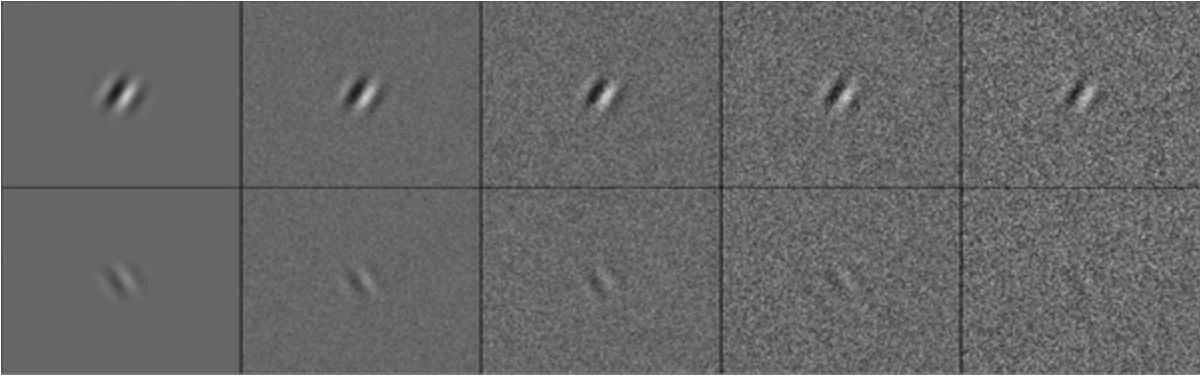




The images above provide an example of contrast and noise levels used in the experiment. Gabor patches are displayed at 75% contrast in the top row and at 25% contrast in the bottom row. Stimuli were presented in five blocks (examples shown from left to right). There was no noise in the first block, but starting with the second block, stimuli were presented in Gaussian noise, with the noise level increasing in each subsequent block.

ADVANTAGES

The important benefits of this innovation are:

- ▶ The perceptual training exercise is short duration - 7 days - compared to many perceptual learning studies that are of longer duration, in some cases up to 30 days.
- ▶ Results indicate that older adults, following training performed as well as pre-trained college age participants with improvements in the ability to see patterns in low contrast and in the presence of visual noise.
- ▶ A surprising finding was that visual acuity improved for older as well as younger adults.
- ▶ Stark progress was evident with the short training session - with permanence of approximately 3 months.

APPLICATIONS

Targeted towards end users as standalone app or software to:

- ▶ Address cognitive decline in older adults.
- ▶ Provide perceptual learning for younger and older adults.
- ▶ Improve contrast sensitivity in aging population

Can be a preventative or therapeutic program that healthcare providers could potentially recommend as an alternative before moving to more costly and invasive procedures

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	10,149,795	12/11/2018	2015-940

STATE OF DEVELOPMENT

The team has designed, developed and tested the system and competent software for use in PCs that is easily portable to other platforms.

RELATED MATERIALS

- ▶ [Improving Vision Among Older Adults: Behavioral Training to Improve Sight](#)

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