

**THE COMPARATIVE EFFECTS BETWEEN DEMONSTRATION VIDEO AND INSTRUCTION MANUAL ON THE PERFORMANCE FOR RESPIRATORY PROTECTIVE DEVICE**

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**Background** Respiratory Protective Device has been used in non-residential areas such as hotels and offices. It is impossible to demonstrate how to use the safety device for all users. Many hotels insert the demonstration video of RPD into the television programme while the instruction manual is placed on the device.

**Objectives** To compare whether demonstration video or instruction manual affects the usability of product in terms of donning time and human error.

**Methods** Two groups of 30 non-experienced subjects were chosen to watch demonstration video and to read instruction manual. Then all subjects were assigned to use the product and to walk through the smoke tunnel.

**Results/Outcome** The results showed that there was not much difference between demonstration video and instruction manual in terms of donning time. The demonstration video was useful to users to navigate the product like pulling the hood. Subjects still spent much time on the difficult operation like pressing the valve. For the human error, three of 10 tasks had less error. Subjects still made high error in difficult tasks.

**Conclusions** The training on the use of device is required; otherwise, the product needs to be used easily.