



The Peak-End Rule

On the Evaluation of Simple and Complex Experiences

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Peak-End Rule

People evaluate experiences based on the pain or pleasure of:

- most intense point
- end of the experience

A long painful experience that ended pleasantly might be remembered as mildly painful, while a short episode of acute pain is remembered as highly painful.

Kahneman et al. (1993) discovered that unpleasant experiences were evaluated as better when an additional but slightly less unpleasant experience was appended. So the discomfort at the peak and the end — but **not the duration** — determined the evaluation of the experience.

Simple and Complex Experiences

The peak-end rule did not occur consistently in past research. In studies involving simple stimuli the peak-end rule was generally found to be a significant factor, e.g.:

- listening to annoying sounds (Ariely & Zauberman, 2000)
- giving small gifts (Do et al., 2006)

Studies on complex experiences, however, showed little evidence of the peak-end rule, e.g.:

- watching a VR film (Strijbosch et al. 2019)
- going on a vacation (Kemp et al., 2008)

The present study aims to explain the discrepancies among past studies by hypothesizing that the peak-end rule occurs more in simple experiences with less sensory information than in complex experiences.

Experiment

Students from Irvine Valley College (n = 88) filled out an online survey where they viewed either:

- short films (complex experience)
- series of images taken from the films (simple experience)



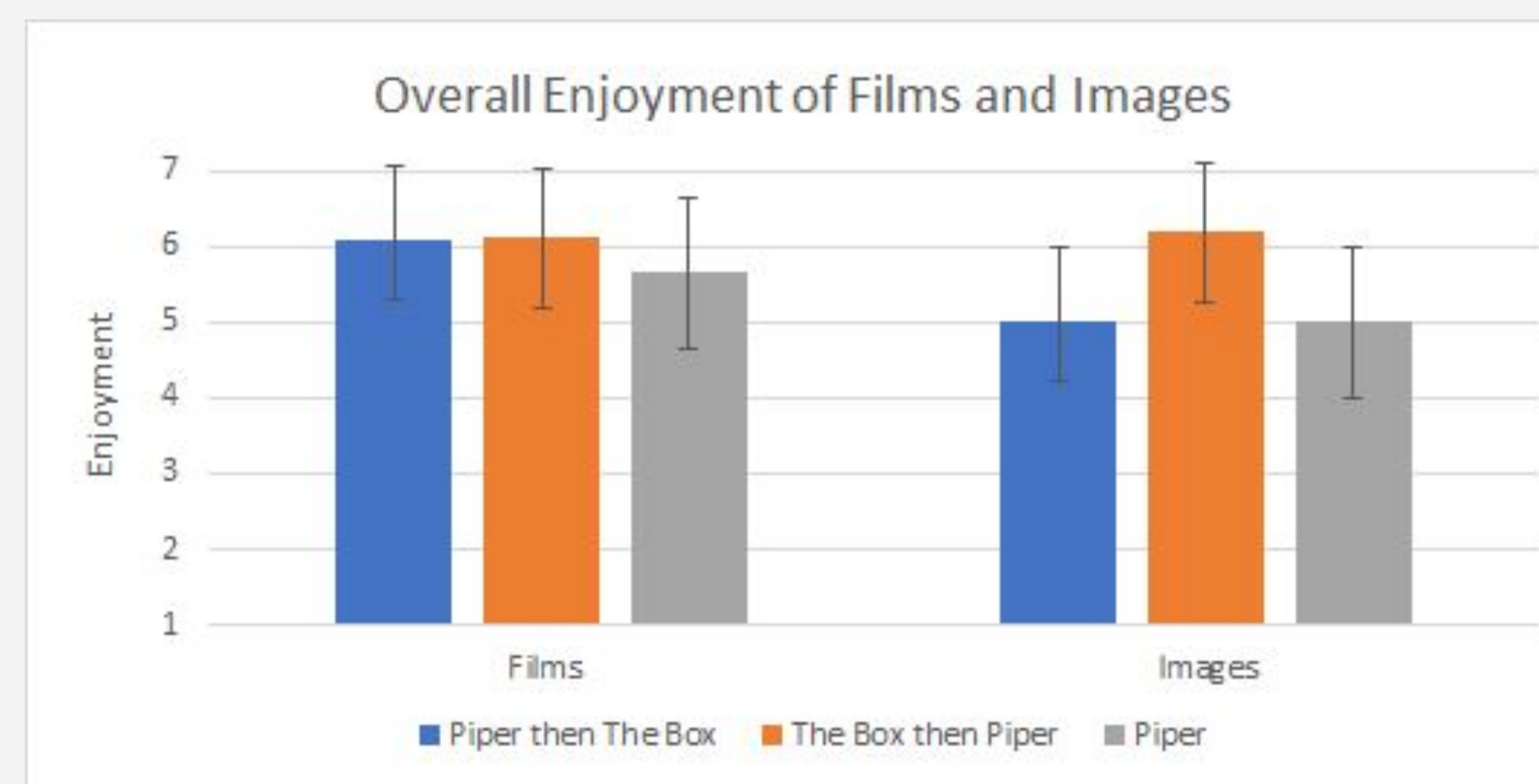
Piper by Pixar

The Box by ESMA

The films/images were presented in one of three possible orders:

- *Piper* (more enjoyable) then *The Box* (less enjoyable)
- *The Box* then *Piper*
- *Piper* only

After viewing, there were asked to evaluate the overall enjoyment, emotional valence, and arousal of the experience on 7-point scales.



The graph shows how much people enjoyed the overall experience depending on whether they viewed films or images and the order in which they were presented.

Findings

As predicted by the peak-end rule, the order in which the films or images were presented affected the enjoyment of the overall experience $F(2, 81) = 4.84$, $p = 0.01$. For instance, viewing *The Box* before *Piper* led to a higher overall enjoyment than viewing them in the reverse order. This confirms that the peak-end rule affects people's overall evaluation of an experience.

We hypothesized that the complexity of an experience affects the extent to which the peak-end rule is observed. On the contrary, the results of this experiment do not show an interaction effect between the type of media presented (films vs. images) and order of presentation on overall enjoyment. $F(2, 81) = 2.27$, $p = 0.11$. So the presence of the peak-end rule cannot be explained by the complexity of the experience.

References

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