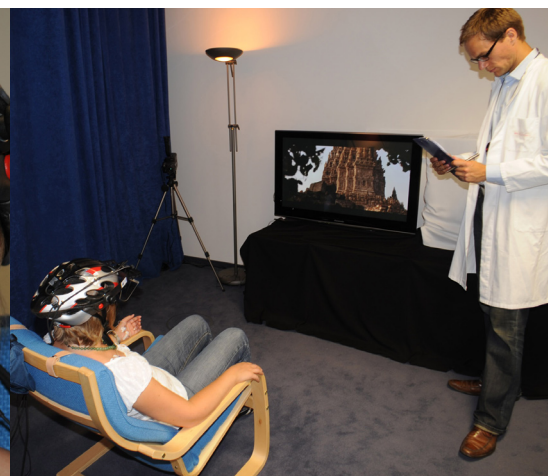
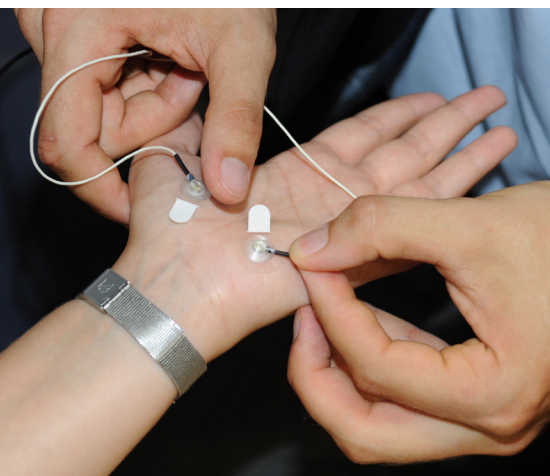


Evaluation of the Panasonic Viera NeoPDP TV

Brief Report

Brief report of a pilot evaluation study conducted by the **Generation Research Program (GRP)**, Human Science Center, Ludwig-Maximilians-Universität Munich, Germany, Prof.-Max-Lange-Platz 11, 83646 Bad Tölz // Contact: info@grp.hwz.uni-muenchen.de



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Introduction

- Panasonic assigned the Generation Research Program (GRP) with the **evaluation of the Panasonic Viera Neo PDP TV on health related parameters.**
- Objective was to **test the effects** of a Panasonic **Plasma (PDP) TV** compared to a LCD TV on psychological and physiological measures such as **eye strain, well-being and related parameters.**
- Each subject watched three **films:** advertisements (11 min.), nature film (16 min.), movie (17 min.).
- **Subjects watched film segments on both the PDP TV and the LCD TV** – half of the subjects started with the PDP TV first and continued afterwards with the LCD TV; the other half vice versa (randomly assigned).
- Every subject watched the segments under **controlled conditions** in order to rule-out confounding influences (e.g., TV adjustments, temperature, air humidity, distance to TV).

Method

- **Sample characteristics: N=31**, mean age=46 years (SD=8), percentage women=52%, subjects had no visual impairments or wore corrective eyewear.
- To measure eye-strain, well-being, mood, and fatigue, we employed **7 psychological measures** and **10 physiological measures.**
- We **compared groups** with adequate statistical methods (e.g., GLM, T-Test, non-parametric) and analyzed time series (for physiological measures only).
- Prior to the analysis, appropriateness of **boundary conditions** to conduct the relevant statistical test was **tested and assured** (outliers, deviation from normal distribution, and missing data).

Results and Discussion

- **Subjects watching a movie on the PDP TV showed significantly less eye strain compared to subjects watching the same movie on a LCD TV.** Hence, results indicate that the **PDP TV is more gentle on the eyes compared to the LCD TV.**
- With regard to the **other measures under investigation, the PDP TV showed a tendency to a better state of mood, well-being and to less fatigue.**
- **Restrictions:** Although principal confounding factors have been controlled it cannot be ruled-out that further factors exert an influence (e.g., chronobiological influence).
- This study replicates the findings of Akira Okada at Osaka City University.