Optical and biometric characteristics of children during accommodation

QUT Ethics Approval Number 1700000541

RESEARCH TEAM
Principal Researcher: Mr Rohan Hughes PhD Candidate
Associate Researchers: Dr Stephen Vincent Principal Supervisor
A/Prof Scott Read Associate Supervisor
Prof Michael Collins Associate Supervisor
School of Optometry and Vision Science, Faculty of Health
Queensland University of Technology (QUT)

DESCRIPTION
This project is being performed as part of a PhD project for Rohan Hughes.

The reason for doing this project is to look at the changes that occur in the eyes of children while they focus on near objects. This will help us to improve our understanding of how the eye focuses and how short-sightedness develops during childhood.

Your child is invited to be a part of this project because they are aged between 4-12 years with healthy eyes that can aim and focus correctly.

PARTICIPATION
Participation in this study will be in two parts, following completion of a short questionnaire regarding your child’s and your family’s eye and general health history.

Firstly, a screening eye examination will be conducted at the QUT School of Optometry and Vision Science O Block laboratory (Kelvin Grove) to assess your child’s vision, refractive error, eye alignment, focusing ability and eye health. As this study requires normal focusing function and eye health, if there are any issues found during the screening, your child will not be involved in the measurement session, and will be referred to the QUT Optometry Clinic or your preferred optometrist for further evaluation.

The second phase is a measurement session, which will involve attending the QUT School of Optometry and Vision Science O Block laboratory. At this visit, your child will be asked to look directly towards a target within an optical system (a series of lenses or mirrors) while keeping their eyes very still. This visit can be done straight after the screening examination if your child meets the suitability criteria for the study. For those children who participate in this measurement session, some of the measurements attained during the screening eye examination may be included in the reporting of the data. The approximate length of time for
both the screening examination and measurement session combined will be a total of one hour.

The amount of focusing effort required to keep the target clear will be altered for each measurement, and will be repeated at varied levels of focusing demand for up to 10 minutes at each level. While your child is focusing on the target, measurements of your child's eye (including focusing ability and eye lengths) will be taken with instruments that do not touch the eye. Between the varied levels, your child will be allowed to take short breaks of 1-2 minutes.

Should you wish, you may choose for your child to participate in the measurement session on the same day as the screening examination, if they meet the suitability criteria.

Your child’s participation in this project is entirely voluntary. If you do consent to them participating you can withdraw them from the project at any time, and there will be no comments or penalty for doing so. If your child withdraws from the study, any information already obtained will be used as part of the study, unless you request for the information to be destroyed. Your decision to participate or not participate will in no way impact upon your current or future relationship with QUT.

**EXPECTED BENEFITS**

It is expected that this project will not benefit you or your child directly. However, the results will contribute to the scientific knowledge regarding the development of short-sightedness in childhood. During the study, the researcher will share with you and your child any information regarding the measurements of your child’s eyes that may be of interest or importance to you, and a written report on the vision, visual function and eye health of your child’s eyes will be provided to you in the months following their participation in the study. The written report will be provided for all children who participate in the screening examination, and will be provided either through the school’s communication channels or by a direct email to you.

**RISKS**

The research team does not believe there are any risks beyond those associated with a normal eye examination, and the inconvenience of the time required to participate in the project. All measurements are to be taken with standard instruments that do not contact the eye, and are used in eye examinations. All researchers are trained in the correct use of the instruments used in this project.

It is possible that the exertion of your child’s focusing system may cause some mild eyestrain symptoms. The screening examination prior to taking measurements will determine any risk factors that may make your child susceptible to eyestrain symptoms, and your child will be able to take regular breaks during the testing.

It should be noted that if you consent to your child participating, they can be withdrawn from participating in the project at any stage without comment or penalty.
PRIVACY AND CONFIDENTIALITY
All comments and responses will be treated confidentially unless required by law.

Any data collected as part of this project will be stored securely as per QUT’s Management of research data policy.

Please note that non-identifiable data from this project may be used as comparative data in future projects or stored on an open access database for secondary analysis.

CONSENT TO PARTICIPATE
We would like to ask you to sign a written consent form to confirm your agreement for your child to participate.

QUESTIONS / FURTHER INFORMATION ABOUT THE PROJECT
If you have any questions or require further information please contact one of the listed researchers:

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Stephen Vincent  sj.vincent@qut.edu.au  07 3138 0415
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CONCERNS / COMPLAINTS REGARDING THE CONDUCT OF THE PROJECT
QUT is committed to research integrity and the ethical conduct of research projects. However, if you do have any concerns or complaints about the ethical conduct of the project you may contact the QUT Research Ethics Advisory Team on 07 3138 5123 or email humanethics@qut.edu.au. The QUT Research Ethics Advisory Team is not connected with the research project and can facilitate a resolution to your concern in an impartial manner.

THANK YOU FOR HELPING WITH THIS RESEARCH PROJECT.
PLEASE KEEP THIS SHEET FOR YOUR INFORMATION.