

Concerns Among Physical Educators with Varying Years of Teaching Experience

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Fuller (1969) suggested that concerns for self, task and impact are natural stages through which most teachers pass and that the parting from one stage to the next could be viewed as a professional maturation process. In the first stage of Self, the teachers are concerned about themselves as individuals whereas in the second stage of Task, they are concerned about the art of teaching, and in the final stage of Impact, their concerns are about the needs of the students.

To identify teacher concerns, Fuller and Borich (1974) developed a 50-item questionnaire which was later revised to become the 15-item Teacher Concerns Questionnaire (George, 1978). Scoring of each item in the Teacher Concerns Questionnaire (TCQ) is on a 5-point scale with the highest point representing the most intense feeling of concern. Items related to concerns for Self included those of "doing well when the supervisor is present", "feeling more adequate as a teacher", "being accepted and respected by professional persons", "getting a favorable evaluation on teaching", and "maintaining the appropriate degree of class control". Items corresponding to concerns for Task included those of "the nature and quality of instructional material", "feeling under pressure too much of the time", "too many instructional duties", "working with too many students each day", and "the routine and inflexibility of teaching". Impact concerns are reflected by items such as "meeting the needs of different kinds of

student", "diagnosing student learning problems", "challenging unmotivated students", "guiding students toward intellectual and emotional growth", and "whether each student is getting what he/she needs".

Since the publication of the TCQ, several studies have made use of it to assess teacher concerns and to testify Fuller's theory, but findings were varied. Behets (1990) tested 100 preservice physical educators and reported no significant decrease in concerns for Self or increase in concerns for Task over time. Mixed results were obtained by Wendt and Bain (1989) who examined concerns of preservice and inservice physical educators. It was reported that based on data from the 90 subjects surveyed, Fuller's theory could not be fully substantiated. They speculated that the TCQ was valuable only in predicting self-concern. Studies which rendered partial support to Fuller's theory included one by Wendt, Bain, & Jackson (1981) who compared concern differences among physical education student teachers before and after their first teaching practicum. Results indicated that the students had successfully lowered their concerns not only for Self and Task, but also for Impact after teaching practice. Finding of a similar nature was reported in studies by McBride (1984) and Boggess, McBride and Griffey (1985). However, in a later study with 30 experienced secondary physical educators, McBride, Boggess, and Griffey (1986) found that Fuller's theory was fully followed. In view of such contradictory findings there seems a need to further test Fuller's theory. Therefore, the main purposes of this study were to determine whether concerns on Self, Task and Impact change with

Table 1: Number of respondents from each group

Pre-service		In-service	
Male	Female	Male	Female
62	79	105	92

teaching experience and to further assess the validity of the three concern constructs as measured by the TCQ with factorial analysis.

Method

Subjects

Subjects for the study included both preservice and inservice physical educators. The preservice subjects (n=141) were in their second year of a teacher preparation program and had just completed their first series of teaching practicum. The inservice teachers (n=197) were secondary physical educators with an average of 7 years of teaching experience (M = 7.30, SD = 5.77). A breakdown of number of respondents from each group is presented in Table 1.

Instrument

The Teacher Concerns Questionnaire (TCQ) (George, 1978) was used for assessing concerns among the participants. Items of the TCQ is presented in Figure 1. A profile questionnaire was also used to obtain information regarding sex, age, and years of teaching experience.

Figure 1: Items of the TCQ

1. Lack of instructional material.
2. Feeling under pressure too much of the time.
3. Doing well when a supervisor is present.
4. Meeting the needs of different students.
5. Too many instructional duties.
6. Diagnosing student learning problems.
7. Feeling more adequate as a teacher.
8. Challenging unmotivated students.
9. Being accepted and respected by professional persons.
10. Working with too many students each day.
11. Guiding students toward intellectual and emotional growth.
12. Whether each student is getting what he/she needs.
13. Getting a favourable evaluation on my teaching.
14. The routine and inflexibility of the teaching situation.
15. Maintaining the appropriate degree of class control.

Procedure

Data from the preservice physical educators were obtained with the help of three teacher college lecturers who were supervisors of the teaching practicum. The questionnaires, together with a cover letter stating the purpose of the study, were given to the preservice physical educators within four weeks following their teaching practicum. Return of questionnaire was on a voluntary basis. Data from the inservice physical educators came from two sources: Teachers attending an inservice training program and colleagues of those teachers. The purpose of the study was first explained to the teachers attending the inservice program, then they were invited to participate. They were asked to cooperate by passing two sets of questionnaires to their colleagues. Material given out to all inservice physical educators included the questionnaires, a cover letter, and a self-addressed envelope for voluntary return.

Four weeks were allowed for collection of data. Of the 500 surveys issued, 338 returns were retained for data processing. The return rate was 67.6%. In order to assess whether areas of concern was influenced by years of teaching experience, three statistical methods were employed. A MANOVA was first used to test whether there was significant difference in rating of concerns between preservice and inservice physical educators. The discriminant function analysis procedure was applied to see whether results of the TCQ could distinguish preservice from inservice physical educators. It was hypothesized that if Fuller's theory could be substantiated, there would be difference between the two groups of physical educators with respect to concern ratings and that the TCQ could be used to distinguish preservice from inservice physical educators. Lastly, a multiple regression analysis was performed with data from the inservice physical educators to assess the influence of years of experience on the rating of concerns. It was hypothesized that if Fuller's theory was met, the ordering of Beta weight would be greatest for Impact and followed by Task and Self, respectively.

To verify the validity of Fuller's three concern areas, data were subjected to a principal component factor analysis with varimax rotation.

Results

Group Differences

Results of the MANOVA (Table 2) indicated that there was no significant difference between preservice and inservice physical educators with respect to the rating of concerns ($F = 0.70, p > .05$). Based on this finding, it was speculated that preservice and inservice physical educators had similar teaching concerns. Means and standard deviations of the three areas of concerns for both groups are presented in Table 3.

Discriminant function analysis (Table 4) also failed to separate the two groups of physical educators. The percentage of group membership correctly predicted was 52.02%. When the standardized canonical discriminant function coefficients were examined, that of Task was highest (.98) and was followed by Self and Impact respectively ($-.85$ and $.22$).

Table 2: MANOVA result on difference between pre-service and in-service physical educators with respect to the factors of Task, Self, and Impact

Factors	ss error	ms error	F	p
Self	2051.99	6.43	0.24	> .05
Task	2284.05	7.16	1.03	> .05
Impact	2235.91	7.00	0.02	> .05

Wilks' Value = 0.99 ($F=0.70, p > .05$)

Table 3: Means and standard deviations on Self, Task, and Impact among preservice and inservice physical educators

Concerns	Preservice (n=141)		Inservice (n=197)	
	M	SD	M	SD
Self	16.87	2.24	16.71	2.71
Task	16.27	2.18	16.59	2.96
Impact	17.25	2.62	17.32	2.64

Table 4: Summary of discriminant functions analysis

Factors	Canonical Functions Coefficients
Task	0.98
Self	- 0.84
Impact	0.22

Wilks' Lambda = 0.99
Canonical correlation = 0.08

Length of Teaching Experience and Rating of Concerns

Initial correlation matrix indicated that there was no significant correlation between rating of areas of concern and years of teaching experience (Self $r = -.01, p > .05$; Task $r = .08, p > .05$, Impact $r = .01, p > .05$). When data from the inservice physical educators were subjected to a multiple regression analysis, Beta weights assigned to each concern area were as follows: Self = $-.07$, Task = $.11$, Impact = $.02$. Thus the progressional stages of Self, Task, and Impact as postulated by Fuller were not substantiated in this study.

Factor Analysis

Final statistics of the factor analysis identified 4 factors which could explain for 49.7% of the variance. Factor Eigen values and variance contributions are presented in Table 5.

Items which loaded into the 4 factors above .5 were as follows: Factor 1 = Items 4, 6, 8, 11, and 12. Factor 2 = Items 7, 9, 13, 14, and 15. Factor 3 = Items 5 and 10. Factor 4 = Items 1,

Table 5: Results of the Factor Analysis

Factor	Eigen value	% variance
1	3.59	23.9
2	1.50	10.0
3	1.31	8.8
4	1.06	7.1

Table 6: Factor Matrix

Item	Factor 1	Factor 2	Factor 3	Factor 4
6	.70			
11	.67			
12	.64			
4	.63			
8	.59			
9		.70		
14		.62		
13		.56		
15		.54		
10			.72	
5			.64	
1				.75
2				.68
3				.55

2, and 3. The complete factor matrix is presented in Table 6.

Discussion

Fuller (1969) suggested that concerns for Self, Task, and Impact are stages that all teachers go through, and that the process of parting from one stage to another could also be viewed as a developmental growth pattern which could extend over months and years of a teacher's career. The basic assumption of this theory rested on the premise that as a teacher gains more confidence in teaching, the concerns for Self, which included such consciousness as whether one is making a favorable impression on students, peers and supervisors, would change to anxieties related to the actual task of teaching. This might include feelings of inadequacy in actual material used for instruction to feelings of being under too much pressure all the time. Finally, as the teacher gains control over those Task related anxieties, concerns would then become student-centered, or in Fuller's terminology, concerns for Impact. Findings from this study failed to support Fuller's theory since all physical educators, irrespective of years of teaching experience, were more concerned about Task. Could there be an optimal length of service attached to each stage? If so, then does it mean that the length of teaching among the inservice group was insufficient

to warrant a replication of Fuller's model? Inspection of subject characteristics showed that 62.4% of the inservice physical educators had taught for five or more years, so could a teaching experience of that length be insufficient to cause a change in concerns? Attempts to answer this and other equally eminent questions such as the effects of personality, training, and environment on the time a teacher takes to "graduate" to the Impact stage, require further investigations.

Factor analysis of the TCQ yielded four factors. All 5 items assigned by George (1978) to represent Impact concerns, loaded clearly into Factor 1. This result was similar to that obtained by Behets (1990) and Boggess et al. (1985). However, of the 5 items relating to Self concerns, only 4 were retained as Factor 2, and only 2 of the 5 items relating to Task concerns were retained as Factor 3. Failure to approximate Fuller's three constructs in this and other studies (Behets, 1990; Boggess et al., 1985) suggested the need for further studies to validate the questionnaire.

To assess whether the internal inconsistency of the TCQ is responsible for the failure to replicate Fuller's model, data were reprocessed and analyzed according to the new factors (F1, F2, F3, and F4) obtained. Manova results showed preservice and inservice physical educators were significantly different from each other with respect to rating of teacher concerns ($F = 7.40, p < .05$). Univariate F tests further revealed that F3 and F4 were the two factors that contributed to group differences ($F = 13.74, p < .05$; $F = 9.46, p < .05$). F3 included the items of "Too many instruction duties" and "Working with too many students", whereas F4 included the items of "Lack of instructional material", "Feeling under pressure too much of the time", and "Doing well when a supervisor is present". For F3, the inservice physical educators gave a higher rating to the concerns than the preservice physical educators (Preservice $M = 6.27, SD = 1.25$; Inservice $M = 6.86, SD = 1.52$) indicating that inservice physical educators are more inclined to feel time management pressures. This is understandable since a teacher under full

employment in a school situation would be expected to carry out more instructional and administrative duties than would a student teacher. For F4, the rating of concerns was reversed. Preservice physical educator gave a higher mean rating than the inservice physical educators (Preservice $M = 9.83$, $SD = 1.62$, Inservice $M = 9.16$, $SD = 2.18$). Examination of the items for F4 aids to explain the phenomenon. It is conceived that preservice physical educators, whose teaching experience was in a more controlled environment and represented an assessment of a course, would be more concerned about presence of a supervisor and adequacy of material for instruction.

When the four factors were entered for discriminant function analysis, 62.62% of the cases were correctly classified and the TCQ could be accepted as an appropriate instrument for distinguishing preservice from inservice physical educators (Wilks Lambda = 0.91, $p < .05$). But, when data from the inservice physical educators was used for correlation analysis, no significant coefficient was obtained between the new factors and years of teaching experience, therefore no further analysis was performed.

In summary, results from the main analysis indicated that the TCQ could not be used to differentiate preservice from inservice physical educators nor could it be used to substantiate Fuller's three stage concern theory. However, results of the repeated analysis suggested that if four factors were employed, the TCQ could indeed differentiate preservice from inservice physical educators but there is still reservation on its sensitivity with regards to measuring teacher concerns on a developmental continuum.

References

- Behets, D. (1990) Concerns of preservice physical education teachers. *Journal of Teaching in Physical Education*, 10, 66-75.
- Boggess, T.E., McBride, R., & Griffey, D.C. (1985) The concerns of physical education student teachers: A developmental view. *Journal of Teaching in Physical Education*, 4, 202-211.
- Fuller, F. (1969) Concerns of teachers: A developmental conceptualization. *American Educational Research Journal*, 6, 207-226.
- Fuller, F. & Borich, G. (1974) *Teacher concerns checklist: An instrument for measuring concerns for self, task, and impact*. Austin, TX: Research and Development Center for Teacher Education, The University of Texas at Austin.
- George, A.A. (1978) *Teacher concerns questionnaire*. Austin: University of Texas R&D Center for Teacher Education.
- McBride, R.E. (1984) Perceived teaching and program concerns among preservice teachers, university supervisors and cooperative teachers. *Journal of Teaching in Physical Education*, 3, 36-42.
- McBride, R.E., Boggess, T.E., & Griffey, D.C. (1986) Concerns of inservice physical education teachers as compared with Fuller's concern model. *Journal of Teaching in Physical Education*, 5, 149-156.
- Wendt, J.C., & Bain, L.L. (1989) Concerns of preservice and inservice physical educators. *Journal of Teaching in Physical Education*, 8, 177-180.
- Wendt, J.C., Bain, L.L. & Jackson, A.S. (1981) Fuller's concerns theory as tested on prospective physical educators. *Journal of Teaching in Physical Education, Introductory Issue*, 66-70.

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