

**An Investigation of Myopic Visual Function and
the Effect of Holistic Vision Therapy**

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Abstract

Vision therapists working in the complementary healthcare sector treat vision problems holistically using a wide range of techniques including massage, vision coordination exercises and changes in lifestyle habits e.g. diet and behaviour patterns. These techniques differ from conventional optometry practically and theoretically and are said to be able to improve myopic vision and restore emmetropic vision. Vision therapy for the treatment of myopia involves the removal or decrease in prescription of refractive lenses alongside the therapy and lifestyle changes, whereas optometric practice prescribes refractive lenses only. Theoretically vision therapy is part of a holistic model of health which views all parts of a person as being interconnected, as compared to the reductionist model of optometry in which the eyes are treated independently of the rest of the person. This thesis explores these differences in approach to myopia. The theoretical background to myopia researched from both contexts and the results from a pilot study assessing the work of a vision therapist are presented.

Vision tests were made using the high and low contrast Bailey-Lovie charts, the Regan Repeat Letter chart, Single Optotypes, the Crowded Logarithmic Acuity Test and the Pelli-Robson chart. Cycloplegic and non-cycloplegic refraction, autokeratometry and axial length readings were taken. Questionnaires were given out and participants who took part in the vision therapy sessions were also interviewed about their experience.

The vision and visual acuity and physical parameter results are presented in chapters 6 and 7. Aspects of visual style were explored and it was concluded that the role eye movements play in vision is different for corrected acuity as compared with unaided vision. It is also concluded that vision therapy did not affect the chart performance or physical parameters of the participants. Experiential data is presented in chapter 8 and vision therapy was found anecdotally to promote fluctuations in vision.

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