INVESTIGATING SOCIAL IDENTITY AND NEUROENDOCRINE RESPONSE IN COMBATIVE SPORTS ATHLETES
Zach Root • Justin Carré • Mark W. Bruner

THANK YOU!
Combative sport clubs throughout Ontario participated in our research aimed to better understand how identities athletes’ form from membership on their sport team (i.e., team identities) may influence their hormonal response (i.e., testosterone) when watching their teammates compete. Results of this study have added valuable understanding to various research areas and we could not have done it without you. Please take a moment to read through this document and gain a better understanding of the project that was completed and the key findings that were discovered. Your contributions have not gone unnoticed and we greatly appreciate the time and effort you and your athletes put into the project. Thank you!

WHAT WERE THE GOALS OF THIS PROJECT?
To investigate and examine if team identity influences athlete’s hormonal response (i.e., testosterone) in male combative sport athletes’ watching their teammates compete.

WHAT DID WE DO?
26 male combative sports athletes representing Brazilian Jiu Jitsu, Muay Thai Kickboxing, Boxing and Karate disciplines participated in the study. Participants completed a survey assessing team identity and provided saliva samples before and after watching a video (win or loss) of their teammate competing at one time point during their competitive training.

WHAT WERE THE KEY FINDINGS?
Athletes who were found to have low team identity in terms of perceptions of importance of being a team member had an increase in testosterone when watching their teammate lose, while a decrease in testosterone when watching their teammate win. This hormonal response may be explained by the German term “Shadenfreude”, which refers to the perceiver’s experience of pleasure at another’s misfortune.

Stronger bonds with the team known as the team identity dimension of ingroup ties was found to decrease in athletes after watching a video of their teammate lose, indicating that the outcome of competition may influence athletes’ perceptions of identity among their team.

FUTURE DIRECTIONS
To examine the influence of field settings (e.g., a live fight) on the team identity - hormonal relationship of athletes watching their teammates compete.

FOR ADDITIONAL INFORMATION
Mark Bruner, PhD
Associate Professor,
Canada Research Chair (Tier II) in Youth Development through Sport and Physical Activity,
School of Physical and Health Education,
Nipissing University, North Bay, ON
Phone: (705) 474-3450 ext. 4068
Email: markb@nipissingu.ca
Web: http://groupdynamics.nipissingu.ca