

Abstract

Research on current status and future directions of experience education in occupational safety and health

Objectives : The purposes of this study were to identify the effectiveness and problems of the experience education centers for occupational safety and health and to suggest some modification strategies and future directions to improve their educational quality.

Methods : This study employed literature review, expert review, observational evaluation, survey, and in-depth personal interview. Literature review was conducted for all on and off-line sources published for some excellent experience education cases of safety in some advanced countries. Expert review was conducted before the survey and observational evaluation to check the research methods of the photovoice-based in-depth interview and to review the instruments developed for this study. A total of 11 safety experience education centers were involved in this study (5 centers managed by Korea Occupational Safety and Health Agency (KOSHA), 4 centers of large commercial companies and 2 centers under the local self-governments). Observational evaluations based on the logic model were conducted in all 11 centers to collect the data of the educational environments, curriculum, and exercise education facilities and media for exercise education. Self-administered survey was conducted to 203 adult workers who took experience education of 8 centers (5 under KOSHA and 3 under large commercial companies) and 8 male workers participated in the in-depth personal interview among them about experience education effectiveness, satisfaction of educational environments and curriculum, and personal beliefs of experience education and safety.

Results :

1) Concerning curriculum, human resource, managerial support, and official review of curriculum management were better in the company-managed experience education centers than KOSHA-managed centers. However, education time and class size per every education were greater in KOSHA centers than company centers. In particular, KOSHA centers were advanced in class preparations focused on learners' interests, job areas, and easy-to-apply

skills.

2) Concerning educational environments and media, overall qualities of education buildings, interiors and facilities, educational material maintenance, and security were better in the company-managed experience centers than the KOSHA centers, but KOSHA centers were better in appropriate posting education-related signs, key phrases, and supplementary materials of injury prevention and distributing some of them than the private company centers. The experience education facilities and materials of KOSHA centers were aging and needed to be renovated compared with the company centers.

3) Concerning the effectiveness of experience education, there was not significant differences between the company centers and the KOSHA centers. Learning outcomes and personal believes on experience education and safety showed the same results as the educational effectiveness. Satisfaction about educational environments and managerial service were better in the company centers than the KOSHA centers but there was no significant differences in the curriculum and educational media.

Conclusions : The following modification points to improve the qualities of KOSHA experience education centers were proposed in terms of environment, curriculum and media, and policy perspectives based on the results of this research. Relatively out-of-date building and facilities should be renovated and some educational systems, particularly, 3D simulation needs to update into 4D systems. As the strengths of the KOSHA centers, educational curriculum and instructional competencies should continually make efforts to improve through self-training or continuing education.

Key Words : Occupational injury, exercise education, curriculum, educational environment, educational media, educational effectiveness