

Title: Function over form: A longitudinal study of predictors and mediation pathways for disordered eating in elite athletes

Running head: Longitudinal predictors of disordered eating in elite athletes

Journal: Sports Medicine Open

Authors: Scott J. Fatt¹ (<https://orcid.org/0000-0002-3796-7907>), Phillipa Hay^{1, 2} (<https://orcid.org/0000-0003-0296-6856>), Emma George^{1, 3} (<https://orcid.org/0000-0001-9936-1911>), Nikki Jeacocke⁴, Kris Rogers⁵, & Deborah Mitchison^{1, 5} (<https://orcid.org/0000-0002-6736-7937>)

¹ Translational Health Research Institute, School of Medicine, Western Sydney University, Sydney, Australia

² Mental Health Services, South Western Sydney Local Health District, Camden and Campbelltown Hospital, Campbelltown, Australia

³ School of Health Sciences, Western Sydney University, Sydney, Australia

⁴ AIS Performance, Australian Sports Commission, Canberra, Australia

⁵ Graduate School of Health, University of Technology Sydney, Sydney, Australia

Corresponding author: Scott J. Fatt

s.fatt@westernsydney.edu.au

Supplementary 1 – Steps for identifying likely spammers

- 1) Responses from before the use of paid social media advertisements were considered *legitimate* responses ($n = 91$).
- 2) All responses received after the paid social media advertisements which included the \$20 reimbursement for participating ($n = 2869$) were considered as potential spam.
- 3) Of these, 176 respondents did not pass the screening questions and so were excluded. An additional 146 responses were deemed *legitimate* through triangulation of the timing of recruitment, the respondent's reported sport organisation, their reported sport, and their name (e.g., an athlete self-reporting as a rower for the NSW Institute of Sport within 48 hours of when the advertisement was sent out to that population), leaving 2547 potential spammers.
- 4) Next, respondents were deemed as likely spammers for any of the following reasons (assessed sequentially).
 - a. Any of the 3 attention checks incorrect ($n = 1675$)
 - b. Having a duplicate IP address ($n = 157$)
 - c. Completing the full survey in less than 9 minutes ($n = 48$)
 - d. Reporting a sport that was not considered a professional or elite sport (e.g., "dog surfing", "keep aways"; $n = 36$)
- 5) This left 631 potential spammers. They were each sent an email explaining that spammers had signed up for the study and requesting for them to confirm their involvement in the study, providing two pieces of information: 1) their sport of competition; and 2) their age they started in sport.

We received email responses from only 48 respondents. Those who did not reply to the email were deemed likely spammers and excluded. For those who did reply to the email, each response was assessed based on triangulation of 1) whether the participant's responses were

consistent with their responses in the survey; 2) appropriate responses to the email request (e.g., some email responses only said “Yes, I will participate” without answering the prompt questions); 3) searching the participant’s name online to determine their athlete status. Of these, only 1 participant was considered a *legitimate* responder and their data was included in the final analyses.