Early Indicators of Good Reading Skill: Grade 3 Learners in Focus, Ethiopia

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ABSTRACT:

The article presents early indicators of good reading skills for Grade 3 learners. It employed an explanatory sequential mixed methods design by which quantitative data collection and analysis occurred first, followed by qualitative data collection and analysis. The intention of using this design was that qualitative data would explain and contextualize the quantitative findings. The quantitative part constitutes a non-equivalent control group design in a quasi-experimental approach. It used naturally occurring intact groups that already existed before and after a quasi-experimental treatment occurred to make comparisons between groups. It involved 1,325 Grade 3 learners selected by convenient sampling technique from 10 primary schools. It used a reading achievement test for quantitative data collection in both groups after and before the intervention. It analyzed quantitative data with the help of a t-test and ANCOVA. Under the qualitative part, a multiple case study design was employed via interviews and observation of learners, teachers, and parents. Qualitative data were analyzed thematically. The findings indicated that there was an association between reading achievement and learners' linguistics skills, schema, motivation, and reading self-efficacy. Therefore, teachers are advised to emphasize early indicators of reading skills in order to make Grade 3 learners more beneficiaries.

Keywords: Linguistics skills, Motivation, Reading self-efficacy, Reading skill, Schema

INTRODUCTION

Reading is a multifaceted interaction of learners with a text shaped by the reader's previous knowledge, experiences, attitude, culture, and language of the community that requires continuous exercise, progress, and improvement (Stanovich, 2000; Leipzig, 2001). This multifaceted interaction of learners requires an essential inner energy called reading self-efficacy. Reading self-efficacy refers to learners' competence in dealing with their individual challenges faced in reading (Bandura, 1997; Schunk & Pajares, 2002). It is also the learners' personal belief in their potential to be knowledgeable, carry out an assigned reading task, or use a course of action to achieve the targeted reading level (Schunk & Pajares, 2002).

Learners' reading skills are associated with their Linguistics Skills, Schema (Background Knowledge), Motivation, Self-monitoring, Interest, Involvement and Reading Self-efficacy, and self-esteem. Learners equipped with these elements are observed in exhibiting good performance in reading activities. Hence they can be taken as early indicators of good reading skills. Chapman, Tunmer, and Prochnow (2000) and Schunk and Pajares (2002), state that an individual's overall subjective attitude, emotional evaluation, and judgment of his or her worth and beliefs determine reading skill. Besides, Corbiere, Fraccaroli, Mbeki and Perron (2006) explain that learners reading performance is influenced by their motivation, interest, and self-esteem and vice versa because self-esteem is the combination of feelings about oneself that guides behavior, influences attitudes, drives motivation and activity. Besides, these psychological factors determine learners' engagement in learning to read.

Learning to read is the process of acquiring the skills necessary for reading; that is, the ability to acquire meaning from a text (Rayner et al., 2001). For an adult who is fairly a good reader, reading seems to be a simple, effortless, and automatic skill, however, the process builds on cognitive, linguistic, and social skills developed in the years before reading typically begins (Rayner et al., 2001).

A child's ability to learn to read, known as reading readiness, begins in infancy, as the child begins attending to the speech signals in their environment and begins producing spoken language. Children make some use of all the material that they are presented with, including perception, concepts, and words that they encounter (Rayner et al., 2001). Thus, the environment in which a child develops affects the child's ability to learn to read. The amount of time that a child spends together with parents or other caregivers while listening to them read is a good indicator of the level of reading that the child will attain later in life. As a child sits with a caregiver, looking at pictures and listening to stories, he or she will slowly learn that all the different lines on each page make different symbols and then together they make words (Rayner et al., 2001). This early life experience will contribute to building good background knowledge (schema) for future language development and reading ability (Shuying, 2013).

Previous studies highlighted that instructional approaches and intervention programmes on reading comprehension were not the prime focus in most of the 1990s studies. However, in the early 21st century, researchers shifted their emphasis to designing certain instructional programmes to improve the reading skills of learners and students at primary, secondary, and tertiary levels. For instance, effects of encoding practice (EP) on the alphabet and phonemic awareness (PA) (Delrose, 2015); a syntax-based reading intervention (SBRI) for English as second-language learners (Tausch, 2012); enhancing English reading comprehension through a "Text Structure Reading Strategy Call Program" (TSRS) (Dentisak, 2010); and an evaluation of the teaching of reading skills of English (Brazier-Carter, 2008, Downey, 2010) are few to mention.

The major gap between this article and the previous studies is that most of them did not give due consideration to early indicators of good reading skills for Grade 3 learners specifically. Since this grade level is a pivotal point and a critical period in learners' educational development (Annie E. Casey Foundation, 2010; Chang & Romero, 2008; Hernandez, 2011; Lloyd, 1978), this article addressed early indicators of good reading skills for Grade 3 learners, which was not widely addressed in previous studies.

Moreover, the Cognitive Foundation of Learning to Read (CFLR) framework was selected as the intervention for the study which is different from the interventions used by the previous studies. It involves the most important elements essential in reading (linguistic knowledge, cipher knowledge, and lexical knowledge) (Wren, 2001). CFLR emphasizes oral and written language comprehension. According to Scarborough (2005), and Scott (2004), an achievement of these two elements contributes a lot to the reading skill of early-grade learners. They also pointed out that one of the major difficulties for school-age learners is the discrepancy between the oral and written language which becomes more apparent by third or fourth-grade learners. Catts, Adlof, Hogan, and Ellis-Weismer (2005) added that a deficit in phonological processing is closely associated with reading difficulties. The noteworthy feature identified in the above studies is

that they studied reading comprehension along with variables like attitude, school and home environment, habit, resource facilities, language impairment, and intervention strategies to solve the reading problem of learners at various levels of schooling. These greatly assisted the present investigation to focus on early indicators of good reading skills for grade 3 learners that were not investigated previously.

Early indicators of good reading skills are determinants for teachers to give emphasis on appropriate areas of reading skills development and to plan appropriate reading instruction for their learners. Therefore, the article presents the findings on the following research question:

• What are early indicators of good reading skills for Grade 3 learners?

METHOD

The study employed an explanatory sequential mixed methods design. Under this design quantitative data collection and analysis occurred first, followed by qualitative data collection and analysis. The intention of using this design was that qualitative data would explain and contextualize the quantitative findings. The following section presents each part specifically.

Quantitative Part

Under the quantitative part, a non-equivalent control group design in a quasi-experimental approach was used. The quasi-experimental study is a type of evaluation that seeks to determine whether a certain intervention would have the intended causal effect on solving the reading difficulty of Grade 3 learners at selected primary schools. Hossein (2012, p. 511) defines quasi-experimental research (a naturally occurring group design) as "an experimental research design in which the researcher cannot assign participants randomly to conditions and manipulate the independent variable; instead, comparisons are made between groups that already exist or within a single group before and after a quasi-experimental treatment has occurred". Therefore, the study used naturally occurring intact groups that already exist before and after a quasi-experimental treatment occurred to make comparisons between them.

Qualitative Part

A qualitative research method is defined as an approach that emphasizes the study of purposively-selected small samples of individuals, not attempting to control contextual factors, but rather seeking, through a variety of methods, to understand things from the informants' points of view, and creating a rich, in-depth picture of the phenomena under investigation (Berg, 2009; Hossein, 2012). Qualitative research is also synthetic or holistic (i.e., it views the separate parts as a coherent whole), heuristic (i.e., discovers or describes the patterns or relationships), with little or no control and manipulation of the research context, and uses data collection procedures with low explicitness (Cohen et al., 2011). The ultimate goal of qualitative research is to study patterns of behavior not previously described and to understand them from the perspective of participants in the activity. It is characterized by rich description, natural and holistic representation (form the participant or insider point of view), cyclical and open-ended processes, various ideological orientations, and interpretive analysis (Hossein, 2012).

Therefore, the study used the qualitative research method, specifically a multiple case study design to observe and interview research participants (learners, teachers, and parents). The intention of using the qualitative methods was to explain and contextualize the quantitative findings. The cases entertained were early indicators of good reading skills namely *Linguistics Skills, Schema (Background Knowledge), Motivation, Self-monitoring, Interest, Involvement and Reading Self-efficacy.*

For the qualitative data, 10 English teachers (five from each group); 10 Grade 3 learners (five from each group); and 10 parents of grade three learners (five from each group) were purposively selected to take part in the interviews. Teachers teaching in Grade 3 who participated in the research were purposively selected to give their views and opinions on the reading difficulty of their learners, improvement observed after the intervention, indicators of good reading skill, and the reading instructional approach they usually used.

Grade 3 learners with reading difficulties and those with good reading skills were also selected to talk about their challenges and experience in reading. Since teachers know their learners well, the researchers used their information for the selection of learners with reading problems and those with good reading skills for interviews. Furthermore, the pre-test results were also very helpful in the selection of these learners. In addition to this, parents of Grade 3 learners with reading difficulties and those with good reading skills were selected to talk about their observations and views on the early indicators of good reading skills, their children's reading difficulties, the improvement observed, and reading instructional methods used in the study.

Population, Samples and Sampling Technique

The population was Grade 3 English language learners, English language teachers, and parents from 10 selected primary schools found in Hawassa city (Sidama Region) and Dilla town SNNPR, southern Ethiopia. All participating schools were government-funded public schools where education was free for all learners. All schools were governed by the same educational policies, rules, and regulations. They followed the same curriculum, syllabus, and lesson plans.

For the quantitative part, the article used 1,325 Grade 3 learners selected by convenient sampling technique from 10 primary schools of Hawassa and Dilla to confirm that the mean of the sample (X) was representative of the population mean (μ). Johnson and Christensen (2012:481) note that "larger samples result in smaller sampling errors, which means that the sample values will be closer to the true population, values (the parameters)". Besides, 10 learners, 10 teachers, and 10 parents were purposively selected to participate in a semi-structured interview for the qualitative part.

Of the 1,325 learners, 673 (from five schools of Dills town) formed the experimental group and 652 (from the remaining five schools of Hawassa city) formed the control group. The experimental and control schools were separated by a distance of about 90 kilometers. According to Gaigher (2006, p.31), "such separation effectively prevents diffusion, contamination, rivalry, and demoralization". Contamination may take place when learners in different groups interact with each other or share educational resources (Shea et al., 2004).

Instruments

The study used mixed instruments to collect quantitative and qualitative data. Hence reading achievement tests, semi-structured interviews and classroom observation were the major instruments used. The following section describes these instruments with a detailed explanation.

Reading Achievement Test

As tools of data collection, the study employed pre and post-reading achievement tests to examine the level of relationships between reading skills and early indicators of good reading skills after and before intervention was done. The test was child friendly and adapted from the Grade 3 English textbook prepared by the Ethiopian Ministry of Education for Ethiopian learners.

Classroom Observations

Gay, Mills, and Airasian (2012) and Mulhall (2003) state that observation is a very important instrument to get a

clear picture of the behavior of teachers, students, and the classroom. Accordingly, the researcher prepared an observation checklist to observe the reading instruction and how teachers emphasized early indicators of good reading skill, reading skills in English lessons; how teachers motivate learners to be engaged in reading activities; how teachers provide the appropriate level of passages to learners to read; then asked explicitly detailed questions about the content of the passage; and how teachers provide a variety of tasks to learners to demonstrate awareness of rhyme, alliteration, and phoneme awareness. Therefore, classroom observation helped to identify the daily occurrences in the classroom and the interaction between teachers and learners during English reading lessons. The observation also helped to paint a rich picture of social phenomena such as the behavior of learners in a classroom.

Semi-Structured Interviews

The researchers prepared semi-structured interviews and conducted them with learners, teachers, and parents. The interviews allowed the participants to verbalize and externalize their views on early indicators of good reading skills, the instructional approaches used in experimental and control groups as well as their educational challenges. The researchers also got the opportunity to follow up on incomplete and unclear responses by probing the participants.

Data Analysis

In analyzing quantitative data, the researchers primarily checked whether the whole sheets (achievement test) given to the learners were completely done and filled. Then the sheets which were clearly and fully completed were selected to provide the data for analysis. For this purpose, the pre-test and post-test were marked to obtain the scores of the learners. Subsequently, the scores collected from the sheets served as the data. Following this stage, the researchers used a one-way analysis of covariance (ANCOVA) to determine the initial group differences in participants' pre-test scores related to performance on the dependent variable. It helped to evaluate the interaction between the covariate and the independent variable in the estimation of the dependent variable. The dependent variables were learners' reading achievement posttest scores, and the covariate was learners' pre-test scores. Before performing the ANCOVA test, the researchers evaluated the assumptions underlying it, namely, the homogeneity of regression (slope) assumption and the assumption of linearity of data distribution. Besides the use of ANCOVA, the researcher used various statistical techniques to analyze certain aspects of quantitative data. For the interpretation of statistical data, an alpha level of 0.05 was considered acceptable for the study.

Qualitative data were transcribed, coded, and sorted according to commonalities before they were categorized into common themes. Then, the themes were represented in terms of the area of focus to which they linked. Similarities and differences were identified. The article addressed rigor and trustworthiness in terms of credibility, transferability, and conformability of qualitative findings. The article achieved credibility through "prolonged engagement" and "member checks." The principal researcher staved at the selected schools for three months to become familiar with the situation of learners and teachers to build trust and rapport with the participants. Besides, peer debriefing was made via deliberations with senior colleague researchers. Furthermore, the study used bracketing to distinguish the assumptions and biases from the truth extracted; and achieve an understanding of the phenomenon as experienced by the participants of the study. In addition, thematic findings were presented to the participants and ensured that their voices were correctly included in the qualitative data without the subjective interference of the researchers. Finally, the themes were described and narrated accordingly. The themes were used to explain and contextualize the quantitative findings.

Ethical Consideration

The researchers followed ethical manners to conduct the study. Therefore, ethical principles were addressed to consider policies regarding permission, informed consent, confidentiality, anonymity, privacy, caring, no harm to participants, and confidentiality. The researchers secured clearance from the University of South Africa College of Education Research Ethics Review Committee, on 17 August 2016 with Ref no: 2016/08/17/49024353/26/ MC. They also had permission from the Ethiopia SN-NPR Government Education Bureau to conduct the research in the region. Permission was also secured from Hawassa and Dilla City Administration Education Offices to conduct the study in the selected primary schools.

Procedure

The study followed essential procedures which includes determining the research design, tools preparation, refining the tools and methods via pilot study, sample selection, and commencement of the main study. The procedure followed is presented in detail below.

Pilot studies are conducted to identify potential problems with the design, particularly with tools and procedures of data collection (Van et. al., 2001). The information obtained from the pilot study is to refine the questionnaire and the interview guide (Neuman, 2006). Besides, a pilot study guides researchers to identify possible problems in the proposed approach and allows them to modify the methods and tools before the main study is conducted (De Vos et al., 2002). Hence, before the commencement of the main study, a pilot study was conducted over two weeks in two primary schools at Chuko and Abosto towns in Sidama region, southern Ethiopia which had similar socio-economic conditions to those schools selected for the main study. The two pilot schools had Grade 3 English classes and were located in completely different areas from where the main study schools Hawassa and Dilla were located. More specifically, the experimental pilot school was located 35 km to the northwest of Dilla town, and the control pilot school was 40 km to the southeast of Hawassa city administration. There was a 30 km distance between the two pilot schools. These geographical locations controlled contamination and possible interaction between learners in the experimental and control schools. The researcher implemented CFLR for reading instruction in the experimental class at (A-primary school) found in Chuko town in Sidama Region. The regular teacher in the control group school (B-primary school) in Abosto town in Sidama Region, SNNPR employed the traditional instructional approach. The samples were convenient samples and the experimental group included 48 learners (34 boys and 14 girls). The control group involved 43 learners (29 boys and 14 girls).

The pilot study followed the schools' guidelines in the construction of the timetable for reading sessions. The English subject had four 40-minute periods per week, which is equivalent to 2.7 hours of teaching time per week. With this time arrangement of the schools, it was possible to implement the pilot study for two weeks. It is obvious that the administration of pre-test and post-tests was the main part of the pilot study.

The pilot study conducted for the study provided valuable insights into the improvements that were made to the achievement test and semi-structured interview, observation checklist as well as the general efficiency of the study. The major benefit of conducting the pilot study was that it helped the researchers to identify and rectify misunderstandings, ambiguities, useless items, and mechanical difficulties in the instruments. Furthermore, the pilot study alerted the researchers to note what challenges could arise in the implementation of the intervention. Besides, it provided ample opportunity for the researchers to be updated on the situation and learning environment of primary schools. Based on the pilot study, it was reasonable to expect similar results from the main study, given that the main study was to be conducted under similar conditions. The pilot schools were comparable to the schools in terms of their socio-economic status. Similar rules were applied to govern the pilot study as those applied at the schools in the main study, and it was, therefore, rational to anticipate similar results from the main study.

Intervention

The researchers implemented the Cognitive Foundation of Learning to Read (CFLR) as an intervention to enhance learners' Linguistics Skills, Schema (Background Knowledge), Motivation, Self-monitoring, Interest, Involvement, and Reading Self-efficacy; and as a result to examine whether learners' reading skill was enhanced in the experimental schools. The regular teachers in the control groups employed their usual instructional approach. The study followed the schools' guidelines in the construction of the timetable for reading sessions. According to the Ethiopian education system, the weekly time allocated for English subjects is five periods, 40 minutes per period which is equivalent to 2.7 hours of teaching time per week. With this time arrangement of the schools, it was possible to implement the intervention strategy designed for 12 weeks (three months), in total, 64 hours. During the period of the implementation, there was an arrange-

Table 1.	Demographic	Information	of Respondents	in the Study
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ment with teachers to enable the principal researcher to conduct classroom observation in control schools at least once during these periods, particularly on days on which the researcher had little teaching time at the corresponding experimental schools. It is obvious that the administration of pre-test and post-tests was the main part of the study.

RESULT

Demographic Information of Respondents in the Study As Table 1 below shows, the study sampled 1,325 participants, which comprised 691 (52.2%) boys and 634 (47.8%) girls. From the total 673 (100%) participants of the experimental group, male and female learners constitute 339 (50.4%) and 334 (49.6%) respectively. Likewise, in the control group, there were 352 (54%) male and 300 (46%) female learners, which accounted for 652 samples.

Result from Achievement Test

Data collected from the pre-test and the post-test were analyzed by employing a t-test. The result indicated improvement in performance from the pre-test to the post-test in the experimental group. Having observed this, the researchers confirmed that this improvement was due to good reading self-efficacy, motivation, schema (background knowledge), and linguistics skills which were enhanced by CFLR intervention. To determine the effectiveness of a CFLR, the mean scores of the pre and post-tests were compared using a t-test at the significance

Group	Sex	N	%	
	Male	339	50.4%	
Experimental	Female	334	49.6%	
	Total	673	100 %	
	Male	352	54%	
Control	Female	300	46%	
	Total	652	100%	

Table 2.	Paired	samples	t-test	result	of the	achievement	test
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Test Periods	Groups	Ν	Mean	SD
Pre-test	Control	652	40.23	12.3
	Experimental	673	39.70	12.7
Post-test	Control	652	46.32	11.63
	Experimental	673	66.15	10.8

level of 0.05. The results suggested that the performance of learners in the achievement test had improved significantly (p < 0.05). From these results, it was possible to conclude that the CFLR designed to improve learners' reading skills had been effective.

Furthermore, Table 2 below indicates that the mean score of the pre-test of the control groups was (n= 652, M=40.23, SD=12.3); and their post-test mean was (n=652, M=46.32 & SD=11.63). There is a slight difference of 6 marks. However, the mean score of the pre-test of the experimental groups was (n= 673, M=39.70, SD=12.7); and their post-test mean was (n= 673, M=66.15, SD=10.8). There was a 26.45 mark larger difference than the control group's mean. Table 2 also shows that the probability of error is less than 0.05 (p=0.000<0.05).

There is a statistically significant difference between the mean scores of pre-tests and post-tests. Based on this, it is possible to state that the implementation of CFLR improved the reading skill of the learners significantly better than the usual instructional method. If this method is applied with sufficient time, preparation, and readiness, it can bring about a significant change in reading self-efficacy, motivation and schema, and involvement of Grade 3 learners. Thus, the result gives sufficient ground to conclude that CFLR is better than the conventional teaching method in enhancing early indicators of good reading skills such as *Linguistics Skills, Schema (Background Knowledge), Motivation, Self-monitoring, Interest, Involvement and Reading Self-efficacy* of Grade 3 learners.

Classification of participants' performance by score

The study analyzed the learners' performance based on the scores of the achievement test. The learners' scores were classified into five categories in accordance with the Ethiopian education policy. The policy clearly stated a marking system used at primary and secondary schools all over the country (TGE, 1994). According to the policy, the following classification of marking method has been stated. Table 3 below presents as follows; (90% and above Excellent; 80% - 89% Very good; 60% -79% Satisfactory; 50%-59% fair; and below 50% fail).

The post-test of the study indicates that the majority of learners performed satisfactorily. Therefore, the scores on the achievement tests between both groups ranged from fair to very good. Table 4 below depicts the comparison of performance on the achievement tests based on this classification.

The result in Table 4 above shows that both the CFLR instruction and conventional instruction enhanced the

Criteria	Code	Description
Excellent performance	EP	90% and above
Very good performance	VGP	80% - 89%
Satisfactory performance	SP	60% - 79%
Fair	FR	50% - 59%
Fail	FL	below 50%

Table 3. Classification of learners' achievement test scores

Groups (n=1325)	Performance category	М	SD	Standard Error	Pre-test	%	Post-test	%	95% Confidence	
									Lower	Upper
Experiment (n= 673)	Fail		0.55	0.21	488	72.5	55	8.2	8.2	8.2
	Fair	2.68			157	23.3	122	18.1	18.1	18.1
	Satisfactory				28	4.2	442	65.5	65.7	65.7
	Very Good				0	0	54	8.0	8.0	8.0
Control (n=652)	Fail	2.43	0.72	0.028	480	73.6	365	56.0	56.0	56.0
	Fair				150	23.0	200	30.7	30.7	30.7
	Satisfactory				22	3.4	87	13.3	13.3	13.3
	Very Good				0	0	0	0	13.3	13.3

reading skills of the learners. In experimental schools, the number of failures is reduced from 488 (72.5) to 55 (8.2%). There is also a "failure" reduction in control schools from 480 (73.6%) to 365 (56.0%). However, the experimental schools' performance outweighs the control schools by far. The figure also depicts that the number of learners who scored "satisfactory" in the experimental schools improved from 28 (4.2%) to 442 (65.5%); whereas the control school participants showed insignificant improvement from 22 (4.2%) to 87 (13.3%). The other remarkable improvement shown by the experimental schools was that 54 (8.0%) participants scored a "very good" result that was not scored by the participants in the control schools. Furthermore, qualitative data from semi-structured interviews and classroom observation were evidence for those learners in the experimental schools exhibited early indicators of good reading skills. In other words, the learners' reading skill got improved as a result of the improvement in Linguistics Skills, Schema (Background Knowledge), Motivation, Self-monitoring, Interest, Involvement, and Reading Self-efficacy were improved. The discussion section presents these indicators in more detail.

DISCUSSION

Linguistics Skills

Learners' linguistics difficulties which include problems with phonology, sentence structure (syntax) and meaning (semantics) lead to reading delays since reading is a language-based activity (Catts et al., 2004; Hoover & Gough, 1990; Nation & Norbury, 2005). Therefore, the implementation of CFLR mainly addressed the issue of linguistic skills in experimental schools. The study emphasized enhancing linguistics knowledge that underlies competence in a language which can be divided into three large domains. The first domain is phonology which describes the knowledge of the sound structure of a language and of the basic elements that convey differences in meaning, including their internal structure and their relationships to each other. Learners who could not produce or hear the sounds that distinguish one word from another would not be able to use language effectively to communicate. The second domain is semantics which deals with the meaning components of language, both at the level of individual units (words and their meaningful parts, or morphemes, such as "pre" in the word "preview") and at the higher levels that combine these units (morphemes into words, words into sentences, sentences into discourse) (Wren, 2001). Besides, states that morphological awareness also contributes to reading comprehension, and to the purpose of constructing meaning (Carlisle, 2000; Deacon & Kirby, 2004).

Therefore, the study considered developing linguistic knowledge that involved learning the individual meanings of words (or vocabulary) as well as the meaning of larger segments–sentences and discourse structures (e.g., narratives and expositions). The third domain is the syntax which constitutes the rules of language that specify how to combine different classes of words (e.g., nouns, verbs, adjectives) to form sentences. In short, syntax defines the structural relationship between the sounds of a language (phonological combinations) and the meaning of those combinations (Wren, 2001). Following this intervention, learners' linguistics knowledge was improved, and able to participate in reading activities. For instance, teacher participant (T-1) in the experimental school said that;

> Wow! ... It is very interesting..... Thank you for your invitation to observe your class at my school... The teaching aids you used especially, phoneme charts, word charts, pictures, and the stories printed on the plastic board (canvas) are very interesting. ... You made the classes more decorated and dynamic than I did..... and I observed most of the learners of my school were highly motivated and participating eagerly.

Another teacher participant (T-2) from the same group also revealed that;

....eh...as I told you earlier... teaching to read is a very challenging activity. But, you amazed me through your instructional approach. Thank you for your invitation to observe your teaching method. It is very surprising to see my classrooms are too fascinated with your teaching aids. Learners are actively engaged in reading activities.

The learners' responses from the experimental schools involved expressions such as, "I like your approach", "I am reading", "My reading is improved", "It is very interesting" and "I enjoyed it a lot". The preceding views from learners from the experimental schools indicate that improved "*linguistics skills*" positively influenced their reading skills; they were motivated and actively participating in the reading activities as they reported as follows;

- Learner 1: Your approach is new. It is very good ... You helped me to read. ... The pictures are very interesting. ... Now I can read some words by myself. Thank you.
- Learner 2: The method is different. I like it..... I like the stories. ... My teacher did not use this approach ... I scored good results on my classwork ... yes. I can read.
- Learner 3: Our teacher didn't teach like this ... eh ... it is interesting ... Well ... now I learned how to spell words ... if I continue like this, my reading will be improved

...I know I didn't have good background ...that affected me not to show good change by your method ...I began learning reading in your class ...Your method is better than what our teacher used.

Therefore, based on the findings of the study it is possible to conclude that learners' improved "*linguistics skills*" can be taken as a good indicator of good reading skills to grade 3 learners

Schema (Background Knowledge)

A schema is an arrangement in semantic memory that indicates the general structure of a body of knowledge. The concept of schema is familiar in the field of psychology. It is commonly linked with the early work on story recall by Bartlett (1932). Bartlett argued that schema is a fitting term to define every human cognitive reaction - perceiving, imagining, remembering, thinking, and reasoning-as an effort after creating meaning. He also indicates that memory is active, constructive, and schematically determined (Brewer, 2000). Later schema theory was introduced in reading by Rumelhart (1980) in discussing the role of "Schema (background knowledge)" in reading comprehension. Al-Jahwari and Al-Humaidi (2015) indicate that prior knowledge plays a significant role in reading comprehension. Schema also gives guidelines to understand how reading comprehension occurs and how inferential reasoning takes place (McCormick, 1992). Moreover, schema theory helps the establishment of mental mappings or schema, which in turn guides the ability to organize information and make inferences (Al-Issa, 2006; Ajideh, 2006; Lerner, 2002).

Ayres and Van-Gog (2009) define a schema (plural schemata or schemas) as a knowledge arrangement that stands for a set of objects, incidents, and circumstances. Al-Issa (2006) describes a schema as a cognitive construct that can systematize the elements of information according to how they will be utilized. It also represents a mental structure used to organize knowledge in memory. The mental structure serves as a platform for patterns that systematize conceptual order or complexity of ideas, separate pieces of data connected to construct more logical wholes and integrate obscure patterns into consistent chains of ideas in the brain (Al-Issa, 2006).

According to Georgeon and Ritter (2011), a schema is a mental configuration attained in the course of several experiences by setting up expectations for what will usually happen, interpreting what does happen, and remembering what in fact did occur in specific circumstances. Rentsch, Mot, and Abbe (2009) identify content schema and formal schema as the two types of schema. Content schemata contain general or specific information on the subject matter. Formal schemata present information about how expressions are structured. The central idea of the theory is that human memory encompasses high levels of configuration known as schemata, each of which encapsulates our knowledge concerning the whole thing linked with a specific object or incident (Georgeon & Ritter, 2011).

The study emphasized enhancing the "schema (background knowledge)" of grade 3 learners in the experimental schools believing that it is an important component of reading skills, which activates their reading practice and understanding. It explored a weave of past and present; a combination of old and new ideas and experiences of the learners. This practice helped the learners to increase their comprehension skills because new information, new concepts, and new ideas from the reading passage became meaningful when the learners related them to what they already knew (Shuying, 2013).

The responses of two learner participants from experimental schools indicate that their poor "*lack of schema (background knowledge)*" affected them not to show a good result with the help of a new instructional approach.

- Learner 3 said: "I know I didn't have good background...that affected me not to show good change by your method... I began learning reading in your class... Your method is better than what our teacher used..."
- Learner 4 "Thank you. I read stories with you...of course, my reading skill is not improved coz... I started learning the alphabet here with you...but ...eh.....I hope I will improve it in the future."

Therefore, the principal researcher helped learners of the experimental group to work on word-spider activities on a given word to teach semantic and vocabulary enrichment. For instance, the researcher gave a word "cow", to the learners. Then they were asked to call any words related to cow from their "lack of schema (background knowledge)" in sequential order. Many activities similar to Figure 1, presented below, were very helpful for this instructional approach. Therefore, the principal researcher gave due consideration to background knowledge (schema) since it summarizes the learners' knowledge about everything connected with a particular object or event in the reading passage. As a result, learners' schema reinforced the importance of their prior knowledge to learning and the use of tools such as memory aids to bridge new knowledge to older knowledge stored in their schema (Shuying, 2013).



Fig. 1. Word-spider activity to enhance background knowledge.

Motivation

The article considered "*motivation*" as an important characteristic of learners since it is related to their desire to participate in the reading process, learning goals, competence-related beliefs, and needs that influence their reading activities and achievement (Guthrie et al., 1999; Lumsden, 1999). Furthermore, Applegate, Applegate, and Modla (2010), Ahmadi, Ismail, and Abdullah (2013), and Ghaedrahmat, Entezari, and Abedi (2014) state that the motivation to read has become one of the main contributors to whether or not a learner succeeds in school.

The findings revealed that initially, learners in both groups were neither intrinsically nor extrinsically motivated. However, following the implementation of CFLR, learners, teachers and parents of the experimental schools emphasized the role of "motivation" in enhancing the reading skill of learners. The interview data collected from these key informants, as well as classroom observation data, revealed that initially, most of the learners were not motivated in the reading lessons. Rather, they were bored and frustrated. Due to a lack of motivation, most of them did not participate. For instance, a teacher participant (T5) from a control school declared that "...I am not comfortable with what I am doing in the classroom ... coz I couldn't enhance the reading skill of the learners... they have no motivation for the lesson ... " In addition, another teacher from a similar group disclosed that "... eh...well.....I have been trying my best...but the learners have no motivation ... " The responses of the teacher participants indicated that they believed that learners' motivation had paramount value in teaching reading skills. However, learners had no motivation and, as a result, they did not participate in reading activities.

In supporting the above result, various research findings in the field of reading motivation confirmed that motivation is a determinant factor in the achievement of learners' reading skills (Chapman & Tunmer, 1995). Other findings also disclosed that there is a positive relationship between learners' level of motivation and improved level of reading skills. For instance, they found a relationship between young children's reading self-concept (learner's perception of reading competence, the reading difficulty of learners, and their attitude towards reading) and word recognition and reading comprehension skills (Chapman et al., 2000). Furthermore, Pintrich, Marx, and Boyle (1993) and Pintrich (2003) also indicate that motivation provides an activating, energizing role for cognitive processes, which, in turn, can impact reading achievement.

Cognisant of the importance of learners' motivation in reading, the researchers addressed the issue in the experimental groups of the study. They helped the learners with intrinsic and extrinsic motivation. However, the researchers' emphasis was on the learners' intrinsic motivation more than extrinsic motivation. Research findings from Ryan and Deci (2000) and Meece and Miller (1999) show that internal motivation is strongly related to intrinsic motivation because it comes from within the individual and it moves the individual to pursue an activity for its own sake rather than for external reasons. Furthermore, Metsala et al., (1996) indicate, that if learners are intrinsically motivated to read and self-satisfied, they will increase the frequency with which they read. Furthermore, Rosenblatt (2005) explained that when learners are engaged in reading for aesthetic reasons, they will be motivated since the reading incites feelings, ideas, and attitudes that are linked through private past experiences. Besides, when learners' reading initiates connections to individual responses, they will be more likely to be interested and continue to read.

In the field of reading motivation, several researchers have examined the relationships between motivation variables and literacy skills. For example, Chapman and Tunmer (1995), Chapman et al., (2000), and Turner (1995) found relationships between young children's

reading self-concept (students' perceptions of reading competence, the difficulty of reading, and their attitude toward reading) with word recognition and reading comprehension skills. Findings also show that children who reported negative reading self-concepts performed more poorly on reading-related tasks than children with positive reading self-concepts (Chapman et al., 2000). In this article, five interrelated dimensions of reading motivation (control, interest, self-efficacy, involvement & collaboration) were addressed as internal motivation for reading (Ryan & Deci, 2000; Schiefele, 1999; Taboada et al., 2009).

• Self-monitoring

This activity refers to the provision of opportunities for the learners to make choices and reflect on their reading. They can control their pace, mistakes committed, and self-correction. Skinner, Wellborn, and Connell (1990) explain that learners' self-regulation/control over their reading is an individual interpretation of the control that the learner can have over his/her experience and expectations, that he/she can generate preferred outcomes and reject unpleasant ones.

The article indicates that learners were given training on language and reading comprehension. Having done this activity, the study made the learners practice their reading by using various reading strategies and materials presented in the classroom. The researchers intervened only if the learners sought more clarification and additional support on the reading activities. Therefore, the learners were free to practice their reading and had control over their activity. The findings show that most of the learners performed well in phonological awareness, word recognition, and comprehension of simple sentences. In supporting this finding, Chang (2007) found that regardless of different levels of English proficiency, learners who applied the self-monitoring strategy obtained higher scores on the comprehension test than learners who did not apply the self-monitoring strategy.

• Interest

Interest is another dimension of internal motivation that can be possessed by the learner. The interest of the learner refers to a relatively stable evaluative orientation towards a certain domain (Alexander & Murphy, 1998; Schiefele, 1999). It is also associated with cognitive processes such as deeper processing of texts and learning when other factors such as text length, text variety, background knowledge, and text difficulty were associated (ibid.). Hidi and Renninger (2006) also explain that interest can be observed when the interaction between the individual and content makes up positive.

Therefore, the finding indicated that learners exhibited a high level of interest in participating in the implementation of CFLR. The finding from teachers and parent participants depicted that, contrary to the control schools, learners in the experimental schools were interested in the reading lessons. For instance, the responses of the following teacher participants (T6, T7 & T8) support the finding. To indicate that learners have no interest in their lesson, a teacher participant from a control school reported: "I am not comfortable with what I am doing in the classroom ... coz I couldn't enhance the reading skill of the learners...they have no motivation for the lesson...they aren't interested in reading ... " Similarly, another teacher participant (T9) from the control school also supported the finding saying that learners were not interested in attending a reading lesson in the classroom. He disclosed that:

> "...eh...well....I have been trying my best...but the learners have no motivation...my instructional approach is that... I will read to them ...then they will follow me by struggling with their books. After that, I will give them class works from their text... I observed that only very few of them attempted to do the activities given...most of them had no interest to follow my lesson... "Capen (2010) shows that even if students have the skills and ability to read, they might not choose to read unless they are motivated.

On the contrary, learners in the experimental schools exhibited a good interest in participating in the implementation of CFLR. For instance, a teacher participant (T5) from an experimental school reported that:

> I also observed the importance of learners' motivation on their learning...they are interested in your lesson... your method is very good to motivate the learners and also to make them motivate themselves intrinsically.....wow...they are interested in the lesson...

Capen (2010) also confirms that teachers' roles and classroom environment influenced the reading motivations of learners. The response of a parent participant (P5) from the experimental school approved that the learners' interest increased. He said that;

> I thank you for your new method...I saw learners are reading stories through your help.....the classroom situation is very attractive. You decorated the classroom with very nice teaching aids... the learners' interest was very high.... I also liked the stories selected for the instruction....

This finding is supported by Pintrich (2003) and Unrau and Schlackman (2006) who state that interest is correlated with cognitive processes such as deeper processing of text.

• Involvement

Learner participants engaged in the reading practice enthusiastically exerted effort in completing the activities given to them. It was observed that they were actively participating in the reading activities. The finding from teachers' and parents' interviews in the experimental schools also depicted that the learners' level of "*involvement*" in the reading activities was good as a result of the intervention. For instance, a teacher participant (T4) described learners' involvement by indicating they are striving to read. He said that "*it is very interesting. I am very happy to see that learners are striving to read through your new approach.*"

Another teacher participant (T5) also reported that "....learners were happily participating in the activities..." The phrase "happily participating" indicates the involvement of learners in a reading activity. Furthermore, the following verbatim also shows the learners were involved in the reading activity. The participants used the phrase "highly motivated and participating eagerly..." and "... actively involved in the lesson" A teacher participant (T2) from the experimental school reported that "... You made the classrooms more decorated, attractive and dynamic than I did...and I observed most of the learners of my school were highly motivated and participating eagerly...' A parent from an experimental school (P3) said that "... learners are highly motivated ... I observed that your learners are actively involved in the lesson... that is very nice..." The views of the participants indicated that "motivation" is an important psychological factor that contributes to good reading participation. Pintrich (2003) also depicts that without motivation, students become less engaged in classroom activities which hinders their learning.

Reading Self-efficacy

Initially, learners of the control and experimental schools, in the study, were found to have poor "*Reading self-efficacy*" due to the belief they had about their reading ability. At the beginning of the intervention learners were not willing to participate and had no motivation. They also indicated that they were not competent since they could not read. They frequently used the expression "I am very lazy coz I can't read"; "I dislike myself coz I can't read as my friends did"; "reading is very difficult for me...so I am not good…" The learners' expressions indicate that they linked their poor reading skills with the concept they had towards themselves. Furthermore, they associated their poor self-concept with their self-efficacy that they believed they could not read. For instance, the phrases "... no I can't stand.."; "...oh...I hate reading coz I can't read..."; "I don't think I can read.." illustrate that the learners developed poor "*Reading self-efficacy*".

Similar findings from Schunk (1996) and Finney and Schra (2003) hypothesized that poor self-efficacy negatively influences the individual's choice of activities to put effort in, the level of commitment, and the results attained. In addition, Bandura (1997) posits that self-efficacious subjects are always ready to accept challenges and successfully complete whatever work assigned to them; hence, learners should be self-efficacious. Besides, the finding of the study indicated that some learners of the study were found to have poor self-regulation skills due to "poor reading self-efficacy". They were observed having challenges in paying attention to the intervention given by the researchers, lacked organization in their classroom activities and homework, displayed nervousness with some activities, and poor participation and low performance in the individual, paired, and group work activities.

In improving the *reading self-efficacy* of learners, the researchers continually encouraged the learners not to be influenced by their peers. This is due to some learners comparing their reading ability with their peers and judging themselves as good or poor readers. Guthrie, McRae, and Klauda (2007) explain that loss of reading self-efficacy occurs due to learners' understanding of their reading performance. Furthermore, Edmunds and Bauserman (2006) posit that at an early age, learners are aware of their reading ability compared to other learners because they can easily draw a comparison between their ability and that of peers. Then if they feel that they are capable readers, they will believe in their ability to read; otherwise, they will refuse to participate in reading activities (Guthrie et al., 2007).

Learners' negative reading self-perception influences their reading skills. For instance, Corbiere, Fraccaroli, Mbekou, and Perron (2006) indicate that readers who continually have poor or unsatisfactory experiences with text may develop a negative reading self-perception. Furthermore, Hamachek (1995) also shows that there is a strong interactive link between self-concept and academic success. Besides, learners' self-perceptions of academic competence develop as the learners advance through elementary school (Bouffard et al., 2003).

Guthrie and Wigfield (1997) pinpoint that a positive attitude facilitates active engagement of the learner in the reading activity; while a negative attitude towards reading de-motivates the learner and contributes to poor reading skills. Personal and social adjustment, home conditions, peer relationships, teacher-pupil relations, and the instructional programme all influence attitudes toward reading.

CONCLUSION

The findings of the study revealed that there was an association between learners' reading skill and their Linguistics Skills, Schema (Background Knowledge), Motivation, Self-monitoring, Interest, Involvement and Reading Self-efficacy. The finding also indicated that there was a significant difference in reading achievement test results between experimental and control groups as a result of improved Linguistics Skills, Schema (Background Knowledge), Motivation, Self-monitoring, Interest, Involvement and Reading Self-efficacy in the experimental schools. As the study indicated, learners from the experimental schools exhibited improved skills and behavior during the implementation of CFLR. These were demonstrated by good comprehension skills in the classroom and good scores on the post-test result as well. For instance, learners' performance on the tasks (phoneme segmentation, alphabetic recognition, matching spoken words to printed words, word recognition, and concept of words in the text) given during the implementation of CFLR, were the best indicators of good reading skills. Learners who performed well on the above tasks were found with good reading ability and a good score on the achievement test (Lonigan et al., 2000; Scarborough, 1998; Storch & Whitehurst, 2002; Torppa et al., 2010). Furthermore, learners with good reading skills exhibited characteristics of cognitive, (fast learning, easy understanding, fast & active construction of meanings, good eye movement, and text scanning); motivational (interest, involvement, and self-monitoring); reading self-efficacy, and linguistic knowledge (phonological awareness, syntax, & semantics). Therefore, these can be taken as early indicators of good reading skills (Carlisle, 2000; Deacon & Kiby, 2004). Since the findings indicated that these elements were early indicators of good reading skills, teachers are advised to emphasize them in order to make Grade 3 learners more beneficiaries.

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REFERENCES:

- Ahmadi, M. R., Ismail, H. N., & Abdullah, M. K. K. (2013). The relationship between students' reading motivation and reading comprehension. *Journal of Education and Practice*, 4(18), 8-17. <u>https://doi.org/10.7176/JEP</u>
- Ajideh, P. (2006). Schema-theory based considerations on pre-reading activities in ESP textbooks. Asian EFL Journal, 16(2), 1-13. Retrieved from www.asian-efl-journal.com (access: 2021/06/20)
- Alexander, P.A. & Murphy, P.K. (1998). Profiling the differences in students' knowledge, interest, and strategic processing. *Journal of Educational Psychology*, 90, 435–447. <u>https://doi.org/10.1037/0022-0663.90.3.435</u>
- Al-Issa, A. (2006). Schema theory and L2 reading comprehension: implications for teaching. Journal of College Teaching & Learning, 3(7), 41–48. https://doi.org/10.19030/tlc.v3i7.1700
- Al-Jahwari, Y., & Al-Humaidi, S. (2015). Prior knowledge in EFL reading comprehension: Omani teachers' perspectives & classroom strategies. International Journal of Applied Linguistics & English Literature, 4(1), 169–181. <u>https://doi.org/10.7575/aiac.</u> <u>ijalel.v.4n.1p.169</u>
- Annie E. Casey Foundation (2010). EARLY WARNING! Why Reading by the end of third-grade matters A KIDS COUNT Special Report from the Annie E. Casey Foundation. Baltimore: Annie E. Casey Foundation.
- Applegate, M. D., Applegate, A. J. & Modla, V. B. (2010). "She's my best reader: She just can't comprehend": Studying the relationship between fluency and comprehension. *The Reading Teacher*, 62(6), 512–521. <u>https://doi.org/10.1598/RT.62.6.5</u>
- Ayres, P., & Van-Gog, T. (2009). Editorial: State of the art research into cognitive load theory. *Journal Computers in Human Behavior*, 25(2). <u>https://doi.org/10.1016/j.chb.2008.12.007</u>

Bandura, A. (1977). Social Learning Theory. Alexandria: Prentice Hall.

Bandura, A. (1997). Self-efficacy: The Exercise of Control. New York: W. H. Freedmand & Company.

- Bartlett, F. C. (1932). Remembering: A study in experimental and social psychology. Cambridge: Cambridge University Press.
- Berg, B. L. (2009). *Qualitative research methods for the social sciences*, 7th ed. Boston: Allyn & Bacon.
- Bouffard, T., Marcoux, M., Vezeau, C., & Bordeleau, L. (2003). Changes in self-perceptions of competence and intrinsic motivation among elementary school children. *British Journal of Educational Psychology*, 73, 171–186. <u>https://doi.org/10.1348/00070990360626921</u>
- Brazier-Carter P. M. (2008). Language learning through storybook reading in Head start. Louisiana State University and Agricultural and Mechanical College. A PhD Dissertation. <u>https://doi.org/10.31390/gradschool_dissertations.2360</u>
- Brewer, W. F. (2000). Bartlett's concept of schema and its impact on theories of knowledge representation in contemporary cognitive psychology. In: A. Saito (Ed.), *Bartlett, culture and cognition* (pp.69-89). London: Routledge. <u>https://doi.org/10.4324/9780203457504</u>
- Capen, R. (2010). The role of the teacher and classroom environment in reading motivation. *Illinois Reading Council Journal*, 38(4), 20–25.
- Carlisle, J. F. (2000). Awareness of the structure and meaning of morphologically complex words: Impact on reading. *Reading and Writing:* An Interdisciplinary Journal, 12, 169-190. <u>https://doi.org/10.1023/A:1008131926604</u>
- Catts, H., Hogan, T., & Adolf, S. (2004). Developmental changes in reading and reading disabilities. In: H. Catts & A. Kamhi (Eds.), pp. 23. *Connections between Language and Reading Disabilities*. Mahwah, N J: Erlbaum. <u>https://doi.org/10.4324/9781410612052</u>
- Catts, H. W., Adlof, S. M., Hogan, T. P. & Weismer, S. E. (2005). Are specific language impairment and dyslexia distinct disorders? *Journal of speech, language, and hearing research: JSLHR, 48 6*, 1378-1396. https://doi.org/10.1044/1092-4388(2005/096)
- Chang, M-M. (2007). Enhancing web-based language learning through self-monitoring. *Journal of Computer Assisted Learning*, 23(3), 187-196. <u>https://doi.org/10.1111/j.1365-2729.2006.00203.x</u>
- Chang, H. N., & Romero, M. (2008). Present, engaged, and accounted for: The critical importance of addressing chronic absence in the early grades. New York: National Center for Children in Poverty.
- Chapman, J. W., & Tunmer, W. E. (1995). Development of young children's reading self-concepts: An examination of emerging subcomponents and their relationship with reading achievement. *Journal of Educational Psychology*, 87(1), 154–167. <u>https://doi.org/10.1037/0022-0663.87.1.154</u>
- Chapman, J. W. Tunmer, W. E., & Prochnow, J. E. (2000). Early reading-related skills and performance, reading self-concept, and the development of academic self-concept: A longitudinal study. *Journal of Educational Psychology*, 92, 703–708. <u>https://doi.org/10.1037/0022-0663.92.4.703</u>
- Cohen, L., Manion, L., & Morrison, K. (2011). *Research methods in education*, (7th ed.). London: Routledge. <u>https://doi.org/10.4324/9780203720967</u>
- Corbiere, M., Fraccaroli, F., Mbekou, V. & Perron, J. (2006). Academic self-concept and academic interest measurement: A multi-sample European study. *European Journal of Psychology of Education*, 21 (1), 3–15. <u>https://doi.org/10.1007/</u> BF03173566
- Deacon, S. H., & Kirby, J. R. (2004). Morphological awareness: Just "more phonological"? The roles of morphological and phonological awareness in reading development. *Applied Psycholinguistics*, 25(2), 223–238. <u>https://doi.org/10.1017/S0142716404001110</u>
- De Vos, A. S. (ed), Strydom, H., Fouche, C.B. & Delport, C.S.L. (2002). *Research at Grass Roots: For the social sciences and human services professions*. 2nded. Pretoria: Van Schaik Publishers.
- Delrose, L. N. (2015). Effects of encoding practice on alphabet, phonemic awareness, and spelling skills of students with developmental delays. Louisiana: Baton Rouge Louisiana: <u>https://doi.org/10.31390/gradschool_dissertations.3416</u>
- Dentisak, D. (2010). *Enhancing English reading comprehension through a text structure reading strategy call program*. Unpublished doctoral thesis. City: Suranaree University of Technology.
- Downey, C. M. (2010). Child acquisition of referring expressions. Louisiana State University. Dissertations. 1405. <u>https://doi.org/10.31390/gradschool_dissertations.1405</u>
- Edmunds, K. M., & Bauserman, K. L. (2006). What teachers can learn about reading motivation through conversations with children. *International Reading Association*, 59(5), 414–427. <u>https://doi.org/10.1598/RT.59.5.1</u>
- Finney, S. J., & Schraw, G. (2003). Self-efficacy beliefs in college statistics courses. *Contemporary Educational Psychology*, 28 (2), 161–186. <u>https://doi.org/10.1016/S0361-476X(02)00015-2</u>

- Gaigher, E. (2006). The effect of a structured problem solving strategy on performance and conceptual understanding of physics: A study in disadvantaged South African schools. PhD thesis. Pretoria: University of Pretoria.
- Gay, L. R., Mills, G. E., & Airasian, P. W. (2012). Educational research: competencies for analysis and applications. 10th ed. Boston, Pearson.
- Georgeon, O. R., & Ritter, F. E. (2011). An intrinsically motivated schema mechanism to model and simulate emergent cognition. *Cognitive Systems Research*, 15–16, 73-92. <u>https://doi.org/10.1016/j.cogsys.2011.07.003</u>
- Ghaedrahmat, M., Entezari, J., & Abedi, A. (2014). Impact of demotivating factors on the reading comprehension achievement of Iranian EFL learners. *International Journal of Language Learning and applied Linguistics World*, 5(1), 250–263.
- Guthrie, J. T., McRae, A., & Klauda, S. L. (2007). Contributions of concept-oriented reading instruction to knowledge about interventions for motivations in reading. *Educational Psychologist*, 42(4), 237–250. <u>https://doi.org/10.1080/00461520701621087</u>
- Guthrie, J. T., Wigfield, A., Metsala, J. L., & Cox, K. E. (1999). Motivational and cognitive predictors of text comprehension and reading amount. *Scientific Studies of Reading*, 3(3), 231–256. <u>https://doi.org/10.1207/s1532799xssr0303_3</u>
- Guthrie, J.T. & Wigfield, A. (1997). *Reading engagement: Motivating readers through integrated instruction*. Newark: International Reading Association.
- Hamachek, D. (1995). Self-concept and school achievement: Interaction dynamics and a tool for assessing the self-concept component. *Journal of Counseling & Development*, 73(4), 419-425. <u>https://doi.org/10.1002/J.1556-6676.1995.TB01775.X</u>
- Hernandez, D. J. (2011). Double jeopardy: How third grade reading skills and poverty influence high school graduation. Annie E. Casey Foundation. New York: City University of New York.
- Hidi, S., & Renninger, K. A. (2006). The four-phase model of interest development. *Educational Psychologist*, 41:2, 111–127. https://doi.org/10.1207/s15326985ep4102_4
- Hoover, W. A. & Gough, P. B. (1990). The simple view of reading. *Reading and Writing: An Interdisciplinary Journal*, 2(2), 127-160. https://doi.org/10.1007/BF00401799
- Hossein, T. (2012). A dictionary of research methodology and statistics in applied linguistics. Tehran: Rahnama Press.
- Johnson, B., & Christensen, L. (2012). Quantitative, qualitative, and mixed approaches. (4thed.). Thousand Oaks: Sage.
- Leipzig, D. H. (2001). What is reading? Retrieved from: http://www.readingrockets.org/ article/what-reading (access: 2023/08/20).
- Lerner, J. W. (2002). Learning disabilities: Theories, diagnosis, and teaching strategies. (8thed.). Boston: Houghton Mifflin.
- Lloyd, D. N. (1978). Prediction of School Failure From Third-Grade Data. *Educational and Psychological Measurement*, 38(4), 1193–1200. <u>https://doi.org/10.1177/001316447803800442</u>
- Lonigan, C. J., Burgess, S. R., & Anthony, J. L. (2000). Development of emergent literacy and early reading skills in preschool children: Evidence from a latent-variable longitudinal study. *Developmental Psychology*, 36(5), 596–613. <u>https://doi.org/10.1037/0012-1649.36.5.596</u>
- Lumsden, L. (1999). Student motivation: Cultivating a love of learning. Publishers Press, Salt Lake City, Utah. URI: http://hdl. handle.net/1794/3294
- McCormick, S. (1992). Disabled Readers' Erroneous Responses to Inferential Comprehension Questions: Description and Analysis. Reading Research Quarterly, 27(1), 55–77. https://doi.org/10.2307/747833
- Meece, J. L., & Miller, S. D. (1999). Changes in elementary school children's achievement goals for reading and writing: Results of a longitudinal and an intervention study. *Scientific Studies of Reading, 3*(3), 207–229. <u>https://doi.org/10.1207/s1532799x-ssr0303_2</u>
- Metsala, J. L., Wigfield, A., & McCann, A. D. (1996). National Reading Research Center. The Reading Teacher, 50(4), 360–362.
- Mulhall, A. (2003). In the field: Notes on observation in qualitative research. *Journal of Advanced Nursing* 41(3), 306–13. <u>https://doi.org/10.1046/j.1365-2648.2003.02514.x</u>
- Nation, K., & Norbury, C. F. (2005). Why reading comprehension fails: Insights from developmental disorders. *Topics in Language Disorders*, 25(1), 21–32. <u>https://doi.org/10.1097/00011363-200501000-00004</u>
- Neuman, W. L. (2006). Social research methods. Qualitative and Quantitative approaches. (6th ed.). Boston: Pearson.
- Pintrich, P. R. (2003). A Motivational Science Perspective on the Role of Student Motivation in Learning and Teaching Contexts. *Journal of Educational Psychology*, 95(4), 667–686. <u>https://doi.org/10.1037/0022-0663.95.4.667</u>
- Pintrich, P. R., Marx, R. W., & Boyle, R. A. (1993). Beyond Cold Conceptual Change: The Role of Motivational Beliefs and Classroom Contextual Factors in the Process of Conceptual Change. *Review of Educational Research*, 63(2), 167–199. <u>https://doi.org/10.2307/1170472</u>

- Rayner, K., Foorman, B. R., Perfetti, C. A., Pesetsky, D., & Seidenberg, M. S. (2001). How psychological science informs the teaching of reading. *Psychological Science in the Public Interest*, 2(2), 31-74. <u>https://doi.org/10.1111/1529-1006.00004</u>
- Rentsch, J. R., Mot, I., & Abbe, A. (2009). *Identifying the Core Content and Structure of a Schema for Cultural Understanding*. https://doi.org/10.1037/e580402009-001
- Rosenblatt, L. (2005). The acid test for literature teaching. In: L. Luedeke. (ed.), *Making Meaning with Texts: Selected Essays / Louise Rosenblatt,* pp. 62–71. Portsmouth: Heinemann.

Rumelhart, D. E. (1980). Schemata. The building blocks of cognition. Theoretical Issues in Reading Comprehension. 1sted.

- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25, 54-67. <u>https://doi.org/10.1006/ceps.1999.1020</u>
- Scarborough, H. S. (2005). Developmental relationships between language and reading: Reconciling a beautiful hypothesis with some ugly facts. In: H. W. Catts, A. G. Kamhi, (eds.), *The connections between language and reading disabilities* (pp.3-24). Mahwah: Erlbaum.
- Scarborough, H. S. (1998). Early identification of children at risk for reading disabilities: Phonological awareness and some other promising predictors. In B. K. Shapiro, P. J. Accardo, & A. J. Capute. (Eds.), Specific reading disability: A view of the spectrum (pp. 75–119). York: York Press. Retrieved from: https://www.researchgate.net/publication/267744244_Early_Identification_ of_Reading_Comprehension_Difficulties (accessed: 2021/03/29).
- Schiefele, U. (1999). Interest and learning from text. 3(3,) 257-279. https://doi.org/10.1207/s1532799xssr0303_4
- Schunk, D. H. (1996). Self-evaluation and self-regulated learning. *Paper presented at the Graduate School and University Center.* New York: City University of New York.
- Schunk, D. H., & Pajares, F. (2002). The development of academic self-efficacy. In: A. Wigfield, J. S. Eccles, (eds.). *Development of Achievement Motivation*, (pp. 16-32). San Diego: Academic Press.
- Scott, C. (2004). Syntactic ability in children and adolescents with language and learning disabilities. In: R. Berman, (ed.), *Language Development across Childhood and Adolescence* (pp. 107–143). Philadelphia: John Benjamins.
- Shea, J. A., Arnold, L., & Mann, K. V. (2004). A RIME perspective on the quality and relevance of current and future medical education research. *Journal of the Association of American Medical College. Academic Medicine*, 79(10), 931-938.

Shuying, A. (2013). Schema Theory in Reading. Theory and Practice in Language Studies, 3(1), 130-134.

- Skinner, E. A., Wellborn, J. G., & Connell, J. P. (1990). What it takes to do well in school and whether I've got it: A process model of perceived control and children's engagement and achievement in school. *Journal of Educational Psychology*, 82, 22–32. https://doi.org/10.1037/0022-0663.82. 1.22
- Stanovich, K. E. (2000). Progress in understanding reading: Scientific foundations and new frontiers. New York: Guilford Press. https://doi.org/10.5860/choice.38-2284
- Storch, S. A., & Whitehurst, G. J. (2002). Oral language and code-related precursors to reading: Evidence from a longitudinal structural model. *Developmental Psychology*, 38, 934–947. <u>https://doi.org/10.1037/0012-1649.38.6.934</u>
- Taboada, A., Tonks, S. M., Wigfield, A., & Guthrie, J. T. (2009). Effects of motivational and cognitive variables on reading comprehension. *Reading and Writing*, 22(1), 85–106. <u>https://doi.org/10.1007/s11145-008-9133-y</u>
- Tausch, C. (2012). A syntax-based reading intervention for English as second language learners. Louisiana: The Louisiana State University(*LSU*) Doctoral Dissertations, 3571.

TGE, (1994). Transitional Government of Ethiopia. Education and training policy. Addis Ababa: St. George printing press.

Torppa, M., Lyytinen, P., Erskine, J., Eklund, K., & Lyytinen, H. (2010). Language development, literacy skills and predictive connections to reading in Finnish children with and without familial risk for dyslexia. *Journal of Learning Difficulties*, 43(4), 308-321. https://doi.org/10.1177/0022219410369096

- Turner, J. C. (1995). The Influence of Classroom Contexts on Young Children's Motivation for Literacy. *Reading Research Quarterly*, 30, 410-441. <u>https://doi.org/10.2307/747624</u>
- Unrau, N., & Schlackman, J. (2006). Motivation and its relation to reading achievement in an urban middle school. *Journal of Educational Research*, 100:2, 81–101. <u>https://doi.org/10.3200/JOER.100.2.81-101</u>
- Van, T. E. R, Rennie, A. M, Hundley, V., & Graham, W. (2001). The importance of conducting and reporting pilot studies: the example of the Scottish Births Survey. Journal of Advanced Nursing, 34, 289-295. <u>https://doi.org/10.1046/j.1365-2648.2001.01757.x</u>
- Wren, S. (2001). *The cognitive foundations of learning to read*. Austin, Texas: Southwest Educational Development Laboratory, U.S. Department of Education.