

Original Article

Motivational Orientations of Allied Health Care Professionals Participating in Continuing Education

MARIA R. TASSONE, MSc, BScPT
Professional Director, Physiotherapy
Women's College Hospital
Lecturer, Department of Physical Therapy
University of Toronto
Toronto, ON

CAROL S. HECK, PhD, MSc, BScPT
Assistant Professor
Department of Physical Therapy
University of Western Ontario
London, ON

Abstract: *The purpose of this review was to determine the motivational orientations of allied health professionals participating in continuing education (CE). It is generally accepted that, prior to learning, a prospective learner must be motivated. If participation in CE is to be viewed as a motivated behavior, the organizations who offer CE programs must ensure that motivational orientations are considered in decision making regarding program development and mandated CE. A review of the allied health literature using Medline, Cinahl, manual searches, article references, and an online public catalogue was conducted for the period 1985-1995. Inclusion criteria included survey research studies using a measurement tool from the educational field and studies involving allied health professionals. Investigators found that adults demonstrated various motivational orientations toward CE, such as individual desire to learn, professional advancement, responses to external pressures, the fostering of community, social interactions, and relief from routine or boredom. The reviewed literature consistently shows that practitioners are motivated to participate in CE by knowledge rather than potential punitive actions by authority figures. The implementation of mandated CE may be an unnecessary action since it has not been shown to produce positive practice changes and since other external influences appear to exist. Licensing bodies and CE providers should focus their efforts on identifying the proportion of individuals who are nonparticipants or whose primary motivation is to meet obligatory relicensure requirements.*

Key Words: Adult education, continuing education, continuing professional education, motivation, motivational orientations, participation

Continuing education (CE) can be defined as learning experiences that enhance and expand the skills, knowledge, and attitudes of health care professionals to enable them to remain current and to deliver competent professional services to

clients, their respective profession, and the public.¹ Today's health care professional is inundated with information and technology that may challenge or require re-examination of traditional means of practice in light of the increasing public demands for scientific evidence of efficacy, effectiveness, and efficiency. With the half-life of information retention at approximately 5 years,² and perhaps shrinking due to technological, social, political, and professional changes in health care, a lifelong commitment to CE will play a vital role in maintaining quality practices and standards of care.

It is generally accepted that, before learning can take place, the prospective learner must be

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Reprint requests: Maria R. Tassone, MSc, BScPT, Professional Director, Physiotherapy, Women's College Hospital, 76 Grenville Street, Toronto, ON, Canada M5S 1B2.

motivated. The motivations and characteristics of adults who attend educational programs have been studied extensively.³⁻¹⁴ Age and amount of formal schooling have been shown to be the two most important sociodemographic factors in predicting participation. Prior educational attainment is further seen as the best index of future participation.³ Although occupation and income as independent factors do not greatly influence participation, when combined with formal schooling the effect is enormous. Individuals with postsecondary training earning an above-average income in a white collar job are six times more likely to participate in adult education as compared to individuals with grade school education earning a below-average income in a blue collar job.⁴ With respect to motivation, it has been shown that adults with higher education participate due to a desire for knowledge, whereas less-educated adults participate to acquire specific skills.⁴

Much of the motivation research pertaining to health care professionals has been based on measurement tools developed in the educational field. Investigators have found that adults demonstrate various motivational orientations toward CE, such as individual desire to learn, professional advancement, responses to external pressures, the fostering of community, social interactions, and relief from routine or boredom.³⁻¹⁴ If participation in CE is to be viewed as a motivated behavior, then the organizations that offer CE programs must ensure that motivational orientations are considered in any decision making regarding program development and mandatory CE requirements. Awareness of these motivational orientations may also allow for design changes to CE programs, which may increase participation in nonmandatory programs.

Although much has been written regarding motivation in adult education, one cannot assume that health care professionals fit the adult learner's profile. The purpose of this review was to determine the motivational orientations toward CE for allied health care professionals. Since no specific information fitting the inclusion criteria was found

regarding motivational orientations of occupational therapists, pharmacists, respiratory technologists, and other allied health care groups, this review will focus on the available nursing and physical therapy literature.

Methods

A review of the allied health literature was conducted to determine the motivational orientations for this group. Literature sources used were Medline, Cinahl, manual searches, article references, and the online public catalogue at the University of Western Ontario, Canada for the period 1985-1995. Key words included *continuing education, continuing professional education, adult education, motivation, motivational orientations, and participation*. Inclusion criteria included (1) studies involving allied health care groups and (2) studies using survey research methodology and a measurement tool developed in the educational literature. Allied health care professionals were defined to be audiologists, dietitians, nurses, occupational therapists, pharmacists, physical therapists, respiratory therapists, and speech pathologists.

Motivational Orientation Measures in Education

Much of the early work in measurement tool construction regarding motivational orientations of adult education participants was conducted by Houle.⁶ These studies have been reviewed because of their significant contribution to the understanding of motivating factors for allied health care professionals.

Houle's conceptual model is based on the analysis of interviews conducted to elicit the motivations that underlie participation in adult education.⁶ Twenty-two adults identified as deeply committed to continued learning were interviewed. Following analysis of these interviews, Houle attempted to classify continuing learners on the basis of their expressed reasons for participating

in education. Although subjects indicated multiple reasons for participation, they varied in the emphasis they placed on these reasons. This led Houle to propose that adults could be classified into three groups of learners on the basis of their motivational orientations: goal oriented, activity oriented, or learning oriented.

Goal-oriented learners use education as a means of achieving a specific goal developed in relation to the self-identification of a need or interest. Activity-oriented learners participate for the sake of the activity itself, for social interaction, and for the amount and kind of human relationship it will yield. Learning-oriented individuals pursue knowledge for its own sake.

One of the limitations of this model was the assumption that people are consistently motivated by characteristic orientations and that these motivations do not change throughout their lives. This concept, however, provided the framework for subsequent research concerning the motives of adult education participants. Other models were needed to explain how multiple motivations could exist in the same individual and how motivations changed over time.

Education Participation Scale

In 1971, Boshier constructed the Education Participation Scale (EPS) in order to (1) test Houle's typology, (2) to develop an instrument that measured motives for participation, and (3) to formulate a model of adult education participation that had cross-cultural generality.⁷ The EPS, a self-report instrument, consists of 48 statements of possible reasons for participating in adult education activities.

The EPS was administered to 233 adult education participants from New Zealand who were randomly selected from CE courses at various institutions. The respondents were asked to indicate on a 9-point Likert scale the extent to which each item influenced a decision to participate in the course. Options ranged from "1 = very little influence" to "9 = very much influence."

Test-retest correlation coefficients for items in the EPS ranged from .44 to 1.00; only five items had coefficients below .71. These figures were based on a 6-week reliability study on 20 students. All correlation coefficients were reported to be significant ($p = .001$). Factor analysis of the responses extracted 14 first-order factors accounting for 69.2% of the total variance. The EPS is considered to be a valid tool for measuring motivational orientations and has good reliability.

Boshier⁸ and Morstain and Smart,⁹ using the EPS in later studies, identified six motivational orientations that are generally accepted as representative of research findings in the area of adult motivational orientations. Whereas Houle classified groups of people, the above investigators identified clusters of reasons for participation in adult education. These six motivational orientations are social relationship, external expectations, social welfare, professional advancement, escape/stimulation, and cognitive interest (Table 1).

Several researchers have used the EPS to identify the motivational orientation of adults participating in CE in a number of countries and in different occupational groups, including health care professionals.

Survey of Adult Education

Another scale that has been used by health care professionals in studying motivational orientations was taken from the tool developed by Carp, Peterson, and Roelfs¹⁰ in a national survey of 2004 Americans. The survey was conducted to determine participation trends, motivational orientations, and educational barriers in adult learners. Participants were between the ages of 18 and 60, were not full-time students, and resided in private households in the continental United States.

For analytical purposes, respondents were divided into two learning groups: "Learners" and "Would-Be Learners." Learners reported receiving instruction in some subject or skill in the previous 12 months, whereas Would-Be Learners only reported an interest in future learning.

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Table 1 Motivational Orientations of Adult Learners

Social Relationship

Participation to establish interpersonal relationships, to improve current relationships, to participate in group activities, and to improve interpersonal skills.

External Expectations

Participation as a response to directions, suggestions, or expectations of others or of authority figures.

Social Welfare

Participation to improve one's ability to serve others, the community, and society.

Professional Advancement

Participation to attain knowledge and skills to increase competence, to promote job advancement, to improve job status, or to obtain certification.

Escape/Stimulation

Participation to avoid routine, boredom, or frustrating situations.

Cognitive Interest

Participation to seek knowledge for its own sake.

To measure motivational orientations, a 20-item scale was constructed using seven motivational factors cited in the literature¹¹ and two factors judged to be important by the investigators: desire for personal fulfilment and desire for cultural knowledge. Would-Be Learners were asked to indicate whether items were "very important," "somewhat important," or "not at all important" in determining motivations. Learners were asked to indicate all of the reasons that they engaged in CE offerings.

Descriptive analysis focused on the percentage of Would-Be Learners who used the "very important" category and the percentage of Learners who checked each reason or item. For both groups, seeking knowledge for its own sake ranked first, with personal fulfilment and job-related goals ranking second and third. Every motive, however,

proved to be important to some respondents who chose it as their major learning priority. Although the items were based on the literature, the results of reliability testing of this instrument were not reported in any published materials.

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Formal versus Informal Continuing Education Activities

In 1979, O'Connor surveyed 843 nurses who were participating in formal CE programs in states with mandatory, proposed, and voluntary CE status.¹⁵ The purpose of the study was to determine the motivational orientations of nurses and the relationship between motivation and legal status of CE (mandatory, proposed, and voluntary).

On the basis of results from piloting the EPS on nurses similar to those who would be sampled in the main study, the EPS was modified for use in this investigation. Eight items were added to the EPS, for a total of 56 items, and the original 9-point Likert scale was extended by adding a zero point. This offered the respondents a "no influence" option.

Factor analysis of the results yielded seven meaningful factors contributing to motivation for participation in CE. These factors, comparable to those identified in previous research, included compliance with authority (external expectations), improvement in social relations (social relationship), improvement in social welfare skills (social welfare), professional advancement (professional advancement), professional knowledge (cognitive interest), relief from routine (escape/stimulation), and acquisition of credentials. The professional knowledge orientation is similar in meaning to the "cognitive interest" orientation identified in other studies.^{8,9} Reliabilities of the scales were estimated using Cronbach's alpha method to determine internal consistency. They ranged from .833 (compliance with authority) to .609 (acquisition of credentials).

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in mandatory states ranked compliance with authority higher than those in voluntary states: second versus fourth, respectively.

The results indicated that the desire to improve or expand professional knowledge was the strongest influence on participation in self-study programs. In the presence of a mandatory CE law, the desire to comply with authority exerted a strong influence, but not as strong as the search for knowledge (see Table 2).

Mandatory versus Voluntary Continuing Education

In O'Connor's 1979 study, the absence of significant findings related to legal status may have reflected the fact that legislation mandating CE for nurses had only been instituted recently.¹⁵ At the time of O'Connor's second study, compliance with authority emerged as a prominent influence on participation in states where mandatory CE had been fully implemented. The number of years that nurses practice under mandatory CE may have been another factor to consider. Since both of O'Connor's studies were completed when mandatory CE first started, nurses may have been reacting to a new requirement.

Thomas¹⁷ investigated whether mandatory requirements were a major influence for nurses who had been functioning in a mandatory system for a number of years. Two hundred and thirty-six licensed nurses who were residing in Kansas were surveyed using the modified EPS developed by O'Connor.

Of the six motivational orientation factors in the EPS, the respondents indicated that professional knowledge was the main reason for participation in CE. Nurses also rated professional knowledge, professional advancement, and improvement of social welfare skills higher than compliance with authority. Furthermore, these factors ranked more important than improvement in social relations and relief from routine (see Table 2).

Urbano et al.¹⁸ sought to expand on this earlier research by studying nurses in a state that had

undergone an official reporting cycle under mandatory CE legislation. The sample of 282 nurses had participated in programs sponsored by a wide variety of providers. Respondents were asked to complete the EPS and were given scores on Boshier's six motivational orientations.

The means on cognitive interest (2.9), professional advancement (2.5), and community service (2.3) were significantly different from each other and significantly higher than the remaining three scales, which did not differ from each other. The low mean scores on external expectations, social contact, and social stimulation indicate that these factors have little influence on participation. These results support O'Connor's and Thomas's conclusions that nurses are not motivated to participate in CE solely by mandated requirements.

Consistent with O'Connor's findings,^{15,16} Urbano et al. concluded that nurses who participated in mandatory professional CE demonstrated the same pattern of motivation as those who voluntarily participated: they have altruistic reasons for participating in CE. They are motivated primarily by cognitive interest and a desire for professional advancement, and to a lesser extent by a concern for mankind (see Table 2).

Karp,¹⁹ in a descriptive study of Georgian physical therapists, identified primary and secondary motivational orientations toward CE in a state with mandatory CE requirements. Although physical therapists in this study were thought to partake in CE for reasons similar to those of other health care professionals, the author sought to determine whether their motivations differed from those exhibited in the general adult population.

A modified version of the 20-item scale from the Survey of Adult Learning was used for Karp's study. The items in this scale parallel five of Boshier's six motivational orientations. Whereas a category to reflect the improvement in social welfare was not included, the Personal Fulfillment category is unique to the 20-item scale. Five content experts were used to determine content validity and the test-retest reliability approach was used to detect change over time. The results

of reliability testing were not reported in this study.

Respondents were asked to indicate which reasons motivated interest in predetermined educational topics. Darkenwald and Merriam¹⁴ stated that the adult learner engages in education for multiple reasons, but when forced to give a single, dominant reason for participation, they choose one that is job related. The instrument in this study was designed to allow the respondent to give multiple reasons for selecting an educational topic.

The results showed that although respondents could have chosen from 13 reasons, they generally chose only one or two reasons for interest in a CE topic. This contradicts previous findings that every motive is important to adult education participants.^{10,14} Over half of the respondents' primary orientation was the Knowledge Goal Orientation. The majority of respondents chose the reason "to be better informed" for each educational topic. These results support earlier descriptive studies by Hightower²⁰ and Rader,²¹ who concluded that physical therapists choose CE because of a desire for knowledge.

The Obligation Goal Orientation was an important secondary motivator. In some cases, the percentage of therapists in this category equalled or surpassed the percentage with a Knowledge Goal Orientation as a secondary orientation. The nurses in O'Connor's 1982 study also ranked the obligation orientation as second in importance.¹⁶ Although O'Connor's study used the EPS to uncover motivational orientations, the results compare favorably with Karp's study. In general, these results indicate that physical therapists seek CE activities primarily to meet learning needs, while meeting external obligations is a strong secondary motivator (see Table 2).

Predicting Participation

A recent study by Waddell²² involved the meta-analysis of 22 studies to determine why nurses participate in CE activities. In this study, motivational orientation was conceptualized as an

independent variable predicting participation in CE and reflective of a nurse's basic human needs, attitudes, values, beliefs, expectations, and perceptions. While motivation was seen as the primary influence, the interaction of motivational orientation and intervening variables, such as demographics and educational opportunity, may have mediated the degree of this influence.²³

Overall, motivational orientation explained 46% of the variance in participation. External expectations (for relicensure, recertification, employer expectation) and cognitive interest accounted for 11% and 12% of the variance, respectively. Demographics explained 25% of the variance, with income and area of clinical practice representing more than any other single demographic. The intervening variable of educational opportunity accounted for 19% of the participation variance; however, the limited number of studies contributing to this category makes interpretation of this finding difficult.

As expected by the author, motivational orientation was the primary reason for participation, but demographic factors and educational opportunity may in fact mediate the degree to which one will pursue an educational opportunity. Studies have shown that younger health care professionals and younger adults, for example, consider social relations and relief from routine more important than older individuals.^{7,9,17} This may be due to the fact that, at the beginning of one's career, one may still be seeking personal acceptance and an ability to build a network with other professionals. The younger professional, who also ranked advancement higher than older counterparts, may also tend to be more competitive and to seek advancement compared to the older individual who may be established in his/her practice.⁷

Demographic factors such as employment status have also been shown to influence motivation toward CE. Employed nurses consider professional knowledge and advancement to be the most important motivators as compared to unemployed nurses, who are more concerned with compliance with authority, be it a state law, employer

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or professional requirement, than the working nurse.¹⁵⁻¹⁷ Nurses who are employed part time in mandatory states are also more likely than those in proposed or voluntary states to participate to acquire credentials.

With respect to educational opportunity, nursing and physical therapy studies have demonstrated that the strongest influence on CE participation may be determined by the health professional's evaluation of its pertinence to their professional practice as well as the opportunities available in their interest area.²⁴⁻²⁶

Implications

Knowledge is what motivates health care professionals to participate in CE. This has implications for program development, for mandatory CE, and for future research. Studies across health care professions show that practitioners participate in CE primarily for the sake of knowledge and not because of external pressures. This finding questions the implementation of mandatory CE measures as a potentially unnecessary action. First, evidence does not exist to support the notion that mandatory CE produces significant changes in practitioner competence or health care outcomes when compared to voluntary measures. In fact, it has been shown that nurses who voluntarily participate in CE have shown more positive changes in practice as a result of CE when compared to nurses who were mandated to attend.²⁷ Second, other external influences on health care professionals appear to exist: employer requirements, specialization requirements, and recertification.²²

Licensing bodies and CE providers are certainly concerned with the competence of health care professionals. Future research should focus on identifying the individuals who are nonparticipants or whose primary motivation is to meet obligatory relicensure requirements. As Waddell suggests, perhaps these individuals may be set apart by their sociodemographic status or by the educational opportunity structure available to them.²² Attitudes toward program design (i.e.,

pertinence to practice, speaker reputation, method of presentation, cost issues) will also need to be considered if an effective and relevant CE program is the goal. Furthermore, research addressing the relationship between motivational orientation and the effectiveness of CE to produce positive changes in practice and health care outcomes should shed more light on the question of mandatory requirements.

Whether CE is mandated or voluntary, health care professionals will continue to seek CE opportunities in order to keep abreast of the rapid technological, social, political, and professional changes in society. The reviewed literature consistently shows that health care professionals are motivated to participate in CE by knowledge rather than potential punitive actions by authority figures. CE providers who promote and market CE offerings should target their strategies toward professional responsibility rather than societal mandates.

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