of gender in leadership or managerial positions of the Greek educational system. The female under-representation is clear evidence and many barriers, such as institutional, personal and socio-cultural, have contributed to this (Athanasoula-Reppa & Koutouzis, 2002). However, the findings of the study indicated that the demographic characteristics that influence the engagement of teachers are their age and their working experience and they proved to be statistically significant in this study. The younger teachers, aged 26-35 years old, are more engaged and willing to participate in the ‘leadership practices’ of the school than those who are 36-45 years old and 46-54 years old. Moreover, another difference was spotted in the dimension of ‘mission, vision and goals’ between the age group ‘26-35’ and ‘36-45’, with the former being more engaged than the latter.

Another factor that influences the teachers’ engagement is the teaching experience of the participants. Teachers who have worked in education 10-15 years feel less engaged in ‘shared responsibility’ practices but as their experience increases they seem to be more engaged. This is also related to the belief that teachers with more experience assume leadership roles at school. This was highly rated in the questionnaire and it is justified by Argiropoulou’s study (2006) that the majority of headteachers have been in education for many years. Perhaps this is also reinforced by the way principals are selected in Greece and the criteria for a teacher’s promotion to principalship. The principals’ selection requires many years of successful experience as teachers along with a “game that has powerful political dynamics”, as good relationships with higher authorities and political alliances can greatly contribute to that (Athanasoula-Reppa & Lazaridou, 2008).

Teachers and principals vary in their engagement in the ‘leadership practices’ as the latter have more duties and they are officially engaged within the leadership practices of the school. Their responsibilities engage them differently in this dimension. The difference in leadership practices between teachers and principals is justifiable as there is a distinction between formal and informal leaders. Principals are appointed by the Ministry of Education to perform leadership activities within their schools and therefore, they have a formal and official role. This contradicts their participation in leadership practices to the teachers’ ones. However, according to a recent study the newly-inducted Greek principals, did not view themselves as “law-enforcers” and this according to Athanasoula-Reppa and Lazaridou (2008) is a sign of dissatisfaction with the degree of centralisation of the Greek educational system and the continuous imposition of new laws.

The findings from the study concerning the other dimensions examined are consistent at some points with the research by Athanasoula-Reppa and Lazaridou (2008). The Greek principals they surveyed valued an ethos of collaboration and cooperation in the school and the most desirable role for them is that of the supervisor. Furthermore, “Greek principals thought that experience and leadership traits contributed most to a principal’s effectiveness” (Athanasoula-Reppa & Lazaridou, 2008). These findings support the results of the present study and are consistent with the principals’ engagement with the three dimensions of distributed leadership.

As far as the demographic characteristics are concerned, the study showed that the age and the teaching experience are those which affect mostly the engagement of teachers.

Finally, the study concluded that there is a difference between the teachers’ and the principals’ engagement with the leadership practices at schools.

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