TEACHERS' ORGANIZATIONAL COMMITMENT, TEACHING EFFICACY BELIEF AND LEVEL OF PERFORMANCE IN RELATION TO THEIR PUPILS'ATTITUDES TOWARDS MATHEMATICS

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Abstract

This study aimed to determine the interrelationship of teachers' organizational commitment, teaching efficacy belief, performance level and their pupils' attitudes towards Mathematics. The descriptive-correlation method was applied to the 377 pupils and 45 Math teachers drawn from Division of Dasmariñas. Also, Likert Scale instruments adapted from Copia (2012) and Paragsa (2014) were used. The study revealed that organizational commitment relates teachers' performance but **not** with teaching efficacy belief and pupils' attitudes in mathematics. However, teachers' performance is related to teaching efficacy beliefs and pupils' attitudes in Mathematics. While teaching efficacy beliefs and pupils' attitude towards mathematics are related, knowing the teachers' variability along commitment, efficacy beliefs and performance level in relation to pupils' attitudes is very significant for better understanding the pupils, especially with negative attitudes towards Mathematics. Time constraints were experienced in retrieving CB-PAST, since it is accomplished at the end of school year.

Keywords: Organizational commitment, Efficacy belief

1. Introduction

Attitudes can be viewed as more or less positive. A positive attitude towards mathematics reflects a positive emotional disposition in relation to the subject and, in a similar way, a negative attitude towards mathematics relates to a negative emotional disposition. These emotional dispositions have an impact on an individual's behavior, as one is likely to achieve better in a subject. Further, a positive attitude can impinge on every aspect of student's life. Students who maintain a positive approach to mathematics and the challenges brought about by the Subject will be able to move forward more constructively than those who become stuck in a negative attitude.

However, many pupils regard mathematics as a difficult subject. It is a subject that is often disliked, regarded as just a talent and not a skill. This negative impression influences the pupils' appreciation and desire to learn the subject. Indeed, most of the pupils have difficulty in understanding the lesson in mathematics.

Researchers concluded that a positive attitude towards mathematics leads students towards success in it. Attempt to improve attitude towards mathematics at lower level provides a base for higher studies in the Subject.

Therefore, there is a great role that teachers must possess in developing positive attitudes towards mathematics among students. Teachers should never minimize the role they play in influencing students' lives. They should show their commitment, beliefs in their abilities and competence to their students. Also, they should be positive, possessing the qualities of a "charismatic adult" who not only touches students' minds but also their spirits. Since the teacher's personality in the attitudinal sense is a significant factor that has great impact on students' attitudes.

This postulate may; therefore, lead to understand how certain interrelated variables such as Teachers' Organizational Commitment, Teaching Efficacy Beliefs and their Performance level would lead to an explanation of students' attitudes towards mathematics.

2. Brief Review of Related Literature

Organizational commitment is a working attitude of employees who have a sense of identification to accomplish organizational goals and wish to maintain good relationship with members within the organization (Robbins, 2001). Mowday, Porter and Steers, 1979 as cited by Paragsa (2014) proposed that teachers' commitment is a teacher's psychological identification on school goals and values and willingness to become a member of an organization to work considerably harder more than an individual benefit. She also stressed that the willingness to remain will result in loyalty to the school. The willingness to support educational vision and the involvement in teaching job are directly related to the teaching efficacy, especially if teachers are

willing to devote themselves to teaching job and remain in the same school, the performance of the school will be increased and the educational goals can be attained.

Further, organizations should use different management and leadership strategies to increase the level of commitment of their employees. When employees are committed to their employer and organization, they will deliver higher levels of performance. Highly committed teachers can help an organization achieve much more each year than teachers with average or low commitment.

Benkhoff and Paragsa (2014) assessed that researchers have mostly measured performance subjectively because acquiring objective data is difficult. Somers and Biernbaum as cited by Paragsa (2014) further contended that "because the terms `commitment' and `performance' have been used in different ways, it is important to specify how these constructs are defined in any given study". Keeping in view their argument, the present study is limited to examine relationship between three components model of organizational commitment and self-rated or perceived employees' performance.

On the other hand, Teacher efficacy can have a great impact towards a student's academic achievement level. Teacher efficacy can be described as beliefs about whether teachers can make a difference with students (Lin, Gorrell & Taylor, 2002). In the study of Paragsa, (2014) she termed the belief that one has as to the effect that personal actions or efforts have on the attainment of goals or the accomplishment of objectives as one's efficacy perception of selfefficacy. Self-efficacy is a person's feeling about himself that he can perform any work by utilizing his abilities or actions. Low self-efficacy promotes negative feelings about one's abilities and responsibility for one's own performance. A high degree of self-efficacy promotes the perception that one is responsible for one's destiny and that one can do what one wants to do.

In terms of student's mathematical behavior, it is an outgrowth of one's attitudes toward mathematics. Ryan and Pintrich, as cited by Copia (2012) found that a student with a positive attitude with regard to competence in mathematics was more likely to seek "adaptive help" in class. Lubigan (2006) mentioned that attitudes influence how well a pupil learns and how he behaves. Accordingly, a teacher aids pupils in learning and promotes healthy interpersonal relations among students and adults. Gaga as studied by Lubigan (2006) commented that attitudes towards subject are important because of the following primary factors: First, a child carries a mental state of readiness with it. Contemporary psychologists maintain that attitudes are learned and are organized through experiences as children develop. Furthermore, a child's attitude can be changed through additional experiences. Third, attitudes are dynamic results of experience that act as a directive factors when a child enters new experiences. Attitudes carry on emotional and an intellectual tone, both of which lead to making decisions and forming evaluation.

3.Research Questions

The paramount objective of this research was to gauge the factors affecting the attitudes of the pupils towards mathematics in the City Schools Division of Dasmarinas.

Specifically, this research sought answers for the following questions:

- 1. What is the teachers' level of organizational commitment?
- 2. What is the teaching efficacy belief of the Mathematics teachers?
- 3. What is the level of performance of Mathematics teachers?
- 4. What is the attitude of the pupils in Mathematics?
- 5. What is the relationship between the following variables?
 - a. Teachers' Organizational commitment and their Teaching Efficacy Beliefs.
 - b. Teachers' Organizational commitment and their level of performance.
 - c. Teachers' Organizational commitment and pupils' attitude towards Mathematics.
 - d. Teachers' Teaching Efficacy Beliefs and their level of Performance
 - e. Teaching Efficacy Beliefs and Pupils' Attitudes Towards Mathematics.
 - f. Teachers' level of performance and pupils' attitude towards Mathematics.

4. Scope and Limitations

This study investigated on the variables such as the teachers' organizational commitment, teaching efficacy beliefs and their performance levels which were perceived as factors that affect pupils' attitudes toward Mathematics in the City Schools Division of Dasmariñas. It also dealt with the interrelationship of the aforementioned variables.

The respondents were mathematics teachers and pupils in grade six from 10 schools of the Division, respectively.

5.Methodology

Research Design

The researcher used the descriptive-correlation research method in the analysis and interpretation of the data gathered for the prognosticative validity of the variables: Teachers' organizational Commitment, Teaching Efficacy Beliefs and Performance Level in relation to the attitudes of pupils in mathematics.

Population and Sample

The research was conducted in 10 schools of the City Schools Division of Dasmarinas. There were 45 mathematics-teacher respondents where purposive sampling was used. While with the pupil-respondents, there were 377 out of the total pupils in all schools which is 6476 with Slovin's Formula used.

Instruments

The research adapted the survey questionnaires with some modifications for organizational commitment, efficacy beliefs and Pupils' attitudes based on the other studies that focused on aforesaid variables, specifically the survey tools used by the unpublished research instruments of Copia (2013) and Paragsa (2014). The CB-PAST used by the DepEd in public schools for the Teachers' Level of Performance was adapted.

6.Timetable

June to July 2014	Title Defense
June to September 2014	Chapters 1-3
October 10, 2014	Colloqium/ Title Defense
October 2014 to January 2015	Revisions of Chapters 1-3
October 2015	Distribution of questionnaires to 10 schools
November to December 2015	
Chapters 1-5	Contraction of the second s
February 22, 2015	Final Defense

The foregoing research framework served as the basis for graphical presentation of the research paradigm.

Below is the research paradigm of the study:



Figure1: Conceptual Framework/Paradigm showing the prognosticative influence of the variables: Organizational Commitment, Efficacy Beliefs and Level of performance of Teachers in relation to Pupils' Attitudes towards Mathematics in the city Schools of Dasmarinas.

7.Results and Discussion

- **1.** The organizational commitment of the mathematics teachers with a total average mean of 3.92 is found Satisfactory.
- **2.** In Teaching Efficacy Beliefs, twenty (20) indicators were presented and got the SD of .3595. It was found out that teachers are Very Good.
- **3.** Teachers are found to be Proficient in mathematics with mean of 3.10 and .2518 SD.
- **4.** In Pupils' Attitudes, there were 239 pupils (positive) while negative ones had a figure of 138.
- 5. Relationship between:
 - **a.** The teachers' sense of efficacy and their organizational commitment has r value is .1521 and no relationship was found.
 - b. Teachers' Organizational Commitment and their Performance Level has r value of .8317 and found great relationship.
 - c. Teachers' Organizational Commitment and their Pupils' Attitudes towards Mathematics had r value of .0909 and found relationship.
 - d. Teachers' Teaching Efficacy Beliefs and Their Level of Performance had r value is .9810 found significant relationship.
 - e. Teachers' level of Performance and their Pupils' Attitude towards Mathematics had r value of .3613 shows significant relationship.

Conclusions

Based on the statistical findings of the research, the following conclusions were drawn/obtained:

- 1. Mathematics teachers are committed to their organization.
- 2. The teachers have high efficacy beliefs.
- 3. Teachers teaching Grade Six Mathematics in the City of Dasmarinas are found to be proficient, well-advanced and competent.
- 4. The Grade Six pupils are moderately positive in their attitude towards mathematics.
- 5. Relationships

- 1. The teachers may be more than willing to exert their strength to dedicate and commit to the organization and remain in the school and the teachers have high intention to stay, however, their teaching efficacy may not necessarily good.
- 2. As the teachers' organizational commitment increases, their level of performance is also strengthened. This follows that when employees are committed to their employer and organization, they will deliver higher levels of performance.
- 3. Teachers are maybe committed yet, there may be some personal reasons why pupils develop negative feelings and attitudes.
- 4. As the level of performance of the teachers' increase, their teaching efficacy beliefs are intensified, too.
- 5. As Teaching Efficacy beliefs increase, it also goes with the pupils' attitude towards mathematics.
- 6. As the teacher is performing well, the pupils are motivated thus, developing their positive attitude towards the subject.

It can be said that, since the students' positive attitude towards mathematics is at medium level. It shows that there are still possible rooms for improvement.

Although the variables are interrelated, the Teaching Efficacy beliefs and Teachers' Performance Level are among the variables that affect

the attitudes of the pupils towards mathematics. Therefore, it is considerably accepted.

Recommendations

- 1. Teachers need to sustain or enhance their level of commitment through actively supporting activities of the organization.
- 2. Teachers need to further enhance their teaching efficacy belief through seminars on valuing.
- 3. Teachers should be encouraged to pursue graduate studies that will enhance their teaching abilities and proficiencies.
- 4. Teachers must be encouraged to attend seminars, trainings and conferences to uplift and increase their commitment, teaching efficacy belief and level of performance.
- 5. Encourage teachers to conduct periodic self –assessment to improve their teaching performance.
- 6. There should be proper coordination with parents whose children showed negative discipline so teachers may not have difficulty and barriers in teaching.
- 7. Teachers should always develop a high sense of positivity towards their pupils--accepting who and what they are.
- 8. There should be Guidance and Counseling program every end of the month for better monitoring of pupils' attitudes.

Policy Note/ Program

Professional Development Program to enhance the level of Teachers' Organizational Commitment, their teaching Efficacy Beliefs and their level of Performance in relation to their Pupils' Attitudes towards Mathematics

Programs/ Objectives A. Teachers' level of organizational commitment 1.Provide the teachers necessary information to develop their commitment	Activities/ Strategies Seminars Trainings Conferences	Persons Involved DepEd Division Personnel Principals Teachers	Time FrameSummer SemestralBreak	Success Indicator At least 75% attendance of teachers
2.Increased commitment through intellectual stimulation and by empowering teachers to be innovative.	Brainstorming Lecture Demonstration Conferences	Principals Teachers	Principal's scheduled Time	Committed teachers to the organizatio n
B. Teaching Efficacy Beliefs 1.Identify demographic characteristics of teachers which could influence work performance and teaching capabilities	Class Observations Individual Conference Dialogues	DepEd Officials Principals Teachers	Start of the school year Convenient Time of the Principals Scheduled Time	Identificatio n of strength and weaknesses of teachers

2.Implement professional development experiences necessary for building effective mastery teaching	In-Service Training Workshop Development Training	DepEd/School Personnel	Summer/ Semestral Break	Teaching Efficacy Beliefs of teachers
C. Performance Level of the Teachers 1.Enhance skills , competencies, and proficiency of the teachers	In-Service Training Workshop LAC sessions	Principals Master Teachers Teachers	Summer/ Semestral Break	CB-PAST
2. Encourage teachers to earn degrees higher than their educational qualification in order.	Graduate Studies	Government and private institution	Summer Saturday Classes	At least 20% of the teachers enrolled in Master's and Doctorate Degree
A. Attitudes Towards Mathematics 1.Enhance positive attitudes of the pupils through film showing that has something to do with mathematics attitude	Film Showing	Teachers Pupils	Every Last Friday of the month	Optimism and Happy Reaction
2. Enhance positive attitudes through Guidance and Counseling	Counseling	Guidance Councilor Pupils	Twice a month	Positive Attitudes



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References

- i. Bandura, A., 2006. *Self-Efficacy: The Exercise of Control.* New York: W. H. Freeman & Company.
- ii. Hammouri, H.A.M., 2004. Attitudinal and Motivational Variables Related to Mathematics Achievement in Jordan: Findings from the Third International Mathematics and Science Study (TIMSS). *Educational Research*, 46(3), pp. 241-257.
- iii. Mangkunegara, A.A.A. P., 2005. *Human Resources Evaluation*. Reflika Aditama. Bandung
- iv. Prasetya, A. & Kato, M., 2011. *The Effect of Financial and Non-Financial Compensation to the Employee Performance*. Paper presented at the 2nd International Research Symposium in Service Management
- v. Prawirosentono, S., 2000. Employee Performance Policy. Yogyakarta, BPFE.
- vi. Robbins, S. P., 2001. Organizational Behavior. New Jersey: Pearson Education International.
- vii. Tschannen-Moran, M. &Hoy, A. W., 2001. Teacher Efficacy: Capturing an Elusive Construct. *Teaching and Teacher Education*, 17, pp. 783-805.

Journals/ Periodicals/ Magazines

- viii. Allen, N. J. & Meyer, J. P., 2007, as cited by Paragsa, J.M., 2014. Affective, Continuance and Normative Commitment to the organization: An Examination of construct validity. *Journal of Vocational Behavior*, 49, pp. 252-276.
- ix. Ashton, P. & Webb, R., 1986. *Making A Difference: Teachers' Sense of Efficacy and Student Achievement*. New York: Longman.
- x. Ashton, P. &Webb, R., 2014. *American Journal of Educational Research*, 2(4), pp. 233-239. doi:10.12691/education-2-4-9.
- xi. Horn-Turpin, F. D., 2009. *A Study Examining the Effects of Transformational Leadership Behaviors on the Factors on Teaching Efficacy*. Job Satisfaction and Organizational Commitment as perceived by Special Education teachers
- xii. Hoy, A., 2000. *Changes in Teacher Efficacy during the Early Years of Teaching*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Koh, W. L., Steers, R. M. & Terborg, J. R., 1995. The Effects of Transformational Leadership on Teacher Attitudes and Student Performance in Singapore. *Journal on Organizational Behavior*, 16, pp. 319-3.
- xiv. Lin, H., Gorrell, J. & Taylor, J., 2002. Influence of Culture and Education on U.S. and Taiwan Pre-service Teachers' Efficacy Beliefs. *The Journal of Educational Research*, 96(1), pp. 37-46.
- xv. Meyer, J. P., Stanley, D. J., Herscovitch, L. & Topolnytsky, L., 2002. Affective, Continuance, and Normative Commitment to the Organization: A Meta-Analysis of Antecedents, Correlates, and Consequences. *Journal of Vocational Behavior*, 61, pp. 20-52.
- Miller, K., 2003. Values, Attitudes and Job Satisfaction. In Robbins, S. P., Odendaal, A. & Roodt,
 G. (eds.) Organisational Behaviour: Global and Southern African Perspectives. Cape Town:
 Pearson Education South Africa.
- xvii. Robbins, S. P., 2001. *Organizational Behavior: Concepts, Controversies, and Applications*, 9th edn, Englewood Cliffs, NJ: Prentice-Hall.
- xviii. Somers, M. & Birnbaum, D., 2012. *Exploring the Relationship between Commitment Profiles and Work Attitudes, Employee Withdrawal, and Job Performance.*
- xix. Woolfolk, A. E., Rosoff, B. & Hoy,W. K., 2002. *Teaching and Teacher Education*. The State University of New Jersey, U.S.A: Rutgers.

Unpublished Materials/ Master's Thesis

- xx. Copia, A. S., 2013. *Teaching Methods, Pupils' Attitudes and their Mathematics Achievement*. Master's Thesis (Philippine Christian University)
- xxi. Escobar, A. B., 2000. *Teaching Methods, Learning Styles and Mathematics Achievement*. Master's Thesis (Philippine Christian University)

- xxii. Gabales, L. Y., 2011. Psycho-social Variates, Attitude towards Mathematics and Academic Performance in Mathematics of Sophomore Students in Noveleta National High School. Master's Thesis, Philippine Christian University
- xxiii. Lubigan, J. A., 2006. Attitude of the Fourth Year High School Students Towards Science and Mathematics Influence on their Academic Achievement in Physics. Master's Thesis. Philippine Christian University
- xxiv. Paragsa, J. M., 2014. School Principals' Transformational Leadership Behaviors and their relationship to Master Teachers' Teaching Efficacy, Job Satisfaction and Organizational Commitment. Master's Thesis. Philippine Christian University

