

Self-efficacy Beliefs and Teaching Performance of Pre-service Teachers in Negros Oriental State University, Bais Campus

Ma. Sarah Fatima P. Valencia
Negros Oriental State University

Abstract

Grounded in the Social Cognitive Theory of Albert Bandura, self-efficacy beliefs have been regarded as powerful predictors of behavior and performance. This descriptive study was conducted on 236 pre-service teachers of Negros Oriental State University, Bais Campus, using the Teachers Sense of Efficacy Scale (TSES) as the main instrument. The findings revealed that the pre-service teachers have high levels of self-efficacy beliefs on student engagement, instructional strategies, and classroom management. Likewise, the pre-service teachers also have a high performance in their practice teaching. There is a significant relationship between the self-efficacy beliefs of pre-service teachers and their teaching performance during their practice teaching.

Keywords: Self-efficacy beliefs, practice teaching, teaching performance, practice teaching, pre-service teachers

Introduction

The ability of the human race to make things happen depends on internal and external factors. In a specific sense, internal factors may refer to the personal knowledge, capabilities, and attitudes of an individual inherent in his or her nature or gain through personal experiences. The belief in one's capabilities to organize and execute a course of action required to attain objectives may be called self-efficacy (Bandura, 1997).

Accordingly, Bandura postulated four sources of efficacy: mastery experiences, vicarious experiences, social persuasion, and physiological or emotional arousal. These sources undergo cognitive processing that

determines how the source of information will influence the desired tasks. As applied to the educational setting, the teacher's self-efficacy is then an essential concept that shapes his or her teaching effectiveness and performance. Teacher self-efficacy is also defined as beliefs in one's ability to complete the steps in accomplishing a particular teaching task in a given context (Tschannen-Moran & Hoy, 2001; Jamil, Downer, & Pianta, 2012). From this definition, it is noted that self-efficacy is not an exact measure of competence but a sense of perception of one's competence one might expect to display given a set of circumstances (Hoy & Spero, 2005).

Various studies found an association between teachers' self-efficacy beliefs

and positive teaching behaviors (Henson, 2001) and evaluation practices (Ceylandog, 2009). Self-efficacy beliefs, however, vary from one person to another (Pendergast, Garvis & Keogh, 2011). Pre-service teachers who were more outgoing and with high values on creating a learning environment (Evrekli, Sasmaz Oren & Inel, 2010) had a higher sense of teacher self-efficacy at the end of their teacher preparation program. Those with a lower sense of self-efficacy were anxious about their success (Jamil *et al.*, 2012). Knowledge and understanding of pre-service teachers' self-efficacy beliefs before practice teaching is imperative to determine the extent of their capabilities, willingness to work, skill in managing a class, and carrying out instruction to their students.

As the forebears in the training of prospective teachers, teacher education institutions must continuously equip their students with the knowledge, skills, and techniques attuned to the demands of the present times. Hence, these teacher education institutions continually expose their students to theories of teaching and learning and the real world of teaching. Practice teaching, undeniably the apex of an education student's life, entails a crucial fit between theory and practice. Here, the pre-service teachers, also called student teachers or practice teachers, can apply theories inside the classroom to actual use in the real teaching world. However, most if not all pre-service teachers at the beginning of their practice teaching are experiencing mixed emotions. Some are excited to start with practice teaching right away,

while some are apprehensive if they can achieve such a gargantuan task. Some even fear failures in this stage, while others rejoice at arriving at the last stint of their student's life. Hence, pre-service teachers' self-efficacy beliefs about their capabilities to undertake practice teaching are vital.

In previous studies, self-efficacy and its effects on teachers' behavior and practices have been studied. This present study investigates the relationship between pre-service teachers' self-efficacy beliefs in terms of student engagement, instructional strategies and classroom management, and their teaching performance during practice teaching. Specifically, it would determine if higher or lower self-efficacy beliefs can lead to a higher or lower teaching performance among pre-service teachers in Negros Oriental State University, Bais Campus. The findings of this study will help the university in designing programs that will assist the pre-service teachers during their practice teaching.

Methodology

The study utilized the descriptive research method by determining the self-efficacy beliefs, teaching performance, and the relationship between self-efficacy beliefs and teaching performance of pre-service teachers in Negros Oriental State University, Bais City Campus. A quantitative approach was utilized to collect the data using a standardized "Teachers' Sense of Efficacy Scale", also called the Ohio State Teacher Efficacy Scale (OSTES)

or Teachers Sense of Efficacy Scale (TSES) from the College of Education and Human Ecology of the Ohio State University. Permission to use the said questionnaire was generated online from Dr. Anita Woolfolk Hoy, a professor of the College of Education and Human Ecology, Ohio State University, one of the instrument's developers.

Locale and Respondents

The study was conducted at the College of Education in NORSU Bais Campus 2, located in Bais City, Negros Oriental. The respondents were the 102 Bachelor of Elementary Education (BEED) and 134 Bachelor of Secondary Education (BSED) pre-service teachers on their last semester of study. The majority of the pre-service teachers were female. Most of the respondents' age ranged from 19 – 21 years old.

Teacher Sense of Efficacy Scale (TSES)

The Teachers' Sense of Efficacy Scale is in two forms, namely: a long-form which consists of 24 questions, and a short form which consists of only 12 questions. The standardized instrument used in the study was the long-form which consists of 24 questions. There are eight (8) questions each for the efficacy on student engagement, instructional strategies, and classroom management with a nine-point Likert Scale, ranging from 1 – *"nothing"*, 3 – *"very little"*, 5 – *"some influence"*, 7 – *"quite a bit"* and 9 – *"a great deal"*. The instrument was also tested for reliability

using Cronbach alpha developed by Lee Cronbach in 1951, which measures internal consistency of reliability. With a coefficient of 0.92, the instrument is considered reliable since the generally accepted value of reliability is 0.6 – 0.7 (Ursachi, Horodnic & Zait, 2015). Created based on Bandura's Teacher Efficacy Scale, the TSES is composed of three dimensions vital for teaching, labeled as efficacy for student engagement, efficacy for instructional strategies, and efficacy for classroom management. The numerical limits and descriptions to determine the efficacy level for each dimension are average scores of 1 -3 (low sense of efficacy), 4 – 6 (moderate sense of efficacy), and 7 – 9 (high sense of efficacy).

Results

This study was conducted to investigate pre-service teachers' level of self-efficacy beliefs based on the Teachers' Sense of Efficacy Beliefs in three dimensions, specifically student engagement, instructional strategies, and classroom management. Likewise, the teaching performance of pre-service teachers is also taken into account. The relationship between self-efficacy beliefs and teaching performance of pre-service teachers is determined whether significant or not. The statistical tools used were the weighted mean for the levels of self-efficacy beliefs, and the chi-square test of association for the relationship between self-efficacy beliefs and teaching performance of pre-service teachers. Data were tabulated and computed using SPSS

Table 1. *Self-efficacy beliefs of Pre-service Teachers*

| Dimensions | N | \bar{x} | Description |
|--------------------------|-----|-----------|-------------|
| Student Engagement | 236 | 7.02 | High |
| Instructional Strategies | 236 | 7.02 | 7.02 |
| Classroom Management | 236 | 7.02 | 7.02 |

Table 2. *Teaching Performance of Pre-Service Teachers*

| Practice Teaching Grade | N | Percentage (%) |
|-------------------------|-----|----------------|
| 83-85 | 13 | 5.51 |
| 86-88 | 72 | 30.51 |
| 89-91 | 126 | 53.39 |
| 92+ | 25 | 10.59 |
| Total | 236 | 100.00 |

package version 20.0.

Self-efficacy Beliefs of Pre-service Teachers

The data in Table 1 indicates that the pre-service teachers perceived themselves to have high self-efficacy beliefs in student engagement, as shown in the composite mean of 7.02. Likewise, the same composite mean is generated for instructional strategies is 7.00 and classroom management. These mean scores indicate high levels of self-efficacy beliefs among pre-service teachers in all dimensions, namely student engagement, instructional strategies, and classroom management.

Teaching Performance of Pre-service Teachers

After finishing their practice teaching, the pre-service teachers were graded on their teaching performance

by the cooperating teachers and supervisors of student teaching. Table 2 shows the teaching performance of pre-service teachers translated to numerical grades. The data shows that most pre-service teachers have high grades during their practice teaching. This means that they were able to show good teaching performance during their practice teaching at the different laboratory schools where they were assigned.

Relationship between the Self-efficacy Beliefs of Pre-service Teachers and their Teaching Performance

Results showed that the $p < 0.05$ or $p = .010$ and is less than the 0.05 significance level; hence, the null hypothesis of no significant relationship is rejected. There is a significant relationship between the pre-service teachers' self-efficacy beliefs and their

Table 3. *Self-Efficacy Beliefs and Teaching Performance of Pre-Service Teachers*

| | Value | df | Asymp. Sig. (2-sided) |
|------------|---------|----|--------------------------|
| Chi-square | 58.473a | 36 | .010 |

teaching performance.

Discussion

Ratings of the scale for the 24 questions are divided into three categories: student engagement, instructional strategies, and classroom management. The questions on efficacy in student engagement ask pre-service teachers on how much can they do in handling difficult students, helping students to think critically, motivating students who show low interest in schoolwork, encouraging students to believe they can do well in schoolwork, helping students value learning, fostering students’ creativity, improving understanding of a student who is failing and assisting families in helping their children to do well in school. Moreover, questions on instructional strategies inquire on pre-service teachers’ efficacy on how to respond to difficult questions from students to gauge students’ comprehension, to craft good questions, to adjust lessons to the level of students’ understanding, to use a variety of assessment strategies, to provide an alternative explanation when students are confused, to implement strategies in the classroom and to provide appropriate challenges for capable students. On the other hand, questions on efficacy in classroom management ask on the pre-service teachers’ ability

to control disruptive behavior in the classroom, making expectations clear about students’ behavior, establishing routines, getting students to follow classroom rules, calming a disruptive or noisy student, establishing a classroom management system with each group of students, keeping a few problem students from ruining an entire lesson and responding to the defiant students.

The study revealed that the pre-service teachers perceived their self-efficacy beliefs to be high in terms of student engagement, instructional strategies, and classroom management (Cason, 2018). These findings are consistent with the studies of Ozder (2011), Isiksal (2005), Senler and Sungur (2010), and Hoy and Spero (2005), which indicate pre-service teachers may have perceptions of self-efficacy beliefs during their senior years. Parallel findings were also shown in the studies of Palmer, Dixon, and Archer (2015), Acikalin (2014), Saricobin (2014), and Kahraman, Yilmaz, Bayrak, & Gunes (2015). The pre-service teachers’ high levels of self-efficacy beliefs can be attributed to both external and internal factors. The external factors are the kind of training they are exposed to for almost four years of study and the mentoring sessions provided by the student teaching supervisors. The internal factors include the disposition and aptitude of pre-service teachers.

Before acceptance to the college of education, the students must pass the entrance examination and screening process. This rigorous process somehow leads to the selection of academically competent students.

However, these findings run counter to the study of Pendergast et al. (2011), which revealed a decline in the self-efficacy beliefs of pre-service teachers when they underwent practice teaching. After deployment to the different laboratory schools, the pre-service teachers are exposed to the actual teaching world and adjust to the new environment and interact with students and cooperating teachers. During this period, a greater understanding of the teaching profession sinks in (Pendergast et al., 2011). After their practice teaching, the pre-service teachers were evaluated on their teaching performance by their cooperating teachers and supervisors of practice teaching. The former evaluated them in terms of their commitment to teaching, knowledge of the subject matter, teaching for independent learning, and management of learning. The latter also evaluated them based on their participation in orientation and enrichment activities, final demonstration teaching, and entrance and exit portfolios. The ratings given by the cooperating teachers and supervisors of practice teaching were collated and given corresponding weights to comprise the final grade for practice teaching. In this study, the final numerical grade was the basis to objectively quantify the teaching performance of the pre-service teachers

during practice teaching.

Using the chi-square test of association, the researchers found out that there was a significant relationship between the self-efficacy beliefs of pre-service teachers and their teaching performance. It is interesting to note that pre-service teachers have high levels of self-efficacy beliefs even if they are not yet licensed, professional teachers. Considering that the Teachers' Sense of Efficacy Scale was originally designed to help teachers better understand their self-efficacy, it can still be contextualized to ascertain how pre-service teachers perceive their capabilities in handling the full responsibilities of teaching. Akin to these findings were also shown in the studies of Isiksal (2005), Thomas and Mucherah (2014), and Tschannen-Moran and Hoy (2001) that manifested that there is a relationship between performance and self-efficacy beliefs and that these beliefs can lead to significant changes. When pre-service teachers perceive that they have adequate self-efficacy beliefs, there was also a reflected effect on their teaching performance. As Bandura (1997) stated in his social cognitive theory, "the self-assurance with which people approach and manage tasks determines whether they make good or poor use of their capabilities" (p.35). There is a possibility that pre-service teachers can be persistent and successful in their tasks bearing in mind that they can do them.

Conclusion

In this study, the pre-service teachers possess high levels of self-efficacy

beliefs in terms of student engagement, instructional strategies, and classroom management. They are also reported to have high teaching performance after evaluation by their cooperating teachers and supervisors of practice teaching. Likewise, there was a significant relationship between the self-efficacy beliefs of pre-service teachers and their teaching performance. The higher the self-efficacy of pre-service teachers, the better their practice teaching performance is. These findings would help the university design programs and activities for pre-service teachers that will sustain or further increase the self-efficacy beliefs of pre-service teachers in the future. It is suggested that other studies may be pursued as to the other factors that can affect positive changes to pre-service teachers' self-efficacy beliefs. Other areas of concern like family support and peer mentoring may be explored.

References

- Bandura, A. (1997). *Self –Efficacy: the experience of control*. Freeman and Company.
- Cason, M. F. (2018). *The Impact of Student Engagement, Instructional Strategies, and Classroom Management on Self-Efficacy of Christian Private School Teachers*. Liberty University. <https://digitalcommons.liberty.edu/cgi/viewcontent.cgi?article=2780&context=doctoral>
- Ceylandog, F. (2009). *Teacher self-efficacy beliefs toward measurement and evaluation practices*. <http://www.etd.lib.metu.edu.tr/upload/3/12610951/index.pdf>
- Evrekli, E., Sasmaz Oren F., & Inel, D. (2010). Examining student teachers' self-efficacy for implementing the constructivist approach in terms of the variables of gender, development, and grade level. *International Journal on New Trends in Education and their Implications*, 2(2), 66-77. http://www.ijonte.org/FileUpload/ks63207/File/6._evrekli-oren-inel.pdf
- Henson, R (2001). *Teacher self-Efficacy: Substantive implications and measurement dilemmas*. https://www.researchgate.net/publication/2365774_Teacher_Self-Efficacy_Substantive_Implications_and_Measurement_Dilemmas
- Hoy, A. & Spero, R. (2005). Changes in teacher efficacy during the early years of teaching: A comparison of four measures. *Teaching and Teacher Education*, 21 (4)343-356, doi:10.1016/j.tata.2005.01.07
- Isiksal, M. (2005). Pre-service teachers' performance in their university coursework and mathematical self-efficacy beliefs: What is the role of gender and years in program? *The Mathematics Education*, 15(2), 8-16. https://www.researchgate.net/publication/237427136_Preservice_Teachers'_Performance_in_their_University_Coursework_and_Mathematical_Self-Efficacy_Beliefs_What_is_the_Role_of_Gender_and_Year_in_Program
- Jamil, F., Downer, J. & Pianta, R. (2012). Association of pre-service teachers'

- performance, personality, and beliefs with teacher's self-efficacy at program completion. *Teacher Education Quarterly*. 39(4) 119-138. <https://files.eric.ed.gov/fulltext/EJ1001446.pdf>
- Kahraman, S., Yilmaz, Z., Bayrak, R. & Gunes, K. (2014), Investigation of pre-service teachers' self-efficacy beliefs of science teaching. *Procedia – Social and Behavioral Sciences* 136 (2014) 501-505, <https://core.ac.uk/download/pdf/82800578.pdf>
- Ozder, H. (2011). Self-efficacy beliefs of novice teachers and their performance in the classroom, *Australian Journal of teacher education*. 36 (5). <https://ro.ecu.edu.au/ajte/vol36/iss5/1/>
- Palmer, D., Dixon, J., & Archer, J. (2015). Changes in science teaching self-efficacy among primary teacher education students. *Australian Journal of Teacher Education*, 40 (12). <https://ro.ecu.edu.au/ajte/vol40/iss12/3>.
- Pendergast, D. Garvis, S. & Keogh, J. (2011). Pre-service Student-Teacher Self-efficacy Beliefs: An Insight into the making of Teacher. *Australian Journal of Teacher Education*, 36 (12). <https://ro.ecu.edu.au/ajte/vol36/iss12/4/>
- Senler, B. & Sungur, S. (2010). Pre-service teachers' teaching self-efficacy: A case from Turkey. *Procedia Social and Behavioral Sciences* 9; 771-775. doi:10.1016/j.sbspro.2010.12.232
- Thomas, K. & Mucherah, W. (2014). The Contextual Difference: Developing Pre-service Teacher Efficacy through Immersive Learning Experiences," *Education and Urban Society*. <https://doi.org/10.1177/0013124514533795>
- Tschannnen-Moran, M. & Hoy-Woolfolk, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teachers Education*. 17, 783-805. https://mxtsch.people.wm.edu/Scholarship/TATE_TSECapturingAnElusiveConstruct.pdf
- Ursachi, G., Horodnic, A. & Zait, A. (2015). How reliable are measurement scales? External factors with indirect influence on reliability estimators, *Procedia Economics and Finance*. 20, 679-686. <https://www.sciencedirect.com/science/article/pii/S2212567115001239?via%3Dihub>