a place of mind
THE UNIVERSITY OF BRITISH COLUMBIA

School of Kinesiology
210-6081 University Boulevard
Vancouver, BC Canada V6T 1Z1

Phone 604 822 9192
Fax 604 822 6842
www.kin.ubc.ca

STUDY INFORMATION AND INFORMED CONSENT

Developing perceptual skills for pitch recognition in baseball

Principal Investigator:
Dr. Nicola Hodges, Professor, School of Kinesiology, The University of British Columbia (UBC). Phone: (604) 822-5895/ cell: 778 772 2813. E-mail: nicola.hodges@ubc.ca

Study team:
MSc students, School of Kinesiology, UBC: Georgia Grieve (georgia.grieve@ubc.ca) and Zachary Besler (kin.msl@ubc.ca).
Faculty: Dr Miriam Spering, Dept of Ophthalmology & Visual Sciences, UBC; Dr Sean Muller, Sport and Exercise Sciences, Federation University, Australia.
Undergraduate RA: Sowmya Gopalakrishnan

Dear Parent/Guardian,

We are a group of researchers in the Motor Skills Laboratory, in the School of Kinesiology at the University of British Columbia in Vancouver (Canada). This project is designed to track the development of perceptual skills in youth baseball players by studying their practice histories, their performance on tasks designed to evaluate pitch-related visual skills in baseball, as well as following up their progressions in a longitudinal fashion. We are particularly interested in when players begin to recognize body cues in the actions of opposition athletes and how they use these cues to guide their responses. A long-term study such as this will aid our understanding of how and when perceptual skills develop in youth athletes and potentially guide how we train and assess these skills and assess the viability of marketed game-training apps.

Your child has been asked to participate in this study as they meet the following inclusion criteria: male, aged 12-21 years, have at least one season of experience with organized baseball practice, normal or corrected (glasses or contacts) vision, no known neurological disorders, no previous experience in a similar study (if you wish to gain clarification, please email the research team).

We will send you a link to give consent for your child to participate in this study (not required if the child is 16 years or older). We will also then send you a personal web-link to give to your child to complete an online survey. Within this survey, your child will be able to provide their assent to participate. The initial survey should take approximately **15-20 minutes** to complete. You may assist your child in responding to this survey. Upon completion of the player survey, you will then be sent a weblink to a baseball

prediction task for your child to complete on their own. They will be asked to make keypress responses to a series of thrown pitches, which will show different amounts of ball flight and different pitch types. There is also a visual identification task to complete which involves moving objects so we can study visual motion perception. These two tasks (baseball prediction and object identification) **will take approximately 30 minutes** to complete, and may be completed at a different time than the survey.

None of the questions that we ask are of a delicate or intrusive nature and there are no known risks associated with a child's and adult's involvement in this study. Participation is entirely voluntary, and even if players or parents/guardians initially choose to take part in this study they may subsequently withdraw at any time without having to give any reason and without experiencing any negative consequences. As an added incentive, we will e-mail your child an Amazon e-voucher ($15) after completion of both the questionnaire and online visual tasks. Because we are hoping to track players across their development, regardless of whether they stay in baseball, we will invite you/your child each year for ~3-5 years to participate again. Yours or your child's consent will be sought each time.

All of the answers provided will be combined with those of other youth baseball players taking part in this research and any information collected will be held in the strictest of confidence. No specific details allowing identification of individuals (e.g., players' name, coaches' name or team name) will be included in subsequent publication or presentation. General results will be made available to interested persons, but no information will be provided that will serve to identify individual players or parents/guardians. Increasingly, funding agencies and research publications require researchers to make their data publicly available at the time of publication. If the data of this study is to be made public, it would be de-identified (e.g., names of players, clubs or teams, and players' month and year of birth **would not** be shared). Although it is not impossible for individual players to be identified through activity histories and psychological responses, this risk is minimal in a large sample of approximately 200 players with de-identified data. Note that once made publicly available, the data that you and your child have provided cannot be withdrawn.

In accordance with the BC Freedom of Information and Protection of Privacy Act (FIPPA), the online survey will be administered via the UBC-hosted version of Qualtrics, which is a survey host that is fully compliant with FIPPA legislation, and ensures that the survey data is kept secure and is stored and backed up in Canada. All electronic personal information will be password-protected and encrypted on desktop computers that are locked in the principal investigator's research office at the University of British Columbia. Personal data shall not be made available to anyone other than the researchers involved in this study. The data from the two visual tasks are collected on a software platform called "Gorilla". The Gorilla servers are located in the EU (Republic of Ireland), with some ancillary services (emailing, error handling) provided by suppliers in the USA. Data stored on the Gorilla platform are de-identified and only contain information about your child's accuracy which is associated with a unique login code (which we will provide).

To learn more about our research please visit the Lab's webpage (http://msl.kin.educ.ubc.ca). We will update this page with general information as data is collected and analyzed.

To provide initial consent for both you and your child to be part of this study, please confirm by e-mailing research personnel in the Motor Skill Lab. (kin.msl@ubc.ca) or Dr. Nicola Hodges (nicola.hodges@ubc.ca) with "Baseball Anticipation" in the subject line and include the following information for all individuals who would like to participate:

- Player(s)' first name and full initials.
- Player(s)' and/or Parent's/Guardian's email addresses (if your child does not have a personal e-mail we will send both player and parent/guardian questionnaires to your e-mail).
- Players' age(s) on January 1st, 2021, what age group they will be playing baseball in this season and what age group they played last season (e.g., U18, U16, or U14 age group).

If you have any questions or desire further information with respect to this study, you should contact Dr. Nicola Hodges, Georgia Grieve or Zachary Besler. If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the Research Participant Complaint Line in the UBC Office of Research Ethics at (604) 822-8598 or if long distance e-mail RSIL@ors.ubc.ca or call toll free 1(877) 822-8598.

Many thanks for your help,
kind regards,

Nicola Hodges, PhD
Professor
School of Kinesiology
University of British Columbia
https://kin.educ.ubc.ca/person/nicola-hodges/