Dear JURA reviewers,

Thank you for taking the time to assess my JURA abstract. Your knowledge and corrections are greatly appreciated. I have taken your comments into consideration and address them below.

**Reviewer comment 1:**

“Why were humans and not a machine used to explore the material property of a stick. This inherently added error and bias to the results. If a more experienced (pro) or less experienced (Jr) player uses the same stick one would expect divergent results.”

**Response to comment 1:**

The primary reason behind this study is to develop a system which analyzes a subjects shot and ultimately matches them with the most appropriate flex of stick. I agree with the reviewer that humans introduce some error and bias into the results, however due to the fact that every subject has a different shooting style, it was decided that the most appropriate results to take would be ones based off a large group of participants. A machine would provide a shot that is constant, whereas no human produces the same shot more than once. The belief in using a group with varying experience was that although error and bias may be introduced, it would provide a better rendition of a real life situation.

Additionally, sticks have been tested using a shooting robot as was suggested. Stick manufacturers have built the “perfect stick” that resulted in the top velocity when the robot shot the puck. Therefore it is known, mechanically, what stick properties are needed to have maximum velocity during a perfect shot. However, when the “perfect stick” was given to players, their performances varied greatly. Some players performed poorly while others performed great. This has to do not with the mechanics of the stick, but with the biomechanical interaction between the player and the stick. This project therefore examined various players in an attempt to gain insight into the biomechanical interaction. Variables such as stick deflection and contact time between the blade and puck, from player to player, were analyzed to see if these were predictive of the overall puck velocity.

I have added one sentence to the paper (page 1, paragraph 1) to briefly explain the goal of developing a stick-fitting system that will match a player to a stick in order to maximize performance.

**Reviewer comment 2:**

“Abstract doesn’t follow the JURA template.”

**Response to comment 2:**

I agree with the reviewer’s comment regarding the format. The abstract has been adjusted to follow the correct JURA template.

Thank you again for your time and consideration. A revised abstract has been submitted in accordance with your comments.

Sincerely,

Rosemary Grover