A CRITICAL EXAMINATION OF THE IMPACTS OF PROFESSIONAL DEVELOPMENT ACTIVITIES ON SHARED PRINCIPAL LEADERSHIP PRACTICES: EVIDENCE OF NINE COUNTRY CASES FROM TALIS 2013

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Abstract:

In the current dispensation due to accountability measures in schools, there have been enormous pressures on key actors to enhance school effectiveness and improvement. This has put some pressures especially on schools heads/principals and teachers to improve student learning outcome, despite growing policies with respect to professional development of schools principals and teachers. At the same time there are increasing efforts to train and re-train school heads to adopt distributed or shared leadership practices so as improve student learning outcomes and school improvement, however there seems to be limited evidence in three ways. First, with regards to whether or not there is a relationship between professional development activities and principal shared leadership skills. Secondly, whether or not there exist some differences between privately or publicly managed schools with respect to principals shared leadership style and finally if there exists variations between female or male principals regarding shared leadership style. Using the TALIS 2013 for data analysis in nine countries which was conducted by the OECD. The results of the study revealed that there was no statistically mean differences with regards to how gender differ with principals' shared leadership, secondly there is a difference in variation of mean with both publicly and privately managed school with respect to principals shared leadership and finally the type of professional development that includes courses, conferences, or observational visits had no significant effect on principals' shared leadership. This paper has some sought of policy lessons for both policy makers and practitioners in the arenas of educational policy with respect to the type of leadership style and type of professional development for enhancing student learning outcomes and school-wide improvement.

Keywords: professional development, principal shared leadership, principal, TALIS 2013.

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1. Introduction

In the current dispensation due to accountability measures in schools, there have been enormous pressures on key actors to enhance school effectiveness and improvement. This has put some pressures especially on schools heads/principals to improve student learning outcome. This assertion is true because over the past five decades research have shown that school improvement is as a result of a strong relationship between school leadership and achievement among student (Hallinger et. al, 1996). In the same vein, within the literature, there seems to be various empirical studies converging on the idea that school principals to some extent have some considerable influence on structures of schools, processes and most importantly teachers (Leithwood and Louis, 2012). Although, the effects or impact of leadership on student's learnings seems to have some variations of 3% to 5% in different studies, this corresponds to 25% of the total variation accounted for by all school-related factors (Leithwood and Riehl, 2003). Again, a study conducted by Bryk et al (2010) confirmed that principal leadership is the driving force for increased student learning outcome as a result of investigating more than one hundred schools with a high concentration of low-socio economic status (SES) students. In this study, principal's instructional leadership was obviously presented as one of the main ingredient present for improving student learning outcome.

Principals or school heads currently are not armchair managers but they are involved in day-to-day activities in order to ensure school improvement and effectiveness. Following some scholars such as Edmonds (1979) he clearly outlined that an effective school possesses a principal who develops academic goals, develops academic goals, keeps track of student progress, provides teachers with necessary material and professional support for development (Brieve, 1972), and observes and evaluates teaching practices (Bridges, 1967).

The development of school principals' shared leadership competencies has gained great importance on the radar of policymakers and other stakeholders. For example, many educational administration/leadership graduate programmes involve courses designed to assist school principals in acquiring shared leadership skills in the USA (Ada and Gumus, 2012). Along with university graduate school programmes, specific in-service training programmes are developed in order to help principals gain necessary skills and knowledge for bettering not only their teaching and learning in their schools but to also improve shared leadership (Carver, 2010; Peterson, 2002).

However, regarding the increasing efforts and policy to train and re-train school heads to adopt distributed or shared leadership practices so as improve student learning outcomes and school improvement, there seems to be limited evidence in three ways. First, with regards to whether or not there is relationship between professional development activities and principal shared leadership skills. Secondly, whether or not there exist some differences between privately or publicly managed schools with respect to principals shared leadership style and finally if there exists variations between female or male principals regarding shared leadership style.

2. Literature Review

This section will discuss in brief the scholarly views on the two main variables of this study. The Professional development and principal shared leadership. The brief literature review will help us to identify our research gap and most importantly to contribute to knowledge by stating our research questions which is in this case our hypothesis.

2.1 Professional Development of School Heads/Principal

Majority of the literature reviewed attest to the fact that continuous professional development is a vital ingredient for school heads or principals, since it has the tendency to improve student learning outcomes and enhance school improvement (Nelson and Sassy, 2005). Professional development could be defined as a system of support that is designed for students, administrators and teachers for effective contribution towards school improvement and enhancing student learning outcomes (Zepeda, 2008). For some scholars such as Bottoms and O'Neill (2001), they emphasized the importance of providing continuous professional development for school heads or principals for effective delivery of their leadership task in schools. Again, these authors went ahead and suggest that in the current dispensation school leaders or principals needs to have a comprehensive understanding of what happens both within and beyond the boundaries of the classroom, working closely with teachers on how to execute effective teaching and learning practices in order to improve student learning outcomes. Despite the immense benefits of professional development on school's principals, there has also been some criticisms of professional development which is characterised by been specific and descriptive and not providing job embedded learning opportunities, not clearly planned and most professional development are not backed with principles and theories (Nicholson, Harris, and Schimmel 2005). Irrespective of the criticisms, the literature converges with the idea that professional development of school heads or principles is a key ingredient for both school improvement and increasing g student learning outcomes (Hoffman and Johnston, 2005; Peterson, 2002).

In contemporary times the literature on professional development attest that, it has taken on new dimensions, and this include individual learning, networking and mentoring (Fenwick and Pierce, 2002). Following these scholars, these also take the form of principal professional development. According to Hoffman and Johnston (2005, p.16) they are of the view that "*meaningful professional development is best when it is peer to peer and imbedded directly in the work principals do*". From this perspective, some scholar's also encourage principals to work cordially and communicate effectively in order to improve their human relations skills which have an unintended effect to enhance student learning outcome (Fullan, Bertani, and Quinn, 2004).

One of the most popular principal's professional development programmes according to the literature is mentorship (Daresh, 2004). By emphasizing the importance of "*principals' personal learning*", Lindley (2009) indicates that one of the most important

responsibilities of the mentor is to provide guidance for mentees in managing and leading the school and staff to achieve school success.

2.2 Shared Principals Leadership Skills

Following the brief literature review, I have read on this shared leadership, most scholarly works points to the movement of shared leadership, transformational leadership and teacher empowerment (Leithwood, 1994; Marks and Printy, 2003). This will help enhance school effectiveness. With the increasing emphasis of school's accountability in the current dispensation, shared leadership is on the rise. A blend of both top-down and bottom up approach on enhancing school improvement and improving student outcomes has been on the priority list of leadership literature (Hallinger, 2005).

The current emphasis of shared leadership concept according to the literature is the importance of school-wide management rather than the day-to-day traditional teaching and learning which existed (DuFour, 2002). According to this view, shared leadership can help student learning through the teachers they employ and the opportunities they ensure for the teachers' development (Hong and Loeb, 2010). In effect following the view of Mark and Parinty (2003, p 377), they defined shared leadership with an "*integrated leadership model which reflects the transformational influence and the shared leadership practices of the principal*".

2.3 Hypothesis

H_0: There will be no statistically mean differences with regards to how gender differs with Principals' shared leadership.
H_1: There is a relationship between mean differences with regards to how gender differs with Principals shared leadership.
H_0: There is not a difference in variation of mean with both publicly and privately managed school with respect to Principals shared leadership.
H_1: There is a difference in variation of mean with both publicly and privately managed school with respect to Principals shared leadership.
H_0: There is no difference with regards to how Principals shared leadership is predicted by professional development, gender and school type.
H_1: There is difference with regards to how Principals shared leadership is predicted by professional development, gender and school type

3. Source of Data, Sample Size and Technique

The source of data for this study is the Teaching and Learning international survey (TALIS) which was conducted in 2013 by the Organization for Economic Cooperation and Development (OECD) database. The main goal of TALIS is to provide in-depth, rich information of OECD and non-OECD countries with regards to their educational system. The countries and regions that participated in this survey was thirty-six (36) in number. Hence, the main source of data was the TALIS 2013 database.

With respect to the sample, this study made use of the TALIS school level data and specifically at the upper secondary school level. This consists of nine (9) countries and a total of 1239 principals. In order to enhance representative sampling the selection of principals cuts across different school locations and size (OECD, 2014). This school level data contains vital information such as school climate, school leadership, characteristics of schools, professional development activities and other vital demographic information.

3.1 Measures of Variables

The dependent variable for this study is Principals' Shared leadership level. Hence in this context I defined principal shared leadership level as the ability of the principal to use his leadership to inspire teaching and learning, helping solve school problem, informing parents or guardians with school information and students' performance. Using this definition as a source of departure principals shared leadership in TALIS database included nine eight items: "I collaborated with teachers to solve classroom discipline problems", "I observed instruction in the classroom", "I took actions to support co-operation among teachers to develop new teaching practices", "I took actions to ensure that teachers take responsibility for improving their teaching skills", "I took actions to ensure that teachers feel responsible for their students' learning outcomes", "I provided parents or guardians with information on the school and student performance ", "I checked for mistakes and errors in school administrative procedures and reports", and "I resolved problems with lesson timetable in this school". In this case, following the TALIS database, principal or School heads were asked to indicate how often they performed such activities using an ordinal scale of measurement. A four point scale which ranges from (1) Never or rarely, (2) Sometimes, (3 Often, (4) Very often. According to the OCED (2014), the acceptable alpha reliability for international samples should be 0.7. Following this direction, the alpha reliability for the eight items for principals shared leadership level was 0.776.

Again, the main independent variable for this paper is the duration of principal's professional development participation or involvement, the scale of measurement was nominal scale. From the TALIS questionnaire and database, it has an alphanumeric code of TC2G07A1-A2 and TC2G07B1-B2 which seeks to enquire from principals their participation in a professional network, mentoring or research activity and participation of courses, conferences or observational visits respectively. Some other independent variables include principal's gender, academic qualification, and school type (i.e. publicly or privately managed). The chief aim of these variables is to control the effect it will have on the dependent variable (i.e. principals shared leadership level).

3.2 Method of Analysis

The primary method of analysis used is the inferential statistics that is independent-t-test and multiple regression analysis. The study also employed a descriptive analysis using tables and graphs. The use of tables and graphs helped to understand the basic and descriptive information and background of not only the context but it aided to

further appreciate the interpretation and analysis of our independent t-test and regression analysis (i.e. inferential analysis).

Again, since the aim of this study is to analysis whether or not there is gender variation among principals shared leadership levels and secondly if principals of privately managed schools exhibit shared leadership levels as opposed to publicly managed schools. It is against this direction that this study employed the independent t-test to analyse these two hypotheses. As argued by Mujis (2004), the use of independent t-test helps to compare means of a dependent variable between two groups. Finally the study also aim to examine whether or not principals professional development activities such as networking, mentoring or research activities, courses, conferences or observational visits, experience of schools principals, age, school type (whether publicly or privately managed) are good predictors for principals shared leadership skills. Hence, the study employed multiple regression to analyse this hypothesis.

3.3 Validity and Reliability

Reliability is the quality of measurement method that suggests that the same data would have been collected each time in repeated observations or applications of the same phenomenon. (Barbie 2006). Hence, it denotes consistency of measurement. The definition of categories into themes forms the various methods that were not ambiguous but applicable to what they were supposed to describe or measure. This dealt with how consistent the findings of the study are. In other words, should the same research be conducted within the same population and respondents, will the outcome be the similar if not same all other things being equal? Hence for this study, reliability was achieved by the use of scientific method of sampling where the sampled is representative of the entire population. Reliability for this study was ensured through the use of TALIS 2013 database by OECD. Validity is a term used to describe a measure that accurately reflects the concept it is intended to measure. In other words, it is the degree to which a test measures what it is supposed to measure. That is, the study ensured construct validity as detailed questions on the concept were asked in the study. According to the OCED (2014), the acceptable alpha reliability for international samples should be 0.7. Following this direction, the alpha reliability for the eight items for principals shared leadership level was 0.776. The focus of the study was clear and made the impact of intervening variables on the independent and dependent variables less.

4. Results

This section presents the findings of the study, before the study presents the inferential statistics (i.e. the independent t-test and multiple regression), it will be prudent to present the descriptive statistics of the study in order to create the basic understanding of our aim of the study. Since the main aim of our study is to analyse the extent to which principals professional development activities have an effect on the level of principal shared leadership. Furtherance to this aim is to also examine whether or not

female or male principals differ in mean with regards to principals shared leadership and finally to also to analyse whether or not there exist a statistically significant relationship among public or privately managed schools with respect to principals shared leadership.

4.1 Descriptive Statistics

The table below gives us an overview information with regards with regards to gender distribution of principals in the nine countries in which the questionnaires was carried out. It could be realized that a total of one thousand three hundred and seventy-five (1375) questionnaires were distributed. Out of this number, one hundred and thirty-six (136) was not administered and invalid representing 9.9%. However, a key look at the table indicates that there are 575 principals who are females representing 41.8% whereas Males are 664 in number which also account for 48.3%. Following this a total of 1239 principals, indicates that male principals are just 89 more than female principals constituting a difference of 6.5%. Hence, the pictorial view of the bar graph below (figure 1) clearly shows that male principals are much more than female principals.

Table 1: Gender of principals

| Personal Background/ Are you female or male?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	575	41.8	46.4	46.4
	Male	664	48.3	53.6	100.0
	Total	1239	90.1	100.0	
Missing	Not administered	132	9.6		
	Omitted or Invalid	4	.3		
	Total	136	9.9		
Total		1375	100.0		
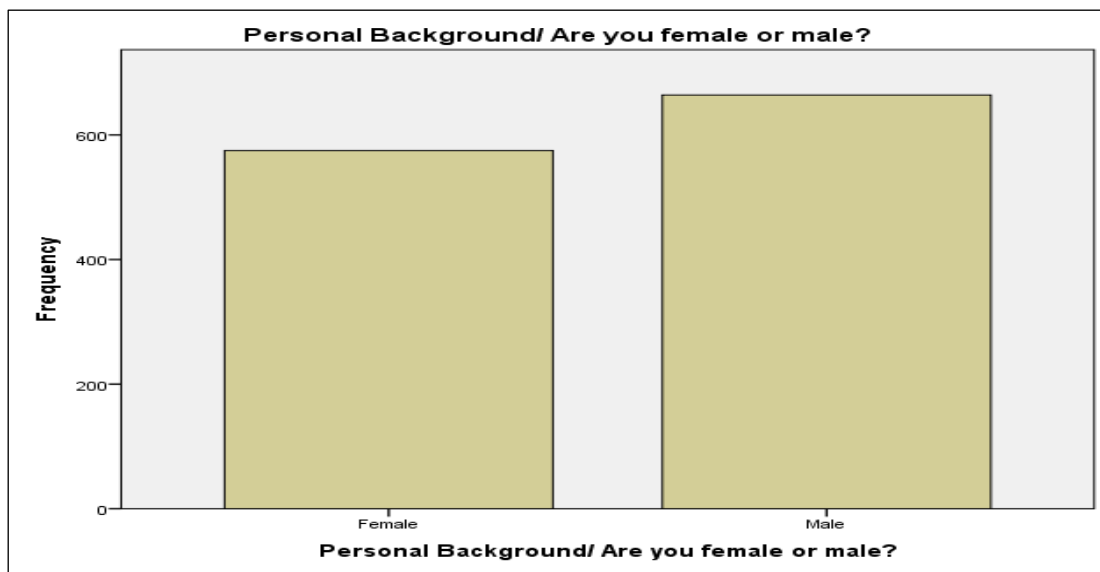
Figure 1: Bar graph showing gender of principals

The table (table 1 and figure 2) below shows the number of countries that were used in this study. In all nine countries which is represented by alpha codes, that is Australia, Denmark, Finland, Italy, Mexico, Norway, Poland and Singapore. From the table below it would be realized that Italy had the highest frequency of 210 representing 15.3%, Followed by Mexico. With Norway being the least country of respondents of principals.

Table 2: Countries Alpha Codes

Country ID - Alpha Code

	Frequency	Percent	Valid Percent	Cumulative Percent
AAD	165	12.0	12.0	12.0
AUS	124	9.0	9.0	21.0
DNK	113	8.2	8.2	29.2
FIN	146	10.6	10.6	39.9
ITA	210	15.3	15.3	55.1
MEX	190	13.8	13.8	68.9
NOR	106	7.7	7.7	76.7
POL	162	11.8	11.8	88.4
SGP	159	11.6	11.6	100.0
Total	1375	100.0	100.0	
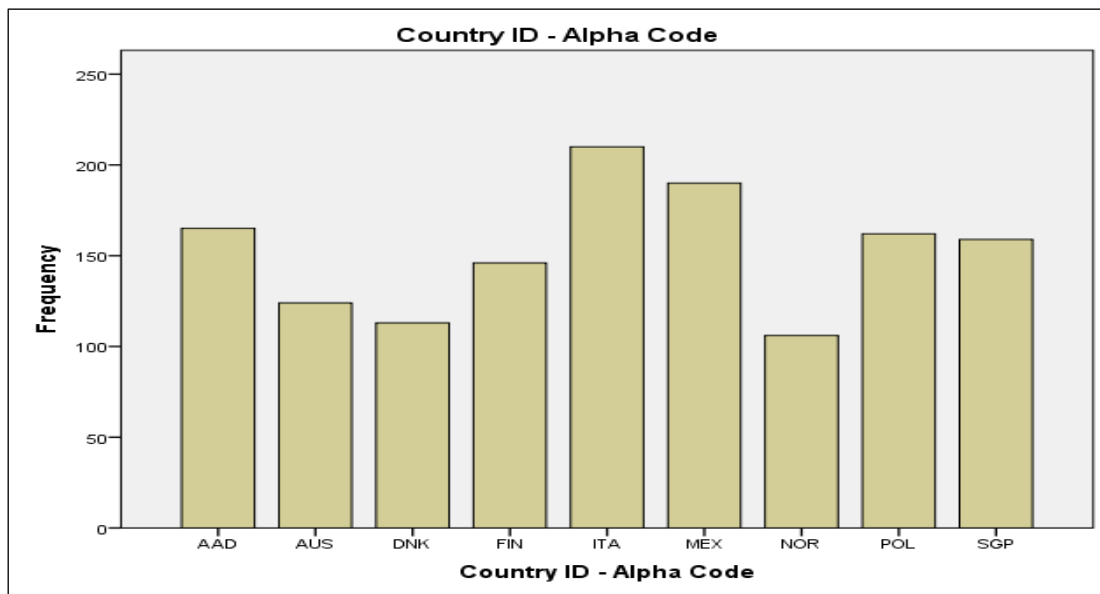
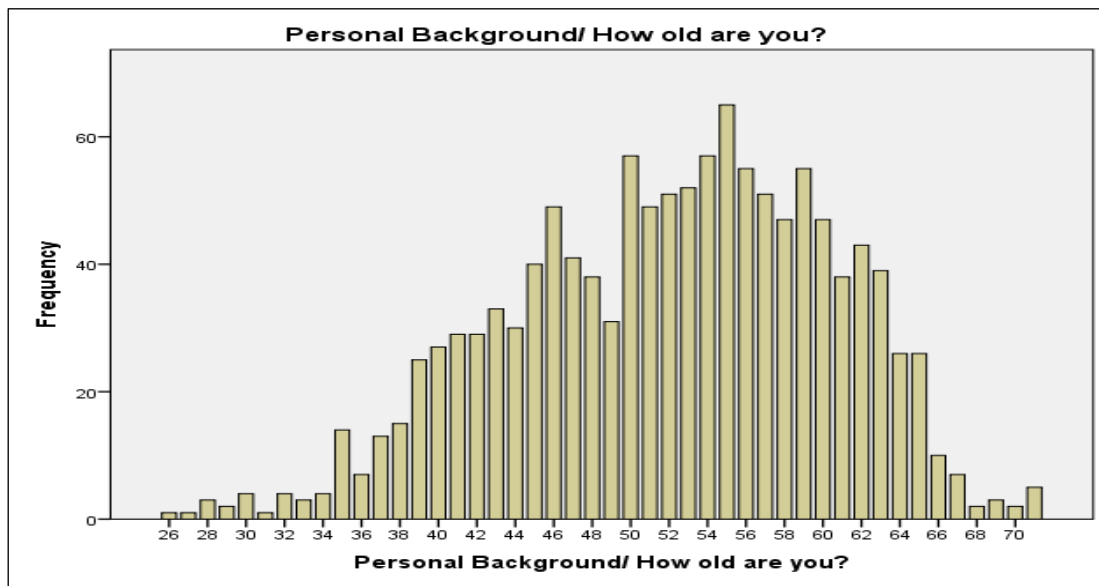**Figure 2:** Country identity in Alpha code

Figure 3: Age distribution of Principals

The above figure depicts in a pictorial form, the age distribution of all principals in nine countries. It could be seen that, the age distribution is skewed towards right. More clearly, it shows that majority of school principals ranges from 50-60 years. Whereas few frequencies shows for age 26-38 years. Strikingly from the distribution it could be seen that principals are aged 65 and above are still in the workforce.
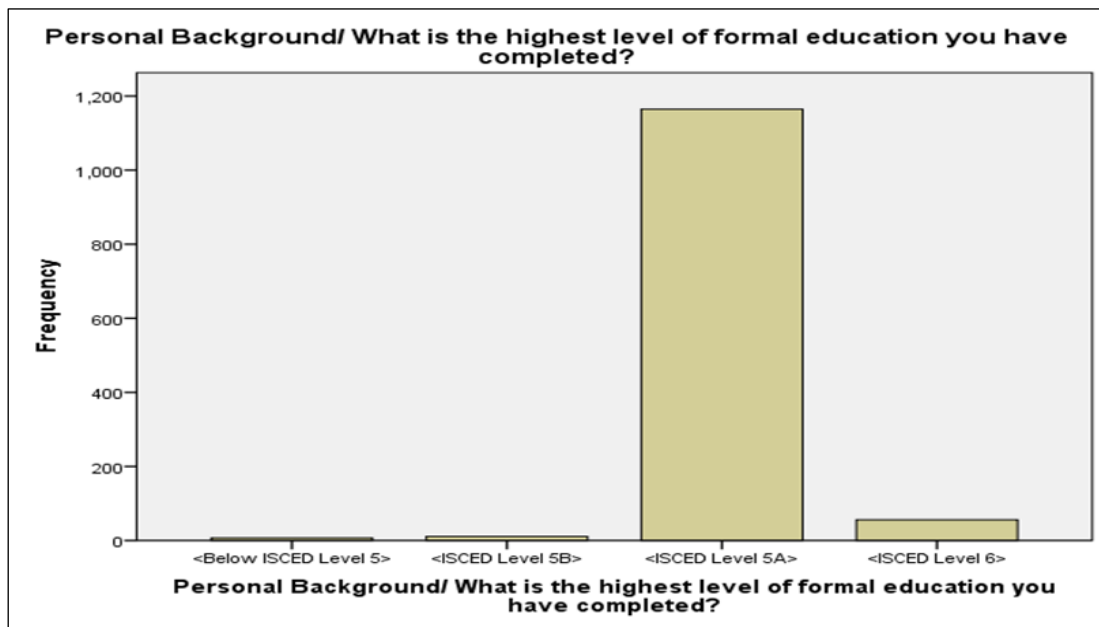

Figure 4: Formal qualification of school principals

From the above figure, it shows the academic qualification of principals in the nine countries under study. It shows that majority of School principals hold a Bachelor's degree whiles a few hold a post graduate degree/master's degree. However, the graph

also depicts that only a few school principals' holds qualifications below Bachelor's degree.

4.2 Inferential Statistics: Hypothesis 1

From the above group statistics table, Female (M= 2.73 SD=0.491 n= 555) Male (M=2.67 SD= 0.496 n=640). Moving to our independent sample results of the Levene's test for equality of variance, F (1.15), p=0.284, indicates that the variance of the two populations are assumed to be approximately equal. Thus, the standard t-test result was used. In this case since the significance under the Leven's test of equality is greater than 0.005, we select equal variance assumed. The results of the independent t-test were not significant, t (1193) =1.95 p=.052 indicating that there is no significance difference between Female Principals (M= 2.73 SD=0.491 n= 555) and that of Males Principals (M=2.67 SD= 0.496 n=640). Reflecting back on our hypothesis

H_0: There will be no statistically mean differences with regards to how gender differs with Principals' shared leadership.

H_1: There is a relationship between mean differences with regards to how gender differs with Principals shared leadership.

Based on our results and interpretations of our findings we accept our null hypothesis which states that; there will be no statistically mean differences with regards to how gender differ with Principals' shared leadership

4.3 Inferential Statistics: Hypothesis 2

The main aim of the second hypothesis is to examine whether or not there exist some variation between public or privately managed schools with respect to shared principal leadership. Based on the group statistics Public managed schools (M= 2.678 SD=0.478 n= 970) privately managed schools (M=2.77 SD= 0.578 n=229). Moving to our independent sample results of the Levene's test for equality of variance, F (11.09), p=0.001, indicates that the variance of the publicly managed schools and privately managed schools are not equally assumed, in other words because the significance level under the Levene's test for equality is less than 0.005 the variance between the two groups (publicly managed and privately managed schools) are not the same. However, the results of the independent t-test were statistically significant, t (332) =-2.24 p=.026 indicating that there is significance difference between publicly managed schools (M= 2.68 SD=0.48 n= 970) and that of privately managed schools (M=2.77 SD= 0.58 n=229).

4.4 Reflecting Back on our Hypothesis

H_0: There is not a difference in variation of mean with both publicly and privately managed school with respect to Principals shared leadership.

H_1: There is a difference in variation of mean with both publicly and privately managed school with respect to Principals shared leadership.

Based on the results and interpretations of our findings we accept our alternate hypothesis which states that; there is a difference in variation of mean with both publicly and privately managed school with respect to Principals shared leadership.

4.5 Inferential Statistics: Hypothesis 3

Table 1: Multiple regression showing the effects of principals shared leadership

Variables	Model 1				Model 2			
	B	SE	B	Sig	B	SE	B	Sig
Constant	2.84	.044	64.42	.000				
PD1	-.10	.029	-.10	.001				
Constant					2.87	.19	15.26	.000
PD1					-.08	.030	-.08	.011
PD2					-.08	.05	-.05	.089
Gender					-.05	.03	-.48	.099
Educational background					-.03	.05	-.18	.534
School location					.023	.012	.06	.060
Public vs Private school					.09	.04	.07	.022
R^2	.009				.024			

P<0.05
PD1 – Professional development in courses, conferences or observational visits.
PD2 – Professional development in professional network, mentoring or research activity.
Dependent variable – Principal shared leadership

The third hypothesis seeks to examine the extent to which principal's professional development activities have an effect on the level of principal shared leadership. Or in other words how do professional development activities predict Principals shared leadership.

Hence our first model will be;

Dependent variable: Principal Shared Leadership (Y)
Independent variables: Professional Development – mentoring, networking and research (X1)
$Y = a + b*X_1$
$Y = 2.84 - .100*X_1$
Intercept/constant a = 2.48
Regression coefficient $b_1 = -.100$
Adjusted $R^2 = 0.009$

All other things being equal, by a principal not participating in professional development that places emphasis on networking, mentoring and research will reduce principals shared leadership practices by -.100. Again, 9% of the variance in the principals shared leadership is predicted by professional development that paces emphasizes on mentoring, networking and research activities.

The study added additional independent variables such as gender of principals, school type (i.e. publicly managed or privately managed schools) to also look at the effects on the dependent variable. Again such dummy variables are controlled to allow

for the detection of how much variation it accounts for the overall model (i.e. adjusted R square) and other principal factors:

Dependent variable: Principal Shared Leadership (Y)
Independent variables:
Professional Development -1 (X1)
Professional Development – 2 (X2)
Gender (X3)
Educational Qualification (X4)
School Location (X5)
School Type (X6)
Regression formula
$Y = a + b_1X_1 + b_2X_2 + b_3X_3$
$Y = 2.87 - .076 * X_1 - .080 * X_2 - .047 * X_3 - 0.033 * X_4 + 0.023 * X_5 + 0.085 * X_6$
Intercept/constant a = 2.87
Regression coefficient b1= -.076
Regression coefficient b2=-.080
Regression coefficient b3= -.047
Regression coefficient b4=-.033
Regression coefficient b5=.023
Regression coefficient b6= 0.085

The first model, that is the linear regression model sought to analyse the effect of the independent variable (i.e. professional development that put emphasis on networking, mentoring and research activities) on the dependent variable (i.e. principals shared leadership). Whereas one will also argue that with only one independent variable it did not give much information with regards to the variation, strikingly, the adjusted R^2 was 0.009, which implies that 9% of the variance in principals shared leadership is explained or predicted by professional development (That places emphasis on networking, mentoring and research activities). This is also confirmed from the from the regression analysis (B= -.100, p=.001), which also makes professional development a very good predictor for principals shared leadership; since it is statistically significant.

The second model added additional independent variables and a second professional development (that places emphasis on courses, conferences or observational visits) was added. This was done in order to ascertain which of these two types of professional development activities better predicts principals shared leadership, while we control for other independent variables such as gender, educational qualifications of principals, school location (is the school located in a large city, city, town, small town, village, rural area) and school type (is the school publicly managed or privately managed). Focusing on schools characteristics, the results indicates that gender (B=-.047, p=.099), educational background (B=-.033, p=.534), school location (B=.023, p=.060) are not good predictors for principal shared leadership and are also not statistically significant. Strikingly the results of school type (i.e. if schools are

publicly managed or privately managed) (B=.085, p=.022), this results makes it a good predictor for principals shared leadership.

Again comparing the two types of professional development (Professional development 1; which emphasizes on networking, mentoring and research activities. Professional development 2; which emphasizes on courses, conferences or observational visits). From the first model, the results indicated from professional development that places emphasizes on networking, mentoring and research activities was (B= -.100, p=0.001) whereas, professional development that places emphasizes on courses, conferences and observational visits results from the second model shows (B= -0.80, p=0.089). This makes professional development that places emphasizes on courses, conferences and observational not a good predictor for principals shared leadership since it is not statistically significant.

5. Discussion of Findings

With the growing concern on accountability in schools, there has been enough pressures from various stakeholders mounting forces on school heads/ principals to enhance school improvement and student learning outcomes. From all indications and research studies, school heads have been at the receiving end of enhancing a collaborative culture and stimulate a congenial school climate (Wiseman, 2005). Hence, in order to expect school heads or principals to activate such shared leadership practices there some professional development activities that has be designed to suit such purposes. However, the question that remains to be answered is what specific type of professional development activities will help to achieve and inculcate such shared leadership skills among school principals? Or in other words, what is the influence of professional development principals shared leadership? Secondly, how does gender varies with regards to Principal shared leadership and lastly is there a difference in mean regarding public or private managed schools with respect to principal shared leadership? With the above aim in mind, the TALIS 2013 database from OECD website was the main data, using nine countries with specific emphasis on upper secondary school. The use of descriptive (use of charts and bar graphs) and inferential statistics (i.e. independent sample t-test and multiple regression) with the aid of SPSS was used to perform this statistical analysis.

The results from the first hypothesis which sought to determine whether or not there exist any statistically mean differences with regards to how gender differ with Principals' shared leadership. Stingingly, the results and interpretations of our findings depicts that, we accept our null hypothesis which states that; there will be no statistically mean differences with regards to how gender differ with Principals' shared leadership. Secondly, in our second hypothesis, we analyzed whether or not there is a difference in variation of mean between publicly and privately managed school with respect to Principals shared leadership. Based on our results and interpretations of our findings we accept our alternate hypothesis which states that; there is a difference in

variation of mean with both publicly and privately managed school with respect to Principals shared leadership.

Finally, the results of our third hypothesis indicated that among the two types of professional development (i.e. Type 1: professional development; which includes professional network, mentoring or research activity. Type 2: professional development that includes; course, conferences or observational visits), and other independent variables, which one of these better predicts professional shared leadership (dependent variable). The results indicated that the type of professional development that includes courses, conferences, or observational visits had no significant effect on principals' shared leadership.

This finding concurred with the existing literature, in the sense that existing professional development activities such as courses, workshops, conferences and seminars were identified as "traditional", and their adequacy was highly criticized (Nicholson, Harris, and Schimmel 2005). Based on the results of this study and the related literature, following this perspective, one can argue that such professional development activities are less likely to provide principals with the support necessary for changing their habits and concentrating more of their time and efforts on the teaching and learning aspects of their schools.

On the other hand, the results indicated that the type of professional development that is based on mentorship, networking and research activity had a significant positive effect on principals' shared leadership. This suggests that when principals take part in professional development that incorporates mentorship and research activities and provides networking opportunities, they are more likely to engage in shared leadership practices in their schools. The importance of such activities is also highlighted in the literature, and it is emphasized that contemporary professional development should be based on these kinds of practices (Peterson 2002). In tandem with results from the multiple regression, there are some studies that have also found that contemporary forms of professional development activities have the key ingredient to empower principals with the necessary toolkits for effective shared or distributed leadership (Hoffman and Johnston 2005). Based on the findings in this research and the supporting literature, it could be stated that the more principals engage in contemporary professional development activities, the higher there is the likelihood to engage in shared leadership in improving student learning outcomes. In summary, the findings of the study showed that through the right type of professional development such as mentorship, networking and researching which provides participants hands on and experiential learning experience which goes a long way to have a ripple effect on principals shared leadership.

6. Conclusion, Significance of the Study and Implication of the Study

In the current dispensation due to accountability measures in schools, there have been enormous pressures on key actors to enhance school effectiveness and improvement. This has put some pressures especially on schools heads/principals to improve student

learning outcome. This assertion is true because over the past five decades research have shown that school improvement is as a result of a strong relationship between school leadership and achievement among student. However, there seems to be limited evidence in three ways. First, with regards to whether or not there is relationship between professional development activities and principal shared leadership skills. Secondly, whether or not there exist some differences between privately or publicly managed schools with respect to principals shared leadership style and finally if there exists variations between female or male principals regarding shared leadership style.

The study used the TALIS 2013 database as its main data, this was analysed using nine countries with specific emphasis on upper secondary school. The use of descriptive (use of charts and bar graphs) and inferential statistics (i.e. independent sample t-test and multiple regression) with the aid of SPSS was used to perform this statistical analysis. In summary, the findings of the study shows that there is a difference in variation of mean with both publicly and privately managed school with respect to principals shared leadership whiles there is no statistical difference with regards to how gender differ with Principals' shared leadership. Lastly, findings of the study explicitly revealed that through the right type of professional development such as mentorship, networking and researching which provides participants hands on and experiential learning experience which goes a long way to have a ripple effect on principals shared leadership.

6.1 Practical Implications of the Study

The study provides a practical implication in the sense that professional development can be inspired among teachers. This could be done through, teachers networking; sharing their own experiences. Hence, the concept of community of practice becomes an essential toolkits in the sense that teachers share the same identity. This will provide a space for teachers to share their work-related experiences in which other teachers can learn from their peers in order to learn from their peers.

Secondly, the study evokes the concept of teacher leadership which seeks to give power to the teachers to act, inspire, and influence not only teaching activities but become critical about their own activities and act as leaders. This can take the form of serving as demonstration teachers, conducting training sessions for fellow teachers, and being teacher mentors on a daily basis and coaching other teachers. This collaboration among teachers will help discuss issues with regards to new ways of improving teacher's pedagogical efficacy. Teachers will serve as a mentor for others through collaborative learning which could sometimes be done informally. They will see themselves as partners or colleagues who share the same dream by working in a mutual interdependency manner.

6.2 Significance of the Study

This study is very significant since it will inform relevant educational actors with respect to the type of professional development programmes that is not only effective but most importantly that will enhance student learning outcomes and school wide

improvement. Secondly, this study will inform principals to acknowledge that professional development could be carried out effectively within and among teachers. This could be done through mentoring and networking where teachers could share their experiences which will act as lessons for other teachers for self-improvement.

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