

A New Prescribing Paradigm for Low Vision Telescope Systems

The “Visual Radius,”
“Social Range,” and “Face Test”

Henry A. Greene, O.D., F.A.A.O.

The activity distance determines the type of management.

- Reading
 - Magnifiers, high adds, microscopes
- Distance
 - Telescopes
- Midrange
 - Telemicroscopes

Reading is a solitary activity

- Reading is the most easily replaced visual activity
 - talking books
 - radio, TV
 - sighted support
- Most responsive to low vision aids
 - high contrast
 - controllable environment

Distance Vision is a Social Activity

- Seeing faces
- Interpersonal relations
 - Non-verbal body language
 - Making eye contact
- Avoidance of isolation
- Quality of life

The Telescope “Face” Test

- A good response to high contrast targets is not prognostic
- The face is a convenient low contrast target
- Seeing a face well through a TS at 8-10 feet is prognostic of magnification response
- Poor response associated with edematous maculas

“Visual Radius”

- Derived from Proximal Magnification
 - Moving closer makes the retinal image larger
- The furthest distance at which one can discern facial features
 - Under normal illumination
- Visual Acuity Correlate
 - 2 feet = 20/200
 - 1 foot = 20/400

The “Visual Radius” and the “Social Range”

- “Social Range”- 3 to 15 feet
- Expand the “Visual Radius” sufficiently into the “Social Range”
- Telescopes extend the visual radius by the power of the device
- With a 4x telescope:
 - 2 feet becomes 8 feet
 - 6 inches becomes 24 inches

TS Prescribing Paradigm Summary

- Identify the furthest distance that a face can be seen- “Visual Radius”
- Confirm a favorable response to telescope magnification- “Face Test”
- Extend the “Visual Radius” into the “Social Range”
- Establish realistic goals and expectations

Indoctrinate the Patient

- Visual activities are distance related
 - Within or beyond arms length and closer
- Match the activity distance to the work distance of the device
- Patient should have identifiable goals
 - The “Buzzer” Test