Does Homework type Affect Pupils' Homework Management? Experience from Standard Five Pupils in Dar es Salaam, Tanzania

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ABSTRACT
The aim of this study was to examine whether homework type may have influence on pupils' development of various Homework Management Strategies (HMS) for effective management of the homework assigned. 154 standard five pupils selected from two Public Primary Schools in Ubungo, Dar es Salaam were assigned into either of the two homework types namely, Interactive homework Assignment (IHA) and Non-Interactive Homework Assignments (Non-IHA). The homework management strategies include: (a) ability to set an appropriate work environment, (b) managing time, (c) handling distraction, (d) monitoring motivation, and (e) controlling negative emotions arising while doing the homework. A Homework Management Strategies (HMS) scale by Xu and Corno (2003) was adapted and used to solicit information on Homework Management Strategies from the pupils. Compared with Non-Interactive Homework assignments, pupils in IHA reported more frequently working to manage their workspace, budget time, handle distraction, monitor motivation, and control emotion while doing homework. This suggests a need to encourage the use of IHA in our public primary schools so as to enhance the use of the five HMS and consequently improve pupils' learning.

Keywords: *Homework Management Strategies, Self-regulation, Interactive Homework, Assignments*

INTRODUCTION

Homework has been identified as one of the means for Continuous academic Assessment (CA) of school learners in several educational settings in the world (Epstein, 2013). On one side, literature focusing on effective schools indicates that homework has significant roles in contributing towards learners' academic progress and terminal achievement (Cooper, Robinson, & Patall, 2006; Ramdass & Zimmerman, 2011; Van Voorhis, 2011). On the other side, homework is known to be

one of the academic assessment tools that can improve learners' self-regulatory behaviors such as motivation to study, self-efficacy, learning goal setting, and learning time management. These factors are considered important and critical for successful learning (Grodner & Rupp, 2013; Ramdass & Zimmerman, 2011).

Besides it being useful and meaningful in promoting learning, homework is reported to be useful and effective only when it is effectively used and managed to achieve the expected results (Carr 2013). When it is ineffectively managed, homework becomes a challenge which may result in other behaviours such as learners' general fatigue (Cooper, 2001), interference of learners' time with friends, family and peers (Trautwein, Ludtke, & Kastens, 2006) and can be a de-motivation to the learning process (Bennett & Kalish, 2006). It is worth noting that ineffective homework management can devalue the usefulness of homework as an effective learning and assessment tool and mechanism (Carr, 2013).

In considering the need for effective homework management, the Corno's model on volitional control and some other studies (Xu, 2004, 2005, 2008b, 2008c; Xu & Corno, 2003, 2006) have examined a range of Homework Management Strategies (HMS) that learners should posses in order to improve their homework management. They include ability to arrange the environment, manage time, monitoring motivation, control negative emotions and avoid various distractions. However, these studies did not investigate whether the use of homework management strategies was influenced by the type of homework assigned to the learners.

The present study has linked type of homework assigned to a range of homework management strategies. This line of research is important, as student academic achievement may be related to the use of certain homework management strategies in particular (Zimmerman & Kitsantas, 2005; Zimmerman & Martinez-Pons, 1990). In addition, there is a need to examine the influence of homework type on homework management, so as to suggest the type of homework that teachers may use in schools to develop learners' various skills useful for their academic achievement.

The two types of homework assignments assessed in this study included the Interactive Homework Assignment (IHA) and the Non-Interactive Homework Assignments (Non-IHA). Interactive homework assignments

are those that promote and enhance parent-child interaction while practicing skills learned in school (Battle-Bailey, 2003). In IHA there was an open dialogue between and among teachers, students and parents/guardian. Teachers instructed the learners on how the assignment was to be done, and also informed the parents about the homework provided for them to effective monitor the tasks at home.

Non-interactive homework assignments were the tasks which were managed and completed by the pupils with no support from their parents. The Non-IHA comprised the same tasks as the IHA but no invitations, no prompts, and no explanations were provided to parents about the homework. In general, with IHA no communication between the school and home about the homework assigned was initiated.

Related Literature

The present investigation was informed by two lines of related literature: (a) literature that points to the need for Homework Management Strategies on pupils' learning, and (b) literature that develop a linkage between the type of homework assigned and the development of homework management strategies for effective learning.

A need for Homework Management Strategies to pupils' learning

Since homework is essential part of student's lives, managing it is an important skill that learners need to have. Due to their ages, young learners remain unfocused and have not yet acquired good study skills that can assist them in managing the homework processes (Howard, 2015). Steinberg (2011) states that young learners have minimal abilities to pay attention to tasks assigned and this leads to increased rate of homework incompletion and low understanding of the materials compared to the condition of older learners. As a result, young learners are often unable to manage their time, to arrange the environment for homework and even to control such distractions as TV and radios which may be loudly on during homework time.

On top of that, young learners are not often self-directed when compared to adult learners and in such a case, they might not know what to do, how to do it and when to do homework (David, & Hossam, 2013). Generally, since homework is mostly to be done after school hours such distractions as extra-curricular activities at home and poor learning environment arise when a child wants to do homework and this affects the learner's

homework completion and consequently becomes a victim of poor academic performance (Xu, 2013).

Again, the currently globalized world puts most of the people and especially the youths under too much pressure and tension due to socio-economic changes affecting families and societies in general (Mishra, 2012). These changes bring lots of stress and anxiety which affect the emotional states of pupils in learning. In most times the learners are emotionally weak due to changes in the environment.

That emotional weakness can have a significant impact on both the physical and mental health of pupils which significantly correlates with the learning process (Namrata, 1992, quoted in Mishra, 2012). Therefore, a need is rife to create an emotion-free environment for learners so that they can effectively engage in homework. This can be done through the use of IHA where both parents and teachers can play their roles for learners to remain emotionally stable as they grow in their educational careers. Thus, because of the lack of the ability for self-actualization and direction compounded with poor self-regulation skills (Axelrod et al., 2009), young learners by all means need guidance and assistance from both teachers and parents on how to manage homework using the HMS.

In support of this assertion and observation, Xu (2013) lists five major challenges of homework that learners encounter outside school hours. These include inability to arrange a conducive environment at home to do homework, inability to manage the time available for out of school activities, inability to handle distractions to learning, and inability to cope with negative emotions. Such learners need tailor-made mechanisms to monitor and evaluate their learning programmes by linking their activities at school as well as at home for enhanced academic progress and achievement.

Homework type and Homework Management Strategies

Different types of homework may affect the development of HMS differently. Several studies have found that homework assignments that encourage participation and assistance from parents cultivate positive learning behaviours (Van Voorhis, 2003; Xu, 2004; Silinskas & Kikas, 2011). These types of homework assignments are commonly known as Interactive Homework Assignments (IHA). These are types of assignments that encourage the participation of the parents in their

children's homework. The proponents of these homework assignments maintain that parental involvement in pupil's educational development significantly increases learners' motivation and achievement in schools (Epstein, 2013; Xu, Benson, Mudrey-Camino & Steiner, 2010). Xu, (2005) comments that homework assignments designed to support direct interaction between learners and parents are efficient and powerful as parents help their children with time management, control of distractions, upholding motivation, controlling emotions and increasing learners' academic achievement.

On the one hand, IHAs have been proved to improve learners' study skills, to support independent learning and to promote the development of positive attitudes towards learning (Zimmerman & Kitsantas, 2005). On the other hand, IHA is also found to be challenging yet interesting in developing learners' behaviour self-regulation such as self-efficacy, self-reflection, time management and gratification, all of which are of paramount importance in promoting a learner's academic achievement (De Jager 2014; Ramdass & Zimmerman, 2011).

Besides the evidences of the effectiveness of IHA in the literature discussed, yet in Tanzania the traditional homework assignments continues to be used in Public Primary Schools are claimed to be Non-IHA. These are claimed to limit the development of the HMS which are effective in improving study skills and achievement in the learning process. This study therefore aimed at introducing the Interactive Homework Assignment in PPS to replace the traditional homework assignments which are non-IHA and assess their effectiveness in enhancing the use of HMS in learning.

METHOD

Research Approach and Design

This intervention study was conducted for a period of 8 weeks. The study employed quantitative research approach with quasi experimental design in order to allow the researcher to select a group of participants for treatment and a control group, something which could be difficult to do in other research approaches (Johnson & Christensen, 2012). Therefore, during the study the treatment phase of research was conducted such that one group of the pupils participated in the Interactive Homework Assignment where the homework was made interactive and allowed parents to participate in their children's homework. The other group was a

control group continued with the traditional homework assignments which are non-Interactive.

Participants

Participants were 154 standard five pupils in two schools conveniently selected from Ubungo Municipality, Dar es Salaam region. Among them 84 participated in the treatment condition and 70 in the Control condition. Parents were also participated in the treatment group so as to assist and guide their children with homework. Two English language teachers were also included as the homework coaches who were to design an Interactive homework and make sure that pupils take them home and return them on time.

Instruments

The Homework Management Strategies Scale (Xu & Corno, 2003) was adapted and used to record pupils' Homework Management strategies before and after the intervention. The scale consisted of 22 items related to all the five Subscales of HMS; planning and arranging the homework environment (e.g., "find a quiet place"), managing time (e.g., "set priorities and planning ahead"), handling distraction (e.g., "stopping homework to send or receive messages"), monitoring motivation (e.g., "finding ways to make homework more interesting"), and controlling emotions (e.g., "calming oneself down"). The possible responses for each item were *never* (scored 1), *rarely* (scored 2), *sometimes* (scored 3), *often* (scored 4), and *Always* (scored 5).

Also, an Interactive Homework guide was developed and used to train the parents on their involvement for one week before the intervention. Also English language homework was prepared by a teacher each week and sent home by a child on a weekly basis.

Validity and Reliability of the Instruments

Since the scale for measuring HMS was adapted, content **v**alidity of the research instruments was achieved through deletion of some concepts which seemed to be irrelevant to the context and an addition of some few ones which were more relevant in meeting the objectives of the study. The reliability of the research instruments was determined through a pilot study conducted in six primary schools.

The test-re-test method was used where the same questionnaires were administered twice to the same pupils of the same school within an interval of two weeks during a pilot study. Any item reported to be unclear was corrected before the actual study. Calculation of Cronbach's alpha coefficient (α) for each study variable was done with data collected from the pilot study where a=0.84 depicts high reliability.

DATA ANALYSIS

In order to assess the effects of the two homework types (IHA and Non-IHA) on pupils' homework management, the Multivariate analysis of variance (**MANOVA**) was done.

However, prior to conducting the MANOVA analysis, a series of Pearson Correlations were performed between all the Dependent Variables (DV) in order to test the MANOVA assumption that there would be at least a moderate correlation between all the DVs. See table 1.0.

Table 1.0: Inter-correlations between Homework Management Strategies (DV)

Study Variables	1	2	3	4	5
1. Pp_ Environment					
2. Pp Time mgt	.681***				
3. Pp_ Motivation	.759***	.717***			
4.Pp_Handle distraction	-.579***	-.516***	-.652***		
5. Pp_ emotion	.781***	.720***	.842***	-.754***	

Note. *** p < .001; Pp=Pupils; N=208; Pp=Pupils;mgt=Management;

Furthermore, separate univariate tests were performed using an Analysis of variance (**ANOVA**) to compare the effects of Homework type (IHA vs. Non-IHA) on the five subscales of Homework Management Strategies. See table 1.1.

Table 1.1: Group Means and Standard Deviations for the Five Subscales of HMS

H/W_type	HOMEWORK MANAGEMENT STRATEGIES (HMS)				
	Env.Mgt	T_Mgt	Motivation	Distraction	Emotion
IHA	3.06 (1.21)	2.97 (1.13)	3.07(1.17)	2.74(1.06)	3.10(1.45)
NON-IHA	2.46(.65)	2.47(.70)	2.16(.48)	4.03(.41)	1.66(.36)
F =	17.52***	12.64***	42.86***	106.79***	76.42***
η2 =	.077	.060	.178	.350	.278

*** $p < .001$; H/W=Homework; Env.Mgt= Environmental Management; T_Mgt=Time Management

FINDINGS

Table 1.0, shows a meaningful correlation amongst all of the DVs, suggesting appropriateness for the MANOVA analysis. Thus, after establishing that there was a correlation between the Dependent Variables, One- way MANOVA was used to test a hypothesis that there would be no statistically significant differential effect of independent grouping Variable (H/W type (1=Non-IHA; 2= IHA)) on the series of Dependent Variables (HMS). Results indicated a P < .001; Wilks' Lambda= (.574), F (5, 194) = 28.77, p = .000; partial η^2 = .43. This means that, pupils' ability to use HMS for homework management significantly depended on the type of Homework assigned. Approximately 57.4% of multivariate variance of the Dependent Variables (use of HMS) is associated with Homework type (IHA or Non-IHA).

Furthermore, results in table 1.1. show a statistically significant effects of Homework type on all five Dependent Variables, namely, arranging the environment [F(1,198) = 17.52, $p < .001$, partial η2 = .077], managing time [F(1,198) = 12.64, $p < .001$, partial η2 = .060], monitoring motivation [F(1,198) = 42.86, $p < .001$, partial η2 = .178], handling distraction [F(1,198) = 106.79, $p < .001$, partial η2 = .350], and controlling emotion [F (1, 198) = 76.42, $p < .001$, partial η2 = .278].

DISCUSSION

The study findings indicate that IHA brought significant effects to the learners' ability to homework management. Compared Means and Standard Deviations between pupils in IHA and pupils in non-IHA pupils, IHA pupils reported more frequently working to arrange the environment, manage time, handle distractions, monitor motivation, and control their own emotions during homework sessions than pupils in non-IHA. This can be said that the more homework is interactively designed, the more it enhances pupils' ability to manage the homework and consequently perform well. This can be associated with several aspects included in the intervention and specifically the quality of the Interactive homework including the following ones; the ability to actively involve all the stakeholders i.e. the teachers, parents and pupils by developing an awareness on their roles in the homework process.

Unlike IHA, traditional homework assignments which are non-IHA do not give opportunity for involvement of parents in supporting the learners with homework. Through Non-IHA, learners are left alone in struggling with the learning without or with less support from their families. IHA exposes learners to supports from their parents and teachers. Through the support from their parents and teachers they are guided, coached and controlled on various HMS and learning strategies. Well designed homework like IHA becomes a tool for training learners on several strategies for homework management and skills that enhance their ability on how to study, how to work diligently and persistently, and how to delay gratification (Bempechat, 2004).

Again, by using IHA in the present study, teachers were taught and encouraged to design homework tasks which are purposely, interested and are of appropriate level of difficulties. These kinds of homework tasks help learners by motivating them and developing their interests towards the works assigned. This is in line with the idea of Beutlich (2008) who suggested a need for the teachers to modify the kind of homework they assign regularly to their learners.

It is reported that poorly designed homework are ineffective in motivating learners to participate in the learning process, but when homework are well designed like the IHA learners' motivational aspects to do the homework assigned is enhanced. The study is also in line with Bembenutty (2011, Carr (2013), Van Voohris (2001) and Vatterott (2010). According to Bembenutty (2011), homework activities which are effectively and appropriately set play a great role in teaching the learners various strategies for handling the homework like self-regulation and self-efficacy beliefs, goal setting, time management, managing the environment, and ability to maintain attention which are considered to be very helpful in the learning process.

Unlike IHA, a typical traditional homework mostly used in our schools involves questions repeated from a class content taught the same day provide no or little opportunity for the learners to learn and develop various HMS (Coutts, 2004). Specifically in Tanzania, it is evidenced that the home environments are not conducive enough for extra learning after school hours. Most of the time Tanzanian pupils get distracted at home by various home chores which hinder them from effective learning.

Through IHA, pupils are taught on how to manage these kinds of environment and handle various distractions arising during homework.
On top of that, besides self training that they get, even their parents are trained on how to help them prepare conducive home learning environments. Parents are also trained on how to assist their pupils manage time effectively by setting a weekly timetable that should be followed accordingly. This is in line with Xu (2005) who opines that adult- monitoring of the homework was significantly associated with the learners' ability to manage time effectively during the homework process.

Through this study's finding, we get to know that if we want pupils to develop various skills for homework management and learning, there is a need to involve their parents. This situation can also be associated with the theoretical perspectives raised in the Epstein's model, where the success of the learner is affected by various practical issues happening at the school and home. In general, this study's finding can be interpreted in light of the context of the today's globalized world which is too demanding and the parents get to be very busy allowing minimal time to provide support in their pupils' learning (Swap, 1993).

Again, in the context of Tanzania in general where most of the parents lack knowledge and skills on how to be involved; what they need is to be reminded by the teachers and other necessary organs on the importance of their involvement and being trained on how to be involved so that pupils are not left alone during the homework sessions. Pupils do better when they are assisted by parents and teachers. They need to be followed, guided and monitored for better success. But for parents to be involved effectively they need training and now and then follow up due to their busy timetable and lack of skills.

Practical implications

The present study revealed that, the more homework is interactively designed, the more it helps pupils to develop homework management strategies and to improve their homework management and effective engagement in the tasks assigned and vice versa. In general, the study findings have practical implications to teachers, parents and the learners in Tanzania who are not aware of their roles in making homework an effective learning tool. Thus, with thus study's findings we get to know that parents and teachers need to work together as core partners in pupils' educational achievement. They both need to play their role in guiding,

motivating and assisting learners to develop strategies for homework management. Teachers should consider elements that will facilitate: parent-child interactions, parent-child interest, Likewise, parents should make sure they are available during the homework time so as to watch out signs of negative emotions to their children and intervene by monitoring them. This is in line with Copper (2001) who reports the need for family support during homework session and that parents, teachers and pupils need to understand the need for collaboration among them during homework process.

LIMITATIONS AND FUTURE RESEARCH

This study has some limitations that should be acknowledged. First, the present findings are based on self-reported data. Also, other predictor variables (e.g., Parent's Social economic status, and gender) might have an effect on homework management strategies had they been included. There is also a need to examine the use of homework management strategies across learners of high school levels because their educational aspirations in homework behaviors may be more pronounced at this level (Xu, 2008). Furthermore, another research should further be done to explore the linkages between student academic achievement and homework management strategies. In addition, there is a need to include a larger sample so as to make generalization of the findings possible.

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