Instructional Competence in Sustaining Receptive And Retentive Memory Skills (SRRMS) In Mathematics

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Abstract — This study determined the extent of competence of the respondent- Mathematics teachers in Sustaining Receptive and Retentive Memory Skills (SRRMS) in their students using specialized media instruction and technologically designed classroom activities. The descriptive method of research was used, with the questionnaire-checklist as the main data gathering instrument. Thirty-eight (38) public junior and senior high school Mathematics Teachers were involved and 40 Junior/Senior high school students were requested to countercheck the responses of their teachers in responding a parallel questionnaire. The data were analyzed using frequency counts, percentages, weighted mean, overall weighted mean, analysis of variance (ANOVA), t-test and Pearson r. Most of the respondent-Mathematics teachers were 20-29 years old, female, married, master's graduate, secondary school teacher III, less than 5 years in the service and active in attending in-service trainings. The analysis revealed that the respondents are both competent in using specialized media instruction, and technologically designed classroom activities. Regardless of the profile variables, the competence in SRRMS in Mathematics did not show any significant differences from each other. The results explains that the Mathematics Teachers are mature, experienced, and have sufficient educational qualifications to provide effective instruction using specialized media instruction, and technologically designed classroom activities. Further studies on Teachers' competence in SRRMS in students should be conducted using other variables in a wider venue and scope, under the auspices of an accredited graduate school in the area.

Keywords — Competency, Skill, Receptive, Retentive, Media, Technology.

I. Introduction

Receptive and retentive memory skills in learning involve a process resulting in systematized thinking perceptions. This concept was Ben-Zvi-Assaraf, O. and Orion, N. (2016) study conducted using four (4) junior high school students taught through an especially designed inquiry-based intervention in Mathematics. The students were closely observed before, during, immediately after, and six (6) years after completing a year of the system-based learning program. The significant finding is that students build mental models of their systems and retain what they have learned based on learning patterns that tend to stay the same over time. Receptive and retentive memory skills facilitated efficient and lasting construction of students' system models,

learning experiences, and the meta-cognitive learning pattern, which holds special significance for constructing systems.

Pintrich, P. R. (2017) reported that motivation plays a significant role in sustaining memory skills, both receptive and retentive. Further, motivation is the best instrument for self-regulated learning, leading to dynamic receptive and retentive memory skills, particularly in Mathematics. Students utilize self-regulated learning strategies to govern their cognition (e.g., various cognitive and metacognitive strategies) and resource management strategies to control their learning (Pintrich, P. R., 2017).

One specialized medium of instructions for teaching Mathematics encountered by the researcher is animation and based on a research article found entitled, "An Experimental Study of Animation, Mathematics Achievement, and Attitude Toward Computer-Assisted Instruction," by Szabo, M., & Poohkay, B. (2017), animation has been used in instruction for many years. However, recent advances permit the creation of desktop animations by a range of instructors through an experimental study to understand the effects of animation on student learning and student reaction to it. Construction of triangles using a compass developed in a one-hour lesson on the 9th-grade mathematics topic in three instructional formats: (a) text only, (b) text plus static graphics, and (c) text plus animation. One hundred seventy-four (174) undergraduate elementary education majors were divided into high and low math achievement levels based on a pretest and randomly assigned to one of the three instructional groups. They found out that when animation is used to present content and is directly related to the objectives of learning, substantial gains in learning are possible, and students like it better than textual presentations; Szabo, M., & Poohkay, B. (2017).

In this study, the focused is on sustaining receptive and retentive memory skills (SRRMS) in Mathematics among junior and senior high school students. It is a way of improving the instructional competence of the Mathematics Teachers in presenting a lesson based on the behavior and performance of the students in the teaching and learning process. It can be done using an on the spot interview to the teacher's observation that intends to expose what is obtaining in the present condition. The two approaches enclosed in this study are: a) specialized media of instructions and b) technologically designed classroom activities. Animation is one of the specialized medium of instructions for teaching Mathematics used for many years. Presenting a lesson with different animations could affect the behavior of the learners into positive attitude. Further, the involvement of the learners in using technology in the classroom is one factor of engaging high levels of confidence in learning Mathematics.

Currently, the country is implementing the K-12 Education program, with technology integration in teaching highlighted as one of its key features in improving the performance and productivity of teachers, particularly Mathematics teachers in public high schools, as well as how technology can be used in the learning process.

"A Study Of Factors Influencing Teacher's Usage of E-Learning For Teaching Math In The Public Secondary Schools In Makati City, Philippines" was aimed to improve the current situation of the schools in Makati City by investigating these three stages in the future implementation of e-learning: a) use or non-use of e-learning; b) usage level of e-learning (frequency, duration, total usage level); and c) impact of e-learning on students (attention, participation, Math assessment scores, National Achievement Test Math Scores). The researcher found out that teachers who adopted and practiced the e-learning approach in their school, developed their skills for teaching using e-learning to create a positive impact on the students in the school (De Velez, L. R., 2019). Utilization of multimedia instruction greatly influenced the instructional performance in Mathematics (Rabut, Salvador N. Jr.,2017).

This study determined the extent of instructional competence of the respondent-Junior/ Senior High School teachers (JSHST) in sustaining receptive and retentive memory skills (SRRMS) of students in Mathematics in Public Secondary Schools in the Municipality of Pozorrubio and Sison, Pangasinan. The researchers felt the need to study the following: (1) socio-demographic profile of the respondent-teachers in terms of: age, sex, highest educational attainment, teaching position, number of years teaching, and the number of relevant in-service training; (2) to what extent of instructional competence of the respondent-JSHST in sustaining receptive and retentive memory skills (SRRMS) of students in Mathematics using: specialized media of instructions, and technologically designed classroom activities; (3) to identify if there are significant mean differences in the extent of instructional competence of the respondent-JSHST in SRRMS of students in Mathematics across the profile variables; (4) to identify if there are significant relationships between the extent of instructional competence of the respondent-JSHST in SRRMS of students in Mathematics and the profile variables; and (5) to propose an in-service training program to enhance the extent of instructional competence of the respondent-JSHST in sustaining receptive and retentive memory skills (SRRMS) of students in Mathematics.

II. Methodology

The research study used the descriptive method and one-shot case study expository research design. The respondents of this study were thirty-eight (38) Junior/Senior High School Teachers (JSHST) of Mathematics, under DepEd Pangasinan Division II, DepEd Region 1, namely: Benigno Aldana National High School, Nama National High School, Alejandro F. Oligan National High School, and the Artacho National High School in the Municipalities of Pozorrubio and Sison, Pangasinan, respectively. The Questionnaire-Checklist used as the primary data-gathering instrument. It consists of two (2) parts. Part I consists of the profile variables of the respondents. Part II consists of the Likert-type items intended to disclose how the indicator statements describe the respondents. The Questionnaire-Checklist was content validated using five experts' evaluators which consists of 1) Secondary School Principal, 2) Master Teacher in Charge of Mathematics, 3) Mathematics Teacher with a degree in MS in Mathematics or MAEd in Mathematics Education, 4) Professor in the UCU-GS Mathematics Program and 5) Professor with

a Ph.D. in Research and Evaluation with an extensive experience in Test/Data-Gathering Instrument construction. The evaluators were used the "Content Validation Instrument" by Dr. Lelia V. Meimban, 1999 (Revised January 02, 2020). After checking the validity of the questionnaire, the researcher secured the permit to conduct from the Office of the DepEd Pangasinan II Schools Division Superintendent through Channels, i.e., through the Department Head and the Office of the Secondary Schools Principal. Upon approval of the SDS, The permit to conduct the study from the Office of the Schools Division Superintendent of DepEd Pangasinan Division 2 brought to the concerned secondary school principal the Office, who authorized the researcher to administer the Questionnaire-Checklist to the respondent-JSHST of Mathematics. The researcher transformed the questionnaire-checklist into Google Forms to be sent to the respondents.

The data were collated and tallied using the Excel Spread Sheet. The Excel Spread Sheet data transport to the SPSS environment for the statistical treatment of the data. In the statistical analysis, SPSS version 23 will use. Frequency counts and percentage were used on the data background information of the respondents. The indicator statements presented in tables, together with the weighted mean (WM) for each item and the overall weighted mean (OWM), used to indicate the overall rating obtained by the respondents in two (2) approaches for SRRMS, namely: 1) Specialized Media of Instruction, and 2) Technologically Designed Classroom Activities. The ANOVA and t-test results presented whether or not the mean differences in the extent of instructional competence of the respondent- JSHST in SRRMS of their students in Mathematics are significant. The Pearson r Coefficient of Correlations determined whether or not there are significant relationships between the extent of instructional competence of the respondent-JSHST in SRRMS of students in Mathematics and the profile variables. A proposed training program for enhancing the extent of instructional competence of JSHST in SRRMS of students in Mathematics was based on the items in the questionnaire which obtained the lowest weighted means (WM).

III. Results and Discussion

Profile of the Respondents

Table 3
Frequency and Percentage Distribution of the Respondent-Teachers Across the Profile Variables

Variable	Variable Category	Frequency	Percentage
1. Age	Less than 20 years	0	0
	20-29 years	16	42
	30-39 years	6	16
	40-49 years	7	18
	50 years or more	9	24
2. Sex	Male	13	34
	Female	25	66
3. Civil Status	Single	16	42
	Married	22	58
4. Highest educational attainment	B.S./A.B.	3	8
	B.S. with units in M.A./ M.S.	15	39
	M.A./ M.S.	16	42
	M.A./ M.S. with units in Ed.D./ Ph.D.	1	3
	Ed.D./ Ph.D.	3	8
5. Teaching position	Secondary School Teacher I	9	24
	Secondary School Teacher II	3	8
	Secondary School Teacher III	20	53
	Master Teacher I		
	Master Teacher II	5	13
	Head Teacher	1	3
6. Number of years teaching	Less than 5 years	14	37
	5- 9 years	7	18
	10-14 years	4	11
	15-19 years	3	8
	20 years or more	10	26

Age. Table 3 shows that 16 out 38 respondents (42%) are 20-29 years old. There are 9 or twenty four percent in the group who are 50 years old or more. Seven or eighteen percent are 40-49 years old. This is followed by six or sixteen percent are 30-39 years old. No respondent is less than 20 years old. Based on findings, most of the teachers that the researcher had surveyed online are still young. According to De Velez, L. R., 2019, the highest percentage of e-learning users are 25-30 years old teachers in Makati City, Philippines and they are members of young teachers who are tech-savvy.

Sex. Female teachers are dominated the respondents that shows in Table 3. Thirteen (13) or 34 percent are male and Twenty-five of them or 66 percent are female. This illustrates that teachers in Sison and Pozorrubio are led by female. This typical situation among Junior and Senior High School Mathematics Teachers in the area. Most of them are female teachers.

Civil Status. Table 3 also shows that twenty-two or fifty-eight percent who are married and sixteen or forty percent are single teachers. None of the respondents are widow/widower and separated in status. The results yielded that most of the respondents are married.

Highest Educational Attainment. The distribution of the respondents in terms of their educational attainment is shown in Table 3. There are sixteen of them or forty-two percent Master's degree holder. Fifteen of them or thirty-nine percent are Bachelor's degree holder with units in Master's degree. This is followed by three or eight percent in both Doctor's degree holder and Bachelor's degree holder. Furthermore, there is only one or three percent who are Master's degree holder with units in Doctor's degree. The results show that most of the respondents are Master's degree holders. This means that most of the respondents go through their graduate studies to further develop their knowledge and skills in teaching Mathematics.

Teaching Positions. In terms of their teaching position, the distributions of the respondents also shown in Table 3. Twenty (20) of the respondents or fifty-three percent are Secondary School Teacher III. Nine (9) of them or twenty-four percent are Secondary School Teacher I. There are five (5) respondents or thirteen percent who are Master Teacher I-II. This is followed by three (3) respondents or eight percent Secondary School Teacher II. Meanwhile, the remaining three (3) percent or one (1) respondent is a Head Teacher. It means that majority of the respondents have 3 years or more experienced in public school.

Number of Years Teaching. With reference to their number of years of teaching experience, fourteen (14) of the respondents or 37 percent have less than 5 years of teaching experience. This is followed by 26 percent of the respondents or 10 of them have from 20 years or more in the service. Seven (7) respondents or eighteen percent have 5 – 9 years of experience. For 10-4 years of teaching experience, there are four (4) respondents or eleven percent. Furthermore, three (3) or eight percent have 15-19 years of teaching experience. As shown in the table, majority of the respondents are relatively new in the service. When K-12 started recently, there are many teachers transfer to Senior High School for a better opportunity. This means that there are many new teachers hired in the Junior High School.

Relevant In-Service Trainings. As the result of relevant trainings of the teachers, it is not presented in the table since all of the respondents has 10 or more trainings attended. This means that these respondent-teachers teaching Junior and Senior high school level Mathematics are well informed about the latest approaches and technologies being used in the DepEd.

Profile of the Students

Table 1
Frequency and Percentage Distribution of the Students Across the Profile Variables

Variable	Variable Category	Frequency	Percentage
1. Age	Less than 20 years	40	100
	20-29 years	0	0
	30-39 years	0	0
	40-49 years	0	0
	50 years or more	0	0
2. Sex	Male	12	30
	Female	28	70
3. Grade Level	Grade 7	0	0
	Grade 8	0	0
	Grade 9	11	28
	Grade 10	9	22
	Grade 11	20	50

Table 1 shows the profile of the students in terms of age, sex and grade level.

Age. The age of the students were categorized into five (5) intervals. All of the 40 students are less than 20 years old. Since, there are programs for the over age students in order to accelerate in a higher education just like ALS, open high school, etc, the selected students who answered the questionnaires are all less than 20 years old.

Sex. Majority of the students are female that is 28 or 70 percent while male students are 12 or 30 percent.

Grade Level. Table 1 also shows that twenty or fifty percent are grade 11 students. Meanwhile, eleven or twenty-eight percent are grade 9 students and nine or twenty-two percent are grade 10 students. None of the respondents are grade 7 and grade 8. The results yielded that most of the respondents are grade 11 students.

Specialized Media of Instructions

Table 2

Levels of Instructional Competence of the Respondent-Mathematics Teachers and students in SRRMS in Mathematics Using Specialized Media of Instructions

	Teachers Rating		Students Rating	
SPECIALIZED MEDIA OF INSTRUCTIONS	**WM**	**TR**	**WM**	**TR**
1. encourage students to submit well-answered written outputs that they are able to accomplish on time and are able to carry out with expected outcome.	4.61	VC	4.12	C
2. use computer applications for creating and developing animations for my lessons in Mathematics.	4.24	C	4.02	C
3. exchange ideas with other teachers regarding the development and used of animations in teaching Mathematics	4.16	C	4.23	C
4. work cooperatively with other teachers of Mathematics in the developing animation in presenting Mathematics lessons.	4.11	C	4.45	C
5. personally create animation for teaching Mathematics to my students.	3.97	C	3.65	C
6. am confident in the use of computer applications in creating animations for my Mathematics lessons.	3.95	C	4.25	C
7. use feedbacks from students regarding the Mathematics lessons presented with animations as part of my evaluation of learning outcomes.	3.92	C	4.20	C
8. create my animations for my Mathematics lessons in my laptop.	3.87	C	4.63	VC
9. update myself with the latest research findings regarding the use of animations in Mathematics.	3.84	C	4.50	VC
10. use “text with animations” in presenting mathematical equations to my students.	3.79	C	4.43	C
11. develop a story flow to guide the creation of animation for my lessons in Mathematics.	3.76	C	4.70	VC
12. use “text and static graphics” in presenting mathematics procedures to my students.	3.76	C	4.08	C
13. use sketches to initiate the development of animations in my lessons in Mathematics.	3.66	C	4.43	C
14. use all the commands provided by the computer application on animation.	3.66	C	4.28	C
15. use “text only” in presenting mathematical concepts to my students.	3.45	MC	3.50	C
OVER ALL WEIGHTED MEAN (OWM)	3.92	C	4.23	C

The information on the levels of instructional competence of the respondent- Mathematics Teachers in SRRMS in mathematics using specialized media of instructions were collected using a 15-item scale.

Teachers Rating. Table 2 presents the teacher-respondents' perception in using specialized media of instructions in teaching Mathematics.

Legend:

WM Score Range	Descriptive Rating	Transmuted Rating
4.50-5.00	Always (A)	Very Competent (VC)
3.50-4.49	Often (O)	Competent (C)
2.50-3.49	Sometimes (S)	Moderately Competent (MC)
1.50-2.49	Seldom (SL)	Slightly Competent (SC)
1.00-1.49	Never (N)	Not Competent (NC)

In general, the ratings given by the teachers and their students were on the same ranges. Although some of the ratings given by the students are a little lower than the ratings given by their teachers. However, these ratings are within the same descriptive and transmuted rating equivalences.

To sum up, the respondents-Mathematics teachers utilized creating and developing animations through the use of computer applications in teaching and learning Mathematics with a competent as by supported by the overall weighted mean of 3.92. With this, it can be deduced that teachers are properly addressing the needs of our 21st Century students. It is never said that the traditional method of teaching must be completely abandoned, but the teacher-respondents change to what is necessary by the K-12 curriculum depending on the findings.

The findings are similar to the study of Szabo, M., & Poohkay, B. , who found that when animation is used to present content that is directly related to the objects of learning, significant gains in learning can be achieved, and students prefer it than textual presentations.

Students Rating. Table 2 also presents the assessment of the JSHS students parallel to the levels of instructional competence of the Mathematics teachers in SRRMS in Mathematics using specialized media of instructions.

It can be seen from the table that the level of instructional competence of the Mathematics teachers using specialized media of instruction had an overall weighted mean of 4.23 interpreted as "Competent" which is higher than the overall weighted mean of the respondent-Mathematics teachers. It shows in the table that Mathematics teachers become experts in creating animations and well knowledgeable in preparing it as a guide in teaching Mathematics based on the assessment of the students.

Technologically Designed Classroom Activities

Table 3
Levels of Instructional Competence of the Respondent-Mathematics Teachers and students in SRRMS in Mathematics Using Technologically Designed Classroom Activities

	Teachers Rating		Students Rating	
TECHNOLOGICALLY DESIGNED CLASSROOM ACTIVITIES	**WM**	**TR**	**WM**	**TR**
1. encourage students to have behavioral engagement as the Mathematics lessons are being presented.	4.66	VC	4.32	C
2. make sure that students have positive attitude towards learning Mathematics.	4.63	VC	4.15	C
3. teach students to have affective engagement in relation to the Mathematics lessons.	4.63	VC	4.18	C
4. encourage students to perform well in aptitude tests requiring both receptive and retentive memory.	4.58	VC	4.85	VC
5. encourage students to work well with selected and appropriate learning resources, which include ICT to address their learning goals.	4.55	VC	4.82	VC
6. make sure that students are able to apply competencies gained/ learned in their Mathematics lessons.	4.45	C	4.78	VC
7. see to it that students manifest working memory as they learn from technologically designed Mathematics lessons.	4.45	C	4.32	C
8. am always conscious of encouraging receptive memory in students during the presentation of technologically designed Mathematics lessons.	4.45	C	4.18	C
9. aware of students who manifest a range of well developed critical and creative thinking, as well as other higher-order thinking skills involving receptive and retentive memory skills.	4.42	C	4.58	VC
10. use standard criteria for evaluating the effectiveness of technologically designed lessons in Mathematics.	4.37	C	4.65	VC
11. search for downloadable instructional materials in Mathematics in the internet.	4.29	C	4.50	VC
12. work with other teachers of Mathematics in developing technologically designed classroom activities.	4.29	C	4.40	C
13. have a collection of downloadable instructional materials ready for any topics in my Mathematics lessons.	4.21	C	4.43	C
14. ask students to contribute and take part in technologically designed classroom activities.	4.21	C	4.42	C
15. use downloadable instructional materials in Mathematics in my classes.	4.16	C	4.55	VC
OVER ALL WEIGHTED MEAN (OWM)	4.42	C	4.48	C

Legend:

WM Score Range	Descriptive Rating	Transmuted Rating
4.50-5.00	Always (A)	Very Competent (VC)
3.50-4.49	Often (O)	Competent (C)
2.50-3.49	Sometimes (S)	Moderately Competent (MC)
1.50-2.49	Seldom (SL)	Slightly Competent (SC)
1.00-1.49	Never (N)	Not Competent (NC)

Another objective of the study is to determine the levels of instructional competence of the Mathematics Teachers in SRRMS using technologically designed classroom activities. It was collected using a 15 items survey questionnaire.

Teachers Rating. There are five indicator statements that are rated very competent, as presented in table 5. On the other hand, the respondents are competent to the remaining indicators and the lowest weighted mean is "Use downloadable instructional materials in Mathematics in my classes." Even though it is has the lowest weighted mean, it is still interpreted as "competent". In the survey, respondents highlighted that sometimes they download resources through internet but they still prefer to make their own instructional materials.

In general, the teacher-respondents are competent in using technologically designed classroom activities listed on the table. It can be inferred that even if the students have different mathematics confidence in using technology, the teacher-respondents are ready to encourage them to have a positive attitude towards Mathematics.

Students Rating. The table shows that the level of instructional competence of the Mathematics teachers in SRRMS in their students, using technologically designed classroom activities attained an overall weighted mean of 4.48 interpreted as "Competent.". It shows in the table that the Mathematics Teachers are skilled in the use of technologically designed classroom activities to SRRMS in their students.

Summary of Levels of Instructional Competence

Table 4
Summary of Levels of Instructional Competence of the Respondent-Mathematics Teachers and students in SRRMS in Mathematics

	Teachers Rating		**Students Rating**	
SRRMS AREAS	**OWM**	**TR**	**OWM**	**TR**
1. SPECIALIZED MEDIA OF INSTRUCTIONS	3.92	C	4.23	C
2. TECHNOLOGICALLY DESIGNED CLASSROOM ACTIVITIES	4.42	C	4.48	C
GRAND OVERALL WEIGHTED MEAN (GOWM)	4.17	C	4.36	C

Legend:

WM Score Range	Descriptive Rating	Transmuted Rating
4.50-5.00	Always (A)	Very Competent (VC)
3.50-4.49	Often (O)	Competent (C)
2.50-3.49	Sometimes (S)	Moderately Competent (MC)
1.50-2.49	Seldom (SL)	Slightly Competent (SC)
1.00-1.49	Never (N)	Not Competent (NC)

The results show that the teacher-respondents are both competent in using 1) specialized media of instruction, and 2) technologically designed classroom activities. The teachers have the confidence to face their 21st century learners. They have the knowledge to integrate those extent in pedagogical practice and it is shown in the number of seminars attended. The GOWM for the instructional competence of the respondent-JHST is 4.17, equivalent to Competent in transmuted rating.

Mean Differences in the Extent of Instructional Competence of the Respondent-JSHST in SRRMS of Students in Mathematics Across the Profile Variables

Table 5
Mean Differences in the Levels of Instructional Competence of the Respondent-Mathematics Teachers in SRRMS in Mathematics across the Profile Variables

Variable	Mean Differences	Specialized Media Of Instructions	Technologically Designed Classroom Activities	Over-All
1. Age	F-value	F=0.480ns	F=0.203ns	F=0.125ns
	Sig. (2-tailed)	0.699	0.894	0.944
2. Sex	T-value	T=-0.874ns	T=-0.065ns	T=-0.576ns
	Sig. (2-tailed)	0.388	0.948	0.570
3. Civil Status	F-value	F=0.025ns	F=0.294ns	F=0.019ns
	Sig. (2-tailed)	0.876	0.591	0.890
4. Highest educational attainment	F-value	F=0.483ns	F=0.822ns	F=0.650ns
	Sig. (2-tailed)	0.748	0.521	0.631
5. Teaching position	F-value	F=2.119ns	F=0.846ns	F=1.508ns
	Sig. (2-tailed)	0.101	0.506	0.223
6. Number of years teaching	F-value	F=1.822ns	F=1.672ns	F=1.868ns
	Sig. (2-tailed)	0.148	0.180	0.140

Table 5 shows the significant mean differences in the extent of instructional competence of the respondent-Mathematics teachers in SRRMS of students in Mathematics across the profile variables using specialized media of instructions and technologically designed classroom activities.

The results show that the teacher-respondents are both competent in using 1) specialized media of instruction, and 2) technologically designed classroom activities. The teachers have the confidence to face their 21st century learners. They have the knowledge to integrate those extent in pedagogical practice and it is shown in the number of seminars attended. The GOWM for the instructional competence of the respondent-JHST is 4.17, equivalent to Competent in transmuted rating.

The findings fail to reject the null hypothesis, which means there is no significant differences in the levels of instructional competence of the respondent-Mathematics Teachers in

SRRMS in Mathematics across the profile variables. Further, this means that respondents did not differ in their competency levels with respect to the variables mentioned. Regardless of age, gender, civil status, higher education and related education, and seminars attended by respondent-teachers, their competence in SRRMS in Mathematics are similar to each other. Research done by Rabut, S. N. Jr., 2016, showed that regardless of the profiles of the respondents, they can perform their task in teaching using multimedia in Mathematics at the same time.

Relationships between the Extent of Instructional Competence of the Respondent-JSHST in SRRMS of Students in Mathematics and the Profile Variables

Table 6
Relationships between the Levels of Instructional Competence of the Respondent-Mathematics Teachers in SRRMS in Mathematics and the Profile Variables

Variables	Coefficient of Corelation	Specialized Media Of Instructions	Technologically Designed Classroom Activities	Over-All
Age	r-value	-0.192ns	.046ns	-0.102ns
	Sig. (2-tailed)	0.249	0.782	0.543
Sex	r-value	0.144ns	0.011ns	0.097ns
	Sig. (2-tailed)	0.388	0.948	0.563
Civil Status	r-value	-0.026ns	0.090ns	0.023ns
	Sig. (2-tailed)	0.876	0.591	0.890
Highest educational attainment	r-value	-0.074ns	0.077ns	-0.013ns
	Sig. (2-tailed)	0.658	0.645	0.938
Teaching position	r-value	-0.160ns	0.009ns	-0.098ns
	Sig. (2-tailed)	0.336	0.956	0.558
Number of years teaching	r-value	-0.251ns	-0.006ns	-0.163ns
	Sig. (2-tailed)	0.128	0.970	0.328

This study fully determined the extent of instructional competence in sustaining receptive and retentive memory skills of students in Mathematics using specialized media of instruction and technologically based classroom activities. The null hypothesis was tested using the Pearson r Coefficient of Correlation.

The statistical findings clearly show that there is no significant relationship in the extent of competence of the respondent-JHST and their profile variables. This means that regardless of the age, sex, civil status, highest educational attainment, teaching position, and number of years teaching of the respondents, the extent of instructional competence in sustaining receptive and retentive memory skills of students in Mathematics is not associated with any of the profile

variables used in this study. There are no indicated associations between the dependent and independent variables, Morales, J. P., 2017.

Therefore, the null hypothesis stating that "There are no significant relationships in the extent of instructional competence of the respondent-JSHST in SRRMS of students in Mathematics and the profile variables," is accepted. Regardless of the profile of the respondent -JHST, their competence in the use 1) specialized media of instructions, and 2) technologically designed classroom activities in Mathematics are similar to each other.

IV. Conclusion

Based on the findings of the study, the Mathematics teachers are mature, experienced, and have sufficient educational qualifications to provide effective instruction. There is still a need to enhance and upgrade their extent of instructional competence in SRRMS of students in Mathematics using specialized media of instruction. They are moderately competent in using text only presentation because they observed that learners are more attracted to text with graphics and animations than text only in presenting Mathematical concepts. Since the Mathematics teachers are competent in the use of both the specialized media of instructions and technologically designed classroom activities, these teachers should be given freedom to use any of these strategies whichever is applicable to a particular class.

The levels of competence in SRRMS of the Mathematics Teachers are not associated with the profile variables considered in this study. Regardless to their profile variables, they can prepare and perform their task in teaching Mathematics using specialized media of instructions and technologically designed classroom activities. A proposed in-service training program was designed to enhance the extent of instructional competence of the Mathematics Teachers in sustaining receptive and retentive memory skills (SRRMS) of students in Mathematics.

V. Recommendations

A system of financial incentives should be developed and implemented for deserving Mathematics teachers should pursue higher degrees to improve their academic profile. The school authorities must screen, oversee and assess the utilization of the instructing procedures to address a few of the issues experienced. A more intensive training program should be conceived, developed, and implemented to improve the skills and competences in using text only presentation in specialized media of instruction. Virtual or online conferences, webinars, fora and symposia should be organized and conducted on a regular basis so that Mathematics teachers will have venues for exchanging ideas and best practice in SRRMS in students.

Further research should be undertaken to investigate the extent of instructional competence in SRRMS of students in Mathematics using specialized media of instruction and technologically designed classroom activities in other variables and a broader scope. Other variables, such as emotional quotient, mental ability, and pedagogical strategies applied, be considered as variables in studies on competence of teachers in SRRMS in their students.

The proposed in-service training program for improving competence in SRRMS in students be implemented. Further studies on Teachers' competence in SRRMS in students be conducted in other subjects like Physics, Chemistry, and in a wider venue under the auspices of accredited Graduate Institutions in the area.

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