



Does compulsory training improve occupational safety and health implementation? The case of Malaysian

Siti Fardaniah Abdul Aziz^{a,*}, Fadzil Osman^b

^a Psychology and Human Well-Being Research Centre, Faculty of Social Sciences and Humanities, Universiti Kebangsaan Malaysia, 43600 Bangi, Selangor, Malaysia

^b National Institute of Occupational Safety and Health, Ministry of Human Resources, 43600 Bangi, Selangor, Malaysia

ARTICLE INFO

Keywords:

Compulsory training effectiveness
Human resource development
Occupational safety and health
Psychology industry and organization
Quasi-experiment
NIOSH Malaysia

ABSTRACT

The objective of this article was to investigate the effectiveness of occupational safety and health's (OSH) compulsory training since it has never been addressed before. Although previous researchers find that OSH training is very important as an intervention to create safety climate; however, some researchers find that compulsory training is ineffective as compared to optional training. Hence, findings of this current research offers original contribution by determining whether OSH's compulsory training could stimulate OSH implementation using a quasi-experimental design. An amount of 287 Malaysian participants attended 21 OSH's compulsory training organized by the Malaysian's National Institute of Occupational Safety and Health (NIOSH) in 2015 was taken for sample. A paired sample t-test indicates a significant implementation of OSH among respondents. In fact, 88.5% respondents passed learning examination at the end of training and majority or 98.3% respondents used what they learned in training at their respective workplaces after training completion. Additionally, using independent sample t-test, it is indicated that there is no significant different between respondents that felt they are mandated and voluntary to attend the OSH's compulsory training. Hence, it is verified that compulsory training could also be effective; in which, the NIOSH's compulsory training had stimulate OSH implementation among the Malaysian. Implications for future research and practice were also discussed.

1. Introduction

Safety training is very important as a part of safety climate (Ajslev et al., 2017; Christian et al., 2009); this is why most of countries around the globe, such as Malaysia required their people to attend safety training especially for those holding high risk hazard occupations. Unfortunately, some of research findings including by Tharenou (2001), Curado et al. (2015), and Aziz and Selamat (2016) reported that compulsory training would not be as effective as optional training. Since, this issue was not addressed using sample from trainees that attended safety training; there is a need to determine the effect of compulsory safety training on training effectiveness. In fact, this issue is significant to be investigated because it would determine whether safety training should be mandated because of its importance; otherwise, alternative intervention should be considered if compulsory safety training is ineffective.

For example, Ngah et al. (2016) reported that the number of occupational accidents and injuries in Malaysia have increased by years. Ironically, the government has been initiating occupational safety and

health (OSH) implementation through laws and regulations. For instance, under the Malaysian Occupational Safety and Health Act/OSHA (1994) revised in 2006, a list of job tasks that is dealing with high risk hazard is mandated to obtain certificate of practice by the Malaysian Department of Occupational Safety and Health (DOSH). This means that those employees involved should attend compulsory training organized by the Malaysian's National Institute of Occupational Safety and Health (NIOSH) or other training organizations that approved by DOSH in order to get the certificate of practice.

Nevertheless, there are some employers that still unconvinced about the importance of OSH's compulsory training. For example, Ilham (2016) reported that a Malaysian contractor is dead after inhaling methane gas when cleaning a tank at PETRONAS plant in Kertih, Terengganu. The incident demonstrates the lack of specific knowledge and skills to prevent occupational accidents; it also provides lesson for employers and top management to be aware of complying the government's laws and rules especially to provide OSH's compulsory training for employees. Unfortunately, some researchers, such as Curado et al. (2015) found that compulsory training is ineffective as

* Corresponding author.

E-mail addresses: daniah@ukm.edu.my (S.F.A. Aziz), fadzil@niosh.com.my (F. Osman).

<https://doi.org/10.1016/j.ssci.2018.07.012>

Received 23 August 2017; Received in revised form 30 March 2018; Accepted 13 July 2018

0925-7535/ © 2018 Elsevier Ltd. All rights reserved.

compared to optional training. Hence, there is a need to determine whether OSH's compulsory training is effective to improve safety performance since previous researches have neglected this issue. Therefore, the purpose of this current research is to investigate the effectiveness of OSH's compulsory training organized by the Malaysian's NIOSH; in which, training effectiveness is measured through learning performance and training transfer.

Findings of this research would be significant because it should guide the government and upper management to decide whether safety training should be mandated. Since previous researches, including [Grau et al. \(2002\)](#), [Holte and Kjestveit \(2012\)](#), and [Ricci et al. \(2016\)](#) reported that safety training would usually be effective because of the needs in controlling occupational accidents; findings of the current research should also verify their research findings. In fact, findings of the current research would be useful for future research questions including the determinations of the needs of implementing periodic safety training, the needs of providing safety training climate, the precise time to evaluate training transfer, and the needs to clarifying characteristic of effective safety training. However, these future research questions would only be relevant if it is verified that compulsory safety training is effective.

Therefore, to achieve the purpose of this current research, the organization of this paper is presented by discussing the literature review related to the role of training in safety and health intervention, followed by research method, findings and discussion, practical implication, and conclusion.

1.1. Literature review of the role of training in occupational safety and health intervention

Occupational safety and health (OSH) literature shows that occupational accidents and injuries could be controlled by providing positive safety climate; one of the climates is to equip employees with related OSH training. However, some researchers find that compulsory training is ineffective as compared to optional training. Hence, there is a need to determine whether OSH's compulsory training is effective using a more rigid study, as well as to determine the impact of OSH's training implementation.

From organizational and industrial psychology perspective, [Hofmann et al. \(2017\)](#) explain that the literature in OSH begins with factory laws, basic worker compensation, and accident proneness; then, the literature move on focusing OSH training, and currently focusing on organizational climate and leadership. This is consistent with recent researches; for example, [Mullen et al. \(2017\)](#) reported the importance of leadership and [Ajslev et al. \(2017\)](#) reported the importance of safety climate for OSH implementation. This is also consistent with OSH model suggested by [Christian et al. \(2009\)](#) as shown in [Fig. 1](#). The model explains that occupational accidents and injuries could be controlled by providing suitable OSH climate; OSH climate is not only to stimulate positive OSH environment but also to provide employees with the right knowledge and motivation in improving safety compliance and participation. One of most important safety climate is to provide compulsory training to stimulate OSH implementation.

Further, from human resource development perspective, training effectiveness is defined as the achievement of training objectives; in which, it would benefits employee, employers, and the organization ([Tai, 2006](#); [Noe, 2017](#)). Training effectiveness evaluation model by [Kirkpatrick \(1959, 1996\)](#) suggests that training effectiveness could be evaluated by determining the four levels of training evaluation including positive reaction from participants, followed by learning performance, behaviour (or training transfer), and results on organizational performance. However, if using [Kirkpatrick's \(1959, 1996\)](#) model to evaluate the four levels completely, it would increase the use of time, costs, commitment, and expertise to determine training effectiveness ([Giangreco et al., 2010](#)). Hence, numerous scholars including [Arthur et al. \(2003\)](#), [Laberge et al. \(2014\)](#), and [Noe \(2017\)](#) have demonstrated

the importance of measuring learning performance and training transfer to determine the status of training effectiveness.

Learning performance and training transfer are significant measurement to determine training effectiveness because the main purpose of providing employee training is to increase employees' knowledge, skills, and attitudes and finally use it to improve job performance ([Kirkpatrick, 1996](#); [Noe, 2017](#)). In fact, by determining training effectiveness from learning performance and training transfer perspectives, it is more convincing that what was transferred to the workplace is actually what was learned from training and not from other sources ([Kirkpatrick, 1996](#); [Noe, 2017](#)). Hence, to determine learning performance, most of previous researchers including [Tziner et al. \(2007\)](#), and [Steensma and Groeneveld \(2010\)](#) use learning test. Meanwhile, [Namian et al. \(2016\)](#) and [Zumrah \(2015\)](#) use self-perception to determine training transfer among participants. Ironically, [Namian et al. \(2016\)](#) did not validate self-perception of training transfer from participants' supervisor because it is believed that data from participants' supervisor would be bias as supervisor represents the organization's image and reputation. Hence, it is more convincing to determine participants' learning performance through examination/test, and their training transfer through self-perception.

On the other hand, a number of researchers have been proving the effectiveness of OSH training. For example, [Grau et al. \(2002\)](#) use a quantitative method, [Holte and Kjestveit \(2012\)](#) use a qualitative method, and [Ricci et al. \(2016\)](#) use a meta-analysis involving studies published from ten databases in between 2007 and 2014. These researchers find that OSH training has significantly improved employees' knowledge, skills, and attitudes towards OSH implementation. However, [Hofmann et al. \(2017\)](#) suggest future researchers to use a more rigid study to determine OSH's training effectiveness. This demonstrates that findings from a quasi-experimental approach could be valuable in proving the effectiveness of OSH training especially when it is blended with longitudinal study. Interestingly, previous studies have neglected to report whether those effective OSH training taken for sample were compulsory or optional.

Compulsory training means that employee is mandated to attend training; meanwhile, optional training means that employee have choice to decide whether they want to attend the training ([Baldwin et al. 1991](#); [Aziz and Selamat, 2016](#)). Using training with various objectives, [Tharenou \(2001\)](#) focus on the Australian sample, [Curado et al. \(2015\)](#) focus on the Portuguese sample, and [Aziz and Selamat \(2016\)](#) focus on the Malaysian sample; these researchers have proven that compulsory training is ineffective as compared to optional training. However, [Tsai and Tai \(2003\)](#) use Taiwanese sample that participated in courses related to banking and financial laws but find the other way round. Curiously, the effect of option to attend training (either compulsory or voluntary) on OSH's training effectiveness has not been addressed previously.

Furthermore, the determination of OSH's compulsory training effectiveness is crucial because it will affect future decision about OSH training. For example, from the management of OSH perspective, [Khanzode et al. \(2012\)](#) explain that each time an accident occur in an organisation, the management will come out with a query about possible factors that caused the accident and alternatives to prevent the accidents. Hence, if organisation climate was already taken into consideration, a query should be pointed whether training should be given as compulsory in periodic time to increase OSH awareness. In fact, [López-Arquillos, et al. \(2015\)](#) find that most of syllabus of engineering courses emphasized about prevention through design in organisation setting; however, OSH training to implement it did not really given for those employees that should exercise it. Hence, the level of knowledge, skill and attitude about prevention through design should be assessed to determine OSH's compulsory training needs. Additionally, [Schwarz et al. \(2016\)](#) find that managers tend to present the organisation's positive attitude towards OSH; hence, leadership training should emphasize OSH's importance as a compulsory.

Download English Version:

<https://daneshyari.com/en/article/11263399>

Download Persian Version:

<https://daneshyari.com/article/11263399>

[Daneshyari.com](https://daneshyari.com)