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Television is an invention that has accompanied us since the first half of the twentieth century. And since then, despite the dynamic development of other technologies related to video and audio transmissions, it remains one of the most important ways of dissemination of information, culture and entertainment. For years we keep installing TVs in more and more rooms in our homes. They are also a standard piece of equipment of hotel rooms. However, despite a long history of use and universal access to these facilities, the question remains: where to install a television in the room to provide the user with convenience, comfort and safety when watching TV? Ergonomics, the science whose one of the main objectives is to optimize functional work environment and human life, is trying to provide the answer to the question above.

Television as any technical device can be characterized by the ergonomic quality of the system that it creates with a potential user. There are three most important factors that determine the ergonomic quality of such an arrangement: the position of the body in which we watch television, how the TV is set in front of the viewer's eyes and the distance from which we will watch the TV. All of these factors will be connected with the place where you set or mount the TV in the room.

The comfort of body position is determined by the degree of static loads related to each group of skeletal muscles - the bigger it is, the faster we will feel the effects of increasing muscle fatigue and the feeling of discomfort. A standing position is characterised by the biggest static load, the static load gets smaller in a sitting position, and it is the smallest in a lying position.

To ensure an optimum arrangement of the television in front of the viewer's eyes you must set the top edge of the screen at eye level of the observer looking straight ahead or slightly below (1-5 cm) the line of sight. Such location of the TV provides the most natural positioning of the head in relation to the cervical spine, and thus reduces the static load of neck muscles, the rim of the upper limb and upper-back muscles. Consequently, a person watching TV is less exposed to the discomfort caused by numbness and muscle pain.

The distance from the TV screen while watching TV is important both for the safety and maintaining good eyesight, as well as the possibility to distinguish fine details of the screen-picture. For modern HDTV 1080 screens the minimum viewing distance is defined to be 1,6 x screen diagonal measurement, maximum 2,5 x screen diagonal.

Our bedroom is a place where we tend to watch television more and more frequently. This room, mostly because of the equipment used and the standard location of the TV (set on a piece of furniture or wall-mounted), significantly impedes watching TV in both the sitting and lying position. The bedroom is rarely equipped with comfortable seats, so we find it difficult to have a proper back support. Watching TV while lying, we are forced to raise our head towards the screen supporting it, for example, with an extra pillow. Such angular positioning of the head in relation to the cervical spine puts a burden on the muscles of the neck and, consequently, can cause not only muscle pain, but also the degenerative changes in the cervical vertebrae.





The solution optimizing the location of the TV in the bedroom is, in my opinion, the ceiling mounting system proposed by SIGDEN Solid Solution. Fixing the TV to the ceiling and the design of the mount itself allow for very precise adjustment of the television according to all the requirements of ergonomics. It will be possible to watch TV in a lying position with a TV set that is installed in that way. The head will be placed in a natural way in relation to all spine parts and muscles of the neck and back will be relieved. The mounting system proposed by SIGDEN allows the TV to be installed at the correct distance and at the right angle to the line of sight. Undoubtedly an additional advantage is that a ceiling-mounted television set will not be an obstacle for people moving in the room and using different pieces of equipment in the bedroom.

In conclusion, it should be noted that SIGDEN ceiling mounts are of high ergonomic quality, due to which the comfort and safety of people watching TV in the lying position is significantly increased.

Ph.D. Jacek Szczurowski

Department of Anthropology

Wrocław University of Environmental and Life Sciences