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Effect of Group Mentoring on Virtual Library Skills of Secondary School Students

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Abstract

The present study aimed to investigate the effect of group mentoring on the virtual library skills of senior secondary school students. The study used a two-group pretest-posttest design to study a sample of senior secondary school students from a Nigerian public secondary school (10 students were enrolled for the group mentoring program and 10 others were waitlisted). Data for this study were collected using the Students' Virtual Library Skills Scale. Compared to their wait-list control group counterparts, senior secondary school students who received group mentoring showed a greater ability to gain virtual library skills. Studies that aim to impart virtual library skills to senior secondary school students will be vital, especially as these students prepare to enter institutions of higher education, where such skills will be essential for their academic success.

Keywords: Group Mentoring, Secondary Schools, Students, Virtual Library Skills

Introduction

      A group mentoring approach combines peer mentoring with group facilitation, in which mentors use their experiences in group facilitation, management and leadership to assist mentees in exchanging ideas and learning from one another (Group Mentoring Supplement, 2020; KMP+ House of Mentoring, 2018). There can be a range of group mentoring compositions, from having one mentor working with three to six mentees, to having two mentors working with a group of eight to twelve mentees (Group Mentoring Supplement, 2020). Within the context of a school setting, group mentoring can provide students with the opportunity to acquire essential skills and competencies required to utilize library information resources effectively, among other advantages.

      In schools, the library is a learning resource center that facilitates student learning and is used to provide guidance and learning support to the students by teachers (Wijetunge & Alahakoon, 2005). Librarians expect students to have good information literacy skills. Students at the secondary school level can use the library to retrieve books and magazines that will assist them in doing their class assignments, reading for pleasure, or completing their assigned reports (Kester, 1994). Ettelt (1992) notes that it is important to help secondary school students acquire library information skills so that they can learn how to obtain assistance from the school librarian, as well as make use of books, bibliographic citations, catalogs, reference books, and periodical indexes. A school librarian can assist students with acquiring the technical and information literacy skills they need to succeed in the academic world (Dupuis, 1997; Mahmood, 2013).

      The school library skills program teaches students how to effectively use library information skills, services, and resources, and such programs are considered an integral part of the educational process (Nolan et al., 2009). According to Carey (1998), teachers have the duty to prepare students to recognize and use various sets of information and knowledge tools

for accessing, creating, and presenting information in various formats. According to the author, it is the students' responsibility to retrieve information from various sources and utilize it for the preparation of reports and presentations (Carey, 1998). According to earlier research, information skills instruction is needed to improve students' knowledge and skills (Burdick, 1996). Information skills instruction can be crucial for empowering students to meet their information needs related to school and life in general, according to Wallis (1996). In their study, Ladbrook and Probert (2011) found that online information searching and critical evaluation skills are inadequate among students, and that this issue is not being addressed by teachers' pedagogical methods. In a prior study, the project-based group inquiry learning approach was found to enhance students' information skills and literacy (Chu et al., 2011). Despite having a variety of computer skills, secondary school students may not be able to navigate the technological environment and resources of institutional libraries (Dupuis, 1997). So, the present research sought to examine the effects of group mentoring on virtual library skills in Nigerian senior secondary school students.

Research Hypothesis

Students in Nigerian senior secondary schools who participate in group mentoring will have significantly higher virtual library skills compared to their wait-list control group counterparts.

Methodology

After the research was approved by the Education Faculty Research Ethics Committee at the University of Nigeria, the researcher obtained further consent to conduct the study from the principal and guardians of the sampled public secondary school students. The two-group pretest-posttest design (see Allen, 2017 for more information about this design) was used in this study to mentor a purposefully selected group of senior secondary class two students from a public secondary school in Southeast Nigeria. Ten students were assigned to the group

mentoring program, whereas 10 were assigned to the wait-list control group. In the selected school, the library is operational. The students gave their consent to participate in the mentoring program and were given information about the advantages of the program and their right to withdraw from it at any time.

During the five-week group mentoring program, meetings were held twice a week and during the long break. During each group mentoring session, two school librarians served as the group's mentors for 30 minutes each. To sustain students' interest in the group mentoring tasks and goals, which centered on the acquisition of virtual library skills, the program employed motivational strategies as suggested by Small (1999). Various approaches to teaching library information skills such as free inquiry, problem-solving, and the process approach were adapted for use at various stages of this group program (see Wallis, 1996 for more details). During week one, students learned about virtual library resources, services, and procedures. During week two, the students focused on learning how to locate, select, and retrieve various online books and periodicals that pertain to their interests. Additionally, students were equipped with the ability to use virtual library information resources during week three. Week four's focus was on the students' ability to evaluate virtual library resources. Program participants discussed issues concerning bibliographic citations and plagiarism in an age-appropriate manner during week five, which focused on ethical utilisation of virtual library resources. This program comprises various aspects of virtual library skills training adapted from previous literature (e.g. Nolan et al., 2009).

The pretest and posttest data were collected using the Students' Virtual Library Skills Scale (SViLSS) developed by the investigator based on a previous literature review (Nolan et al., 2009; Wallis, 1996). It is a 25-item scale that mentors use to assess their students' virtual library skills prior to and after the library skills training program. It is comprised of a four-point instructor-rated scale (HPS through DNPS), with a Cronbach's Alpha value of 0.87.

Higher scores in the SViLSS suggest better skills in virtual libraries, as recorded by the student observer. Students who participated in the group mentoring program were given a practical test at the end of the program during which the researcher observed how each student displayed and recognized various sets of virtual library skills and rated them accordingly. Analyses of covariance were used at the .05 level of significance to analyze the study pretest and posttest data. On the last day of the group meeting, the students received one of their favorite reading materials as an incentive. Additionally, wait-list control group members were scheduled to undergo group mentoring during the next academic term.

Results

In the group mentoring, the students' demographic data analysis revealed that four male students (40%) and six female students (60%) comprised the study sample, as did five male students (50%) and five female students (50%) in the wait-list control group. The mean age of the students was 16.25±0.79.

Table 1: Data analysis summary of SViLSS scores for each group during pretest and posttest

SViLSS scores	Mentoring Group M±SD	Wait-list control Group M±SD	df	F	p	η^2_p	ΔR^2
Pretest	2.35±.41	2.45±.42	[1,19]	.233	.635	--	--
Posttest	3.51±.43	2.56±.32	[1,19]	29.51	.000	.63	.60

In Table 1, the results of data analysis indicate that students in the group mentoring program had a low pretest SViLSS score (2.35±.41), which was significantly similar to the pretest SViLSS score for students in the wait-list control group (2.45±.42) [$F(1,19)$=.233, p=.635. The mean difference is -.093. Nevertheless, results show that the SViLSS score obtained by the senior secondary students who participated in group mentoring (3.51±.43) was significantly higher than the SViLSS score achieved by their wait-list control group

counterparts (2.56±.32). Therefore, students' participation in group mentoring improved their use of virtual libraries compared to those in the waitlist control group [$F(1,19)=29.51$, p*.05, $\eta^2_p=.63$, $\Delta R^2=.60$, mean difference=0.941]. Therefore, the hypothesis that students in Nigerian senior secondary schools who participate in group mentoring will have significantly higher virtual library skills compared to their wait-list control group counterparts was supported. In Figure 1, the mean difference in SViLSS scores between senior secondary students in the mentoring group and the wait-list control group is shown.
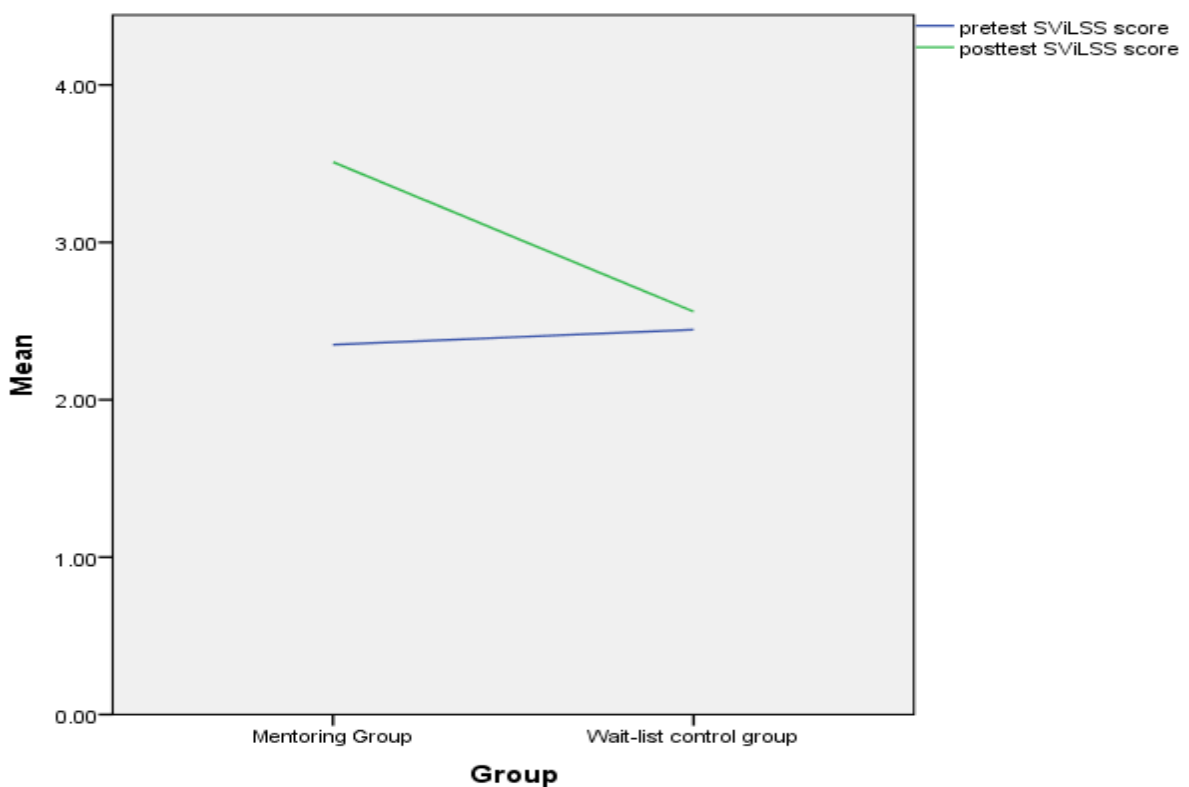

Figure 1: SViLSS scores for students in the group mentoring and control groups.

Discussion

The purpose of the current study was to examine the effect of group mentoring on the virtual library skills of secondary school students. The study found that group mentoring helped senior secondary students acquire virtual library skills more effectively than the wait-list control group. It appears that this finding supports the notion advanced by Nolan et al. (2009) that a school library program designed to equip students with library information

skills can enable students with the skills necessary to take full advantage of library information resources efficiently and effectively. The instruction on library skills promotes students' acquisition of skills necessary to solve information problems, stimulates and promotes information seeking behavior, exploration behavior, and intellectual curiosity among students, according to Small (1998). As Wallis (1996) demonstrated, students can benefit from a library information skills program by learning about reference sources and how to use them properly to locate and retrieve information. The limitations peculiar to the quasi-experimental design used in this study suggest that future studies should employ more robust research designs, such as randomised controlled group designs, to verify the relevance of group mentoring in developing students' proficiency in virtual libraries.

Earlier research by Hunter (1994) demonstrated that students' ability to use library information skills for class assignments can be enhanced through a library skills program. Wijetunge and Alahakoon (2005) suggest that library and information skills should be integrated into the school program of activities as this will assist students in engaging in active and self-directed learning activities. By recognizing the library skills that students need and providing appropriate learning activities to develop them, teachers can support the efforts of school librarians(State Committee on Reading & Indiana State Department of Public Instruction, 1966). Future research should focus on the development of virtual library skills among senior secondary school students, especially as these students prepare for transition to higher education institutions where such skills are crucial to their success. Future research should collect data on students' satisfaction with a mentoring program designed to develop and sustain their virtual library skills.

Conclusion

Group mentoring supported students' acquisition of virtual library skills more than wait-list control condition. Having the goal of imparting virtual library skills to senior secondary school students is extremely important, especially as they prepare to move on to higher education institutions, where such skills are of critical importance.

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