



## **Determinants of Teachers Innovative Behaviours and Secondary Education Goals Attainment in Rivers State**

Umeh, Mary Hilary Carol<sup>1</sup>; Opiti, Onoriode Anthony<sup>2</sup> & Okwu, Francis Bogbula<sup>3</sup>

<sup>1</sup>Education Foundation/GST French,  
Tansian University  
Oba-Umunya, Anambra State, Nigeria  
07034704668, [umehmary68@gmail.com](mailto:umehmary68@gmail.com)

<sup>1</sup>Quality Assurance Department,  
Local Government Education Authority,  
Aboh, Delta State, Nigeria  
07036634187, [onorideapiti@gmail.com](mailto:onorideapiti@gmail.com)

<sup>3</sup>Department of Educational Management,  
Faculty of Education, Rivers State University,  
Port Harcourt, Rivers State, Nigeria  
08063948300, [okwufrancis728@yahoo.com](mailto:okwufrancis728@yahoo.com)

### **ABSTRACT**

The study investigated the determinants of teacher's innovative behaviour and secondary education goals attainment in Rivers State. There were three research questions and three corresponding null hypotheses that guided the study. Design used for the study was correlational design. Population of the study consisted of all the 7, 852 teachers in all the 262 public senior secondary schools in Rivers State while 367 teachers were sampled for the study using stratified random sampling technique. Sample size for the study was determined using Cochran's minimum sample size determination technique. The instrument used for data collection was two sets of questionnaire tagged "Teachers Innovative Behaviour Scale" (TIBS) and "Secondary Education Goals Attainment Scale" (SEGAS). The instruments were face and content validated by two experts in the Department of Educational Management, University of Port Harcourt. Reliability index of the instruments was 0.84 and 0.87 and this was determined using Cronbach alpha statistics. 359 copies representing 97.8% of the 367 copies of questionnaire administered were retrieved. Research questions raised were answered using Pearson Product Moment Correlation co-efficient while the hypotheses were tested using t-test of relationship at 0.05 level of significance. The findings of the study showed that work characteristics has a very high positive relationship of  $r=0.69$  with secondary schools goal attainment in Rivers while social capital and leadership practices have very low positive relationship of  $r=0.18$  and  $r=0.24$  respectively with secondary schools goal attainment in Rivers State. It was recommended based on the findings of the study that relevant resources should be provided in the school environment by principals for teachers to be able to discharge their educational responsibilities professionally for secondary education goal attainment in Rivers State.

**Keywords:** Teachers, Innovative Behaviour, Secondary Education, Goal Attainment, Rivers State

## INTRODUCTION

Education is a significant tool for propelling any nation whether developed or developing towards the path of sustained growth and development. This is the reason why investment in education has become a joint responsibility among individuals, institutions and governments around the world. This explains why the education sector has continued to draw great attention in terms of budgetary allocation (Ahmed, 2015) compared to other sectors of the national economy in any nation. Secondary education has equally drawn the same level of attention as it contributes significantly to the educational development of the entire nation. This level of education does not only help correct the shortcomings of primary education in students but also prepare students for tertiary level of education as well as provide middle level manpower for national growth and development. This is why educational stakeholders including teachers who are at the heart of teaching and learning activities in the classroom are expected to give in their best services for the attainment of the goals and objectives of secondary education in the nation.

Teachers who act as in-loco-parentis to students are expected to go beyond merely teaching and executing other administrative duties to bringing in innovative practices into the school system for the goals and objectives of secondary education to be achieved in the school where they have been deployed. However, the school environment must be conducive for the teacher to be able to carry out innovative behaviours that will contribute to the goals and objectives of education in their school. Li and Zheng (2014:447) asserted that “innovative behavior is an act of generating, promoting and application of innovative thinking in the organization for the purpose of personal and organizational performance, which enables employees to use innovative ways of thinking, quickly and accurately respond to customer demand changes”. Teachers innovative behaviour is therefore indispensable for the goals and objectives of secondary education to be achieved in today’s contemporary education system.

The innovativeness of any teacher is determined to a large extent by the work environment where the teacher operates. The work environment must be suitable with the required working resources if the teacher must be able to bring in creativity into his or her service delivery. The work environment also goes a long way to determine the job experiences of the teacher which contribute to the teacher’s innovativeness. In the same manner, the work routine of the teacher improves on the teacher’s job competence which enables him or her to be able to render better educational services that will contribute to the attainment of outlined educational goals and objectives.

The social group or link which the teacher belongs to in the school also goes a long way to influence their innovative ability irrespective of the type or level of education. Educational scholars have pointed out that the innovative behaviour of the teacher is not only a product of individual ability but also depends on the work interaction that the teacher has been able to establish over the year. This forms part of the social capital of the teacher which is important for bringing in innovativeness into the school environment. The social interaction established by the teacher helps to enhance emotional reciprocity, build social trust and justice which is important for teachers to share workplace experiences which helps to promote quality job performance.

Loury as cited in Rogošić and Baranović (2016) asserted that the quality of job performance of any employee often depend on their social background. Similarly, it is believed that the more teachers interact with educational stakeholders around their work environment, the easier it becomes to gather and practice innovative behaviours that will satisfy the educational needs of all stakeholders. Similarly, Abdul-Hakim, Ismail, Razak and Azam (2012) pointed out that just as student’s academic success depends on demographic variables of their individual families, so does the social group of the teacher influence their innovativeness.

Aslandogan and Cetin as cited in Acar (2011:458) equally pointed out social capital helps to promote teachers on-the-job networking and this is important for the success of the goals and objectives of education. As teachers continue to communicate with people in their social space, innovative ideas are exchanged which can be used to actualize the goals and objectives of education in their school. In the same manner, the leadership practice of those in authority in the school also goes a long way to influence the building of an innovative teaching force in the school. This is why Hutton (2014:93) stated that: if optimal performance will be realized at the leadership level, not only are principals to be trained, but the whole central leadership of the school system such as vice principals for a comprehensive preparation for authentic education transformation. Those who are in position of authority in the school must therefore be professional and democratic in their leadership

approach so as to bring in innovativeness in the administrative and academic activities in the school. This will contribute to the attainment of the goals and objectives of secondary education in the short and long run.

### **Purpose of the Study**

The purpose of the study was to investigate the determinants of teachers innovative behaviours and secondary education goals attainment in Rivers State:

1. ascertain the relationship between work characteristics and Secondary Education Goals Attainment in Rivers State
2. determine the relationship between social capital and Secondary Education Goals Attainment in Rivers State
3. examine the relationship between leadership practices and Secondary Education Goals Attainment in Rivers State
4. ascertain the joint relationship between the determinants of teachers innovative behaviour and Secondary Education Goals Attainment in Rivers State

### **Research Questions**

The following research questions were answered in the study:

1. What is the relationship between work characteristics and Secondary Education Goals Attainment in Rivers State?
2. What is the relationship between social capital and Secondary Education Goals Attainment in Rivers State?
3. What is the relationship between leadership practices and Secondary Education Goals Attainment in Rivers State?
4. What is the joint relationship between the determinants of teachers innovative behaviour and Secondary Education Goals Attainment in Rivers State?

### **Hypotheses**

The following hypotheses were tested at 0.05 level of significance:

1. There is no significant relationship between work characteristics and Secondary Education Goals Attainment in Rivers State
2. There is no significant relationship between social capital and Secondary Education Goals Attainment in Rivers State
3. There is no significant relationship between leadership practices and Secondary Education Goals Attainment in Rivers State
4. There is no significant joint relationship between the determinants of teachers innovative behaviour and Secondary Education Goals Attainment in Rivers State

### **METHODOLOGY**

The design adopted for the study was correlational design. The population of the study comprised all the 7, 852 teachers in all the 262 public senior secondary schools in Rivers State out of which 367 teachers were sampled for the study through stratified random sampling technique. The sample size for the study was determined using Cochran's minimum sample size determination technique. Instrument used for data collection was two sets of questionnaire titled "Teachers Innovative Behaviour Scale" (TIBS) and "Secondary Education Goals Attainment Scale" (SEGAS). The instruments were responded to on a four-point modified Likert scale of Strongly Agreed (SA), Agreed (A), Disagreed (D) and Strongly Disagreed (SD) with values of 4, 3, 2 and 1 respectively. The instruments were face and content validated by two experts in the Department of Educational Management, University of Port Harcourt. The reliability index of the instruments was 0.84 and 0.87 respectively using Cronbach alpha statistics. 359 copies representing 97.8% of the 367 copies of questionnaire administered were retrieved. The research questions raised were answered using Pearson Product Moment Correlation co-efficient while the hypotheses were tested using t-test of relationship at 0.05 level of significance.

**RESULTS**

**Research Question One:** *What is the relationship between work characteristics and secondary education goals attainment in Rivers State?*

**Table 1: Pearson Product Moment Correlation Co-Efficient of the Relationship between Work Characteristics and Secondary Education Goals Attainment in Rivers State**

Variable	n	r	r <sup>2</sup>	Remark
Work Characteristics Secondary Education Goals Attainment	359	0.69	0.4761	Very high positive relationship

Table 1 showed that the value of r is 0.69. This implied that there existed a very high positive relationship between work characteristics and secondary education goals attainment in Rivers State. Similarly, the value of r<sup>2</sup> of 0.4761 implied that 47.61% of secondary educational goal attainment is predicted by teachers work characteristics while the other percentage is predicted by other variables.

**Research Question Two:** *What is the relationship between social capital and secondary education goals attainment in Rivers State?*

**Table 2: Pearson Product Moment Correlation Co-Efficient of the Relationship between Social Capital and Secondary Education Goals Attainment in Rivers State**

Variable	n	r	r <sup>2</sup>	Remark
Social Capital Secondary Education Goals Attainment	359	0.18	0.0324	Very low positive relationship

In table 2, it was revealed that the value of r was 0.18 indicating a very low positive relationship between social capital and secondary education goals attainment in Rivers State. The value of r<sup>2</sup> of 0.0324 equally implied that social capital predicted 3.24% of secondary education goals attainment in Rivers State while the other percentage is predicted by other external factors.

**Research Question Three:** *What is the relationship between leadership practices and secondary education goals attainment in Rivers State?*

**Table 3: Pearson Product Moment Correlation Co-Efficient of the Relationship between Leadership Practices and Secondary Education Goals Attainment in Rivers State**

Variable	n	r	r <sup>2</sup>	Remark
Leadership Practices Secondary Education Goals Attainment	359	0.24	0.0576	Very low positive relationship

Table 3 indicated that the value of r of 0.24 implied that a very low positive relationship existed between leadership practices and secondary education goals attainment in Rivers State. In a related manner, the value of r<sup>2</sup> of 0.0576 implied that leadership practices predicted 5.76% of secondary education goals attainment in Rivers State while the other percentage is predicted by other external factors.

**Research Question Four:** *What is the joint relationship between the determinants of teachers' innovative behaviour and Secondary Education Goals Attainment in Rivers State?*

**Table 4: Multiple Regression Analysis of the Joint Relationship between the Determinants of Teachers Innovative Behaviour and Secondary Education Goals Attainment in Rivers State**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.833 <sup>a</sup>	.693	.691	1.94714

In table 4, the value of r<sup>2</sup> of 0.696 suggested that work characteristics, social capital and leadership practices jointly predicted 69.3% of secondary education goals attainment in Rivers State while the remaining 30.7% was predicted by other variables in the school.

**Test of Hypotheses**

**Hypothesis One:** There is no significant relationship between work characteristics and Secondary Education Goals Attainment in Rivers State

**Table 5: t-test Analysis of no Significant Relationship between Work Characteristics and Secondary Education Goals Attainment in Rivers State**

Variable	n	df	t-cal.	t-crit.	Level of significance	Decision
Work Characteristics Secondary Education Goals Attainment	359	357 2	18.11	1.96	0.05	H <sub>0</sub> was rejected

In table 5, the value of t-cal. at 357 degrees of freedom and 0.05 level of significance was 1.96 which was below the value of t-cal. of 18.11. Therefore, the null hypothesis was rejected indicating that there was a significant relationship between work characteristics and secondary education goals attainment in Rivers State.

**Hypothesis Two:** There is no significant relationship between social capital and Secondary Education Goals Attainment in Rivers State

**Table 6: t-test Analysis of no Significant Relationship between Social Capital and Secondary Education Goals Attainment in Rivers State**

Variable	n	df	t-cal.	t-crit.	Level of significance	Decision
Social Capital Secondary Education Goals Attainment	359	357 2	3.47	1.96	0.05	H <sub>0</sub> was rejected

Table 6 indicated that the value of t-cal. at 357 degrees of freedom and 0.05 level of significance was 1.96 which was below the value of t-cal. of 3.47. Therefore, the null hypothesis was rejected implying that there was a significant relationship between social capital and Secondary Education Goals Attainment in Rivers State.

**Hypothesis Three:** There is no significant relationship between leadership practices and secondary education goals attainment in Rivers State

**Table 7: t-test Analysis of no Significant Relationship between Leadership Practices and Secondary Education Goals Attainment in Rivers State**

Variable	n	df	t-cal.	t-crit.	Level of significance	Decision
Leadership Practices Secondary Education Goals Attainment	359	357 2	4.67	1.96	0.05	H <sub>0</sub> was rejected

In table 7, it was revealed that the value of t-cal. at 357 degrees of freedom and 0.05 level of significance was 1.96 which was below the value of t-cal. of 4.67. Therefore, the null hypothesis was rejected showing that there was a significant relationship between leadership practices and Secondary Education Goals Attainment in Rivers State.

**Hypothesis Four:** There is no significant joint relationship between the determinants of teachers innovative behaviour and secondary education goals attainment in Rivers State

**Table 8: One-Way Analysis of Variance of no Significant Joint Relationship between the Determinants of Teachers Innovative Behaviour and Secondary Education Goals Attainment in Rivers State**

Model		Sum of Squares	df	Mean Square	F-cal.	F-crit.	Sig.	Decision
1	Regression	3043.152	3	1014.384			.000 <sup>b</sup>	Ho was rejected
	Residual	1345.935	355	3.791	267.551	2.61		
	Total	4389.086	358					

Table 8 indicated that the value of f-cal. was 267.551 while the value of f-crit. was 2.61. Therefore, since the value of f-cal. of 267.551 was more than the value of f-crit. of 2.61, the null hypothesis was rejected indicating that there was a significant joint relationship between the determinants of teachers innovative behaviour and secondary education goals attainment in Rivers State.

## DISCUSSION OF FINDINGS

### Work Characteristics and Secondary Education Goals Attainment in Rivers State

The work environment where a teacher operates from has a great influence on their ability to contribute to the attainment to the goals and objectives of education in whatever school they are deployed. These work characteristics which includes access to work tools and equipment as well as the work culture goes a long way to promote the ingenuity of the teacher which enhances their ability to contribute to the educational goals of the school. The study however shows that there existed a high positive relationship between work characteristic and secondary education goals attainment in Rivers State. This suggests that when teachers have an enabling environment in terms of access to work tools as well as work place support, they will be able to contribute to the attainment of the goals and objectives of education in their individual schools. This position agreed with the findings of the study conducted by Hernaus and Mikuli (2014) which revealed that only knowledge characteristics of work design exhibit a significant effect on both dimensions of work behavior, while task and social characteristics showed different effects on task and contextual performance, respectively. This finding exposes just like the finding of this study that when all work characteristics are given adequate attention, they contribute more to organizational outcome than other work place factors such as social characteristics.

Similarly, the study showed a significant relationship between work characteristics and secondary education goals attainment. This implied that improvement in the work characteristics of teachers will enable them contribute to better educational goals and objectives. This is not different from the outcome of the findings of the study conducted by Akareem and Hossain (2016) which showed that extracurricular activities, previous organizational result had significant influence on quality of higher education. This further indicated that the work environment and characteristics greatly influences the attainment of the goals of secondary education by teachers. This finding further establishes the need for the creation of the right work environment for teachers to be able to contribute to the attainment of the goals and objectives of secondary education in Rivers State.

### Social Capital and Secondary Education Goals Attainment in Rivers State

Teachers in secondary schools interact from time to time on how to deal with instructional challenges that pose as a threat to the achievement of their educational goals and objectives. This social interaction becomes a useful instrument by which educational challenges can be resolved. However, the finding of this study showed that social capital developed by teachers in their school has a very low positive relationship with the attainment of the goals of secondary education in Rivers State. This finding suggests that the social interaction which teachers build in their school has a limited influence on the attainment of secondary education goals in Rivers State. However, this may not be unconnected with the fact that some teachers use their social influence and interaction for other purposes other than the pursuit of educational goals and objectives such as resolving personal issues. Abrar-ul-haq, Akram, Muhammad and Farooq (2015) agreed with this assertion when they

pointed out from the findings of their study that social capital resources have direct and indirect effects on personality development of educational stakeholders. This development suggests the need for teachers to be directed and compelled to use their social capital for the actualization of outlined educational goals and objectives.

Furthermore, the low positive relationship between teachers social capital and secondary education goals attainment may also not be unconnected with the fact that teachers lack the required exposure on how their social influences can be used to accelerate the attainment of the goals and objectives of secondary education. This is because the findings of the study revealed that a significant relationship exists between teachers social capital and secondary education goal attainment. This calls for the need for teachers to be trained on how they can use their social connection to further the attainment of the educational goals of the school. Similarly study by Byun, Meece, Irvin and Hutchins (2012) showed that the social class and capital of students has a 53% influence on their educational aspirations. This trend can also apply to the teacher if they are adequately assisted and guided to build educational social capital which will help to enhance the attainment of the goals of secondary education in Rivers State.

### **Leadership Practices and Secondary Education Goals Attainment in Rivers State**

The leadership practices of educational administrators and managers in any school system have an influence on the innovative behaviour of teachers which in turn determines the extent to which educational goals and objectives will be attained. However, the findings of the study indicated that leadership practices of these school administrators on teachers activities has a low positive relationship on the attainment of educational goals and objectives in these schools. This tends to suggest that the principals in these schools are not fully assisting their teachers through their leadership activities on how they can contribute innovatively to the goals and objectives of education in their schools. The findings of this study however differ from that of Boonla and Treputtharat (2014) which revealed that leadership practices of school administrators in the study area on school effectiveness was at high level. However, it was revealed that this was as a result of the support that these administrators give to their teachers. This might be an area where the principals in secondary schools in Rivers State are lacking. This will go a long way to enable teachers express their creativity which will contribute to educational goals attainment in these schools.

School administrators leadership practices should not be limited to simply providing guidance to teachers but also supporting them and helping to educate them on how to improve on their service efficiency and effectiveness. This is because the significant relationship revealed in the findings of this study with the attainment of educational goals and objectives in the study area suggests that if principals are professional in their leadership practices, educational goals attainment will become easy to actualized. This position aligns with the findings of the study carried out by Wilson-Morgan (2015) which indicated that significant and positive relationship existed between school leadership practices of principals and teachers and classroom management as well as perceived academic performance. This finding places more responsibilities on school administrators and managers to be proactive in their relationship with their teachers as the leadership assistance provided by these leaders to the teachers will go a long way to assist in the actualization of the goals and objectives of secondary education in Rivers State.

### **Teachers innovative behaviour and Secondary Education Goals Attainment in Rivers State**

Teacher's innovative behaviour is important for the success of any school system. However, there are different factors that influence teachers innovative behaviour for the attainment of the goals and objectives of secondary education. The school as an organization can only achieve its goals and objectives when factors that determine teachers innovative behaviours are given adequate attention. It was revealed in the findings of this study that these factors such as work characteristics, social capital and leadership practices can jointly predict 69.3% of secondary school goals attainment in Rivers State. Dan, Xu, Liu, Hou, Liu and Ma (2018) agreed with the position of this finding when they posited in the finding of their study that innovative behaviour and self-efficacy had medium and high level of relationship on colleague solidarity. It was also revealed that innovative behaviour and its determinants have positive correlation on colleague solidarity which has great impact on organizational goals and objectives as well as performance.

In a related manner, Yonla, Johnmark, Liman, Gani, Sortu and Longdi (2019) revealed in the findings of their study which agreed with the outcome of this study that innovative behaviour has a significant effect on psychological capital and self-employment among graduates. This finding exposes more insight on the fact that if innovative behaviours among education stakeholders are adequately managed across any level of education, it will become easy for educational outcomes to be achieved in the short and long run.

## CONCLUSION

The study concluded as follows based on the findings of the study:

Work characteristics has a strong positive relationship with educational goals attainment in secondary schools in Rivers State while social capital and leadership practices in these schools have significantly low positive relationship with secondary school goals attainment in Rivers State.

## RECOMMENDATIONS

The following recommendations are made in line with the findings of the study:

1. Principals in secondary schools in Rivers State need to ensure that relevant educational resources are provided in the school environment that will make the school ideal for teachers to discharge their educational responsibilities professionally for the goals and objectives of education to be achieved in Rivers State.
2. Teachers should be mandated to enroll and be active in relevant educational clubs and associations that will help harness their skill and development as well as assist them build professional social interaction and groups that will help them contribute meaningfully to the outlined goals and objectives of secondary education in Rivers State.
3. Principals and heads of departments in these secondary schools should be regularly trained on how to use their leadership privileges to assist teachers under their control by providing them with professional support which will help improve on their service efficiency and effectiveness for the goals of secondary education to be achieved in Rivers State.

## REFERENCES

- Abdul-Hakim, R., Ismail, R., Razak, A., & Azam, N. (2012). Social capital and educational attainment among rural community in Malaysia: *International Journal of Management Studies*, 19(1), 53-71
- Abrar-ul-haq, M., Akram, E., Muhammad, R. & Farooq, A. (2015). The impact of social capital on educational attainment: Evidence from rural areas of Pakistan. *Research on Humanities and Social Sciences*, 5(13), 95-102
- Acar, E. (2011). Effects of social capital on academic success: A narrative synthesis. *Educational Research and Reviews*, 6(6), 456-461
- Ahmed, S. (2015). Public and private higher education financing in Nigeria: *European Scientific Journal*, 11(7), 92-109
- Akareem, H. S. & Hossain, S. S. (2016). Determinants of education quality: What makes students' perception different? *Open Review of Educational Research*, 3(1), 52-67
- Boonla, D. & Treputtharat, S. (2014). The relationship between the leadership style and school effectiveness in school under the office of Secondary Education Area 20: *Procedia-Social and Behavioral Sciences*, 112, 991-996
- Byun, S., Meece, J. L., Irvin, M. J. & Hutchins, B. C. (2012). The role of social capital in educational aspirations of rural youth: *Rural Sociology*, 77(3), 355-379
- Dan, X., Xu, S., Liu, J., Hou, R., Liu, Y. & Ma, H. (2018). Innovative behaviour and career success: Mediating roles of self-efficacy and colleague solidarity of nurses. *International Journal of Nursing Sciences*, 5(3), 275-280
- Dierdorff, E.C. & Morgeson, F.P. (2013). Getting what the occupation gives: Exploring multilevel links between work design and occupational values. *Personnel Psychology*, 66(3), 687-721
- Hernaus, T. & Mikuli, J. (2014). Work characteristics and work performance of knowledge workers: *EuroMed Journal of Business*, 9(3), 268-292



- Hutton, D. M. (2014). Preparing the principal to drive the goals of education for all: A conceptual case developmental model. *Research in Comparative and International Education*, 9(1), 92-110
- Li, X. & Zheng, Y. (2014). The influential factors of employees' innovative behavior and the management advices: *Journal of Service Science and Management*, 7, 446-450
- Rogošić, S. & Baranović, B. (2016). Social capital and educational achievements: Coleman vs. Bourdieu. *Center for Educational Policy Studies*, 6(2), 81-100
- Wilson-Morgan, L. N. (2015). *The influence of school leadership practices on classroom management, school environment, and academic underperformance*. Retrieved from <https://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=1451&context=dissertations>
- Yan, M., Peng, K.Z. & Francesco, A.M. (2011). The differential effects of job design on knowledge workers and manual workers: A quasi-experimental field study in China. *Human Resource Management*, 50(3), 407-424
- Yonla, M. N., Johnmark, R. D., Liman, J. A., Gani, J. B., Sortu, M. S. & Longdi, D. J. (2019). The role of innovative behaviour in the relationship between psychological capital and self-employment among graduates in Nigeria: *European Journal of Business and Innovation Research*, 7(5), 42-65