

SEVEN DIMENSIONS OF LEARNING CULTURE: ENHANCING PUBLIC HEALTH PRACTICE THROUGH FORMAL LEARNING

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Abstract: Continuing Professional Education (CPE) is entering the third era in which education and learning occur in a workplace. The concept of learning in the profession is believed to lead to the improvement of job performance of public health professionals. However, little research has been carried out to gain insight into the motivation to enhance professional development through formal education opportunities in the workplace. This study aims at understanding participation in professional development of public health professionals to enhance their professional development. All data were collected using online survey to public health professionals in the database of The Georgia of Public Health Training Center (GPHTC). The results of the study suggests that most public health professionals participated in available formal learning opportunities in their organization to advance in their professions. The type of the formal learning opportunities and the reason for participation varies depending on the type of organization. In addition, the results of the study also indicate that the participants mostly considered the learning culture in their organization as high at individual, team/group, and organizational level.

Keywords: Public health professionals, Formal learning, Continuing professional education

Introduction

There are many opportunities for public health professionals to engage in learning in the profession. These learning opportunities may be conducted formally by particular organization, but some may be experienced as informal or incidental learning in the workplace. Formal, informal and incidental learning are distinguished based on the degree of control by the learner (Marsick & Watkins, 1990). Formal learning is typically highly structured, a classroom-based, and organized by a particular organization (Marsick & Watkins, 1990).

Formal learning opportunities are commonly organized by organizations or educational providers in the form of education and training to enhance specific skills of public health professionals. These formal learning opportunities may be designed as conferences and seminars organized by professional associations of public health professionals. The seminars, conferences, education and training which are organized by educational providers or professional associations of public health professionals are identified in this study as the formal forms of Continuing Professional Education (CPE) activities.

The original definition of CPE is any “Educational experiences that assist in the development or enhancement of the knowledge and skills directly related to the individual’s professional occupation.” (NCHCE, 2013). However, most CPE today has been perceived as “a means to an end for regulating the practice, often in combination with licensing bodies and professionals societies.” (Cantor, 2006). Most CPE has been perceived as those formal educational activities that are highly structured in facilitating the information update, re-certification, and re-licensure (Desikan, 2009). In the field of public health, CPE is also commonly perceived as those formal educational programs for public health professionals and mandated for those who wish to maintain their professional certification. Therefore, in this study, the term CPE will be used to describe these formal learning opportunities for public health professionals.

The fact that CPE is an intentional, ongoing and systematic process makes CPE a significant factor in support of the improvement of public health professionals’ practice. Despite the advantages offered by CPE, over 60%

of public health professionals did not conduct research or participate in professional development activities due to various reasons (Glascoff, et.al, 2005). The heavy workload, the cost to participate, the lack of administrative support, child care and home responsibilities were some of the barriers resulted in low participation in CPE activities (Bower et.al, 2007; Schweitzer & Krassa, 2010).

The objective of this study is to establish understanding of participation in professional development of public health professionals to enhance their professional development through the following questions:

1. To what extent do the public health professionals participate in formal learning to enhance their professional development?
2. To what extent does perception of a high learning culture relate to high levels participation in formal learning among public health professionals?

Methodology

This study used a cross-sectional and exploratory study design to survey members of the Georgia Public Health Training Center (GPHTC) at the University of Georgia (UGA). All data were collected from December 2013 to February 2014 for an approximately 10-week period of study. Since few studies about the role of the learning culture and participation in professional development of public health professionals were conducted in the past, the data collected for this study were collected for descriptive and exploratory purposes through *Qualtrics* survey site as the medium for data collection. The professional database that was chosen for this study was the database of the Georgia Public Health Training Center (GPHTC). The mission of GPHTC is "to assess the needs and build the capacity of the current and future generation of public health workers in governmental public health, health care organizations, and non-profit organizations for the purpose of advancing and improving the health of Georgia citizens" (GPHTC, 2013). The GPHTC database was chosen to increase the representativeness of the study because GPHTC members are those public health professionals in the state of Georgia that share a common characteristic in terms of competencies and job description.

The online survey was developed by the researchers based on Watkins's formal learning Questionnaires and the short version of the Dimensions of the Learning Organization Questionnaire (DLOQ). DLOQ has grown out from research and practice, and it has been tested and modified through many research studies since 1990 (Marsick & Watkins, 2003). DLOQ has been validated by submitting DLOQ to rigorous critique for meaning, and has used reliability coefficients to identify poorly worded items and low performing items (Marsick & Watkins, 2003). Through this process of validation, items were deleted or revised until coefficient alphas, which is above the recommended 70 for each scale, were acceptable (Marsick & Watkins, 2003).

The participants in this study were asked to answer questions in the online survey that took about 10-15 minutes to complete. Once the participants received the study invitation in the recruitment email and read it, they could ignore or self-select as participant in this study by clicking the URL that took them to the online survey. If the URL did not work, participants could copy and paste the link to their browser. By clicking the URL link, the participants were confirming consent to participate in the study that was included in the recruitment email. Participants could then begin to fill the online survey. The participants were instructed to answer the questions as fully and honestly as possible and were not asked to complete the survey again if they had done it before. Once the participant had answered all the online survey questions, the survey thanked the participant.

The researchers pilot tested the survey website on function, readability, and graphics. This pilot test established the length and ease of completion of the survey. The online survey took about 10-15 minutes to complete. After the pilot test of the online survey, the researchers sent the members of the GPHTC a recruitment email to participate in the study. Three separate recruitment emails were sent asking for participation in the study. They were delivered at the beginning of December 2013, at the beginning of January 2014, and at the beginning of February 2014. The researchers explained about the purpose of the

study and the approximate time to complete the online survey. All the data gathered from the online survey were saved in password-protected files on the researchers' personal computer. No paper printed copies of the data were made.

All of the data in this study were gathered using *Qualtrics* and were analyzed using statistical software. The online survey questions were used mainly for descriptive and not for inferential purposes. Thus, the researchers obtained the frequency count and percentages to describe the relationship between the available and participated formal learning opportunities in this study.

Results

The final sample used for analysis consisted of 172 public health professionals in the database of The Georgia of Public Health Training Center (GPHTC). The age of the participants varied between 24 to 74 years old, with both the mean and the median being 47 years old. Most of public health professional who participated in this study identified themselves as female (69.4%), married (70.3%), non-Hispanic (98.1%), White or Caucasian (83%), working in a non-profit institution (90.6%), and with a public health background (77.5%).

The analysis showed that not all participants that identified the availability of formal learning in their organization actually participated in these learning opportunities. 47 participants in this study identified the availability of the formal learning opportunities. In average, 53 participants in this study participated in formal learning. The most identified and participated formal learning opportunities were: 1) Seminars or conferences off-site; and 2) Videotapes or webinars on work-related topics available to view. Table 1 describes the frequencies of the participants that identified the availability of the formal learning opportunities in their organization and those who actually participated in these learning.

Table 1: Formal Learning Opportunities and Actual Participation in Learning

Formal Learning Opportunities In the Last Six Months	Available*		Participated**	
	Freq	%	Freq	%
Seminars or conferences off-site	90	52.3	71	78.9
Videotapes or webinars on work-related topics available to view	85	49.4	68	80
Seminars or conferences offered in-house	80	46.5	56	70
Web-based courses, desk-top learning, or other computer-based instructional materials available	78	45.3	57	73.1
Tuition reimbursement to attend formal university courses	22	12.8	1	4.5

* Total sample: All Participants in the study (172 participants)

**Total Sample: Participants who identified the availability of each learning activity in their organization (different total number of sample for each activity depending on the number shown in the available (*) column)

As showed in table 1, it seems that many of the variables do not have significant correlation when they come to formal learning availability and participation. In this study, the seven dimensions of learning culture 1) Continuous Learning (CL); 2) Dialogue & Inquiry (DI); 3) Team Learning (TL); 4) Establish Systems (ES); 5) Empower People (EP); 6) System Connection (SC); and 7) Strategic Leadership (PL) in the organization do not seem to be correlated with the participation in formal learning (FoP).

Based on table 2, many of these participants stated that formal learning were considered more credible, professional, focused, detailed, comprehensive, and provided the most up to date information about trends and research in public health professions. Participants also stated that they prefer to learn formally because they

were led by the expert in the field when participating in formal professional learning. The other reason that formal learning were more preferable by the participants is because some of these formal learning activities provided with credits that could be used to maintain their professional credentials.

Table 2: Reasons for Participation in Formal Learning Opportunities

Reasons for Participation in Formal Learning Vs. Informal Learning
Credibility and professional delivery of information
Experts are invited in to provide training and networking with peers across the state
Focused, more structured, and well organized presentation
Opportunity to ask the experts questions and to learn from others who may experience similar issues.
Provide the most up to date information on the professional trends and research.
More detailed and comprehensive
Opportunity for continuing education and other credits

Discussion

This study suggested that many of the participants were aware of these learning opportunities in their organization, but many also responded they were not aware of learning activities in their organization. For participants who identified that these learning activities were available in their organization, many of them also stated that they participated in these learning activities in the last six months.

The most common formal learning opportunities that were identified by the participants in this study are seminars or conferences off-site (52.3%). Public health professionals preferred to attend seminars or conferences in order to continue their professional learning, attend professional association annual meeting, and complete home self-study print materials (Davidson, 2008). However, this study also found that despite the high awareness of the availability of seminars or conferences offsite, only 78% total of them actually participated in these conferences or seminars.

There are many reasons for the lack of participation in formal learning opportunities that were identified in previous studies. Two main reasons behind the lack of participation in formal learning opportunities, they were the cost of participation and the heavy workload of public health professionals (Demers & Mamary, 2008). As showed in this study, a low number of participants stated that they were reimbursed to participate in formal learning opportunities. Although most employers reported supporting continuing education, less than two-third of respondents were reimbursed for expenses (Demers & Mamary, 2008). The lack of time, the financial resources, and the administrative support also contributed to the barrier of participating in these formal learning opportunities (Bower et.al, 2007). Several factors acted as deterrents to nurses’ participation in continuing professional development, they are: (1) the cost of attending these learning activities; (2) the inability to get time off from work to attend the learning activities; (3) the lack of support for child care; and (4) reasons related to home responsibilities (Schweizer&Krassa, 2010).

As found in this current study, the availability of these formal learning opportunities in the workplace is not a guarantee that the learning process will occur. In regards to the learning culture at the individual, team, and organizational levels, the participants have an overall high perception of the learning culture in their organizations. In order to get a better picture of the perception of learning culture of the participants, a line graph was made to compare the results of this study with the previous study on the dimensions of learning culture. The results are compared based on the seven dimensions of the learning culture as the followings: Create continuous learning opportunities (CL), promote inquiry and dialogue (DI), encourage collaboration and team learning (TL), establish systems to capture and share learning (ES), empower people toward a collective vision (EP), connect the organization to its environment (SC), and provide strategic leadership for learning (PL) (Marsick, 2013).

The line graph compares the result of this study (GAPH) and the previous study on meta-analysis of data from 28 companies (INTL NORMS) (Dirani, 2013). The organizations' capacity to learn and to change to meet current public health demands in four local public health departments (OPHS) (Watkins et.al, 2009).

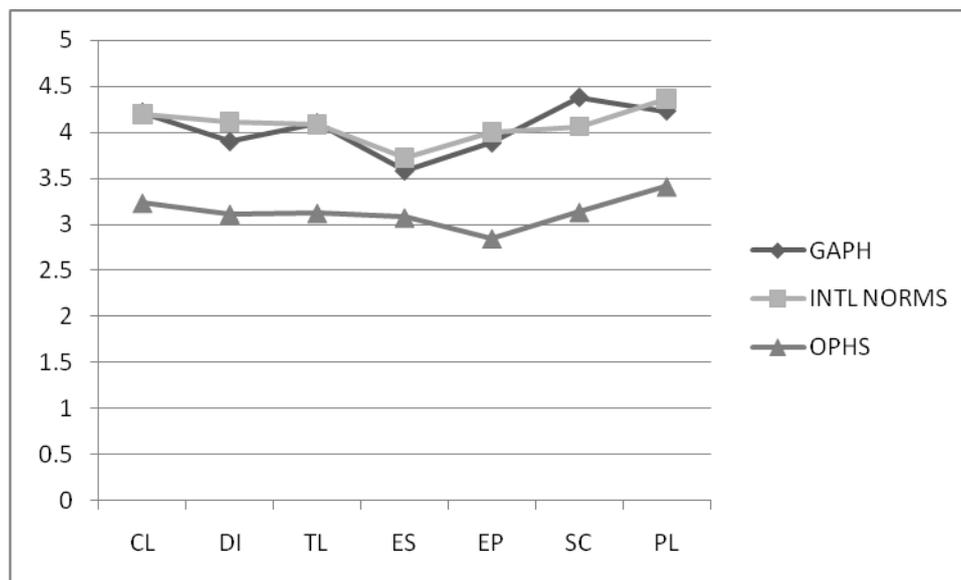


Figure 1. Line Graph of the Perception of the Learning Culture

According to the line graph, the findings of this study are similar to previous study (Dirani, 2013) in which the lowest perception of learning culture was found in the dimensions of *establish systems to capture and share learning* (ES). This information warrants some actions from the organization to improve the systematic methods of performance's feedbacks for public health professionals in order to support their learning. A slightly different result from previous study showed overall lower means than the other two studies (Watkins et.al, 2009). The result might also be the indication that the organization had put some efforts over the years from 2009 to 2014 to support the learning process of public health professionals.

As for the relationship between variables in this study, the results indicate that the availability of formal learning is only slightly related to the dimensions of learning culture and it does not seem to be related to *dialogue and inquiry* (DI) and *establish systems to capture and share learning* (ES). Participation in formal learning activities is not significantly related to having a learning culture. It is also important to bear in mind that the high perception of learning culture and participation in learning activities may not always indicate that the learning process takes place. It is dependent on the individuals involved in these learning activities to take advantages of the knowledge they gain from participating in learning activities to be able to advance in their profession.

Conclusion

This study describes the learning culture and professional development of public health professionals in public health organizations in the State of Georgia. This particular study provides new insight because it illustrates the various types of learning through formal learning opportunities. This study is significant because the results of this study contribute to the existing literature about the experiences of learning among public health professionals in improving their work performance and fostering their professional development.

This study also provides descriptions of the learning culture in public health institutions experienced by public health professionals. Although individual and team learning appear to be a necessary, it is not a sufficient prerequisite in creating a learning culture in the organization. The findings from this study help to develop a planned change to create or maintain the learning culture in public health organizations that are

more conducive to increase the learning at the individual, group/team, and organizational level. The result of this study may also provide leverage for the organization to create a learning culture that facilitates the learning process for professionals in their daily work. These learning processes may come from a variety of activities from formal learning opportunities as described in this study. As suggested by the results of this study, the employer of public health professionals should consider creating a high learning culture in the organization at every level to increase participation in formal learning opportunities.

Future direction and research ideas

Further research is needed to elaborate each item in the formal learning opportunities experienced by professionals to provide a deeper understanding about the challenge and facilitating factors to encourage professional learning in the organization. An in-depth interview may be useful to provide more information about the learning culture at individual, team/group and organizational level to support the learning of public health professionals.

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