Motivational Virtual Training for People with Disabilities in Rural Areas of Malaysia

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ABSTRACT

Virtual training with its interactive and inclusive features is a very suitable psychological empowerment tool for people with disabilities in Malaysia's rural areas. Since the conduct of virtual supervision does not require any trainer or instructor to be physically present at the training premise, it is accessible for the usage of minority groups, who usually face the issue of mobility and accessibility. A session of virtual training involving 50 people with disabilities in Kota Kinabalu, Sabah was conducted for market validation of the virtual training. Post-training, the participants were interviewed to obtain their feedback on the virtual training in which they had participated. Overall findings from the interview showed that the participants had found the motivational virtual training to be relevant to them. The themes that emerged as the findings of the study are the conduciveness of virtual training for people with disabilities, modelling behaviour and error management. It has been found that virtual training could actually provide people with disabilities with the skill development and knowledge enhancement opportunities that lead to positive implications in their career development.

Keywords: Empowerment, people with disabilities, rural area, virtual training module

INTRODUCTION

Recent years have demonstrated that technology advancement has contributed to the fast growth of corporate online and virtual training. Such a revolution has allowed for wider opportunities of knowledge, skills and attitude changes as well as enhancement for individuals of various backgrounds. These include

the minorities who usually have limited accessibility to conventional learning and training, such as rural communities and people with disabilities. In the context of Malaysia, virtual training has never been developed to benefit people with disabilities.

According to Malaysia's Persons with Disabilities Act 2008, people with disabilities have the right to access information, communication and technology on equal basis with persons without disabilities. The government and the provider of information, communication and technology shall in order to enable persons with disabilities to have such access, provide the information, communication and technology in accessible formats and technologies appropriate to different kinds of disability in a timely manner and without additional cost. The government and the private sector shall accept and facilitate the use of Malaysia sign language, Braille, augmentative and alternative communication and all other accessible means, modes and formats of communication of their choice by persons with disabilities in official transactions. Hence, virtual training for the career success of people with disabilities is an effort to provide an alternative way of psychologically empowering this particular group (Disability Act, 2008).

Interventions such as training are necessary for effective change in skills, attitude and behaviour of people with disabilities. As a matter of fact, previous research has empirically shown that the challenge of dynamic global forces of change has made training necessary for the professional development and career success of people with disabilities (Spence, 2003). It helps people with disabilities to achieve formal qualifications as well as to enhance their self-confidence through training tasks besides other employment aids such as counselling, travel to work assistance and job search. (Steven, 1992).

Nevertheless, mobility and accessibility are the main issues in providing training for this particular group. Thus, virtual training is the most suitable mode of training for them, as the features of such training would not require them to be physically present at the training premise. The content of the training is accessible at any time and from anywhere (Lim, Lee, & Nam, 2007). However, there has never been any conduct of virtual training for people with disabilities in Malaysia, what more for those living in rural areas. It is high time that such implementation was initiated.

Literature Review

People with Disabilities in Malaysia's Rural Areas. Until 5 February, 2017, the registered number of people with disabilities in Malaysia reported by the Department of Welfare was 413,345. The number of people with disabilities residing in the rural states of Malaysia is illustrated in Table 1.

Table 1
Statistics of people with disabilities in rural states of Malaysia in 2017

State	Number
Perlis	5,094
Kedah	36,749
Kelantan	29,512
Terengganu	20,706
Pahang	24,503
Sabah	25,897
Labuan	1,171
Sarawak	28,562
Total	172,194

Source: Department of Welfare Malaysia, 2017

According to Hosseini, Niknami and Chizari (2009), the challenges faced by rural communities in using ICT include organisational, financial, technical, social, regulatory and human-related issues. Nevertheless in Malaysia, the establishment of the Village Development and Committee Security or VDSC in accordance with Order No. 3 Plan on Country and Development 1962 to create more developed rural communities has led to many programmes that made ICT more accessible to those living in rural areas, including people with disabilities. As a matter of fact, the Malaysian Communications and Multimedia Commission (MMMC) has implemented the Malaysia ICT Volunteer initiative to help and teach rural community members to utilise ICT tools.

Virtual Training. Virtual training that generates simulated objects and events allows for interaction and thus, has now become more commonly and popularly practised to enhance individuals' capacities (Stephens & Mottet, 2008). Its flexibility features allows the training to be conducted in accordance with participants' needs and circumstances (Chen, Weinberger, & Blitzer, 2011). According to Tichon (2007), the features of virtual training when built and customised according to participants' diverse backgrounds and needs, would be able to engage their focus and thus, increase the training's effectiveness. Wilson, Foreman and Stanton (2009) have identified the features and technologies of virtual training to enable people with disabilities to engage in a range of activities despite their limitations in movement.

As mentioned by Schweizer (2004) as well as Newton and Doonga (2007), among the benefits of virtual training is budget efficiency. The conduct of virtual training saves not only the travelling costs of the trainer as well as the participants, it also helps to reduce the costs of material printing, rental and refreshments. This is because all that is involved in virtual training is simply the interaction between the participants and the training content. There is no need for any trainer or facilitator to be physically present at the training site. The other benefits are flexibility and consistency in content delivery. In terms of flexibility, the participants may pursue the training content at their own pace. They are also free to access it anywhere as long as Internet connection is available. Virtual training has been found to be as beneficial as real-life training. The virtual environment is able to motivate learning in people with

disabilities (Brooks, Rose, Attree, & Elliot-Square, 2009).

Nevertheless, there are issues and challenges in implementing virtual training. Among them are lack of awareness of the usage of virtual training, low level of adaptation, limited wireless connectivity and computer illiteracy (Ali, 2010).

Baldwin and Ford Model (1989). The Baldwin and Ford Model, which was developed in 1989, presents how the effectiveness of training can be achieved. It proposes answers to issues that influence training transfer, including the important criteria of training transfer and output of training transfer (Baldwin, Ford, & Blume, 2009). This model is illustrated in Figure 1.

The model focusses on training input, training output and the conditions of transfer as main components for effective training. Training input encompasses trainee characteristics (cognitive ability, self-efficacy, motivation and perceived utility of training), training design (behavioural modelling, error management, realistic training management) and work environment (transfer climate, support, opportunity to perform, follow-up). However, this particular study focusses mainly on the training design of the virtual training. Last but not the least, a realistic work environment refers to the surroundings of the training.

The training design of this virtual study is the focus component due to the fact that the content material, process flow as well as features of the virtual training must be designed to be inclusive enough for the use of people with disabilities. In terms of behavioural modelling, the content material is designed in forms that allow the participants to model or do their observational learning from the shared experiences of other persons with disabilities (PWDs) that have become successful in both their career and life.

Usually, the modelling or observational learning takes place in two steps i.e. acquisition and performance. Acquisition refers to the observation of other people's acts and the consequences of those acts. Such acquisition forms mental images that encourage imitation of the shared experiences or actions. This happens especially when the mental images result in positive consequences such as success, happiness, satisfaction or competency.

The goal of error management in training is to improve the quality of training performance. The initial errors that occur during the training serve as an enhancer of learning, eventually leading to better performance. This component of error management in developing and improving virtual training is essential for ensuring the effectiveness of the virtual training. Meanwhile, realistic training environments refer to training that takes place not in a controlled environment. Nevertheless, this particular component is not relevant or applicable in designing virtual training for people with disabilities.
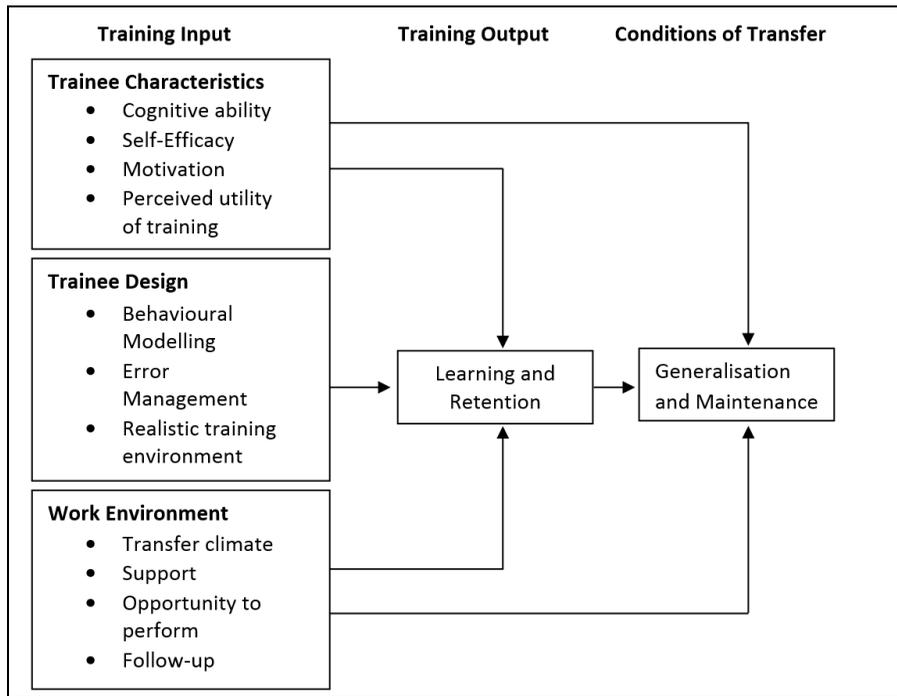
Figure 1. Training transfer model
Source: Baldwin and Ford Model, 1989

METHODS

A total of 50 persons with disabilities (PWDs) from Sabah were invited to participate in virtual training for career success of PWDs. Their names were obtained from the Welfare Department of Sabah. Sabahans have been listed as living in rural communities by the Ministry of Rural and Regional Development. The participants were from various ethnic backgrounds including Malay, Bidayuh and Kadazan. In terms of gender, the number of participants in this study from both genders was equally balanced. The majority had a low level of formal education. Fewer than five had tertiary education. Most of the respondents had physical disabilities, while 10 were hearing impaired.

The virtual training consisted of four parts. The first part entitled *Redha* (Acceptance) covered the acceptance of disabilities. The content was spiritual in nature, emphasising intimate relationship with the Creator. The closer one feels to God, the higher is one's level of acceptance of one's condition. The second part entitled 'The Importance of Training' covered the topic of person-job fit. This session highlighted the importance of enhancing one's knowledge as well as upgrading one's level of skills for continuous development and success. The aim was to

motivate continuous self and professional development of people with disabilities in pursuing career success. The third part entitled 'Love Yourself' covered the basics of self-evaluation among PWDs. It focussed on the essence of one's internal locus of control and self-esteem to remain in pursuit of career success. Last but not the least, the fourth part entitled 'Career Success' considered the importance of subjective career success for PWDs. Career success does not necessarily mean receiving a high salary and promotions. It could also translate as happiness and gratitude at having a job (Steven, 1992).

The average duration for the training was 1.5 hours. There was no instructor, only a facilitator for the virtual training session. The facilitator was not involved in the virtual training content at all. The facilitator was in charge of seating in the computer labs set aside for the training and the briefing session on the purpose of the virtual training for the PWD participants. Likewise, an interpreter was recruited to assist the hearing impaired participants.

The virtual training was interactive in nature, allowing the participants to engage with the content of the virtual training throughout the 1.5 hours on their own based on the audio instructions provided. Instructional text was also provided on the computer screen. The participants were required to click the relevant buttons based on the instructions provided. The objectives of the training were shared first prior to beginning the modules. The participants were required to complete the modules in sequence before proceeding to the following modules. All the modules contained the real-life experience of people with disabilities who had journeyed through adjustment, self and professional development, success establishment and maintenance.

Upon completion of the virtual training, the participants were interviewed for their feedback and views on the usefulness of the training. The researchers also observed the participants' reaction and engagement during the virtual training.

RESULTS AND DISCUSSION

Observation of the participants' engagement during the virtual training sessions showed that all of the participants were highly focussed on the content of the training. They did not stop or pause during the training session at all. Most of them were observed to be focused while interacting with the content of the training modules. They were able to work through the training modules without assistance. Nevertheless, a few of the participants who were computer illiterate seemed to face some difficulty interacting with the content of the virtual training.

The Conduciveness of Virtual Training for People with Disabilities

As mentioned by Tichon (2007), the features of virtual training that are built and customised to participants' diverse backgrounds and needs can engage their focus and increase the training's effectiveness. It is indeed very true in this particular context of study.

Several of the participants reported that the virtual training content was not only very interesting but had also captured and engaged their hearts, as the content was actually a sharing of experience by people with disabilities to people with disabilities. Thus, the content was able to address the motivational and inspirational needs of the participants. According to one participant,

> I actually cried when I was reading and listening to the shared stories in the virtual training. It reminded me of my own coping and adjustment experiences when I had initially become disabled due to an accident. What was being shared in the virtual training was almost similar to my own experience. That is why it touched my heart so much. What was being shared was indeed very true. Yes. I had also initially felt so down after the accident. It took me some time to accept the reality. It was a struggle. Yet it is finally 'Redha' and the acceptance of my condition that finally helped me through, besides the support from my loved ones. If the training content could touch my heart, I believe it can touch the hearts of many more people with disabilities out there. The virtual training should be widely shared and promoted.

Behavioural Modelling

The training design of this virtual study was the focus component as the content material,

process flow as well as features of the virtual training must be designed to be inclusive for the use of people with disabilities. In terms of behavioural modelling, the content material was designed to allow the participants to model or do their observational learning from the shared experience of other PWDs who were successful in both their career and life.

Usually, the modelling or observational learning takes place in two steps i.e. acquisition and performance. Acquisition refers to the observation of other people's acts and the consequences of the acts. Such acquisition forms a mental image that encourages imitation of the shared experience or actions. This happens especially when the mental image results in positive consequences such as success, happiness, satisfaction or competency (Taylor, Russ, Chan, & Daniel, 2005). This was reflected in the findings of this study. Interviews with the participants echoed this finding that behavioural modelling is an important element for ensuring training transfer effectiveness.

According to one of the participants, the virtual training had motivated her to resume her studies. She said,

> Before this I had pursued my studies at a distance learning centre. However due to mobility and transportation issues, I had to quit my studies. Nevertheless, after listening to the shared experience of successful people with disabilities who have narrated their persistence

in enhancing their knowledge and skills, I feel so motivated to resume my studies.

This participant was obviously encouraged to imitate the actions of other successful people with disabilities. She was convinced that she would experience the same results if she persistently and similarly pursued developing new knowledge and skills like the successful people with disabilities whom she had been introduced to through the virtual training.

Error Management

The interviews with the participants on conduct of market validation showed that there were several points for improvement that needed to be addressed. One was the content of the virtual training itself. It was reported by the interpreter for participants with hearing impairment that textual materials should be lessened for this particular group. Initially, it was thought that hearing-impaired participants would have benefitted from textual-based content as they could not listen to audio recordings. However, the assumption was found to be wrong.

The hearing-impaired participants suggested that the content be given in point or bulleted format. In addition, a small screen with a Malaysian Sign Language interpreter would have been more helpful. This is because they were used to the Malaysian Sign Language format, which seldom used full sentences to deliver messages. Most of their communication

through Malaysian Sign Language is simplified and not delivered in complete sentences.

This feedback enabled the researchers to identify the initial errors that had occurred and plan for improvements to be made to the learning process via virtual training for people with disabilities. Such improvements will ensure the effectiveness of the virtual training.

CONCLUSION

The findings of this study on the effectiveness of a virtual training programme for people with disabilities that consisted of four modules, 'Self-Acceptance', 'The Importance of Training' (person-job fit), 'Love Youself' (core self-evaluation) and 'Career Success', supported previous findings on the importance of person-job fit perception and core self-evaluation on career success of people with disabilities (Wahat, 2010). It can be concluded that it is indeed essential to transfer all these important elements via accessible tools such as virtual training to benefit a large number of people with disabilities in Malaysia. In line with the Malaysia Disability Act 2008, everyone with disabilities in Malaysia, including those residing in rural areas, has the right to accessibility to education and training. Accessibility to virtual training is equally important as it provides skill development and knowledge enhancement opportunities to people with disabilities (Sitzmann, 2012).

It is recommended that significant applicability and impact of virtual training

be assessed based on the improvements made to the content and features of virtual training based on the findings of the study. The existence of a first ever self-change management training system would benefit the transitional and adjustment period of many new persons with disabilities. There is no research-based guiding system to assist as well as to motivate this particular target group in leading a less stressful, productive life. Virtual training should also be customised to the specific disability category such as visual disability or hearing impairment. The former would benefit from virtual training that uses kinetic features or haptic technology, while the latter would benefit from more visual rather than textual content.

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