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# LEADERSHIP AND PROBLEM SOLVING SKILLS AMONG PRINCIPALS OF PUBLIC AND PRIVATE SECONDARY SCHOOLS IN BAYELSA STATE

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#### **ABSTRACT**

This paper was aimed at investigating school leadership and problem solving skills among principals of public and private secondary school. Data for the research were collected through a survey of public and private sector school principals of Bayelsa State. One hundred forty nine school principals from sixty four private and eighty five public sector school principals in Bayelsa State. A 35 items questionnaire of leadership and problem-solving skills was developed and subjected to face and content validity. The Cronbach's alpha were calculated for people oriented and task oriented leadership and problem solving skills items used in the questionnaire and found the acceptable values .640 and .550, which was adjudged suitable by experts in educational management. Factor analysis of the scores on such items yielded two dimensions of leadership and problem solving skills: (a) task orientation, and (b) people orientation. Items of the scale had high reliability, validity, and discriminative power on two dimensions of leadership and problem solving skills. Factor analysis, Pearson's correlation and Fisher's z-test were used to analyze the collected data. The results showed that a significant relationship exists among the task oriented. people oriented leadership and problem solving skills. This study also found that there is a significant difference in the relationship between the task oriented, people oriented leadership and problem solving - skills of the public and private secondary schools' principals in Bayelsa State.

**Keywords**: Leadership, Principal, Public and Private School, Problem-solving, Skills.

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# INTRODUCTION

Leadership has been defined in many connotations such as a process whereby an individual influences a group of individuals to achieve a common goal. Northouse (2004) defined leadership as the influencing process of leaders and followers to achieve organizational

objectives through changes. By implication, it is a relationship between those who aspire to lead and those who choose to follow. Some of the general ideas in leadership definitions include exerting influence, motivating and stimulating, helping others realize their potential, leading by example, selflessness and making a difference. Yukl (2002) defined leadership as enabling a group and connect together in the process of developing, sharing and moving into vision, and then living it out. Leader's character and sincerity is also important in building up the trust necessary for the leadership and to achieve goals over a period of time (Ololube, 2017a).

In any organization there must be a power to direct its resources (employees, money and materials) towards organizational goals and standards. In a school, for example, there must be a force to guide the activities of staff and students towards achievement of the schools affirmed objectives (Yukl, 2002).

The leadership in education means directing the activities of those engaged in the training of minds towards the achievement of organizational goals set by those persons who have organized themselves for it. In the educational set up this leadership is exercised by the schools head/principal. Educational research in school organization and administration has recently been dominated by the concept of principal as leaders (Blank, 2001). He also cited that the role of the principal as a leader is critical in creating school environment that lead to higher student academic performance. Conditions such as setting high standards/goals, planning and coordinating with staff having direction toward the innovation, frequent monitoring of staff and involving parents through and communicating students' performance.

Therefore, the researcher considered the study of organizational structure, leadership and problem solving skills and its effect of job sector a valuable one with the expectation that findings of this study would help to improve effectiveness of leadership and problem solving skills in secretary school setups. It is stated that schools in Nigeria can be classified into two main categories i.e. public and private. It has been observed over the years that private schools are increasing in numbers and flourishing rapidly. Government is also encouraging the participation of private sector in educational enterprise.

It is an observed phenomenon that students are shifting from public schools to private schools which resulted in decreasing the numbers of students in public schools. This situation created a competitive environment between public and private schools. Therefore the researcher conducted a study to compare the leadership problem solving skills among principal of public and private schools sector in Nigeria. The style of leaders is the behavior patterns they consistently use when working with other people. These patterns are perceived by others and the pattern emerges over a period of time (Mehrotra, 2005). Leader also disagree in the extent to which they pursue a human relations approach and try to maintain friendly supportive relations with their followers those with a strong concern are identified as people-oriented concerned for maintenance. The behavior that a leader exhibits during supervision of subordinates is known as leadership and problem solving skills. The term style is roughly equivalent to the manner in which the leader influences subordinates stein (Ololube, 2017b).

Task oriented skills: The extent to which a leader organizes and defines the roles of individuals and members of his or her organization by explaining what activities each is to do as well as when, where and how tasks are to be accomplished. It is further characterized by the level to which a leader defines patterns of communication and specific ways of getting the assign targets of job accomplished. Leaders disagree in their concern for groups, goals and means to achieve the organizational goals. Those with this strong concern are considered to be task

oriented. The leader's assumptions about their roles purposes and behavior reflect their interest in completing assignments and getting their work done in time (Iqbal, 2005).

**People Oriented Skills:** This is the extent to which a leader engages in personal relationships with individuals or members of his or her organization. The amount of socioemotional support and psychological strokes provided by the leader as well as the extent to which the leader engages in interpersonal communication and facilitating behavior. The way in which the leader uses power also establishes a type of style.

Table 1: Continuum of Leadership and problem solving skills Based on Classic Studies and Theories of Leadership

Boss centered	Subordinate centered	
Leadership and problem solving skills	Leadership and problem solving skills	
Theory X	Theory Y	
Autocratic leadership	Democratic leadership	
Production centered leader	Employee centered leader	
Close supervision	General supervision	
Initiating structure	Consideration	
Task directed leader	Human relations leader	
Directive leadership	Supportive leadership	
Directive leadership	Participative leadership	

Source: Adapted from Fred Luthans (2000). Organizational Behaviors 7<sup>th</sup> ed. New York: McGraw Hill (2000)

Each style – Autocratic, Participative and Free Rein – has benefits and limitations. A leader uses all three styles over a period of time but one style lends to be the dominant area.

Leadership and problem solving skills evolved by researchers: In the present study leadership is defined within a superior and subordinates relationship, hence, the principal and the teacher relationship i.e. the ability or skill to direct influence and coordinated group activities. Because the word that ends with the suffix 'ship' can be used to denote a skill such as in the word sportsmanship, craftsmanship or can also be used to indicate a relationship as in partnership, apprenticeship, fellowship and in the word relationship itself.

Leadership helps in turning plans and decisions into action. Leaders with certain motives and purposes mobilize resources so as to stimulate, engage and satisfy the motives of followers. In the educational organization, principals create situations in which the ends are desired by both leaders (principals) and followers (teachers). They raise the rights and aspirations of the teachers and the relationship is thus transforming one. Today's leaders/principals are transformational. They revitalize the entire organization.

Solving problems is a quintessential aspect of the role of an educational leader. In particular, building leaders, such as principals, assistant principals, and deans of students, are frequently beset by situations that are complex, unique, and open-ended. There are often many possible pathways to resolve the situations, and an astute educational leader needs to consider many factors and constituencies before determining a plan of action. The realm of problem solving might include student misconduct, personnel matters, parental complaints, school culture, instructional leadership, as well as many other aspects of educational administration. Much consideration has been given to the development of problem-solving skills for educational leaders.

#### The Nature of Problems

Before examining how educational leaders can process and solve problems effectively, it is worth considering the nature of problems. Allison (1996) posited simply that problems are situations that require thought and/or actions. Further, there are different types of problems presented to educational leaders. First, there are well-structured problems, which can be defined as those with clear goals and relatively prescribed resolution pathways, including an easy way of determining whether goals were met (Allison, 1996). Conversely, ill-structured problems are those with more open-ended profiles, whereby the goals, resolution pathways, or evidence of success are not necessarily clear. These types of problems could also be considered unstructured or open-design (Allison, 1996). Many of the problems presented to educational leaders are unstructured problems. For example, a principal must decide how to discipline children who misbehave, taking into consideration their disciplinary history, rules and protocols of the school, and other contextual factors; determine how best to raise student achievement (Duke, 2014; Ololube, 2017b); and resolve personnel disputes among staff members. None of these problems point to singular solutions that can be identified as "right" or "wrong." Surely there are responses that are less desirable than others (i.e. suspension or recommendation for expulsion for minor infractions), but, with justification and context, many possible solutions exist.

# **Problem-Solving Perspectives and Models**

Various authors have shared perspectives about effective problem solving. Marzano, Waters, and McNulty (2005) outlined the "21 Responsibilities of the School Leader." These responsibilities are highly correlated with student achievement based upon the authors' meta- analysis of 69 studies about leadership's effect on student achievement. The most highly correlated of the responsibilities was situational awareness, which refers to understanding the school deeply enough to anticipate what might go wrong from day-to-day, navigate the individuals and groups within the school, and recognize issues that might surface at a later time. Though, the utility of situational awareness for long- term, large-scale decision making, in order for an educational leader to effectively solve the daily problems that come her way, she must again have a sense of situational awareness, lest she make seemingly smaller-scale decisions that will lead to large-scale problems later.

Bolman and Deal (2008) outlined a model of reframing problems using four different frames, through which problems of practice can be viewed. These frames provide leaders with a more complete set of perspectives than they would likely utilize on their own. The structural frame represents the procedural and systems-oriented aspects of an organization. Within this frame, a leader might ask whether there is a supervisory relationship involved in a problem, if a protocol exists to solve such a problem, or what efficiencies or logical processes can help steer a leader toward a resolution that meets organizational goals. The human resource frame refers to the needs of individuals within the organization. A leader might try to solve a problem of practice with the needs of constituents in mind, considering the development of employees and the balance between their satisfaction and intellectual stimulation and the organization's needs. The political frame includes the often competing interests among individuals and groups within the organization, whereby alliances and negotiations are needed to navigate the potential minefield of many groups' overlapping aims. From the political frame, a leader could consider

what the interpersonal costs will be for the leader and organization among different constituent groups, based upon which alternatives are selected. Last, the symbolic frame includes elements of meaning within an organization, such as traditions, unspoken rules, and myths. A leader may need to consider this frame when proposing a solution that might interfere with a long-standing organizational tradition.

Bolman and Deal (2008) identified the political and symbolic frames as weaknesses in most leaders' consideration of problems of practice, and the weakness in recognizing political aspects of decision making for educational leaders was corroborated by Ololube (1997). An implication for leadership preparation is to instruct students in the considerations of these frames and promote their utility when examining problems.

Further, in an extensive review of prior research studies on the subject, Ololube (2017b) noted that Problem-Based Learning (PBL) though applied successfully in other professions and written about extensively was relatively unheralded in the preparation of educational leaders. According to the author, characteristics of PBL included problems replacing theory as the organization of course content, student-led group work, creation of simulated products by students, increased student ownership over learning, and feedback along the way from professors. Their review noted that PBL had positive aspects for participants, such as increased motivation, real-world connections, and positive pressure that resulted from working with a team. However, participants also expressed concerns about time constraints, lack of structure, and interpersonal dynamics within their teams. There were positive effects found on aspiring leaders' problem-solving skill development with PBL (Bass, 1996; Lusseir & Achua, 2004; Ololube, 2015).

# **Objective of the Study**

The purpose of this study is to find relationships between leadership and problem solving skills like people oriented and task oriented with the job sector (public and private secondary schools)

# **Research Questions**

To guide the study, the following research questions were posed:

- Is there correlation among task-oriented leadership, people-oriented leadership and problem-solving skills of principals in the public and private secondary schools in Bayelsa state?
- Is there difference in the relationship between task-oriented leadership and problem-solving skills of the public and private secondary schools principals in Bayelsa state?
- Is there difference in the relationship between the people-oriented leadership and problem-solving skills of the public and private secondary schools principals in Bayelsa state?

## **Hypotheses**

• H<sub>o1</sub>: There is no significant correlation among task-oriented leadership, people-oriented leadership and problem-solving skills of principals in the public and private secondary schools in Bayelsa state.

- H<sub>02</sub>: There is no significant difference in the relationship between task-oriented leadership and problem-solving skills of the public and private secondary schools principals in Bayelsa state.
- H<sub>o3</sub>: There is no significant difference in the relationship between the people-oriented leadership and problem-solving skills of the public and private secondary schools principals in Bayelsa state.

#### DATA COLLECTION PROCEDURES

The data were collected from one hundred private and one hundred public sector school principals in Bayelsa State. Two hundred public and private sector schools were selected randomly for the study. They were approached individually. They were given the questionnaires, assured complete anonymity of responses, and requested to return the filled-in questionnaires within a fortnight. A total of 200 questionnaires were distributed and 149 were returned, giving a 75% response rate. All respondents indicated that they had no problems in completing any of the items.

### **Research Instrument**

The questionnaire was divided into three sections: Section 'A' was designed to establish research credibility, discuss the research objectives, benefits for respondents, describe survey mechanics and most importantly assure respondent's confidentiality; Section 'B' contain items related to leadership and problem solving skills, Section 'C' solicited respondent's demographical data. All items were positively keyed. Response descriptions against items were given on a five point Likert type scale 'never' (1), 'seldom' (2), 'occasionally' (3), 'frequently' (4), 'always' (5) was used for all items.

For the assessment of leadership and problem solving skills (T-P Leadership Questionnaire adapted by Ritchie & Thompson. In the current research the questionnaire is taken from Daft (1995). Through this questionnaire one can identify its relative emphasis on two dimensions of leadership; Task orientation (T) and people orientation (P). These are not conflicting approaches, and an individual can rate high or low on either or both. The Cronbach's alpha were calculated for people oriented and task oriented leadership and problem solving skills items used in the questionnaire and found the acceptable values .640 and .550.

# **Sampling**

The sample used in this study was comprised of 85 public school heads and 64 private school principals (N=149). There were 54.4% males and 45.6% females were included to avoid contamination of results by sex differences. The resource person component was chosen so as to make sure the respondents are likely to be professionals and form all category of life. A summary of demographic characteristics of the respondents are shown in Table 1. A total of 200 principals were contacted during this study and 75% of them willingly participated in the survey. The sample size, response rate and demographic mix were considered sufficient to perform meaningful statistical analyses and develop appropriate sense. The sampling technique used was the stratified random sampling.

Table 2: Demographic Characteristics of Respondents (N: 149)

Gender	Frequency	Percent
Male	81	54.4
Female	68	45.6
Total	149	100.0
Marital Status		
Single	51	34.2
Married	86	57.7
Widow/Widower	12	8.1
Total	149	100.0

## **Monthly Income**

#10,000 or less	31	20.8
# 10,000-15,000	12	8.1
# 15,000-20,000	13	8.7
# 20,000-25,000	14	9.4
# 25,000-30,000	35	23.5
Above # 30,000	44	29.5
Total	149	100.0
Age		
Less than 25	27	18.1
25-34	36	24.2
35-44	34	22.8
45-54	32	21.5
Above 54	20	13.4
Total	149	100.0
Job Experience (Years)		
Less than 5	53	35.6
5-10	21	14.1
10-15	19	12.8
15-20	30	20.1
Above 20	26	17.4
Total	149	100.0
Job (Sector)		
Public Sector	85	57.0
Private Sector	64	43.0
Total	149	100.0

# **Data Analyses**

Factor analyses were conducted for the leadership and problem solving skills using a multistep process which includes; (a) extracting the factors; (b) labeling the factors; (c) creating summated scales and examining the descriptive statistics.

The data was analyzed stepwise. Exploratory factor analysis, using the principal component matrix, extraction method and varimax rotation, was used to determine the factor structure of 15 items related to people oriented leadership and problem solving skills. Second an exploratory factor analysis using 20 items related to task oriented leadership and problem solving skills of resource persons using the principal component method of extraction and varimax rotation. Finally, spearman's correlations were used to probe the correlation coefficient

of people oriented leadership and problem solving skills, task oriented leadership and problem solving skills and job sector.

# **Exploratory Factor Analysis for People Oriented Leadership and Problem Solving Skills**

All the scores of people oriented leadership and problem solving skills items were factor analyzed using principal component method and rotated through varimax procedure. The variance explained=27.50%, KMO=0.66, Bartlett's Test=146.40, Cronbach's Alpha=0.64, Eigenvalues=2.34, Mean=55.24 and Standard

Deviation=5.24 were found. As per a prior knowledge a single-factor solution was expected. As per the obligation, that the factor content must cohere for people oriented leadership characteristics. Individual items seemed to cohere to some degree were included in the factor. Subsequently the single factor was named as per a preceding knowledge and according to the nature of the highest loading items. Table 2 shows factors, eigenvalues, and percentages of variance and loadings of people oriented factors from a maximum likelihood analysis with varimax rotation.

Table 2: Factor Analysis People-Orientation Leadership and problem solving skills (P-Score) Observed among the Principals of public and private schools (N=149)

Eigenvalues	2.34
Variance Explained	27.50
Mean	45.24
Std. Deviation	5.24
Items	Factors loading
I would refuse to explain my actions.	.72
I would be reluctant to allow the (staff) members any freedom of action.	.67
I would act without consulting the group/staff members.	.62
I would turn the (staff) members loose on a job and let them go for it.	.57
I would ask that group/staff members follow standard rules and regulations.	45
I would permit the group/school to set its own pace.	.41
I would allow the group/staff members a high degree of initiative.	37
I would let some (staff) members have authority that I could keep.	36
KMO	.66
Bartlett's test	146.40
Cronbach's Alpha	.64
Guttman Split-Half Coefficient	.56, .63(4), .23(4)

# **Exploratory Factor Analysis for Task Oriented Leadership and Problem Solving Skills**

All the scores of task oriented leadership and problem solving skills items were factor-analyzed using principal component method and rotated through varimax procedure. The variance explained = 36.82%, KMO = 0.66, Bartlett's Test = 75.39, Cronbach's Alpha = 0.55, Eigenvalues = 1.98, Mean = 76.59 and Standard Deviation=6.06 were found. As per a prior knowledge a single-factor solution was expected. It was prerequisite, that the factor content must cohere with task oriented leadership characteristics. Individual items seemed to cohere to some degree were included in the factor. Subsequently the single factor was named as per an earlier knowledge and according to the nature of the highest loading items. Table 3 shows

factors, eigenvalues, and percentages of variance and loadings of task oriented factors from a maximum likelihood analysis with varimax rotation.

Table 3: Factor Analysis Task-Orientation Leadership and problem solving skills (T-Score) Observed among the principals of public and private schools (N=149)

Eigenvalues		1.98
Variance Explained		36.82
Mean		46.59
Std. Deviation		6.06
Items		Factors loading
I would ask the (staff) members to work harder.		.63
I would get swamped by details.		59
I would tolerate postponement and uncertainty.		59
I would encourage overtime work.		49
I would assign group/staff members to particular tasl	ks.	.49
I would encourage the use of uniform procedures.		.40
I would keep the work moving at a rapid pace.		.34
I would push for increased production/output.		.31
Method: Principal Component Analysis.		
KMO		.66
Bartlett's test		75.39
Cronbach's Alpha		.55
Guttman Split-Half Coefficient	.52(4) .27(4)	.46

# Explanatory Correlations among People Oriented Leadership and problem solving skills, Task Oriented Leadership and problem solving skills and Job Sector

Task orientation and People orientation have positive significant correlation that is 0.43. Task orientation and Job sector have positive significant correlation that is 0.25. Similarly People orientation and Job sector have positive significant correlation that is 0.24. Shown in (Table 4). So the null hypothesis calming there is no significant correlation among task oriented leadership and problem solving skills, people oriented leadership and problem solving skills and job sector, there for rejected. These correlations are well explained by the model below.

**Hypothesis One:** There is no significant correlation among task-oriented leadership, peopleoriented leadership and problem-solving skills of principals in the public and private secondary schools in Bayelsa state.

Table 4: Correlations among Task Orientation, People Orientation and Problem solving skills (N: 149)

	M	SD	1	2	3
Task Orientation	76.59	6.06	1.00		
People Orientation	55.24	5.24	.43**	1.00	
Problem Solving skills	1.43	.49	.24**	.25**	1.00
**. Correlation is significant at	the 0.01 level (2-1	tailed).			

From Table 5 we get that there is a positive significant multiple correlation coefficient between task-orientation leadership and problem solving skills (r= 0.24, Sig= 0.01). Also there is a positive significant multiple correlation coefficient between people-orientation leadership and problem solving skills (r= 0.25, Sig= 0.01). And Table 4 is also showing that there is a positive significant multiple correlation coefficient between task-orientation leadership and problem solving skills (r= 0.43, Sig= 0.01). The null hypothesis postulating that there is no significant relationship among the task-orientation, people-orientation leadership and problem solving skills of the school principals. Therefore null hypothesis one is rejected. Table 4 is showing significant correlation among all three factors there is strong correlation between people-orientation and task-orientation and both are correlating with problem-solving skills with minor difference.

Table 5: Mean and Standard Deviation for People Orientation and Task Orientation in Public Sector and Private Sector (N=149)

Problem solving skills	Public sector		Pri	vate sector
	(N=85)		(N=	=64)
	Mean	S.D	Mean	S.D
Task Orientation	75.27	5.65	78.34	6.19
People Orientation	54.11	3.95	56.73	6.30

There was a positive significant multiple correlation coefficient (F= .9.92 and F=9.61) at 0.002 level between task-orientation and people-orientation. The F statistics evidenced statistically significant relationship between the attributes. In Table 5 we see that private school sector principals are more task-oriented (M=78.34, SD=6.19) and as well people-oriented (M=56.73, SD=6.30) in their profession, than public school sector principals. The same Table 5 is showing that public school sector principals are less task-oriented (M=75.27, SD=5.62) and less people-oriented (M=54.11, SD=3.90) in their profession, than private school sector principals.

**Hypothesis Two:** There is no significant difference in the relationship between task-oriented leadership and problem-solving skills of the public and private secondary schools principals in Bayelsa state.

Table 6: Fisher's z-test on the difference in the relationship between task-oriented leadership and problem-solving skills

Variable	N	r	Z-Calculated	Critical value	Decision
Private	149	0.41	0.84	1.96	Reject H <sub>0</sub>
Public		0.32			-

Table 6 shows that the relationship between task-oriented leadership and problem-solving skills of the principals in private schools is 0.41, and 0.32 for the principals in public secondary schools in Bayelsa state. It also shows the calculated value of Fisher's Z (0.84), which is less than the critical value (1.96), this shows that there is a significant, and the null hypothesis is rejected. Therefore, there is a significant difference in the relationship between task-oriented leadership and problem-solving skills of the public and private secondary schools' principals in Bayelsa state.

**Hypothesis Three:** There is no significant difference in the relationship between the peopleoriented leadership and problem-solving skills of the public and private secondary schools principals in Bayelsa state.

Table 7: Fisher's Z test on the difference in the relationship between people-oriented leadership and problem-solving skills of the public and private secondary schools' principals in Bayelsa state

Variable	N	r	Z-Calculated	Critical value	Decision
Private	149	0.48	108	1.96	Reject H <sub>0</sub>
Public		0.30			

Table 7 shows that the relationship between people-oriented leadership and problem-solving skills of principals in private schools is 0.48, while 0.30 in public secondary schools in Bayelsa state. It also shows a Z-calculated vale of (1.08) which is less than the critical (table) value of 1.96, and this means that there is a significant difference; therefore, the null hypothesis is rejected. This means that there is a significant difference in the relationship between people-oriented leadership and problem-solving skills of the public and private secondary schools' principals in Bayelsa state.

#### DISCUSSION OF FINDINGS

For the null hypotheses, there is no significant difference between task-oriented school principal's leadership and problem solving skills in public and private sector schools; and there is no significant difference between people-oriented school principals' in Public and Private sector schools therefore rejected. The result we got that private sector schools principals are more task-oriented and people-oriented and running in both leadership and problem solving skills with little difference. But the public sector schools principals are less task-oriented and people-oriented and they are running free rein leadership and problem solving skills, because of not having so much power in public sector to change the setup or they do not have this much potential and want no change in their school system.

# **CONCLUSION**

Firstly, from the study, it was established that there is correlation among task-oriented leadership, people-oriented leadership and problem-solving skills among principals in public and private secondary schools in Bayelsa state. Secondly, there exist significant difference in the relationship between task-oriented leadership and problem-solving skills of public and private secondary schools principals in Bayelsa state. Lastly, it was also established in this study that there exist a difference in the relationship between the people-oriented leadership and problem-solving skills among principals of private secondary schools in Bayelsa state.

#### **Recommendations**

• Government should help to improve the effectiveness of leadership and problem solving in schools settings.

- Government and stakeholders should also encourage the participation of private schools
  principals to be involved in this practice, as their roles are critical in creating school
  environment that lead to high students academic performance.
- Solving problems is a quintessential aspect of educational leaders, and as such the Government should engage both public and private school principals to some levels of awareness through periodic workshops and seminars.

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