

DEVELOPMENT OF AN INSTRUMENT FOR MEASURING THE TEACHERS' CONCERNS BASED ON THE CONCEPTS OF THE CONCERN-BASED STAGE THEORY

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Abstract: This research was aimed at developing an instrument for measuring teachers' concerns according to the Concern-Based Stage Theory by using content validity analysis and construct validity analysis through confirmatory factor analysis. The analysis results found that the teachers' Concern Component Model corresponded to the empirical data. When analyzed with the Structural Equation Model (SEM) analysis program, the analysis results comprised 3 aspects of the principles of teaching concern i.e. self, task and impact on students with another 14 sub-components.

Introduction

The development of teachers in response to the needs and nature of changes that follow individual development of professional teachers involves gaining an understanding of beneficial phenomenon toward learning in terms of what components must be considered for improving teachers. Thus, there are different needs and concerns at each stage of beginning teaching and self conduct in the teaching profession. Therefore, studies on teachers' concerns based on principles and reasons are of great benefit toward the pool of knowledge with respect to the development of teachers. Studies on teaching concerns are based on theories which explain phenomena in the form of developmental changes in beginning teachers, that is, the Concerns Based Stage Theory which is a theory that explains the phenomena of changes in terms of thoughts, feelings and attitudes toward various aspects of the teacher's surroundings in relation to concern for environmental components and context, which is a theory that has received long-term and continued interest from educators.

Objectives

To develop the Teacher Concerns Checklist (TCC) in Thai and assess the teachers' concerns according to Concerns Based Stage Theory

Literature Review

The Concerns Based Stage Theory is a theory that explains the concern model for teachers which shows the model of natural transformations in terms of the thoughts and

feelings of concern held by beginning teachers toward the teaching profession. The target group for the explanation of this theory comprised teaching interns and beginning teachers (Watzke, 2007).

Fuller (1969 cited in Watzke, 2007) was the first person to mention the Concern Theory for teachers, which later received considerable interest in terms of teachers' education. At first, studies were conducted on the development of teaching interns and beginning teachers by studying and examining stages of concern. The findings of Fuller's research (1969) showed the developmental model of the changes of teachers, which can be generalized and referred to in terms of the varied roles of beginning teachers.

The Concerns Based Stage Theory for teachers introduces the developmental model for teachers' concerns toward various aspects in the context of teachers' lives, which consist of teachers' concerns that are shown in the order of 3 stages. These three stages have been arranged in a hierarchical pattern wherein the advancement from one stage to another requires that lower levels are passed, situations are faced and that problems at that level are successfully solved prior to advancement to the next level or stage, that is, the aforementioned developmental model for teachers' changes in stages. And the circumstances in each of those stages are events that are cascaded in a hierarchical pattern of stages according to a period of time, which can be explained by Figure 1, Developmental Model for the Concerns Based Stage Theory as follows (see in next page):

The developmental model for the changes in teachers' concerns according to the Concerns Based Stage Theory consists of attitude, thoughts and feelings of teachers that show concern in various areas surrounding their lifetime roles as teachers during the first 2 – 3 years of teaching.

Stage 1: the stage of self concern, is reflected by feelings of self satisfaction, for example, concerns about being appropriated evaluated by administrators, being accepted by students and fellow teachers within the organization, and so on.

Stage 2: the stage of concern teaching tasks is concerned about the use of educational strategies, management of curriculum implementation and various problems encountered by teachers in developing their own teaching.

Stage 3: the stage of concern about teaching impact on students reflects teachers' use of strategies for advising guidelines for students regarding both study and personal problems. At this stage of confronting the aforementioned variety of student needs, the teacher has

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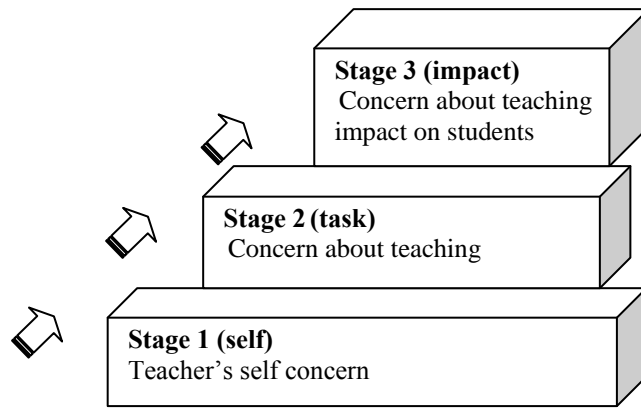


Figure 1: Developmental Model for the Concerns Based Stage Theory
(Modified Version of Fuller's concept (1969))

to be a representative of all people (the whole person), which differs from the first 2 stages, that is, the self and task stages are concerns about self development and teaching ability, which is also an internal issue. The impact stage, however, is the students' issue in terms of growth in terms of academy, intelligence, emotion and society.

Later on, Hall et al. (cited in Marsh, 1996) applied the developmental concept of the Concerns Based Stage Theory established by Fuller (1969) by extending the explanation of the developmental model for changes from 3 stages (self task impact) to 7 stages, naming the revised model the "Concerns Based Adoption Model (CBAM), reasoning that changes are issues requiring time, experience, energy and resources which need to be improved, practiced and depend upon the capacity of individuals and changes according to surrounding roles such as students, colleagues and family. Therefore, explanations of the development of concern should include details that should be able to explain in terms of thoughts and feelings that are too complicated to be roughly explained on only 3 stages.

The researcher assessed the teachers' concerns through the use of survey research accompanied by qualitative data collection. However, the popular and widely accepted method for assessing teachers' concerns is the method according to Concerns Based Stage Theory, which refers to the teachers' feelings or attitudes toward themselves, toward teaching (task) and toward the impact on the students (impact) through the use of the Teacher Concerns Checklist (TCC) developed by Watzke (2007). The Teacher Concerns Checklist (TCC) is an instrument used to measure the teachers' concerns by examining a list consisting of questions that measure the 3 stages of teachers' concerns according to Fuller and Borich's (1988) Theory, which classifies the assessment of teachers' concerns into 14 elements arranged in 46 items with 5-level Likert Scales.

Research Methodology

The development of an instrument for measuring teachers' concerns involves applying the aforementioned Teacher Concerns Checklist developed by Watzke, which the

researcher conducted by translating the checklist into Thai and developing as follows:

1) The TCC was submitted to a panel of experts who examined it for content validity. Comprising a total of 7 professional experts, this panel consisted of the following: 1) 3 teachers / professors; 2) 2 educational instructors, 3) 1 expert well-versed in educational psychology, and 4) 1 expert knowledgeable in evaluation.

2) The TCC was submitted to a trial study with teachers possessing characteristics similar to the sample group, who comprised 55 teachers from Kanchanaburi Educational District Offices, Districts 1, 2 and 3.

3) The TCC was implemented in the sample group, which comprised 348 teachers under the direction of the Kanchanaburi Educational District Offices, Districts 1, 2 and 3 from 53 schools by simple random sampling by holding a drawing to select schools as representatives of schools with different characteristics in terms of type, location and size.

4) The TCC was used with the sample group to examine the quality of the checklist in terms of internal consistency and construct validity through the use of confirmatory factor analysis with the program, LISREL 8.54.

Conclusion

The results from developing the TCC according to Concerns Based Stage Theory through the use of the aforementioned 3 approaches to improve and examine the instrument's quality in terms of content validity, internal consistency reliability and construct validity yielded the following results:

1) Content Validity Results

According to the results of the test for content validity by experts through the use of the IOC technique, it was found that 44 of the 46 items had IOC values between 0.88-1.00 and 2 items had IOC values of 0.75. The researcher revised and improved upon these 2 questions according to the experts' recommendations.

2) Internal Consistency Reliability Results

The results of the test for internal consistency, which is a test for representation of the same

characteristics to be measured, found that this TCC possesses an internal consistency value for the whole check list of 0.917, meaning that the internal consistency of this check list is at a high level and internally consistent.

3) Construct Validity Results

The results of the test for construct validity through the use of confirmatory factor analysis with a computer program for causal model analysis in terms of the Structural Equation Model, it was found that the analysis results of the confirmatory factor analysis for Teachers' Concerns Model were consistent with the empirical data with a Chi Square value of 94.31, P-value = 0.056, Goodness of Fit Index = 0.96, Adjusted Goodness of Fit Index = 0.95, Parsimony Goodness of Fit Index = 0.67, and Root Mean Square of Residual = 0.017 in which consideration of the chi square, P-value and GFI, AGF and RMR indexes found that the Teachers' Concerns Model comprised variables with proportions that can be explained by the components of teachers' concerns as follows:

Group 1: Self Stage-related Grouping

Self Stage-related Grouping consists of concerns in the following 4 areas: 1) professional development; 2) performance appraisal, 3) school policies and culture, and 4) relations with students.

Group 2: Task Stage-related Grouping

Task Stage-related Grouping consists of concerns in the following 6 areas: 1) adequacy of instructional materials/curriculum; 2) instructional deterrents to teaching; 3) classroom conduct; 4) non-instructional demands on time; 5) student personal problems; and 6) professional independence (with regard to teaching).

Group 3: Concern for impact stage-related Grouping

Concern for Impact Stage-related Grouping comprises concerns in the following 4 areas: 1) student academic growth; 2) student motivation; 3) student social-emotional growth; and 4) individual student differences.

Recommendations

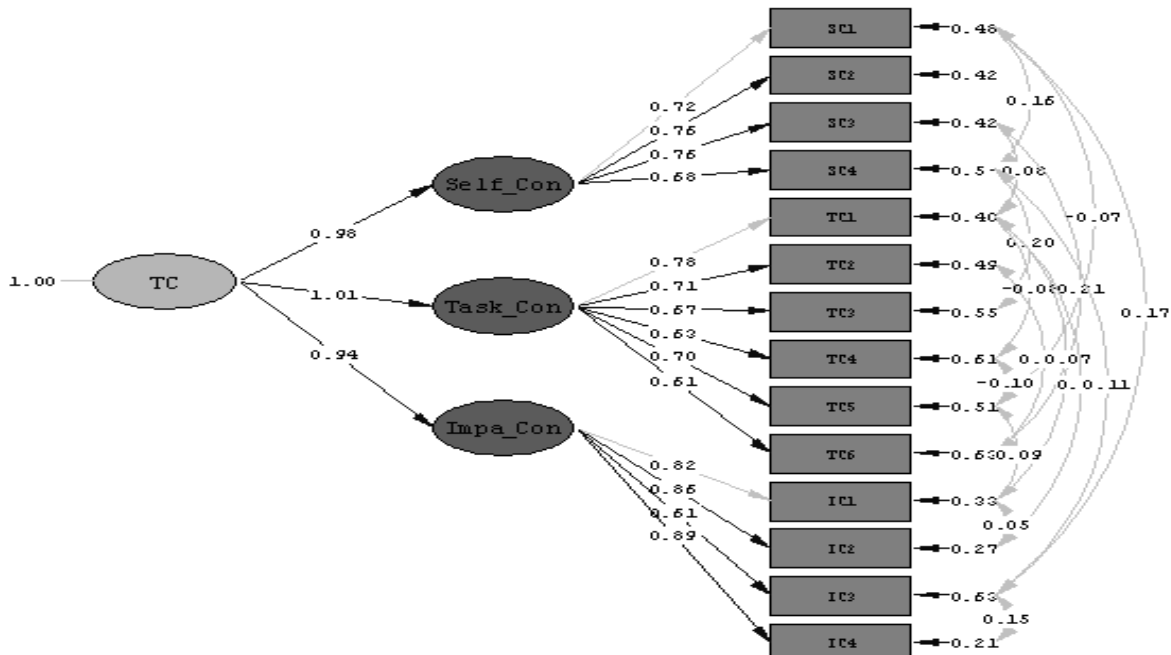
Implementing the TCC by the method of translating it from the source language of the instrument to measure concerns about differing environmental contexts with regard to language, cultural and social conditions as implemented by the researcher in the present study, the researcher found that further studies should give importance to defining the meaning of "concerns" in a manner that is clear and directly relevant to the topic, especially regarding definitions related to language usage in circumstances involving the questions in the instrument. The language usage should be improved by giving importance to implied meanings. In addition, the context of the questions should be modified in consistence with the cultures of teachers who answer questions in the checklist. In some questions, situations similar to the original tools may be used; however, the situation should be modified into a parallel situation that is suitable with the responder's environment. By giving importance to improving the instrument in terms of language usage as recommended by the researcher, the problem of cultural bias will be reduced and standard instruments will be able to be used more appropriately in different cultural situations.

References

Charambous, C. (2004). Towards a Unified Model on Teachers' concerns and Efficacy Beliefs Related to a Mathematics Reform. Paper presented at the Conference of the International Group for the Psychology of Mathematics Education.

Cheung, D. (2000). Teachers' Stages of Concerns about Target-Oriented Curriculum. *Education Journal*, 28.

Conway, F. C. M. (2003). The journey inward and outward: a reexamination of Fuller's concerns-



Chi-Square = 94.31, P-value = 0.056, df = 74, RMR = 0.028

- based model of teacher development. *Teaching and Teacher Education*, 19(2003), 465-482.
- Findlay, H. E. (2005). Analysis of teachers' concerns in selected Alabama public schools. Source unknown.
- Holloway, k. (2003). A measure of concern. *Journal of National Staff Development Council*.
- Johnson, S. M. (2006). *The Workplace Matters Teacher Quality, Retention, and Effectiveness*. (Publication. Retrieved from National Educational Association.
- Marsh, C. (1996). *Handbook for beginning teachers*. Malaysia: Longman.
- Sweeny, (2003). A Model of the People Development Process Retrieved from [http:// www. Department of Public.html](http://www.DepartmentofPublic.html).
- Toh, K .A. (2000). Case Studies of Beginning Teacher Paper presented at the Educational Research Conference on Towards an Optimistic Future.
- Watzke: J. L. (2007). longitudinal research on beginning teacher development: Complexity as a challenge to concerns-based theory. *Teaching and Teacher Education*, 23(1): 106 - 122