Based upon several studies involving teacher trainees, Fuller (1969) posited that education students progress through a three-stage sequence of concerns during their training. First, they are concerned about themselves, and later they tend to become more concerned about their knowledge of the subject. Finally, they become concerned about their effect on the pupils they teach. This study investigated whether Fuller's concerns model would be applicable to the training experienced by health professionals. Two areas were investigated: (1) the three concerns' stages of teachers and their similarity to the concerns' experience of physical therapists; and (2) the progress of the physical therapists through the stages of the sequence and the similarity to the sequence proposed by Fuller. Thirty-four physical therapy students and forty-eight practicing physical therapists were the subjects of the study. The instrument used was the Teacher Concerns Checklist, developed by George, Borich, and Fuller (1974), which was modified slightly to measure the concerns of physical therapists. Results indicated that physical therapy students and practitioners experienced the same three concerns' stages as outlined by Fuller for teachers. The students and therapists also progressed through the stages in the same sequence that was proposed by Fuller. The results suggest that Fuller's concerns model is valid in professions other than education and has some implications for the training of health professionals. (AB)
CROSS-DISCIPLINE GENERALIZABILITY OF
FULLER'S TEACHER CONCERNS MODEL

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ABSTRACT

Effective instruction of professionals presumes knowledge of the concerns and motivations of students. One model of profession-related concerns has been formulated by Fuller. This study investigated the applicability of Fuller's teacher concern model in the health professions. The results conform quite closely to theoretical expectations, and have important implications for training practice and curricula. The results suggest that the teacher concern model does generalize to other professions.
Educational psychologists have long accepted as axiomatic the principle that students best learn content which helps them to resolve their concerns and meet their needs. However, as McKeachie (1963, p. 1119) notes, "usually the learning psychologist stops with this point, but to be useful the principle of motivation needs to be accompanied by information about dependable motives of college students." Unfortunately there is surprisingly little literature dealing with the profession-related concerns of students in the health professions.

Most of the literature about student concerns has been provided by the clinical education supervisors who every semester must face and deal with student anxieties. For example, Ramsden and Dervitz (1972) argued that physical therapy students' major concerns center around insecurities about dealing with patients. Jacobsen (1974) felt that physical therapy students' anxieties could largely be explained by the fact that students who are suddenly placed in clinical environments experience a sudden loss of the security which they felt in the more familiar classroom or laboratory environment. Similar findings have been reported in other health fields (Botkin, 1979; Moody, Tassel & Cash, 1974). However, none of the studies in this area represents an effort to formulate a theory regarding "dependable motives of college students."
Nevertheless, this type of theory has been developed and applied in other professions. Based upon several studies involving teacher trainees as subjects, Fuller (1969) posited that education students progress through a three-stage sequence of concerns during their training. At the beginning of their training, students typically experience concerns about self. For example, they are concerned about whether their pupils will like them once they begin teaching. Later, students tend to become more concerned about task. For example, students wonder if they have enough content knowledge to teach subject matter adequately. Finally, students become concerned about having impact on the individual pupils they will teach. At this stage of concerns, students view their pupils as individuals whose unique needs must be met in the most effective manner.

Several researchers have investigated the validity of the concerns model as it applies to teacher education (cf. Fuller, Parsons, & Watkins, 1973; Hardy, 1977). Furthermore, several researchers have suggested that Fuller’s concerns model may generalize to other disciplines. For example, Hall, Wallace, and Dossatt (1974) have suggested that the model also characterizes how persons respond to innovations. That is, people initially are concerned about how the innovation will affect their status, then they become concerned about whether they can master the innovation, and finally they become concerned about how the innovation can be made more effective. Thompson, Frankiewicz, and Ward (1978) sought to determine
whether the model correctly typifies the concerns which counselors experience during their training. They found that the concerns stages are distinct but that counselor educators may tend to progress through the concerns in somewhat idiosyncratic orders.

This study investigated whether Fuller's concerns model will generalize to training in the health professions. Specifically, the study addressed two questions. Do the three concerns stages underlie the concerns experienced by physical therapists? Second, do physical therapists progress through the concerns stages in the sequence proposed by Fuller?

METHOD

The subjects in the study were 34 physical therapy students and 48 practicing physical therapists. The average age of the subjects was 26.8 (SD = 6.9). Roughly 73% of the subjects were females.

The instrument used in the study was a modification of the Teacher Concerns Checklist developed by George, Borich and Fuller (1974). Minor modifications were necessary before the instrument could be used to measure the concerns of physical therapists. All references to teachers were replaced with appropriate references to physical therapists. Also, six items measuring concerns unique to the health field were added to the questionnaire. An example of an added item is, "providing
patients with follow-up care after discharge." For each of the
21 items, seven per theorized concerns stage, subjects marked
through a continuum to indicate their degree of concern. This
response format tends to maximize the reliability of results

RESULTS.

The first question posed in the study asked whether the
stages of concerns proposed by Fuller (1969) underlie the
concerns experienced by physical therapists. The subjects' responses were factor analyzed to address this question. Three factors, accounting for 60% of the variance of the 21 items, were identified. Factor adequacy coefficients (Pitts & Thompson, 1980) were computed to determine how closely the identified factors corresponded to the factors postulated by Fuller. The coefficients for the factors were respectively .99, .98, and .99. This result indicates that the actual factors were remarkably similar to the theorized factors.

The second question posed in the study asked whether
physical therapists progress through the concerns stages in the sequence proposed by Fuller. In order to address this question, the average factor scores of the 34 students were compared with the average factor scores of the 48 practicing therapists. Theoretically, the students should have been primarily concerned about "lower" level concerns while the practicing therapists should have been primarily concerned about "higher"
level' concerns. A Multivariate Analysis of Variance was conducted to determine if the two sets of averages were different to a statistically significant degree. They were \( F = 13.2, \text{df} = 3,34, p < .01 \). The standardized scores of the students on the self, task, and impact factors were respectively .58, -.15, and -.19. The standardized scores of the practicing therapists on the factors were respectively -.41, .11, and .14. Thus the concerns patterns were exactly as expected.

**DISCUSSION**

The results indicate that the concerns of physical therapists conform quite closely to theoretical expectations. Consequently the results suggest that Fuller's concerns model does generalize to professions other than education. These results have some noteworthy implications for the training of health professionals.

Educational psychology suggests that the typical concerns of students must be considered if the learning of students is to be maximized. This means, for example, that it may be important to let students know that many of the concerns they experience are normal. This may facilitate discussion and resolution of concerns.
The model also has important implications for curricula. Early clinical experience may facilitate more rapid progression to the impact concerns level. But whether or not this occurs, it is clear that early training will be less effective if instructors attempt to teach students how to have impact when students are in fact interpreting content with a view toward resolving concerns about self.
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