

Working With Developing Females

Craig Robertson

Know What You Don't Know

- WHY?
 - Female Performance at the Summer Meet
- HOW?
 - Bio-Psycho-Social Development Model – Jason Tee
 - The Menstrual Cycle – Craig Robertson
 - Nutrition – Andrew Shepherd & Jasmine Campbell
 - Strength & Conditioning – Tim Jarrett
 - Reducing Injury – Rebecca Rhodes
 - Dealing with Stress – Hannah Stoyel

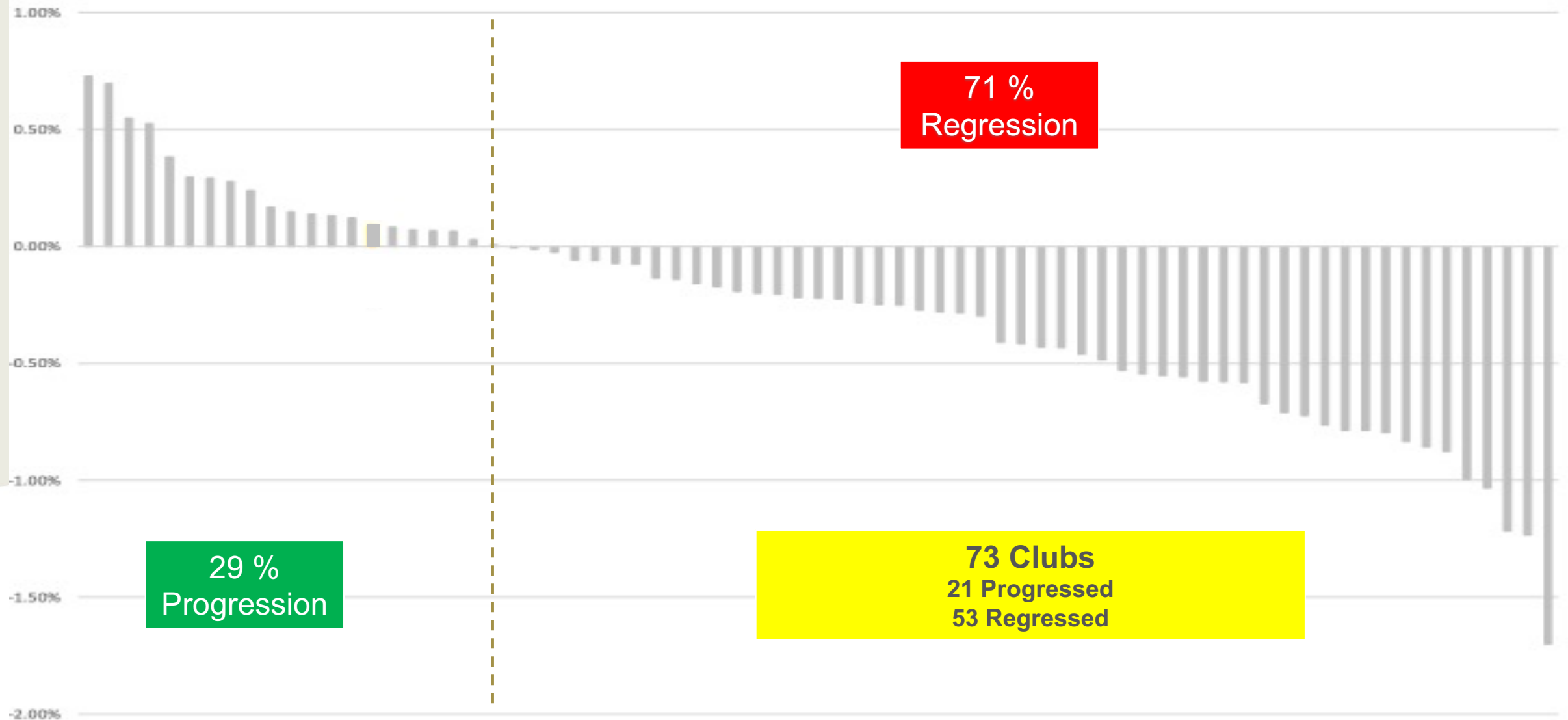
Supporting female swimmers –
a multidisciplinary perspective



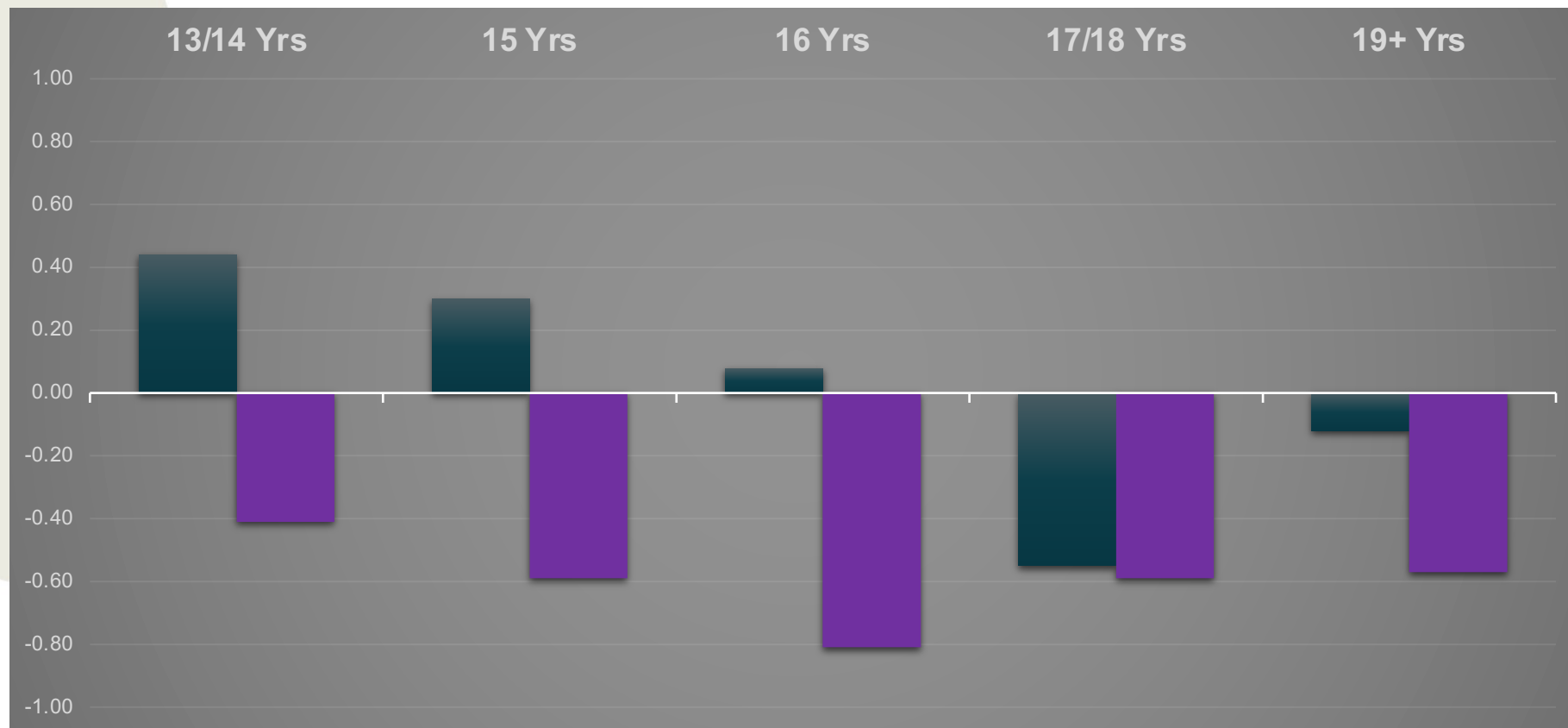
Jason Tee^{1,2},
Timothy Jarrett^{1,2,3,10},
Jasmine Campbell^{1,5},
Andrew Shepherd^{1,6,7},
Hannah Stoyel^{1,9},
Rebecca Rhodes^{1,8},
Craig Robertson^{1,2,3,4}

1. Swim England Swimming Sports Science and Medicine Team
2. Leeds Beckett University
3. Leeds City Council Swim Training Scheme
4. City of Leeds Swimming Club
5. Oxford Brooks University
6. Absolute Sports Nutrition
7. Sheffield Hallam University
8. Millfield School
9. University College London
10. University of Leeds

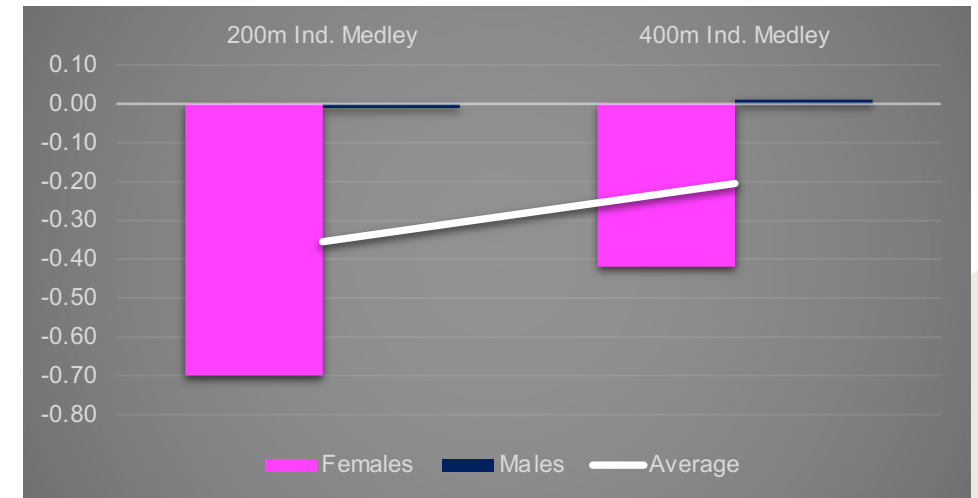
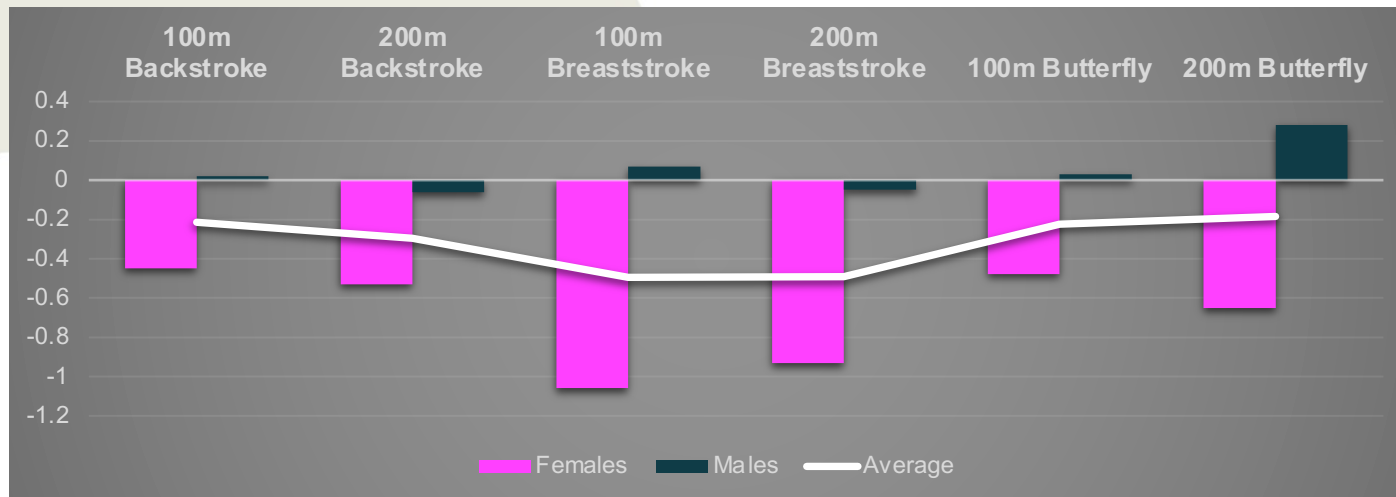
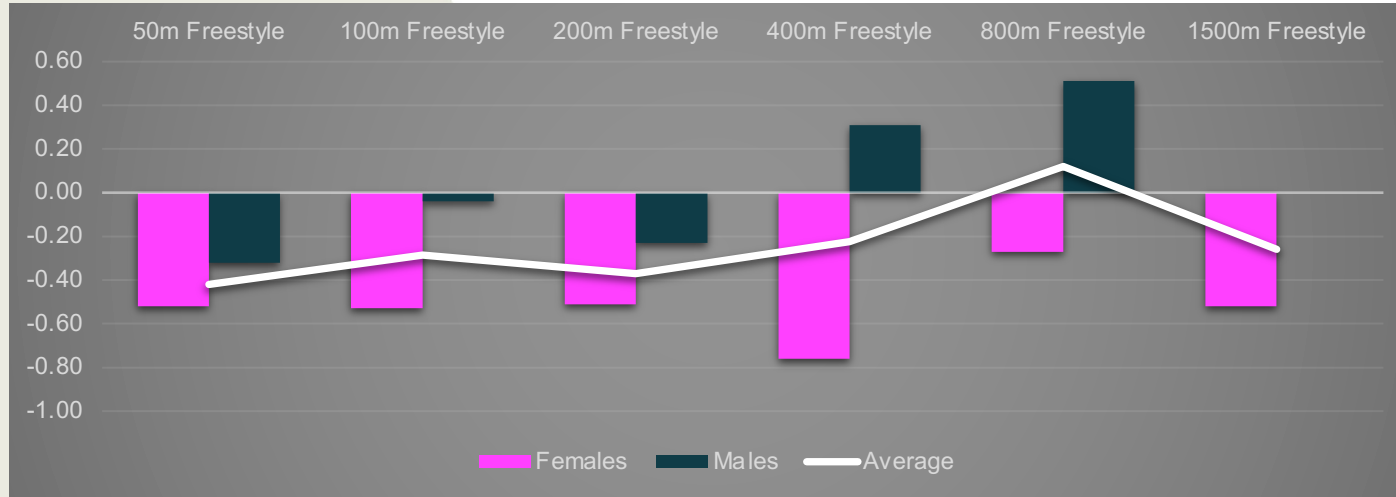
British Summer Championships



Gender Differences?



Event Differences



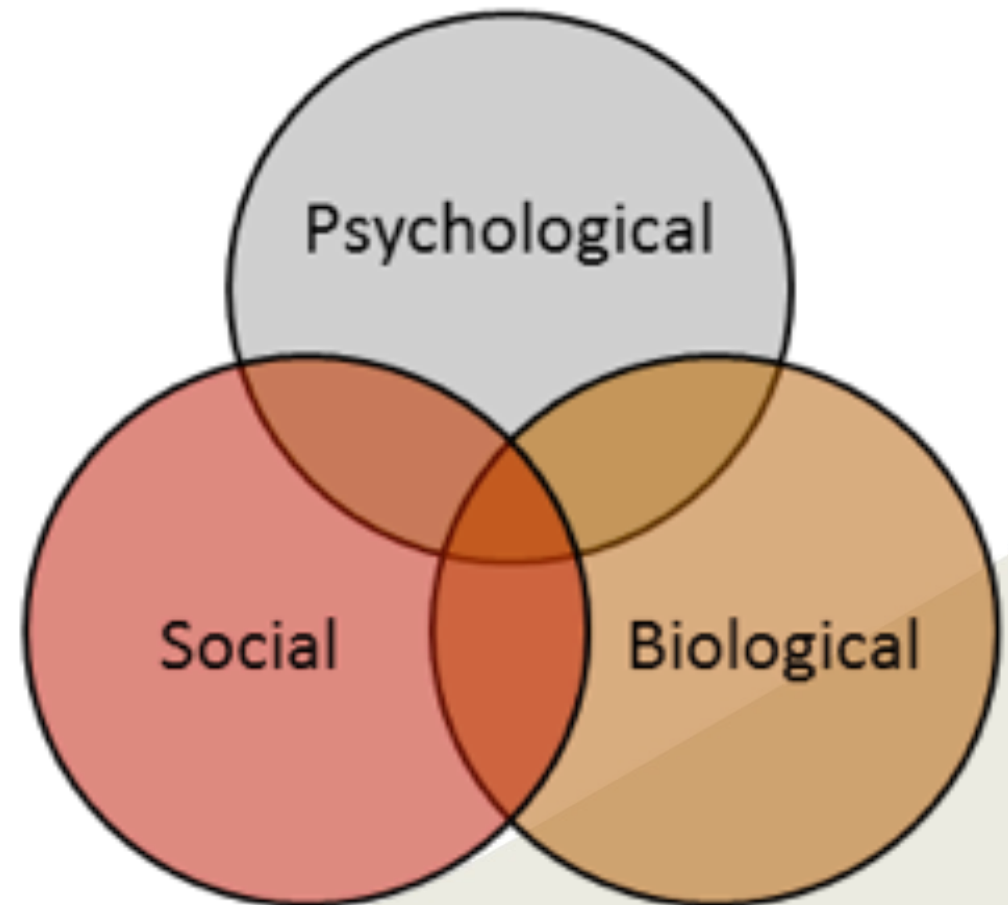
The Bio-Psycho-Social Model (Engle, 1977)

Dr Jason Tee

- 1) Psychological – How They Think
- 2) Biological – Physical Development
- 3) Social – Their Interactions / Social Circles

Typically (Sweeping Generalization!)

- 1) More Empathic towards people
- 2) More focused on building relationships
- 3) Increased internal conflict of balancing their identities/ family members/ peers or swimmers.
- 4) Become more Conscious of Body Image



Nutrition – Fuel for Female Swimmers

Andrew Shepherd / Jasmine Campbell

- Pre-pubescent children's energy demands are relatively similar
- During Periods of Growth & Development Nutritional needs to meet energy requirements increase.
- Females typically under fuel! (Shaw et al 2)
- Health Over Performance!!
- Seek Help! Do not use Bro Science!

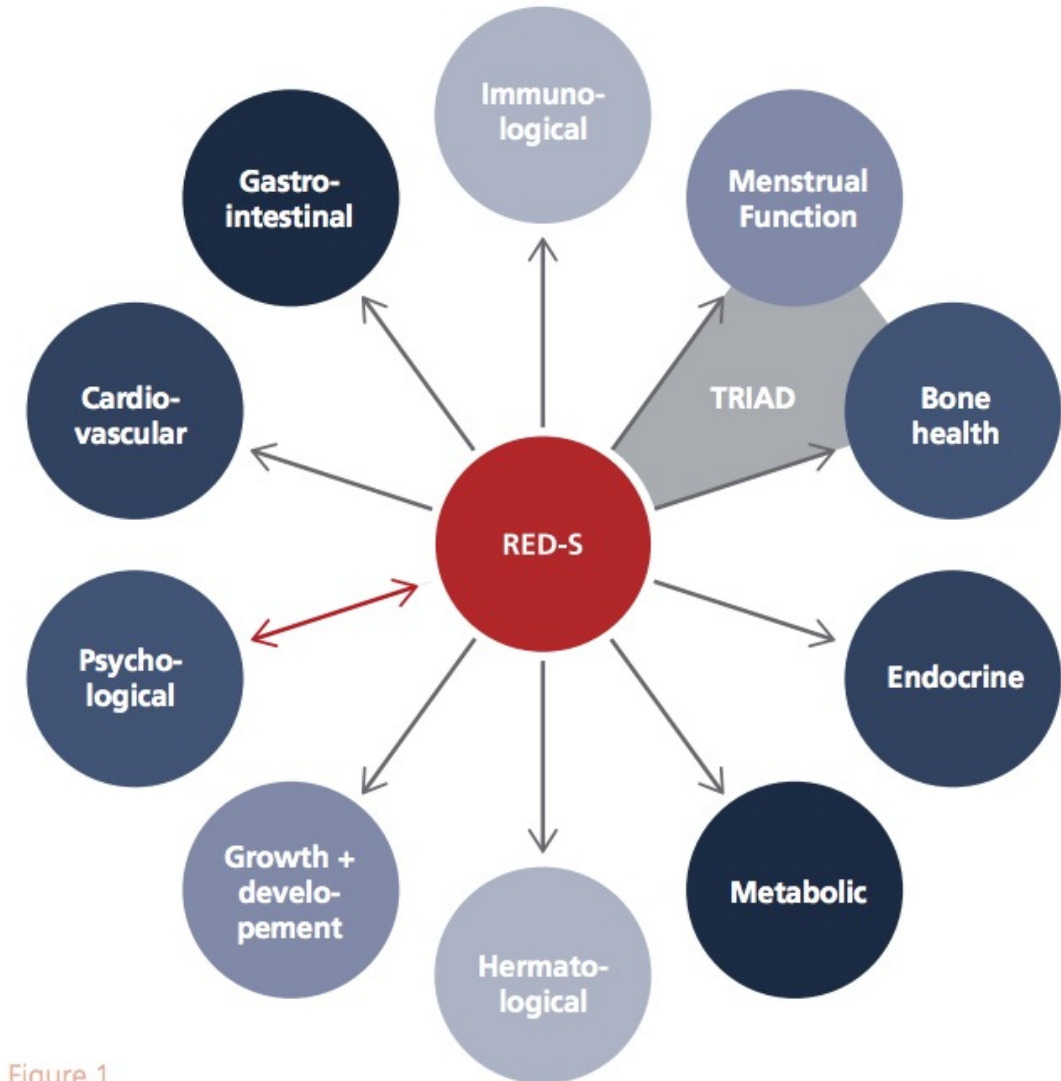


Figure 1

Strength and Conditioning

Tim Jarrett

- Strength Training is Essential
- Not all Strength Training = Hypertrophy
- Body Image issues are more Prevalent in female athletes
- Strength over Size
- Education is Key



Reducing Injuries

Rebecca Rhodes

- Pre-pool Routines are effective in reducing the likelihood of injury
- Be Athletic / Move well on land
- Maintain joint and Muscular Flexibility.



Dealing with Stress

Dr Hannah Stoyel

- How to Cope with Stress?
- Break down big goals into smaller chunks
- Build a portfolio of previous successes
- Use Visualization to mentally rehearse favorable and unfavorable situations
- Use Familiarization to your advantage.

Hi, I'm Helen



Hi, I'm Hannah



The Menstrual Cycle

Ovulation

Oestrogen
Progesterone
Testosterone

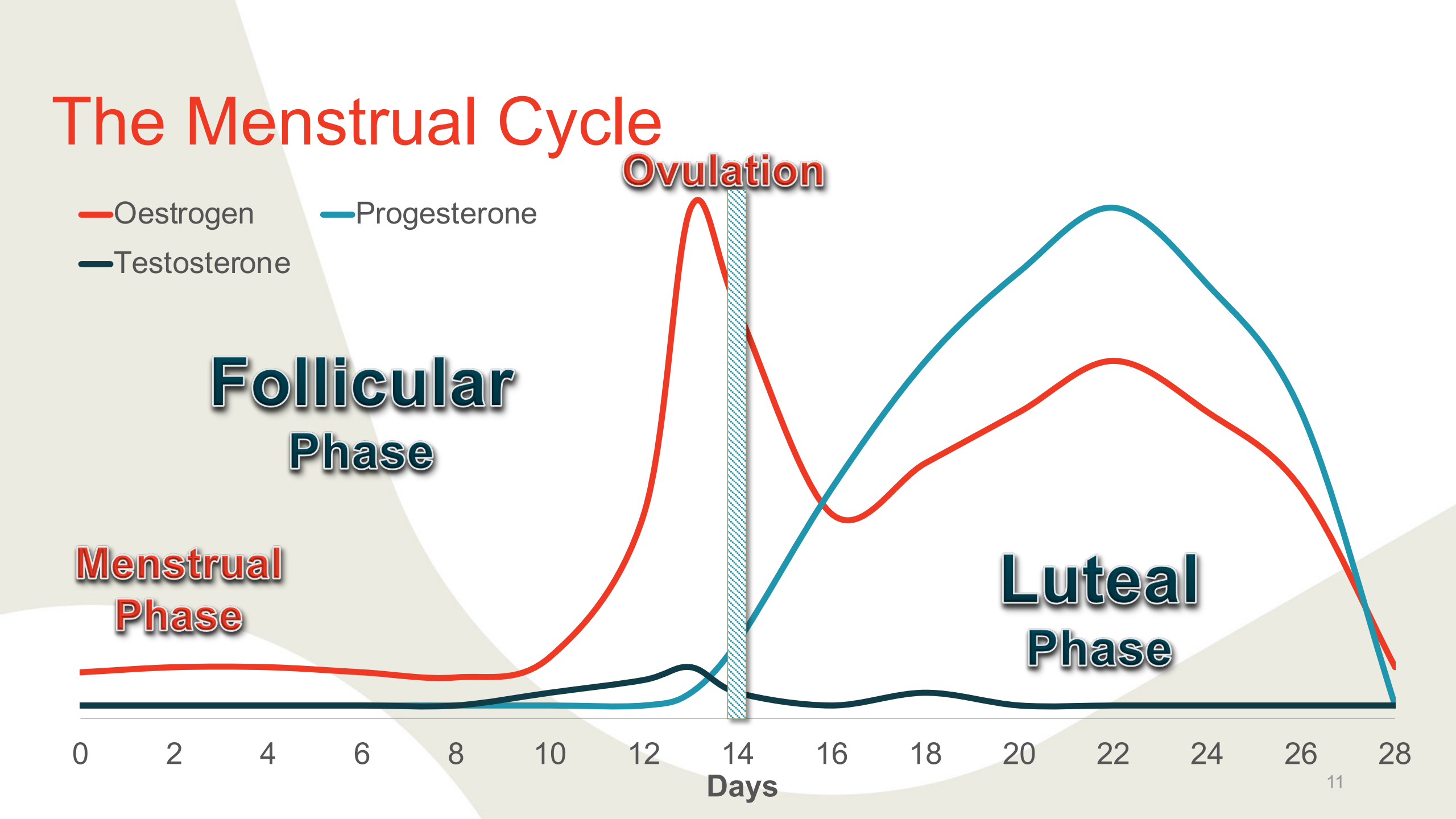
Follicular
Phase

Menstrual
Phase

Luteal
Phase

0 2 4 6 8 10 12 14 16 18 20 22 24 26 28

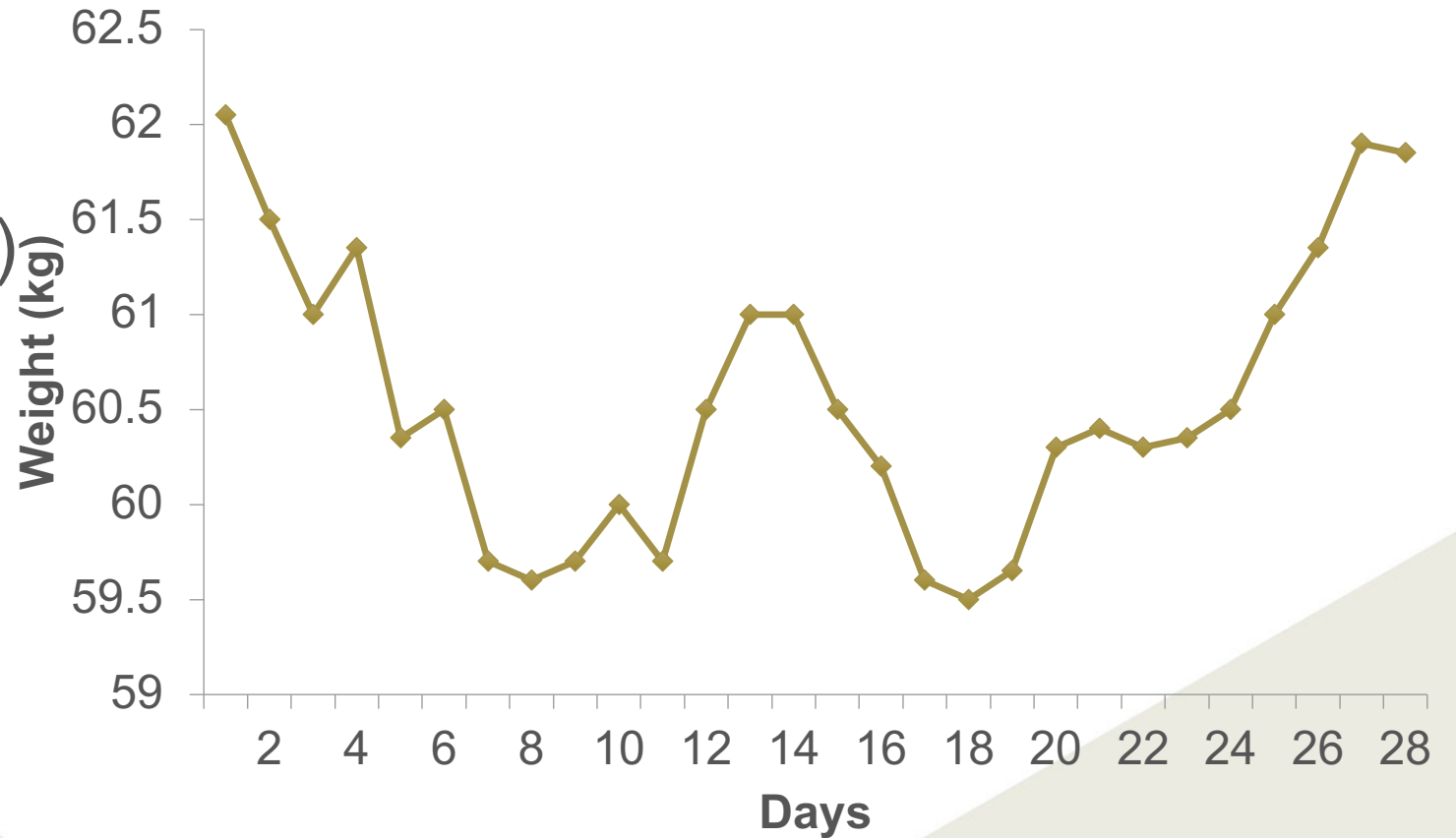
Days



The Menstrual Cycle

Craig Robertson

- Water / Glycogen (Weight) Fluctuations
- Muscle Function & Strength
- Immune Function
- Psychological Profile
- Contraceptive Pill?
- Health Over Performance!!



Adaptable Coaches

Supporting female swimmers –
a multidisciplinary perspective

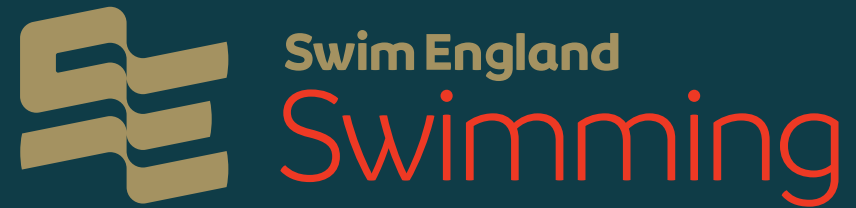


**Swim
England**

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Self-Reliant Swimmers



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