

## Relative Contributions of Caregivers' Level of Education, Role Definition and Average Household Income to caregiver Involvement in Children's Emergent Reading

Gladwell N. Wambiri  
Kenyatta University

Mary N. Ndani  
Department of Early Childhood Studies

### Abstract

Recent studies have consistently reported low reading achievement levels among primary school children in Kenya. Reading is a very critical component of children's development. Many aspects of learning at school revolve around this skill. Being the media via which other subjects are taught and learnt, reading is very significant and could contribute to failure in school. Reading is not only a school agenda. Children also acquire early reading skills through specific experiences at home that require support of other adults besides teachers. Parent involvement in children's early reading development has been found to play a very critical role in the child's later reading success. Parents who take an active role in children's reading foster children's lifelong passion for reading, which in turn lead to improved children's performance in learning at school. However, majority of the parents do not perceive themselves as crucial partners in children's emergent reading development. This paper is based on a study that compared the relative contributions of the parents' level of education, parents' role definition and the average household income, to parents' involvement in children's emergent reading development. The authors argue that although these three factors positively correlate with parents' involvement in children's reading development, parents' perceptions about their role in children's reading development is the most important predictor of their involvement in terms of direct and indirect behaviours and strategies with children around print. Interventions to improve reading achievement levels need to address parent involvement in children's reading. Such interventions should place priority in helping parents to correctly define their role in this important aspect of children's development.

**Key words:** caregivers, children, education, role definition, household income, emergent reading.

### Introduction

Parents' involvement in children's early reading experiences has been associated with stronger pre-literacy skills, literacy experiences during the preschool years and subsequent reading achievement (Arnold, et al., 2008; Clark, 2007; Neuman & Dickinson, 2001; Sanders and Epstein, 1998). These benefits are related to the subsequent interest in reading, attitudes towards reading and attentiveness in the classroom (Rowe, 1991). According to Hoover-Dempsey & Sandler (1995) specific variables determine the patterns of influence in the parents' involvement process. Consequently, numerous studies have sought to establish the factors associated with parent involvement in this respect.

Many of these studies have found family socioeconomic status (SES) and parent level of education to be key players in explaining the level of parental involvement in their children's emergent reading. The studies reported SES to correlate positively with parents' involvement in children's reading development (Arnold, et al., 2008; Wambiri, 2014), and by extension influencing children's reading achievement (Begum, 2007). In addition, other studies have shown that children from low income families start school already behind others and the consequent disadvantage persists overtime (Kupcha-Szrom, 2011).

Studies on the relationship between parent involvement in their children's emergent reading and their level of education have also found a positive relationship between the two variables. In Wambiri's (ibid) study parents with more years of schooling tended to use appropriate behaviours and strategies with children around print more than those with less years of schooling. Mother's education has also been reported as an essential factor on children's reading. In a study by Raley (2007), College-educated mothers were found to read to children more often and were more involved in their schooling when compared with less educated mothers. In another study conducted by Chia-Hui & Hwa-Wei (2015), mothers' education was found to be related to reading attitudes and behaviors, children's early literacy experience at home, recent literacy activities with children, and home literacy resources. In addition, mothers with a high school education and above had more positive reading attitudes and frequently read at home. They also participated in their children's reading activities. Mothers with high education levels have also been said to be more likely to promote literacy in the home (Canadian Council on Learning, 2006).

Though variations in parents' level of education and family income have been associated with emergent literacy development, such associations have not always been consistent. For instance, Wambiri (2007) reported significant positive correlation between caregivers' level of education and direct parents' behaviours with children around print. This study, however, reported an insignificant relationship between parents' level of education and their indirect behaviours and strategies with children around print. In another study Hammer & Miccio (2004) did not support the relationship between the home environments of the poor or uneducated families and opportunities for language development. Further Ortiz (2004) and Auerbach (1989) showed that poor minority families valued literacy and also provided a rich literacy environment for their children. Fitzgerald et al (1991) concurred with these findings. In their study, parental literacy levels correlated negatively with perceptions of the importance of literacy artifacts and events. Compared to parents with high literacy levels, those with lower levels appreciated the importance of literacy artifacts and events towards children's literacy development more. These inconsistencies suggest that there are variables other than parents' level of education and social economic status that shape parent involvement.

Beliefs and perceptions held by parents have not received much attention in research on parent involvement in children's reading. These variables could perhaps inform the inconsistent findings reported in research. Stoughton (1984) explored the relationship between grade 4 children's reading and parental behaviors and attitudes and found that parental behaviors and attitudes were linearly predictive of children's reading achievement. Parents' beliefs about involvement in children's reading, as a result of their awareness of such involvement could determine the way they define their role in children's reading development.

According to Hoover-Dempsey & Sandler (1997), parents decide to get involved in children's education based on the way they construct their role in that involvement. Thus role construction could influence and shape parent involvement irrespective of the presence of other favorable factors. In this regard, a study by Skuza-Richard-Louis (1997) found that parents' lack of involvement in children's education is partly due to lack of awareness of the importance of their involvement. Such lack of awareness could make parents think they have nothing to do with the child's reading. As such the parents may perceive their role in children's reading development as inconsequential which then could lead to lack of involvement. On the contrary, as Cuckle (1996) advances, when parents believe that reading stories with their children provides an appropriate model for reading, they demonstrate the belief by reading to children. This suggests that the reading relationships between parents and their children could be shaped by parental attitudes and beliefs about reading.

Consistent with this observation Conrad (2008) found parents' belief scores regarding their involvement in children's literacy development and learning to be significantly and positively associated with children's exposure to books, parents modelling reading, strategies used by parents during read alouds, and children's reading interest. Similarly, studies by Sigel (1985) and Meighan (1989) showed that parents who believed that they had a role to play in the education of their children were more actively involved than those who did not. Reports by Sigel (1985), Schaefer and Edgerton (1985) and Meighan (1989), also indicated that parents who believed they should be involved in their children's education were more likely to be involved than parents who did not accept this role definition. Consistent to these findings, a study conducted by Wambiri (2014), reported that although majority of the parents (74%) had a negative role definition of their involvement in children's emergent reading development, parents' role definition correlated positively with their levels of involvement in their children's activities around print materials. These results were also reported by Kimathi (2014). In this study, parents with high role construction scored high in the cognitive, behavioural and modeling dimensions of parental involvement in children's reading.

The above studies have not explored the relative contribution of the three variables; Parents' social economic status, level of education and role construction. The studies have also focused on parents while other caregivers who are equally important in aiding children's emergent reading have been ignored. This study therefore sought to compare the contributions of these variables towards caregivers' involvement in children's emergent literacy.

### **Objectives**

1. To determine the relative contributions of caregivers' years of schooling (CYS), average household income (AHI) and caregivers' role definition (AHI), to caregivers' direct behaviours and strategies (CDBS) with children around print.
2. To determine the relative contributions of caregivers' years of schooling (CYS), average household income (AHI) and caregivers' role definition (CRD), to caregivers' indirect behaviours and strategies (CIBS) with children around print.

3. To determine the relative contributions of caregivers' years of schooling (CYS), average household income (AHI) and caregivers' role definition (CRD), to caregivers' total behaviours and strategies (CTBS) with children around print.

### **Methodology**

The target population for this study was caregivers and their 30 to 42 months old children. Children in this age bracket were selected because they had not started formal reading instruction and were thus in the emergent reading stage of reading development which was the focus of the study. All the children in the study sample did not attend school. They stayed at home with their mothers or hired ayahs. The questionnaire was distributed to 157 caregivers (of whom 94 were parents and 63 were ayahs. A total of 133 caregivers responded.

A researcher-developed questionnaire was used to obtain information concerning the contextual and process variables. The questionnaire was used because it is a valid instrument for obtaining information that is not observable and is difficult to infer from observations. Questionnaires have several other advantages. They allow the selection of a large and representative sample. One major disadvantage of the questionnaire is that members of low educated respondents tend not to answer or are unable to express their responses clearly due to poor reading and writing skills. The researchers presented the questionnaire to such caregivers orally.

The caregiver was supposed to indicate his or her level of education by putting a tick against the relevant level. A caregivers' behaviours' checklist consisted of a list of expected caregiver behaviours and strategies. The caregiver was supposed to indicate how often s/he had performed each behaviour with the child. There were four possible frequency choices namely; consistently, moderately, rarely and never. Caregiver behaviours and strategies were scored according to whether they were appropriate or inappropriate. Appropriate behaviours are those that have a positive impact on children's emergent reading development. Inappropriate caregiver behaviours and strategies are those that have a negative impact on children's emergent reading development. Appropriate behaviours and strategies were given a score of three for consistent, two for moderate, one for rarely and zero for never. Inappropriate behaviours and strategies were given a score of zero for never, 'minus one' (-1) for rarely, 'minus two' (-2) for moderately and 'minus three' (-3) for consistently. Three caregiver scores emerged for each caregiver: Caregiver Direct Behaviour Score (CDBS), Caregiver Indirect Behaviour Score (CIBS), and Caregiver Total Behaviour Score (CTBS). CDBS was obtained by adding the scores for all the direct behaviours and strategies. CIBS was obtained by adding all the scores for the indirect behaviours and strategies and the CTBS was obtained by adding the scores for all the behaviours and strategies for each caregiver.

The household income was estimated using a questionnaire in which the parent(s) indicated monthly incomes from the mother and the father or guardian from various sources including salary and other sources. The Average household income was obtained by adding up the income from the various sources for each family.

Caregiver's role definition questionnaire consisted of structured items concerning caregivers' perceptions about their role in children's emergent reading development. These items consisted of a number of alternatives on a 5-point likert scale and the respondent was required to indicate one of the alternatives as his or her response. The respondent was supposed to indicate whether he or she strongly agreed, agreed, was not sure, disagreed or strongly disagreed. For positive statements strongly agreed was given a score of five, agreed was given a score of four, not sure was given a score of three, disagreed a score of two and strongly disagreed a score of one. For negative statements strongly agree was given a score of one, agreed was given a score of two, not sure was given a score of three, disagreed a score of four and strongly disagreed a score of five.

### **Findings and discussion**

#### **Demographic data**

The proportions of caregivers by their level of education are presented in Table 1.

**Table 1. Caregivers by Level of Education**

Level of Education	Frequency	Percent
Unschoolled	7	5.3
Primary	39	29.3
Secondary & High school	46	38.4
College & University	25	27.1
Total	133	100

Majority of the caregivers had secondary education. The least category of caregivers was the unschooled. 94.8 % of the caregivers had completed primary school education and above. The proportion of caregivers who had not completed primary school was only 5.3%.

**Table 2. Frequencies and Percentages of Caregivers by Role Definition**

Role Definition	Frequency	Percent
Positive	35	25.6
Negative	98	73.7
Total	133	100

The larger proportion (73.7%) of caregivers surveyed had a negative role definition score. Only 25.6% of the parents had a positive role definition. These findings are comparable to those of another study conducted in Kenya by Kimathi (2014), who reported that 81% of parents had a low role construction concerning parent involvement in their primary standard three children's reading at home.

Table 3 shows the frequencies and percent values of the ranges of average household income.

**Table 3 Frequencies And Percent Values Of The Ranges Of The Average Household Income (AHI)**

Range of AHI (KSH)	Frequency	Percent
Less than 5,000	36	28.3
5,000 – 20,000	45	35.4
20,001 – 50,000	25	19.7
30,001 – 50,000	14	11.0
50,001 – 80,000	5	3.9
80,001 – 100,000	2	1.6
Total	127	100

The largest category of households (35.4%) had an average household income of between 5,000 and 20,000 Kenya shillings. 16.5% of the households had an income of 50,000 Kenya shillings and above.

### Caregiver Behaviour Scores

Caregivers' responses about their behaviours with children around print environment were coded to give two kinds of behaviour scores: caregivers' direct behaviour and strategies (CDBS) scores and caregivers' indirect behavior and strategies (CIBS) scores. Table 4 summarizes these scores.

**Table 4. Caregiver Behaviour Scores**

Score	Mean	Standard Deviation	Coefficient of Variance
CDBS	15.35	11.13	73.6
CIBS	3.31	3.06	92.4

The CDBS scores were higher than the CIBS. The coefficients of variance for CDBS and CIBS were 73.6 and 92.4 respectively. This showed that these scores were highly scattered. This suggested that the population was not homogeneous in reference to their use of direct and indirect behaviours and strategies. The CIBS were more widely scattered than the CDBS.

Hypotheses **Ho1 Ho2 and Ho3** were tested using a step wise regression analysis to establish the relative contribution of CDBS, CIBS and caregiver total behavior and strategies (CTBS) around print materials.

**Ho1: CYS, CRD and AHI Contribute Equally To Caregivers’ Direct Behaviour Scores**

Table 5 presents results of the test of this hypothesis.

**Table 5. Coefficients for CDBS**

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta		
1	(Constant)	11.110	2.333		4.762	.000
	CRD	.693	.093	.552	7.433	.000
	AHI	.108	.047	.173	2.309	.023
	CYS	.432	.200	.160	2.157	.033

Dependent Variable: Caregiver Direct Behaviour Score

The CRD, AHI and CYS were significant in predicting the direct behaviour scores (CDBS). The Beta values for the independent contributions of CRD, AHI and CYS were 0.552, 0.173 and 0.060, respectively. The three independent variables had a significant effect on the caregiver direct behaviour scores. CRD explained 55.2%, AHI explained 17.3% and CYS 6% of the CDBS. CRD had a greater effect on the CDBS than the AHI, which in turn had a greater effect than the CYS. Caregivers’ perceptions about their role in children’s emergent reading development had a greater effect on the frequencies of print based behaviours than the average household income, which in turn had a greater effect than the caregivers’ level of education. The three variables explained about 78% of this variability. Thus, 22% of this variability is not explained. This suggests that there are other variables other than those that were studied that contribute to caregivers’ use of direct behaviours and strategies with children around print.

**Ho2: CYS, CRD and AHI Contribute Equally To Caregivers’ Indirect Behaviour Scores**

The following table shows the regression analysis coefficients for CIBS

**Table 6. Coefficients for CIBS**

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta		
1	(Constant)	3.001	.868		3.456	.001
	CRD	.228	.035	.555	6.575	.000
	AHI	2.110E-02	.017	.103	1.208	.230
	CYS	7.265E-02	.075	.082	.974	.332

Dependent Variable: Caregiver Indirect Behaviour Score

The three independent variables had a significant effect on the CIBS. The beta values for the independent contributions of CRD, AHI and CYS to CIBS were 0.555, 0.103 and 0.082, respectively. Thus the order of their effects was CRD, AHI and CYS. The CRD was the most important predictor of CIBS. CRD explained 55.5%, AHI 10.3% and CYS 8.2% of the variability in CIBS. Caregivers’ perceptions about their role in children’s emergent reading development had a greater effect on the frequencies of non-print based behaviours and strategies than the average household income, which in turn had a greater effect than the caregivers’ level of education. These three variables explained 74% of this variability. 26% of this variability is not explained by the variables under study. This suggests that there are other variables in addition to the three that were studied that contribute to caregivers’ use of non-print based behaviours.

### Ho3: CYS, CRD and AHI Contribute Equally to Caregivers' Total Behaviour Scores

The following table shows the regression analysis coefficients for Caregivers total behaviours scores (CTBS)

**Table 7. Coefficients for CTBS**

Model		Unstandardized	Standardized t		Sig.	
		Coefficients	Std. Error	Beta		
1	(Constant)	14.111	2.781	5.073	.000	
	CRD	.921	.111	.589	8.287	.000
	AHI	.129	.056	.166	2.314	.022
	CYS	.505	.239	.150	2.113	.037

Dependent Variable: Caregiver Total Behaviour Score

All the independent variables had a significant effect on CTBS. The order of their effect was CRD ( $\beta=0.589$ ), AHI ( $\beta=0.166$ ) and CYS ( $\beta=0.150$ ). Thus the most important predictor of CTBS was CRD. Caregivers' perceptions about their role in children's emergent reading development had a greater effect on the frequencies of the total behaviours and strategies than the average household income, which in turn had a greater effect than the caregivers' level of education. These three variables explained about 90% of this variability. 10% of this variability is not explained by the variables under study. This suggests that there are other variables in addition to the three that were studied that contribute to the full range of behaviours and strategies that caregivers use with children around print materials.

### Discussion

CRD and CYS were the most and least predictive variables respectively. Thus, caregivers' perceptions about their role in stimulating children's reading related development is a more predictive factor than the average household income that in turn is a more predictive factor than caregivers' years of schooling. It was therefore concluded that the CRD explained the highest variability in the three dependent variables. Thus the caregivers' perception about involvement in children's emergent reading development was the most important predictor of the behaviours and strategies that caregivers employed around print with their children. These findings suggest that caregivers irrespective of the average household income and their level of schooling may not stimulate children's emergent reading development if they do not accept that they have a role to play in this development. Thus caregivers with a rich print environment and high level of schooling may fail to stimulate these developments unless they consider themselves to have a role in it. This underlines the importance of making caregivers aware about this role and its importance in children's reading related development.

These findings are in agreement with Hoover-Dempsey & Sandler (1997) who argue that parents decide to get involved in children's education based on the way they construct their role in that involvement. Thus role construction could influence and shape parent involvement irrespective of the household income and caregivers level of education. A caregiver that is not aware of, or does not accept his or her role in children's emergent reading development may fail to stimulate children's reading even where the socioeconomic status is good enough for adequate provision of print materials for such stimulation. According to Smith (1990), people act very frequently according to their beliefs and feelings. In the current study, majority of the caregivers reported that the teacher should be the first person to be involved in children's reading related development. It appears then, that these caregivers leave this important task to the teacher. This reflects the importance of caregivers' conviction about what they do with children. If caregivers are not convinced that they have an important role to play in interacting with children around print materials, they may not stimulate their emergent reading development.

Average household income was the second most important predictor of caregivers' behaviours and strategies with children around print. Average household income determined the range and abundance of print materials available in the households, which in turn influenced the extent of caregiver involvement. This suggests that once caregivers are persuaded to accept their role in children's emergent reading development, the next thing they need is provision of print materials. Educated caregivers who have a positive role perception may not stimulate children unless there are print materials in the households.

## Conclusion

Since caregivers' understanding of their role in the child's reading related development is very crucial in their family involvement practices, awareness is really the first step towards provision of such stimulation. Any attempts towards increasing caregiver involvement in stimulating children's emergent reading development should therefore start by convincing them that their involvement is significant. The researchers concluded that the utmost important strategy towards getting caregivers to stimulate children's emergent reading development is to make them aware and help them accept their role in this development. If caregivers are persuaded to appreciate the important role their involvement on children's reading play, and if they have access to print materials, there are higher chances that children will receive more stimulation in emergent reading and they may thus develop reading skills faster.

## References

- Arnold, D. H., Zeljo, A., Doctoroff, G. L., & Ortiz, C. (2008). Parent involvement in preschool: predictors and the relation of involvement to preliteracy development. *School Psychology Review*, 37, 74-90.
- Auerbach, E.R. (1989). Towards a socio-cultural approach to family literacy. *Harvard Educational Review*, 59, 165-181.
- Begum, N.N. (Ed.). (2007). Effect of parent involvement on math and reading achievement of young children: Evidence from the Early Childhood Longitudinal Study. A doctoral dissertation, Indiana University of Pennsylvania
- Canadian Council on Learning, (2006). Lessons in learning. How parents foster literacy. In <http://www.ccl-cca.ca/CCL/Reports/LessonsInLearning/LiL-1Feb2006.html>
- Conrad N.K. (2008). Fostering emergent literacy through parent/child reading relationships. [link.springer.com/.../978-0-387-74525-1](http://link.springer.com/.../978-0-387-74525-1).
- Carroll C. (2013). The effects of parental literacy involvement and child reading interest on the development on emergency literacy skills. PhD Dissertation-University of Wisconsin-Milwaukee
- Chia-Hui, C., & Hwa-Wei, K. (2015) Parental factors related to children's reading: evidence from comparing transnational marriage families and local families. International Association for the Evaluation of Educational Achievement [http://www.iea.nl/fileadmin/user\\_upload/IRC/IRC\\_2008/Papers/IRC2008\\_Chui\\_Ko.pdf](http://www.iea.nl/fileadmin/user_upload/IRC/IRC_2008/Papers/IRC2008_Chui_Ko.pdf)
- Clark, C. (2007). Why families matter to literacy. A brief research summary. National Literacy Trust
- Cuckle, P. (1996). Children learning to read-exploring home and school relationships. *British educational Research Journal*, 22(10), 17-32.
- Denney, M. K., Moore, K., & Snyder, P. (2010). Supporting parent and caregiver involvement in early Literacy practices with young children from diverse backgrounds and abilities. HeadStart Center for inclusion.
- Fitzgerald, J., Spiegel, D. L., Cunningham, J. W. (1991). The relationship between parental literacy level and perceptions of emergent literacy. University of North Carolina at Chapel Hill. *Journal of Literacy Research*. Vol.23 (2) 191-213.
- Hammer, C.S., & Miccio, A.W. (2004). Home literacy experiences of Latino families. In B.H. Wasik (Eds), *Handbook of family literacy* (pp 305-328). Mahwah, N.J: Lawrence Erlbaum Associates.
- Hoover-Dempsey, K.V., & Sandler, H.M. (1997). Why do parents become involved in their children's education? *Review of Educational Research*, 67, 3-42.
- Kimathi, H. K. (2014). Parental involvement in primary standard three pupils' reading at home in Igembe South Constituency, Meru County, Kenya. Unpublished Masters Thesis, Kenyatta University.
- Kupcha-Szrom, J. (2011). A window to the world: early language and literacy development. Retrieved on 5/7/2015 from [http://www.zero.to.three.org/publicpolicy/policytoolkit/early\\_literacy](http://www.zero.to.three.org/publicpolicy/policytoolkit/early_literacy).
- Lynch, J., Anderson, J., Anderson, A., & Shapiro, J. (2006). Parents' beliefs about young children's literacy development and parents' literacy behaviors. *Reading Psychology*, 27, 1-20.

- Meighan, R. (1989). The parents and the schools: Alternative role definitions. *Educational review*, 41 (2), 105-112.
- Neuman, S. B., & Dickinson, D. K. (2001). Introduction. In Susan B. Neuman & David K. Dickinson (Eds.), *Handbook of early literacy research* (pp. 3-10). New York: Guilford Press.
- Ortiz, R.W. (2004). Hispanic/Latino fathers and children literacy development: Examining involvement practices from sociocultural context. *Journal of Latinos and Education*. 3, 165-180.
- Raley, S. (2007). Transmitting advantage: Maternal education differences in parental investment activities. Unpublished doctoral dissertation. University of Maryland, College Park.
- Rowe, K. (1991). The influence of reading activity at home on children's attitudes towards reading achievement: An application of structural equation modelling. *British Journal of Educational Psychology*, 61, 19-35.
- Sanders, M. G. and Epstein, J. L. (1998). Schools-family-community partnerships and education change: International perspectives. In A. Hargreaves, A. Lieberman, M. Fullan, and D. Hopkins (eds.) *International Handbook of Educational Change*. Hingham MA: Kluwer.
- Schaefer, E.S. & Edgerton, M. (1985). Parent child correlates of parental modernity. In I.E. Siegel(Ed.), *Parent beliefs & systems. The psychological consequences for children*. Hillsdale, NJ: Erlbaum.
- Sigel I.E. (1985). *Parent belief systems: The psychological consequences for children*. Hillsdale, NJ: Erlbaum.
- Skuza, R. (1997). The impact of an elementary parent center on parent involvement and student classroom performance as perceived by parents and professional staff in 142 Somerville, Texas. *Dissertation Abstracts International*, 58(11), 4177A. (UMI No. 9815687).
- Stahl, S. A., & Miller, P. D. (1998). Whole language and language experience approaches for beginning reading: A qualitative research synthesis. *Review of Educational Research*, 59(1), 87-116
- Stoughton, C. K. (1984). The relationship between children's academic achievement and their perception of parental behaviors and susceptibility to parental influence. Unpublished doctoral dissertation. Boston College.
- Wambiri, G. N. (2007). *Factors Contributing to Caregivers' Behaviours and Strategies with Children around Print and Children's Emergent Reading Development in Thika District, Kenya*. Unpublished PhD Thesis, Kenyatta university.
- Wambiri, G.N. (2014). Caregivers' role definition and practices in the stimulation of children's emergent reading development in Ruiru, Kenya. *Journal of Education and Practice*. 5, 2, 23-31.
- Weigel, Martin, & Bennet, (2005). Contributions of the home literacy environment to preschool-aged children's emerging literacy and language skills. *Early child development and care*, 176, 357-378.

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage:

<http://www.iiste.org>

### CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

**Prospective authors of journals can find the submission instruction on the following page:** <http://www.iiste.org/journals/> All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

### MORE RESOURCES

Book publication information: <http://www.iiste.org/book/>

Academic conference: <http://www.iiste.org/conference/upcoming-conferences-call-for-paper/>

### IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

