

# COGNITION AS PREDICTOR OF WILLINGNESS TO TEACH IN THE MOTHER TONGUE AND THE MOTHER TONGUE AS A SUBJECT AMONG PROSPECTIVE LANGUAGE TEACHERS

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**ABSTRACT:** *This descriptive-quantitative-correlational investigation involving a total of 1080 pre-service teachers primarily aimed to determine the cognition of the would-be teachers towards the mother tongue. In addition, it intended to also identify the willingness of the respondents to teach using the mother tongue and to teach the mother tongue as a subject. This cross-sectional investigation gathered data through a developed and validated survey-questionnaire. The research tool yielded reliability characterized as 'excellent' (Cronbach's Alpha = 0.94). Analysis of the data revealed that the respondents are 'positive' in terms of their held cognition or belief towards the MT. Moreover, the respondents are found to be willing to teach using the MT as a medium of instruction and to teach MT as a subject. Furthermore, a high positive significant correlation was established between the variables cognition and willingness to teach in the MT and cognition and willingness to the MT.*

**Keywords:** Cognition, Mother Tongue, Pre-service Teachers, Language in Education, Medium of Instruction

## 1. INTRODUCTION

Language-in-education has gained currency as a concern and a topic in the context of the Philippines as the country has shifted from the use of English to the utilization of Mother Tongues (MTs) as the language of instruction (LoI) [1]. Moreover, the decision involved in choosing the language instrumental to the realization of the teaching and learning process is critical. Others [2], contend that appropriate language choice leads to quality education while an inappropriate one results in detrimental effects and dire consequences. The movement that encourages and enjoins the use of students' first language (L1) in early education started from the call made by the United Nations in 1953 [2]. The contention is that when students gained a good linguistic foundation on their L1 learning a second or third language would not be a struggling experience [3]. Moreover, research such as that conducted by [4] proved that the use of children's MT in education facilitates cognitive development. This happens because when first language is allowed in the classroom the culture that comes with it is also given essential space in the school and class activities. Young learners then can use then both their language and culture as resources they can capitalize and take advantage [1]. Apart from the cognitive benefits that the use of L1 provides to learners, [3] maintained that it also impacts the development of the affective domain. This is the result of the empowerment that takes place as students' L1 and culture take essential spaces in the educational system [5].

Despite the benefits of using MTs in teaching young learners as found and established by a considerable number of research workers, in the context of the schools in the country, it seemed that the educational system shunned the use of MTs [6]. The cold regard people afford MTs stems from the held belief people have towards mother tongues. Researches have documented the existence of various belief devaluing MTs resulting in their non-acceptance. Some [7], related that indigenous languages are believed to be linguistically limited, and could not deliver the teaching of modern concepts which the English language could. In addition, the same research found that MT teaching is believed to interfere with the learning of the second language. On the other hand

others [8] found that people oppose Mother Tongue Education because MT is spoken and learned at home; therefore, there is no need for it to be learned in school. Additionally, in the same study, it was found that people believe that teaching in MT is a form of regression and not advancement in education. At this juncture, it is alarming to note that these beliefs are ideological challenges to the successful implementation of the recently enacted language policy [6].

Moreover, [9] described teachers' cognition as the non-observable cognitive dimension of the teacher involving what he or she thinks, knows and believes. He pointed out that it is teachers' cognition that emerges as a powerful influence on teachers practices which proves the point that it is not the only attitude that impacts instruction. Moreover, in [9], the author explained that these beliefs of teachers are so strong that they are characterized to be resistant to change. Furthermore, Borg [9] posited further that the pedagogical practices of teachers are shaped with what the teachers perceived and believed to be important in the classroom. Hence, Haukås [10] explained that the key to understanding the decisions teachers' make inside the classroom rests on their beliefs. Additionally, [11] asserted that teachers' beliefs do not only influence classroom practice but impact policy decision.

It is in this contextualized need that the importance of determining prospective language teachers' cognition or belief be realized as their held belief towards MTs serves as either a disabling or enabling factor in their practice and implementation of the policy favouring the use of L1 in early education.

## 1.2 RESEARCH PROBLEMS

The current empirical investigation primarily purposed to determine the respondents' Cognition. Specifically, this study is guided by the following questions:

1. What is the Cognition of the respondents towards the mother tongue?
2. Are the respondents willing to teach in the mother tongue (as MoI) and the mother tongue (as a subject)?

3. Is there a significant relationship between the respondents' Cognition towards the mother tongue and their willingness to teach in the mother tongue and the mother tongue?

## 2. METHODOLOGY

### 2.1 RESEARCH DESIGN

The study employed a descriptive-quantitative-correlational research design with the use of a survey questionnaire. Elsewhere [12], maintained that investigations aiming to describe a phenomenon is classified as descriptive. Moreover, the study is cross-sectional as the phase of data gathering was realized in a relatively short period of time. In addition, as the study involve no use of treatment and no control group was established, it is further characterized as non-experimental.

### 2.2. PARTICIPANTS OF THE STUDY

The sample size of the study is comprised of 1080 education students. The respondents are at their penultimate year and all are enrolled in the bachelor of elementary education program from 5 Higher Education Institutions (HEIs). Of the total respondents, 68% are females and their age range is 18-39 (mean (M) – 21.18, standard deviation (SD) – 3.156). Further, the selection of the respondents was purposively done in consideration of the following inclusion and exclusion criteria: the inclusion criteria are : (1) the pre-service teacher at least had one month of practice teaching exposure, and (2) the participants must have teaching assignments in the grades level one to three; the following would make students ineligible to be included as participants of the study : (1) if the student is graduating but had taken his/her practice teaching in previous year/s prior to the conduct of this study, and (2) if the student has had less than 20 teaching contacts. The rationale behind the criteria is to ascertain comparability of exposure to the use and teaching of MT in their practice teaching or on-the-job exposure.

### 2.3 THE RESEARCH INSTRUMENT

To determine the cognition of the respondents towards mother tongue, a quantitative approach was employed through the use of a survey questionnaire with a continuous six-point scale ranging from strongly disagree to strongly agree. Various studies like that of [6, 3, 8, 14]] were extensively reviewed aiding in the formulation of the statements included as items in the questionnaire. A total of 22 items compose the questionnaire. Equal number of positive and negative statements constitutes the 22-item of the Cognition towards Mother Tongue Questionnaire (CTMTQ). The positive and negative statements are alternately placed in the survey. Even numbers contain positive statements while odd numbers are negative statements toward the mother tongue. Added to the instrument were two questions relating to respondents willingness to teach in the MT and the MT as a subject answerable with yes and no.

### 2.4 PILOT TESTING AND RELIABILITY

[12] claimed pilot-testing addresses semantic issues and improve the validity of the inventory. Thus, a pilot study was first conducted before the data collection of this current study. The questionnaire was administered to a total of 100 respondents not forming part of the sample of the

investigation. The respondents were not only asked to respond to each item in the inventory but also provide feedback as to whether there was any confusion in the wording used, how easily the directions can be followed and how appropriate the items are as regards their experiences.

Request for pilot testing was sent to the school administrator of the external campus unit. Upon approval, a meeting was set by the researcher with the assigned faculty to assist in the pilot testing. The schedule set for the administration of the pilot test was at 4 in the afternoon after the pre-service teachers have had a thirty-minute break after having their teaching for the day.

A convening hall was allowed to be used for this activity. The researcher made arrangements for the chairs to be used and other facilities such as the sound system. Attendance was checked to determine whether the number needed for the pilot testing is met. At around 4:15 p.m., the introduction was made about the study. Instructions reflected on the questionnaires were read twice. The introduction and discussion of instruction were timed and was noted to last for about 15 minutes. Afterward, students were encouraged to raise questions or inquiries should they find anything in the questionnaire confusing. At around 4:35, the tool was distributed to the participants. On average, it has taken 15 minutes for the respondents to finish answering all the questionnaires. Feedbacks were very minimal and limited to terminology used in the directions and in the statements. For instance, is the word *tick*. Most of the respondents approached the researcher to inquire about certain terms used in the instrument. Hence, in the final drafting of the instrument, the word *tick* was changed to *check* and adjacent the sign ( $\surd$ ) was placed. The pilot testing data was analyzed employing Cronbach's alpha reliability test and the instrument was determined to be of excellent (Cronbach's alpha = 0.94) reliability.

### 2.4 PROCEDURE

HEIs were first identified in terms of their offerings. This is to ascertain that the institution offers the teacher education program. Afterward, schools were further shortlisted in terms of population. Schools with less than 20 pre-service teachers by the time of the conduct of the study were excluded. Afterward, correspondences were sent to seek permission. Upon approval, a meeting was set to meet with the coordinators of the school for the discussion of concerns like the venue and the best time for the administration of the instrument. When consensus was reached each school was personally visited for the conduct of data gathering on 4 separate dates with 5 days, at least, interval to give time for the researcher to prepare the materials.

### 2.5 METHOD OF ANALYSIS

#### 2.5.1 CODING

Data analysis was done through the use of the Statistical Package for Social Sciences (SPSS) software. For the analysis of the CTMTQ, the following code for the Likert scale was used for the first twenty-two (22) items: 1 (strongly disagree) to 6 (strongly agree). However, reverse coding was used for negative statements. For the willingness to teach, the code is 1 for NO and 2 for Yes. To give an interpretation to the data for the willingness to teach, the

following scale was used: 1.0-1.49 - not willing and 1.50-2.0 – willing. On the other hand, Tables 1 provided the scale utilized for the interpretation of the respondents’ cognition.

**Table 1. Teachers’ Cognition Scale**

Range	Descriptor	Interpretation
5.15-6.0	Strongly Agree	Very Positive
4.32-5.14	Agree	Positive
3.49-4.31	Agree Slightly	Slightly Positive
2.66-3.48	Disagree Slightly	Slightly Negative
1.83-2.65	Disagree	Negative
1.0-1.82	Strongly Disagree	Very Negative

**2.5.2 STATISTICAL TOOLS**

To determine the Cognition towards MT and to identify the willingness of the respondents to teach in the MT and to teach the MT, descriptive statistics (mean and standard deviation) were used. Moreover, to determine the significant relationship between the respondents’ cognition and willingness to teach in the mother tongue and the mother tongue, Pearson Product Moment Coefficient also known as Pearson *r* was employed.

**3. RESULTS AND DISCUSSION**

**3.1 Cognition towards the MT of the respondents**

To answer research question number 1: What is the Cognition of the respondents towards the mother tongue?, the mean value of the CTMTQ was computed on SPSS. Moreover, the SD was included to provide a reference for the spread of scores. Table 2 presents the mean values along with the interpretation.

**Table 2. Cognition towards the Mother Tongue**

Variable	Mean	Standard Deviation	Interpretation
Cognition towards the MT	4.40	0.987	Positive

Scale: 6.0-5.15 = strongly agree (very positive) , 5.14-4.32 = agree (positive), 4.31-3.49 = agree slightly (slightly positive), 3.48-2.66 = disagree slightly (slightly negative), 2.65- 1.83 = disagree (negative), and 1.82 -1.0 strongly disagree (very negative)

It is clearly seen from table 2 that the respondents hold positive cognition or beliefs about the mother tongue as provided by the data (M-4.40, SD-0.987). This implies that the respondents, as would-be teachers, perceived positive the use of mother as substitute language of English in early education. The beliefs that MTs are linguistically limited to be used as LoI [7], that MTs are already learned enough at home hence there is no need for it to be taught in school [8] among other ideologies that disfavour the use of MTS are not held by the respondents or are not completely believed by them. This further implies that the soon-to-be implementers of the language policy at the grassroots level are of cognitions that MT use in education may prove beneficial and provide academic gain such at that found in [2].

**3.2 Willingness of the Respondents to teach in and the MT**

To answer research question number 2: Are the respondents willing to teach in the mother tongue (as MoI) and the mother tongue (as a subject)?, the mean score of items 23 and 24 were computed. The mean values for willingness to teach the mother tongue as LoI and to teach the mother tongue as a subject are provided in Table 3.

**Table 3. Respondents’ Willingness to teach in MT and to teach MT as a subject**

Variables	Mean	Standard Deviation	Interpretation
Willingness to teach in the MT	1.61	0.891	Willing
Willingness to teach the MT	1.52	1.551	

Scale: 1.0-1.49 - not willing and 1.50-2.0 – willing

As shown in Table 3, the respondents are willing to both using the MT as a medium of instruction (M-1.61, SD-0.891) and to teach MT as a subject (M-1.52, SD-1.551). The study counters the results of the investigation of [11] which reported the lukewarm acceptance of the idea of using MT and teaching the same to students in the early years of education. Moreover, it can be noticed that the respondents are more willing to use MT as a LoI than in teaching it as a subject. This may be due to the logistic limitations as there are very limited materials available (i.e. books and other resource materials) in MT. This constraint may have become a consideration of the respondents affecting the extent of willingness to teach the MT as a subject.

**3.3 Relationship between Respondents’ Cognition and Willingness to teach in and the MT**

To answer question number 3: Is there a significant relationship between the respondents’ Cognition towards the mother tongue and their willingness to teach in the mother tongue and the mother tongue?, Pearson *r* was employed. The correlation value is presented in Table 4.

**Table 4. Correlation: Cognition towards the MT and Willingness to teach in and the MT**

Variables	<i>r</i> -value	<i>p</i> -value
Willingness to teach the MT	Cognition	0.743
Willingness to teach in the MT		0.773

Note:\* Significant at alpha = 0.05

The data revealed that the variable willingness to teach in the MT significantly relates to the respondents’ cognition (*p*-value = 0.000) and the relationship is determined as ‘high positive’ (*r*-value =0.773). Moreover, there is also a significantly high correlation found between the variables cognition and willingness to teach the MT as a subject (*p*-value = 0.000, *r*-value = 0.743). The data imply that respondents with positive cognition towards MT are likely to be willing to teach in MT and teach MT as a subject. This further means that cognition is indeed a determining factor as regards respondents' willing to use MT as LoI and to teach MT as a subject.

**4. CONCLUSION**

In light of the results yielded from the study, the following are a reasonable conclusion to make:

1. The respondents are positive in terms of their beliefs towards the MT.
2. As regards willingness to teach, the respondents are found willing to perform both – use MTs as the language of instruction and to teach MT as a subject.

3. Cognition is a factor influencing the willingness of the respondents to teach in MT and to teach MT as a subject.

### 5. IMPLICATIONS FOR TEACHER EDUCATION

The findings of the study bear multiple implications, but primary are the following:

1. Teacher Education Institutions must afford education students with discussions and lectures that highlight the benefits of the use of MT as a medium of instruction. This helps students to hold positive cognitions about the MT, or assist students in repositioning their perspective should they hold ones that devalue MTs.
2. Students should be assisted to determine their own beliefs and biases towards MTs. Such would be helpful for students to evaluate their own belief system.
3. The positive stance of students and willingness signify the successful campaign that supports MT in education. This should be reinforced especially when these beginning teachers become front liners when they eventually become part of the public education system and encounter problems inherent to the implementation of the program.

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## Appendix

### Cognition towards Mother Tongue (MT) Questionnaire (CMTQ)

**Directions:** The following is a list of statements concerning your cognition towards MT. Each statement is followed by six (6) choices. Tick the choice which applies to you.

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#### Statements

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1. Teaching in MT adversely affect young students learning of English
  2. Teaching in MT degrades the Teaching Profession
  3. There is no need to teach MT in the school because it is already learned at home.
  4. To be able to speak in English and not in MT is a mark of being educated
  5. Use of MT in education is a sign of regression and not progression
  6. Subjects in school are better presented and understood in English than in MT.
  7. MT has no value outside home
  8. English is the only sought-after language in this time of globalization
  9. Use of MT in early education is an ideal form of education and is a good educational practice.
  10. Teaching in MT makes students interested and motivated in classroom discussion.
  11. MT is linguistically limited, and could not deliver the teaching of modern concepts which the English language can.
  12. Learning English and not MT is necessary because advancement in education is dependent on it as examinations are set in the language.
  13. MT used as medium in teaching young learner leads to laying of weak educational foundation
  14. Utilization of MT as medium of instruction makes teaching effective
  15. When a child learns his MT well, it becomes easy for him/her learning other languages.
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16. The use of MT is a rightful choice that leads to educational success.

17. It is best to teach children in their MT because it enables clear communication between teachers and students, and among students themselves.

18. Non mother tongue-based education imposes constrained in the acquisition of knowledge and learning of skills.

19. MT instruction enables students to relate to what happens during class hours.

20. When education of young children is in their MT, attending school becomes inviting.

21. MT as medium of instruction breaks barrier of learning

22. The non-use of MT fosters difficulty to learners

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