

Welcome to today' webinar

“I want to perform better; so how should I feel and what should I do?”

Prof Andy Lane
FBASES

About today's webinar

Today's webinar is the first of a series being produced jointly by the British Association of Sport and Exercise Sciences (BASES) and Human Kinetics.

It is scheduled to last for about an hour and will be recorded and made available for download and playback.

You will automatically receive an e-mail containing a link to the recording when it is available.

All microphones and phone lines are muted so we ask that you submit questions by typing them into the question box, located in the lower right-hand corner of your screen and click "send."

We'll collect any questions sent throughout the presentation for Andy and he will answer as many as possible during a Q&A segment at the end.

About today's presenter

Prof. Andrew Lane has published over 125 peer refereed articles, authored 2 books and given numerous presentations. His recent work has been part of a 4-year project on emotion regulation on others and self that culminated in an online project in conjunction with the BBC fronted by former athlete Michael Johnson. The project “*Can you compete?*” examines the effects of emotion regulation strategies on emotions and performance has had over 100,000 participants. He actively seeks to transfer his work to practice and the University of Wolverhampton estimate his media exposure to be worth of £1 million in the last 3 years.



Emotion Regulation of Others and the Self (EROS)

ESRC Programme Grant 2008-2013

A Collaborative Research Network

Clinical – Developmental – Neuroscience
Work – Social – Health - Sports

Peter Totterdell
Warren Mansell
Brian Parkinson
David Holman
Pasco Fearon
Thomas Webb
Tom Farrow
Andy Lane
Paschal Shearan

What did EROS achieve?

- 80 journal papers published
- 2 *Books* and 21 chapters to edited books
- 94 conference papers.
- 4 TV broadcasts, 6 radio broadcasts, 8 national and regional newspapers, and 16 professional and lifestyle magazines.
- A BASES expert statement on emotion regulation (and one on music)
- *Advice.* We provided input to the RCUK (2010) report on behaviour change for the House of Lords Select Committee on Science and Technology
- *Website usage.* Our website had 15,575 unique visitors and 58,000 page views during the project.



Aims of my talk

- Identify emotions associated with best and worst performance.
 - ✓ *If I want to perform better, how should I feel?*
- Examine how people change their own emotion –
 - ✓ *If I want to feel better, then how do I do it?*
- Examine how people change someone else's emotions
 - ✓ *How do I change your emotions to help you perform better?*

Emotions and performance



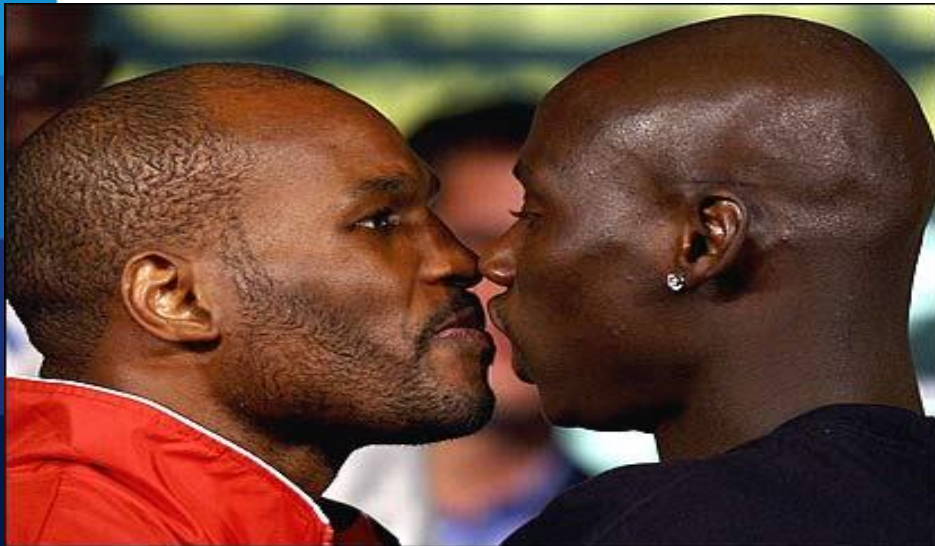
"I was a little bit off. I wasn't really myself.

Anxiety got the better of me. I really wanted to go. I really felt like I wanted to run.

I've never felt like that before at a race,"

Bolt told a news conference

Athletes influence each others emotions



Influencing officials



Emotional control is important

- Player loses temper and kicks a box in front of the umpire's leg



Anecdotal summary

- And so emotions seem to be key?
- Before we invest our resources into trying to improve performance by changing our emotions, we need to be convinced that emotions do influence performance.

What are emotions?



“Everyone knows what an emotion is, until asked to give a definition” (Fehr & Russell, 1984, cited in Parkinson, 2012)

- Emotion is about something;
 - » *You just don't just get angry, you get angry about something!*
- Emotions feel good or bad in some way;
 - » *They are not neutral states of mind*
- Emotions wax and wane over the course of seconds, minutes or hours

Should I Strap A Battery To My Head?
(And Other Questions About Emotion)

'Should I strap a battery to my head?', 'When should I listen to my heart?' and 'Can good moods kill?' – these are some of the many unusual questions about human emotion that psychologists try to answer in this offbeat popular science book, edited by Professor Peter Totterdell and Dr. Karen Niven. For more information visit www.erosresearch.org



Available at Amazon for £8.90

Proceeds go to a mental health charity and to fund research on emotion.

Launch
event Friday
19th October

Free
admission

6pm at University
of Sheffield,
Mappin Hall, Sir
Frederick Mappin
Building, Mappin
Street, S1

Includes screening
of a specially
commissioned
short film by Third
Angel followed by
a Q & A with some
of the scientists
and artists.

Evolutionary perspective

- [Baumeister](#) et al. (2007)

*“if the total **net effect of emotion** were to cause **behaviors that were maladaptive**, such as by reducing survival and reproduction, then **natural selection** would likely have **phased** emotion out of the human psyche” (p. 168).*

- **All emotions have a function!**
- See <http://www.psy.fsu.edu/~baumeistertice/index.html>

Anxiety and anger (Nesse, 2009)

- Emotional states associated with high-action tendencies
- Anger and anxiety have strong physiological response that promote action (withdrawal and approach respectively)
- See <http://www.randolphnesse.com/>



Cont...

- Depression, low action tendency, signals conserve and withdraw.
 - Emotion has social function and so when someone feels down others engage in regulation acts to change that emotions.
 - Sadness is appropriate at a funeral
 - [Beedie](#) (2012) “should I tackle my emotions or let them pass”
 - » *Feeling unpleasant emotions can be a good thing, can help you deal with task demands and provide an important message, and its worth knowing what that message is.*



High Activation

Fear

Surprise

Anger

Excited

Anxiety

Energetic

Unpleasant

Neutral

Pleasant

Disgust

Happy

Downhearted

Relaxed

Sadness

Calmness

Low Activation

Russell, 1980



Emotion appears to be relevant and emotion regulation might be a useful way to improve performance...

LETS LOOK AT SOME OF THE EVIDENCE

Emotion in sport

- Over 500 papers have been published that have examined emotion in sport.
- Emotion is typically assessed using **self-report measures** (see Lane, Beedie & Devonport, 2011).

The BASES Expert Statement on Emotion Regulation in Sport

Produced on behalf of the British Association of Sport and Exercise Sciences by Prof Andy Lane FBASES, Dr Christopher Beedie, Dr Marc Jones, Dr Mark Uphill and Dr Tracey Devonport



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JOANNE
THATCHER,
MARC JONES
AND
DAVID
LAVALLEE

Examples of measures

– Standardised scale

- Profile of Mood States (McNair et al., 1971)
 - Brunel Mood Scale (BRUMS: Terry, Lane et al., 1999, 2003) ([available on-line](#))
- Sport Emotion Questionnaire ([Jones](#), Lane et al., 2005)
- Competitive State Anxiety Inventory-2 (Martens et al., 1990)
- Individualised approaches
 - ✓ Hanin (2010)
 - ✓ [See also Hanin 2003](#)



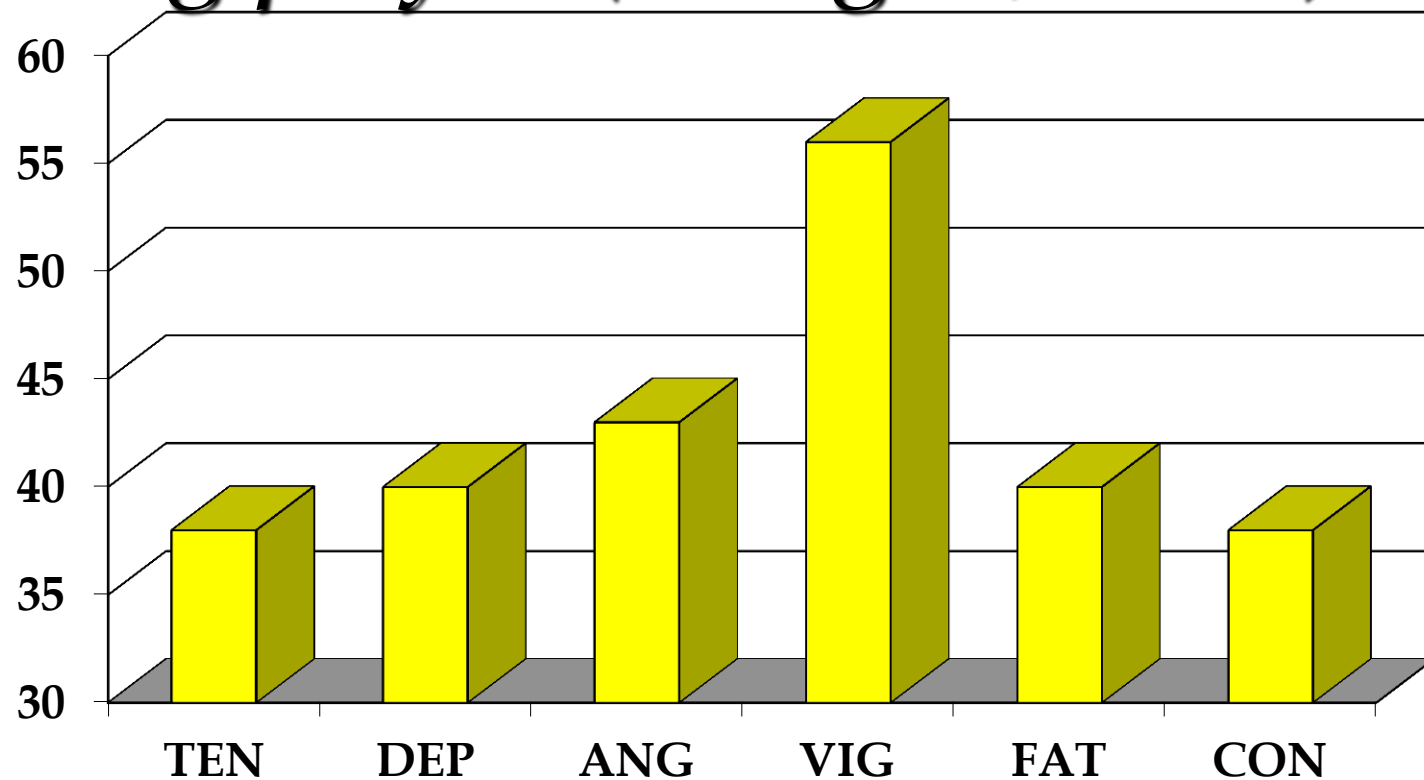
PROFILE OF MOOD STATES

Below is a list of words that describe feelings people have. Please read each one carefully. Then circle the answer which best describes **HOW YOU FEEL RIGHT NOW**. Make sure you answer every question.

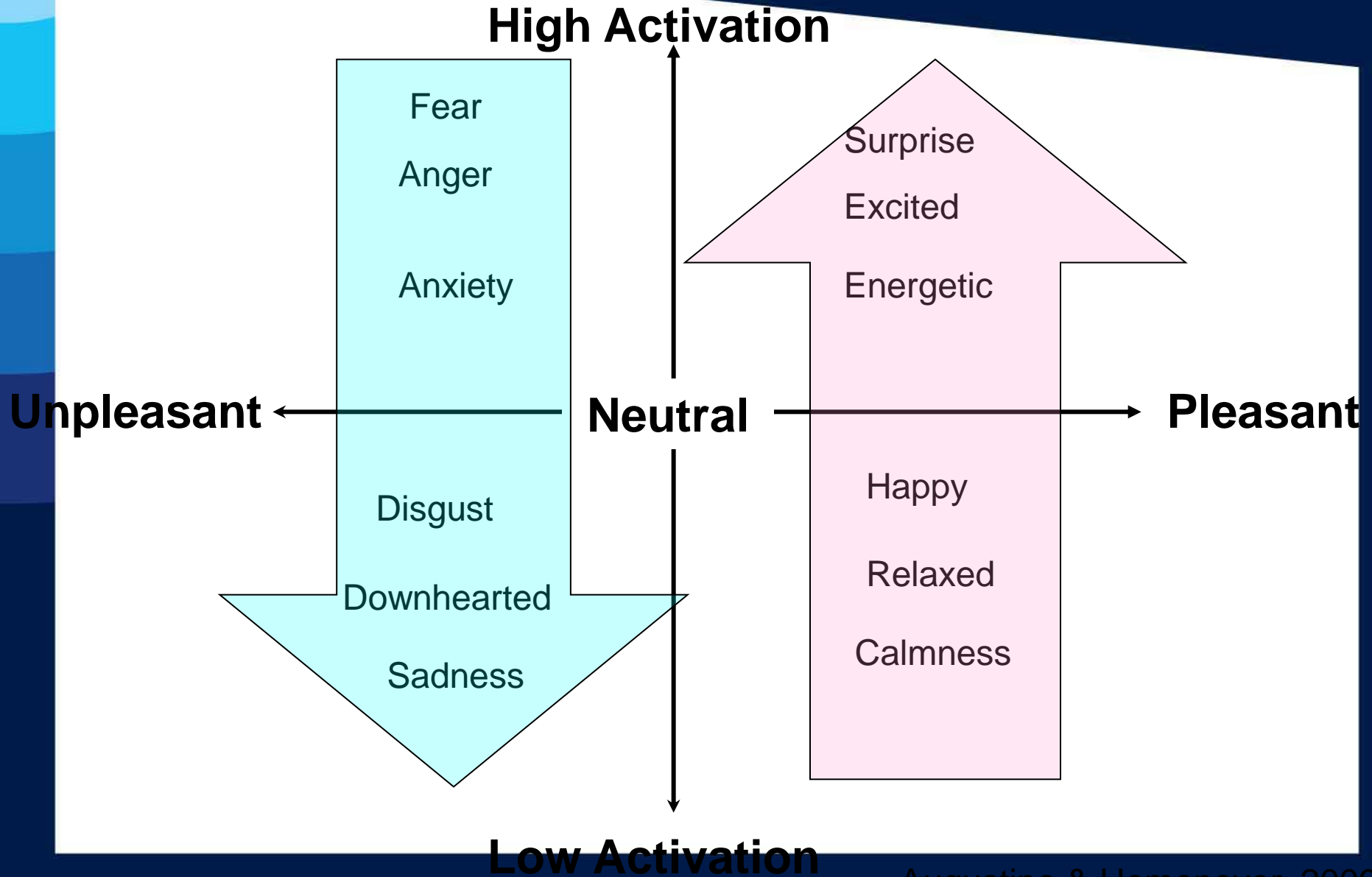
	Not at all	A little	Moderately	Quite a bit	Extremely
1. Panicky	0	1	2	3	4
2. Lively	0	1	2	3	4
3. Confused	0	1	2	3	4
4. Furious	0	1	2	3	4
5. Worn out	0	1	2	3	4
6. Depressed	0	1	2	3	4

(Terry, Lane, Lane, & Keohane, 1999)

Early findings: Iceberg profile (Morgan, 1980)



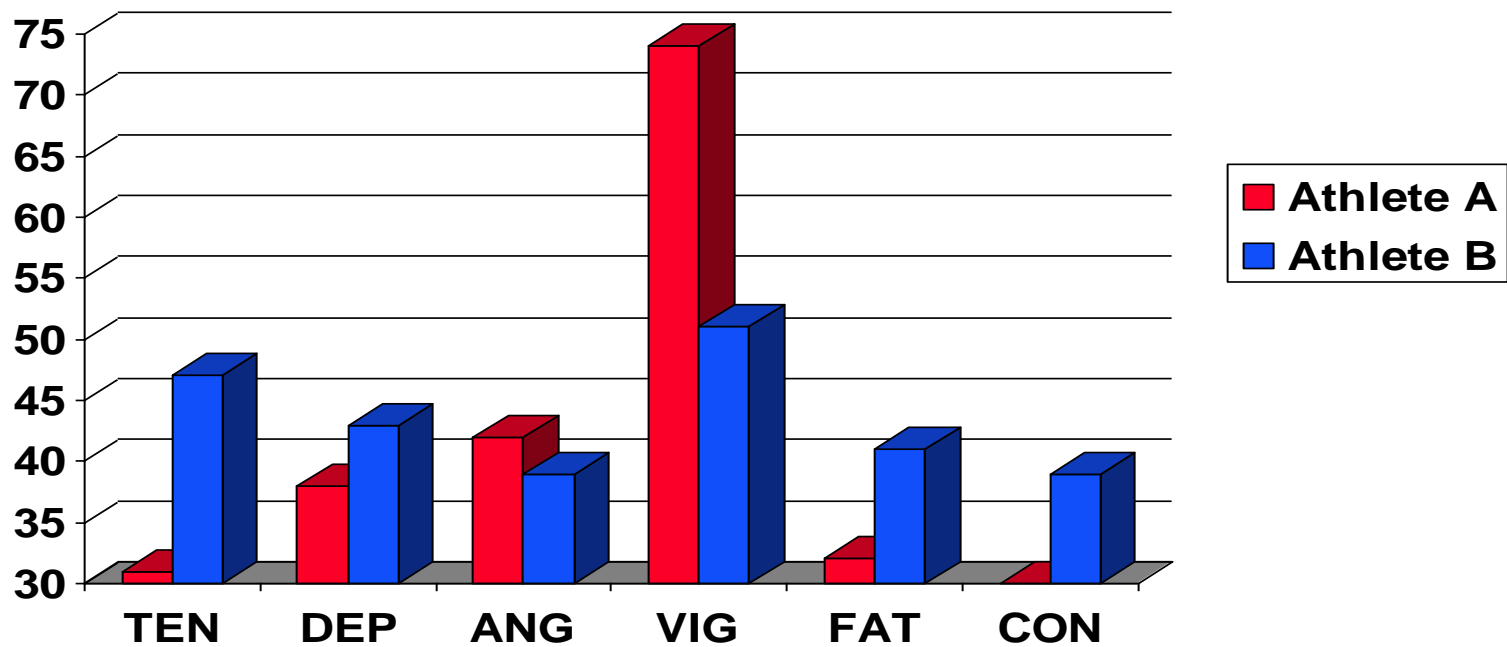
Hedonic Emotion Regulation



Testing the iceberg

- Meta analysis (Beedie [et al., 2000](#)) results indicated that:
 - Vigour associated with successful performance
 - Confusion, and depression associated with poor performance.
 - Effects were small and inconsistent for Anger and Tension.
 - Anger and Tension were associated with good performance in some studies (e.g., Cockerill, Nevill, & Lyons, 1991).

Mood profiles for two athletes prior to World Cup winning performances



(Terry, 1992)

Individualised emotional profiling

Negative

Positive

Harmful: (N-)

- Tired
- Sluggish
- Unwilling
- Uncertain
- Downhearted
- Depressed
- Distressed
- Sorrowful
- Afraid
- Strained

Helpful (N+)

- Tense
- Dissatisfied
- Vehement
- Attacking
- Intense
- Angry
- Irritated
- Nervous
- Provoked
- Restless

Helpful (P+)

- Energetic
- Confident
- Charged
- Certain
- Motivated
- Purposeful
- Willing
- Cheerful
- Enthusiastic
- Alert

Harmful (P-)

- Easy-going
- Tranquil
- Satisfied
- Overjoyed
- Excited
- Pleasant
- Comfortable
- Calm
- Exalted
- Nice

Summary of anxiety research

- *“Many athletes maintain high levels of performance when they reported feeling intense anxiety and tended to see anxiety as helpful of performance”*
 - *Questionnaire based studies*
 - *Open-ended interview studies*
 - *Intervention studies* (see Hanton et al., 2008; Wagstaff, Neil, Mellalieu, & Hanton, 2011).

Instrumental emotion regulation



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KNOWLEDGE • INNOVATION • ENTERPRISE

High Activation

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Anger

Anxiety

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Energetic

Unpleasant

Neutral

Pleasant

Disgust

Downhearted

Sadness

Happy

Relaxed

Calmness

Low Activation

My desired emotions? depends on what I am doing?

- Hedonic
 - To feel happier, calmer, cheerier and to reduce anxiety, anger, misery
- Instrumental
 - What emotions help me achieve my goal in the short-term?

- Now some of our studies.....

Managing and running our projects

- Data collection issues
- Engagement with users of research to do research that people want




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Monthly Tips | Rough Guide | **Andy Lane on Motivation**

Professor Motivation

Five tips to train your mind

As well as working with athletes at Olympic and World championship level, Andy has authored two books, written numerous articles in specialist magazines such as Peak Performance and given over 100 conference presentations.


Here are his five pearls of wisdom about how to get into great shape for marathon running. Andy's marathon PB is 3:05. He's clever and quick.



Andy on brain training

1. Running Music: Like a legal way of cheating. (43 seconds)
2. Good mental as well as physical strength... (53 seconds)
3. How anxiety can become motivational... (43 seconds)
4. If / Then planning. (38 seconds)

Andy on the research with Runners World



CAN YOU COMPETE UNDER PRESSURE?

- Get your performance analysed by Michael Johnson
- Help investigate the psychology of pressure
- Takes just 20 minutes

[→ Start the experiment](#)

You will need to [sign in](#) or [register](#)

Before you start...

Before you start the experiment, please be aware that...

→ This test uses the 'Flash' plug-in and works best on desktop and laptop devices.

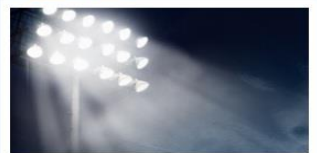
Also on Labuk

→ [What is Lab UK?](#)
More about the website where you can take part in real science experiments.

Get in touch


If you would like to make a comment about Can You Compete Under Pressure? please [contact us](#).

About the test



Professor Andy Lane explains the science behind the test and what the experiment is seeking to discover.

Frequently asked questions



Find out all you need to know about taking the test, how the data will be used and when the overall results will be announced.

www.bbc.co.uk/compete

RACING

You are looking at: Home : Racing

Sound Mind, Sound Body: How to Beat Pre-Race Nerves

Professor of Psychology Andy Lane explains how positive thinking can improve performance



Posted: 1 November 2010

by Andy Lane, Ruth Emmett



You've trained wisely and eaten well - but you just can't shake those pre-race nerves. So how can you work on mental preparation? To find out, I teamed up with researchers from Sheffield, Oxford, Manchester, Reading and Wolverhampton universities. We tried and tested five ways of boosting runners' moods. Before following the strategies, most of the runners under-performed; afterwards, 70 per cent of them improved their performances. Here are the secrets of their success.

Strategy 1: If-Then Planning

This is a strategy of two halves. First, identify the barrier, then work out a possible solution. This forms an 'if-then' mantra: "If I feel anxious, then I remember that even my worst performance is pretty good." Or, "If I feel sluggish, then I ask myself, 'Can I take another step?' The answer is yes." Each runner in our study repeated their mantra in the morning and before training. It works because you can automatically implement the solution as soon the problem arises.



Professor Motivation

Five tips to train your mind



As well as working with athletes at Olympic and World championship level, Andy has authored two books, written numerous articles in specialist magazines such as Peak Performance and given over 150 conference presentations.

Here are his five pearls of wisdom about how to get into great shape for marathon running. Andy's marathon PB is 3:09, he's clever and quick.



Andy on brain training

1. Running Music. Like a legal way of cheating...
(48 seconds)



2. Build mental as well as physical strength...
(53 seconds)



3. How anxiety can become motivational...
(43 seconds)



4. If / Then planning...

Andy on the research with Runners World



How do people want to feel?
And what strategies do people use to achieve this state?

Scand J Med Sci Sports 2011; 21: e445–e451
doi: 10.1111/j.1600-0838.2011.01364.x

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SCANDINAVIAN JOURNAL OF
MEDICINE & SCIENCE
IN SPORTS

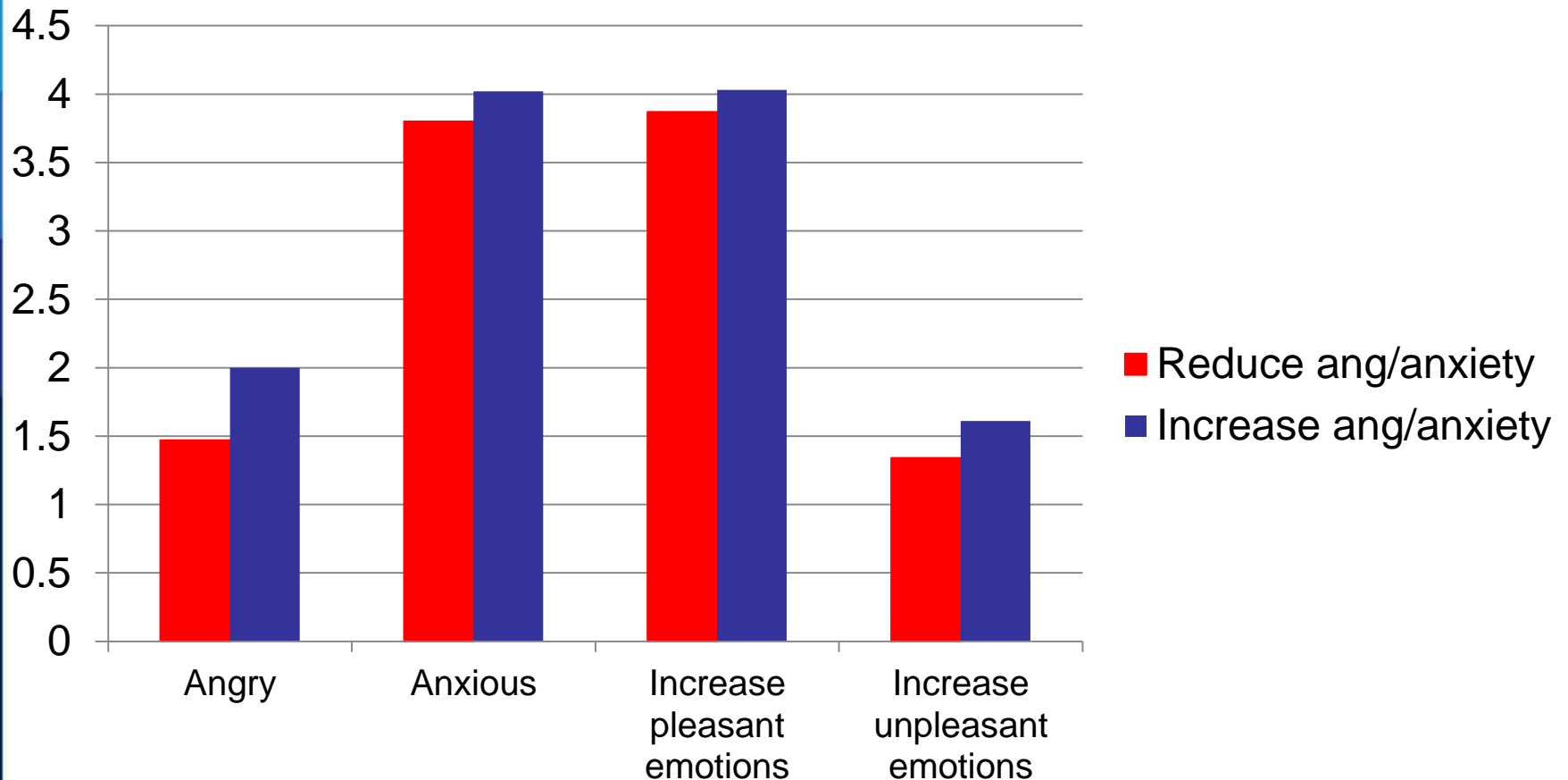
Instrumental emotion regulation in sport: relationships between beliefs about emotion and emotion regulation strategies used by athletes

A. M. Lane, C. J. Beedie, T. J. Devonport, D. M. Stanley

Results

- 55 runners (15%) reported meta-emotion beliefs that strategies aimed at increasing anxiety and/or anger would help performance
- 305 runners (85%) reported beliefs that strategies intended to reduce the same emotions before competition would help performance.

Descriptive statistics for emotions and emotion regulation strategies between participants wishing to increase anger or anxiety and those wishing to decrease anger or anxiety



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- Takes just 20 minutes

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Professor Andy Lane
Social Science Cluster Chair



May 1st 2012

BBC Sign in News Sport Weather iPlayer TV Radio

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Hosted by Alex Jones, Matt Baker and Chris Evans, and aided by a team of top reporters, The One Show is a live magazine programme featuring topical stories and big name studio guests.

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BBC RADIO 4 LISTEN LIVE

On Air Now



ON AIR NOW 22:00 - 22:45
The World Tonight 11/04/2013
In-depth reporting and analysis from a global perspective with Carolyn Quinn.

NEXT 22:45 - 23:00
Book at Bedtime
How Many Miles to Babylon?, Episo...



COMING UP 23:00 - 23:30
Jon Ronson On
Brainstorming

BBC News Sport Weather iPlayer TV Rad

NEWS COVENTRY & WARWICKSHIRE

Home World UK England N. Ireland Scotland Wales Business Politics Health Education Sci/Enviv

iPlayerRadio) WHAT'S NEW? (Stations)

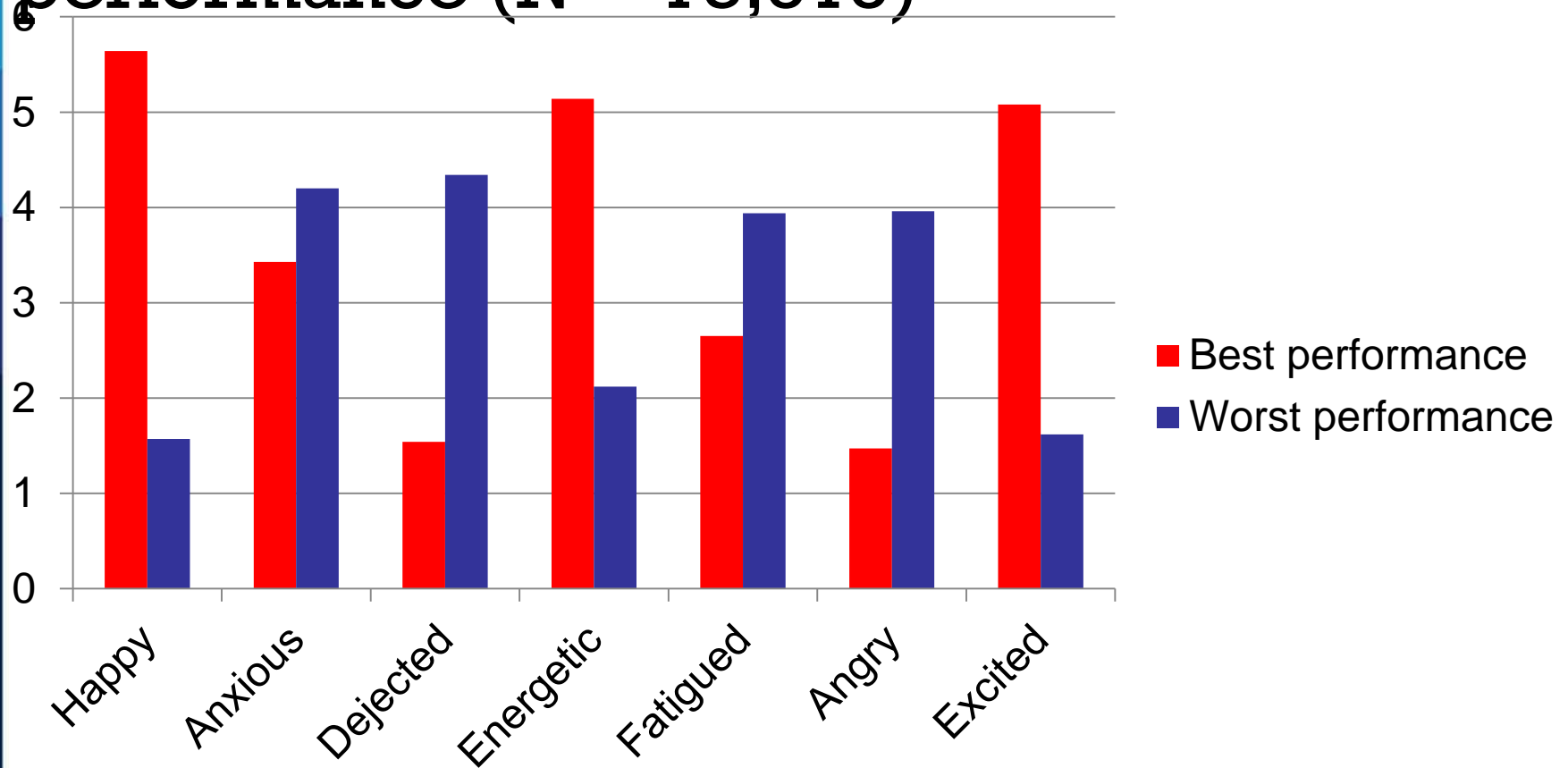
BBC OXFORD LISTEN LIVE

On Air Now

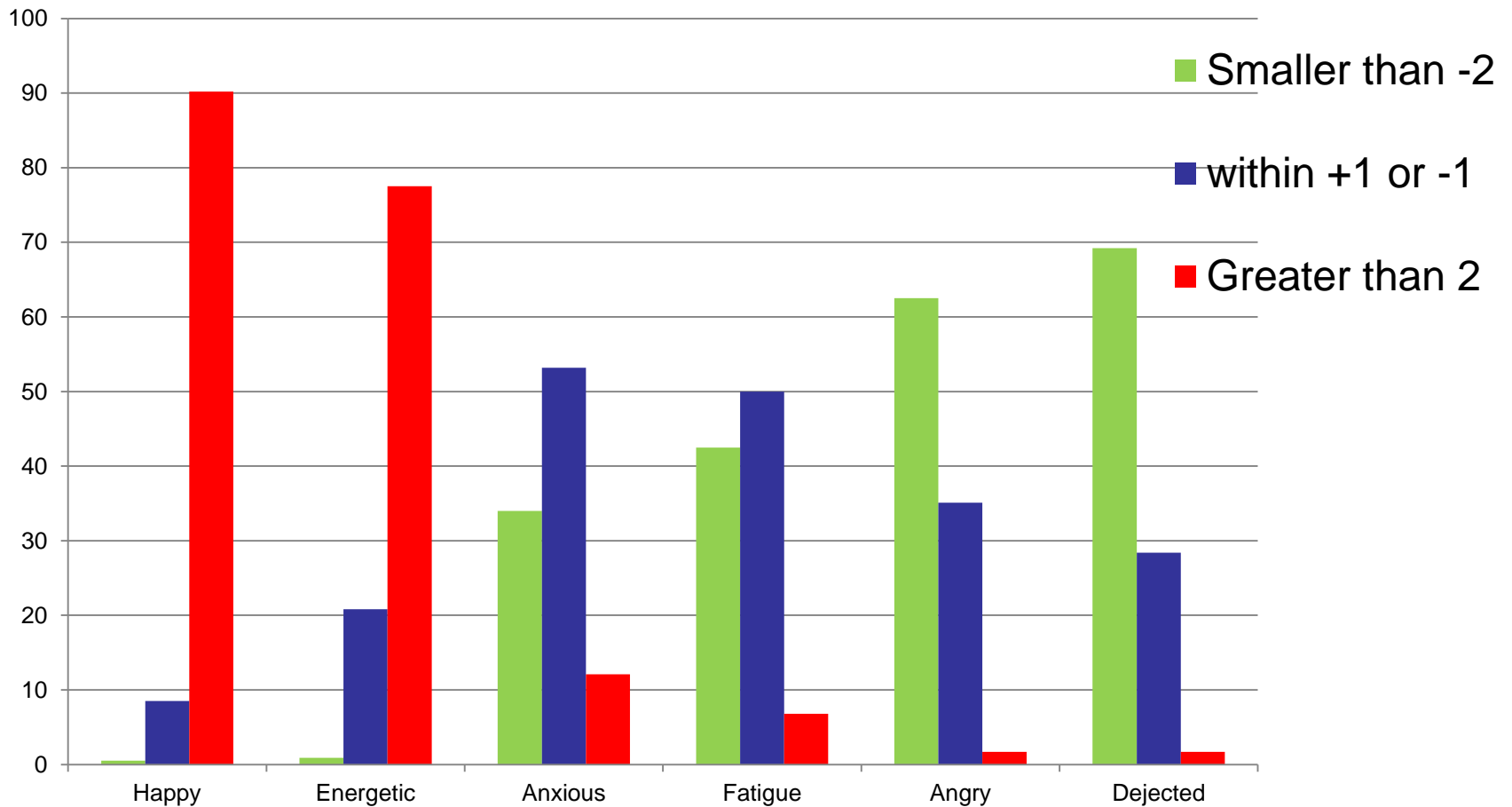
ON AIR NOW 22:00 - 1:00

Preliminary BBC results...

Emotions association with best and worst performance (N = 73,515)

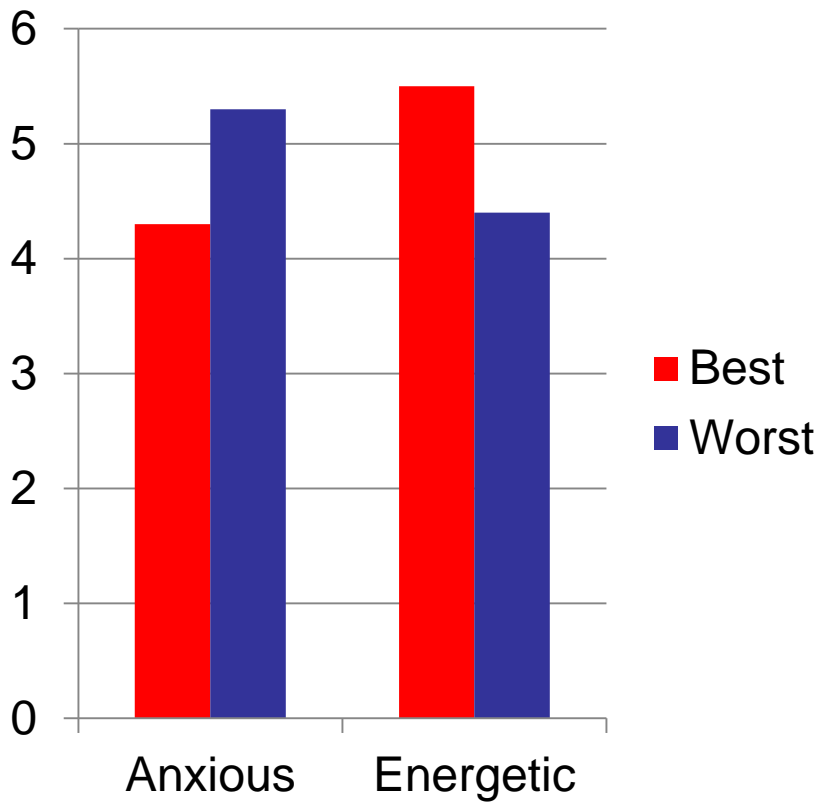


Differences between best and worst performance



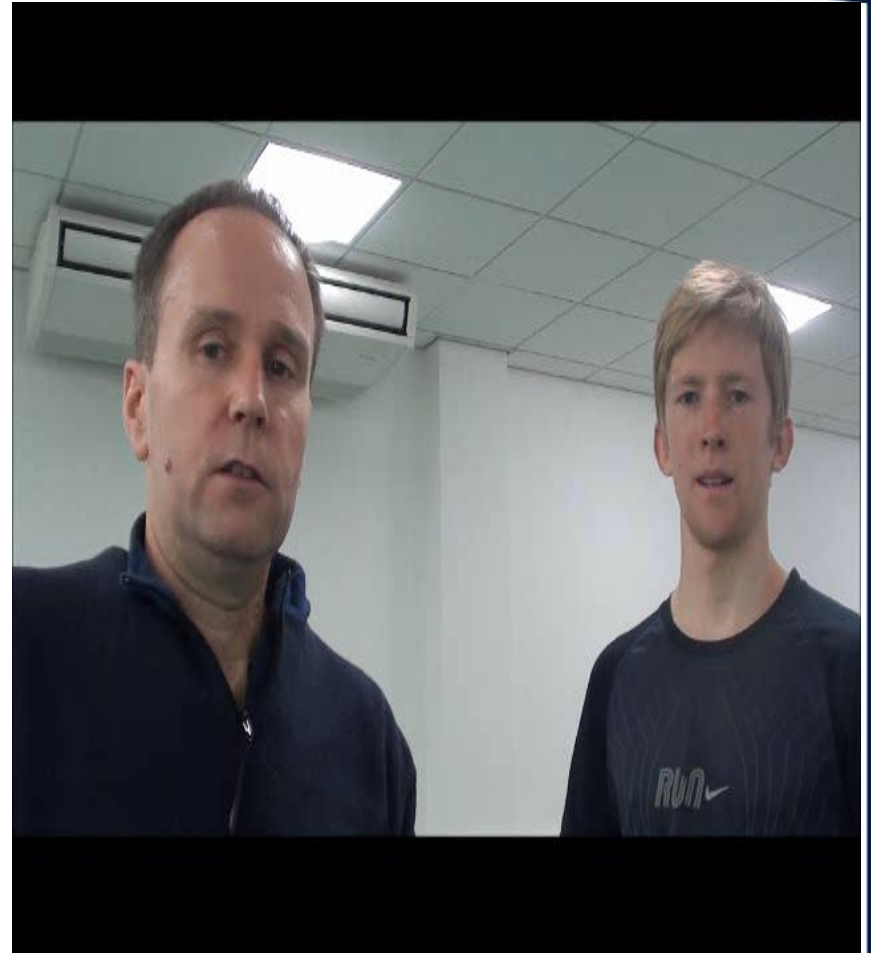
Example of an athlete

Emotions and performance



Summary so far....

- High anxiety might not always be seen as harmful and high happiness be seen as helpful
- Emotions have a signal function and listening to that message can indicate whether regulation is needed



How should I feel?

- Identify emotional states associated with best and worst performance, exploring the strength of meta-emotion beliefs on the proposed functionality of emotions.
- Help athletes examine the perceived cause of their feelings and if change is desired, help them re-appraise the meaning.

The BASES Expert Statement on Emotion Regulation in Sport

Produced on behalf of the British Association of Sport and Exercise Sciences by Prof Andy Lane
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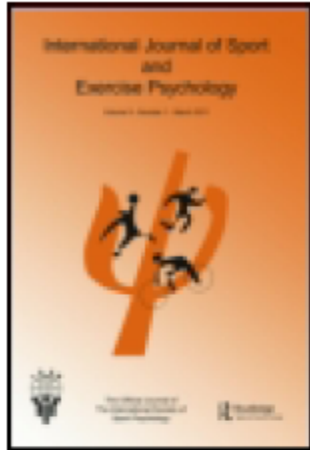
Let's look at the strategies people use

Emotion regulation strategies

- Over 400 different strategies reported in the literature (cognitive and behavioural distinction, Parkinson & Totterdell, 1999)
 - See [EROS website](#)
- Most sport psychology interventions also act as emotion regulation interventions (Jones, 2003).

Meta-analysis of emotion regulation strategies (Webb et al., 2012)

- Systematic search of the literature identified 306 experimental comparisons of different emotion regulation (ER) strategies.
- [Webb, Miles, and Sheeran \(2012\)](#) emphasized the effectiveness of re-appraisal as an emotion regulation strategy.
 - Changing the interpretation of a situation so that success was more likely to be the outcome was an efficacious emotion regulation strategy.
 - For example, if an athlete engages in self-talk to try to strengthen her beliefs that she will perform successfully during competition, this could also help manage her emotions.
- Webb et al (2012) also found support for the effectiveness of re-appraising the emotional experience.
 - Re-appraising intense anxiety as readiness for competition (e.g., Hanton & Jones, 1999).



International Journal of Sport and Exercise Psychology

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/rijs20>

Emotion regulation strategies used in the hour before running

Damian M. Stanley ^a , Andrew M. Lane ^a , Christopher J. Beedie ^a , Andrew P. Friesen ^a & Tracey J. Devonport ^a

^a School of Sport, Performing Arts and Leisure, University of Wolverhampton, Walsall, UK

Available online: 05 Apr 2012

To cite this article: Damian M. Stanley, Andrew M. Lane, Christopher J. Beedie, Andrew P. Friesen & Tracey J. Devonport (2012): Emotion regulation strategies used in the hour before running, International Journal of Sport and Exercise Psychology, DOI:10.1080/1612197X.2012.671910

To link to this article: <http://dx.doi.org/10.1080/1612197X.2012.671910>

Stanley et al. Summary

- Emotion regulation strategies and performance management strategies can be closely aligned
- Stanley et al identified a number of different strategies that people use:
- Lets look at them; there should be some that you will recognise



International Journal of Sport and
Exercise Psychology

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subscription information:

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**Emotion regulation strategies used in
the hour before running**

Damian M. Stanley^a, Andrew M. Lane^a, Christopher J. Beedie^a,
Andrew P. Friesen^a & Tracey J. Devonport^a

^aSchool of Sport, Performing Arts and Leisure, University of
Wolverhampton, Walsall, UK

Available online: 05 Apr 2012

Stanley et al. (2012)....

- *Goal setting*
 - “I thought about my targets to make myself feel better”,
 - “I was raising money for charity so I focused on the benefits”
- *Listening to music*
 - “played music to make me more aggressive”,
 - “upbeat music to feel better and energised before a run”).
- *Visualisation*
 - “picture myself finishing the race and in the time I wanted”, “
 - “I tried to imagine reaching a difficult point in the race and how that would feel, then imagined myself overcoming the difficulty and running strong
- *Physical preparation*
 - “Jogged to warm up and distract myself from my anxiety
- *Task focus*
 - “Repeated words in my head to replicate what I hoped to be running like, e.g., ‘smooth, strong, flow’
 - “Concentrated on breathing and rhythm to stay focused on my goal”, “Tried to concentrate on good technique and feeling relaxed”).

- *Race planning/strategy*
 - *“Just went through what I knew I needed to do in the race”).*
- *Distraction*
 - *“I chatted to friends and strangers before the run to take my mind off the distance”, “I distracted myself by watching other people around me and listening in to their conversations”).*
- *Downplaying outcomes*
 - *“thought that in the grand scheme of things performance in this race really did not matter all that much, which took pressure off and helped me to relax”.*

- **Active enjoyment**

- “I focused on ... and on enjoying the run”, “Tried to remember this was for fun”),

- **Anticipated benefit**

- “I thought about the benefits of exercise and dwelt on knowing a run would be good for me”, “I remind myself how good I feel afterwards and how running helps my body to be reasonably slim and fit”).

- **Anticipated unpleasant emotions after running**

- “thought about how embarrassed I would feel if I complete the race in a bad time”,

- **Self in relation to others**

- *“Just talked to others about how I felt, telling them that I knew I would not perform well since I felt sluggish*

- **Giving social support**

- *“positive messages to less experienced runners”, or “talking to someone else in the same situation, trying to reassure them”.*

- **Social comparison**

- *“compare myself to other runners on the start line and tell myself that I am faster than her”, or having “focused on the fact that hundreds of other people would run more slowly than me”.*

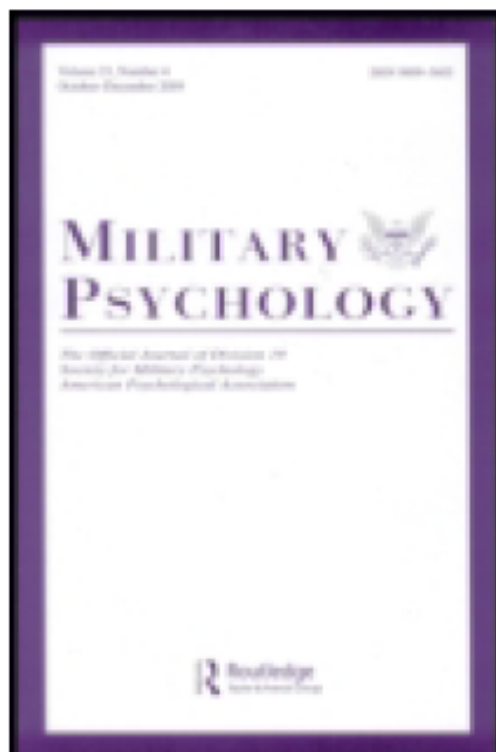
- Drawing inspiration from loved ones
 - *“looking at photos of family and friends”, or thinking “about the love of my family and my lost brother and the love I had for past lovers”*
- Avoiding others
 - *“Kept myself to myself, tried to allow time to pass me by”, “Keep away from other runners as much as possible”*
- Drawing inspiration from loved ones
 - *“looking at photos of family and friends”, or thinking “about the love of my family and my lost brother and the love I had for past lovers”*
- Avoiding others
 - *“Keep away from other runners as much as possible”*
- *For a further study see*

Stanley et al (2012)

- ***Summary***
- In running, findings indicate that emotion regulation and performance management are closely related.



- We have looked at emotion and emotion regulation in a range of different situations
 - Work, sport, extreme conditions, ultra-endurance, laboratory, military
 - Here are some of the findings



Military Psychology

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/hmlp20>

Emotions and Emotion Regulation Among Novice Military Parachutists

Andrew M. Lane ^a , Gordon Bucknall ^a , Paul A. Davis ^a & Christopher J. Beedie ^a

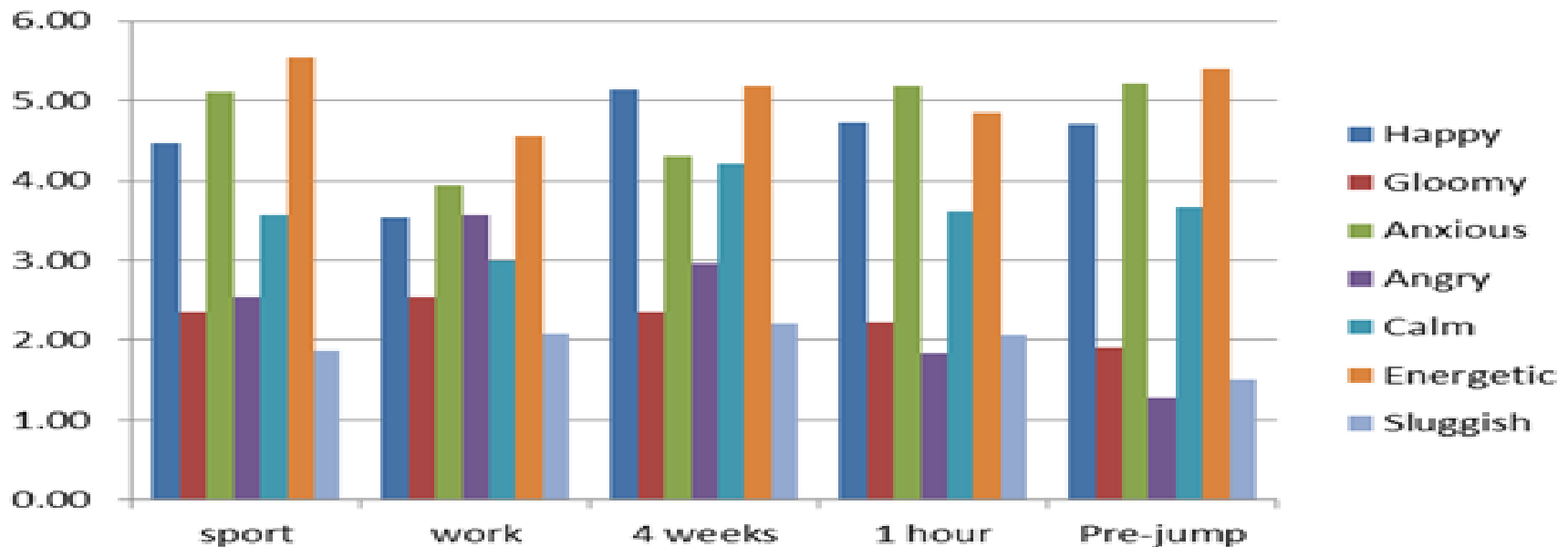
^a School of Sport, Performing Arts, and Leisure, University of Wolverhampton, Walsall, United Kingdom

Available online: 08 May 2012

To cite this article: Andrew M. Lane, Gordon Bucknall, Paul A. Davis & Christopher J. Beedie (2012): Emotions and Emotion Regulation Among Novice Military Parachutists, *Military Psychology*, 24:3, 327-341

To link to this article: <http://dx.doi.org/10.1080/08995605.2012.678244>

Emotions in sport compare with those experienced in military settings



Emotions experienced in sports competition were argued to help prepare for parachutist's 1st jump

WILDERNESS & ENVIRONMENTAL MEDICINE, **22**, 333–337 (2011)

WILDERNESS &
ENVIRONMENTAL
MEDICINE

Official Publication of the Wilderness Medical Society
Volume 22 • Number 4 • 2011
wms.org



BRIEF REPORT

Keeping Your Cool: A Case Study of a Female Explorer's Solo North Pole Expedition

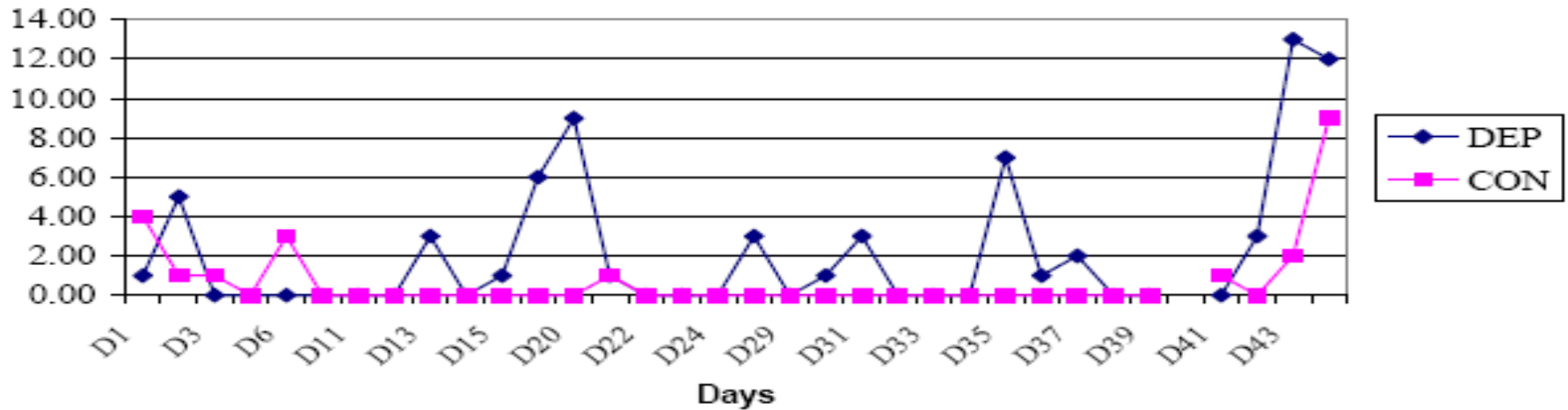
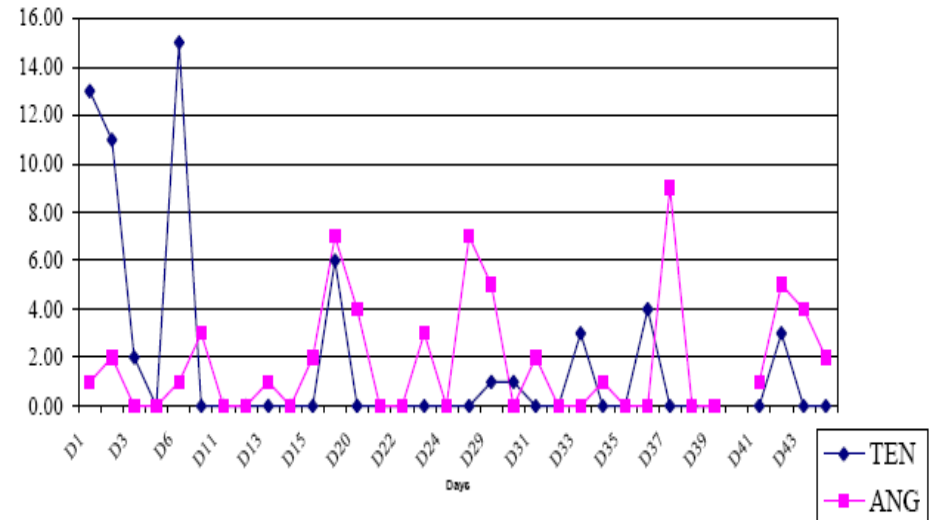
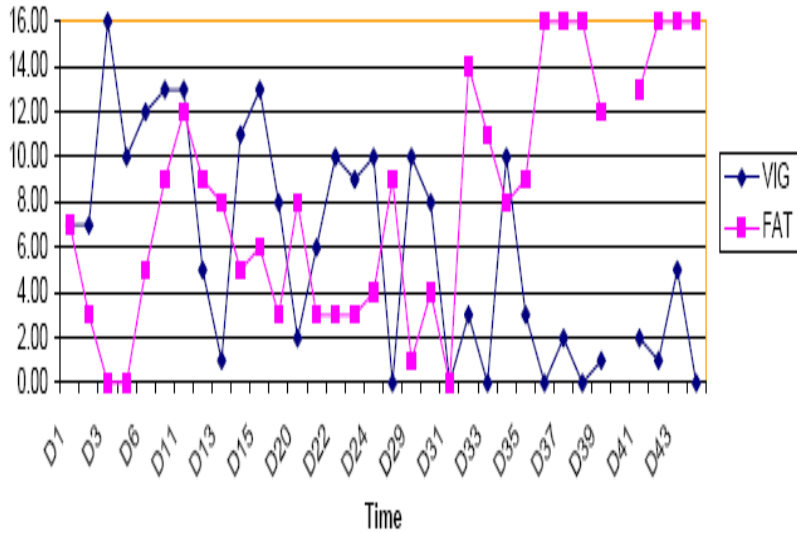
Tracey J. Devonport, PhD; Andrew M. Lane, PhD; Juliette Lloyd, MSc

From the University of Wolverhampton, Department of Sport & Physical Activity Walsall, West Midlands, United Kingdom (Drs Devonport and Lane), and English Institute of Sport, United Kingdom (Ms Lloyd).

Story of an explorer: North and South Pole Expeditions

- Female explorer, aged 43
- South Pole expedition (Pedlar et al., 2007; Lloyd et al., 2007).
 - 44 day expedition
- North Pole expedition
 - 84 day and 525 kilometers

Results: Extreme fluctuations in emotions



Training strategies to manage emotions

- Anticipating feelings during extreme conditions and training in the cold (performance accomplishments, Bandura, 1997)
 - *“I was being prepared very realistically to react to certain situations, it wasn’t always the serenity of the gym...it was in the dark, in the cold or basically uncomfortable, when one wasn’t in the **mood or feeling tired because that was how it was going to be.** I had to prove to myself that I could do that and not lose focus on the end goal*

Improving own emotions

- **Caring about yourself like a dear friend:
coping with front bite:**
 - *“I pretended it wasn’t my foot, but I was very fond of that foot so I always treated it with great **affection** and care, and that helped me disembody myself from the nastiness”.*

Regulating Others and Own emotions

- **Enhancing own and others emotions**

- *“I spoke to my partner several times which I’ve never done on an expedition before because I didn’t want that emotional tug back all that time”.*
- *“We had to talk practicalities because of the support team problems arising”.*

Avoiding use of dysfunctional and worsening strategies

- “*you must be careful not to slip into a victim mentality*”.



Devonport et al summary

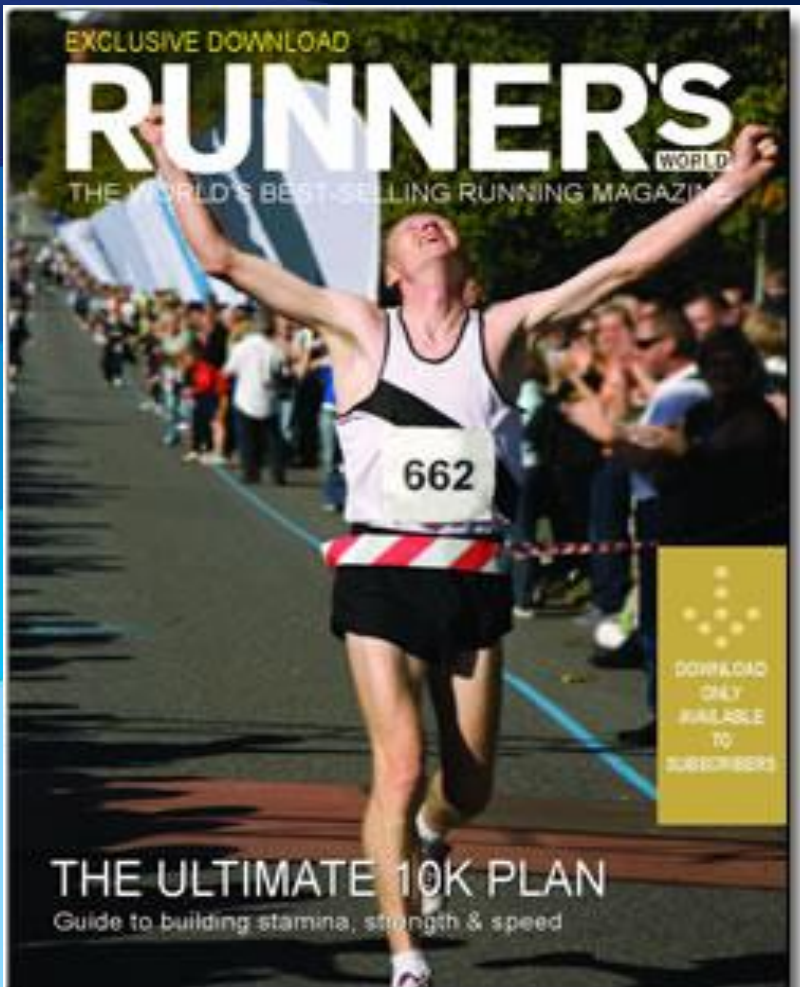
- Proactive effort to engage in strategies intended to enhance own emotions
- Conscious rationalisation of potentially negative effects of using strategies intended to worsen emotion
- [For further research](#)

Emotion regulation in running:



UNIVERSITY OF
WOLVERHAMPTON
KNOWLEDGE • INNOVATION • ENTERPRISE

Self-help interventions



First presented by Andy Lane
*at the Stress Anxiety Research
Conference, Galway, 2010*

*Supported by Runner's World and
Audiofuel*

Paul Davis, Tracey Devonport, Helen Lane,
Cat Swift, Paschal Sheeran, Peter
Totterdell & Tom Webb

Overview

- Runners signed up for 3-stage intervention study.
 - **Stage 1**,
 - 1110 runners registered interest by completing measures of emotion, emotion regulation, psychological skills, and emotional self-efficacy.
 - Runners competed in events from 5km to 100km races.
 - Runners trained for an average of 8 hours per week and had been competing for 5 years.
 - **Stage 2**, runners attempted to complete their self-set goal, completing measures of emotion and emotion regulation
 - **Stage 3**, runners followed one of 5 interventions and then repeated stage 2.

Interventions

- ✓ Self-selected music
- ✓ Music as a pacing strategy
- ✓ If-then planning
- ✓ Goal setting
- ✓ Self-regulation

For music research see, Karageorghis, C. I., Terry, P. C., Lane, A. M., Bishop, D. T., & Priest, D.L (2011). The BASES Expert Statement on the use of music in exercise. *The Sport and Exercise Scientist*, 28, 18-19.

<http://www.bases.org.uk/Music-in-Exercise>

For practical guide, see also

Music conditions

Self-selected music vs Audiofuel

- **Self-selected Music**

- Participants provided with instructions on how to select music that might help attain their goal

- » E.g.,. Rhythm
- » Inspirational lyrics

	✓ Name	Time	Artist	Album	Genre	Rating	Plays
90s Music	1 ✓ NEWTOWN NEUROTICS - F...	3:25					160
Classical Music	2 Persons Unknown (Live)	4:06	Poison Girls	Real Woman	Rock		153
Music Videos	3 Oh Bondangel Up Yours!	2:51	X-Ray Spex	Let's Submerger: The...	Pop		108
My Top Rated	4 ✓ Siouxsie and The Banshees - Pulle...	3:49		Siouxsie and the Ba...			104
Recently Added	5 Fly From Here - Overture	1:54	Yes	Fly From Here	Rock		99
Recently Played	6 Stone Heroes	3:17	Penetration	The Best Of Penetra...	Rock		94
Top 25 Most Played	7 Propaganda	3:06	Theatre Of Hate	Revolution	Rock		89
marathon 7	8 Germ Free Adolescents	3:12	X-Ray Spex	Germ Free Adolesce...	Alternative...		89

- **AudioFuel** (a company who create music to listen to whilst running)



- Participants selected tempo in relation to intended running speed



0 items £0.00 Login

AUDIOFUEL
- MUSIC + SPORT -

RUN TRIATHLON BIKE SWIM FREE

DOWNLOAD AND TRY AUDIOFUEL TODAY

If-then planning (see [Achtziger, Gollwitzer, & Sheeran , 2008](#))

- **Barriers to performance “IF”**

- *“If I feel gloomy”*
- *“If I feel anxious”*
- *“If I feel sluggish”*

- **Solution to barriers “THEN”**

- *“Then I will focus on running efficiently reinforcing the message to continue putting one leg in front of the other”*
- *“Then I will ask myself, can I take another step, and I will always answer yes to that question”*



IF-THEN PLAN

- *“If I feel anxious, then I will tell myself to relax”*

Emotion goal-setting

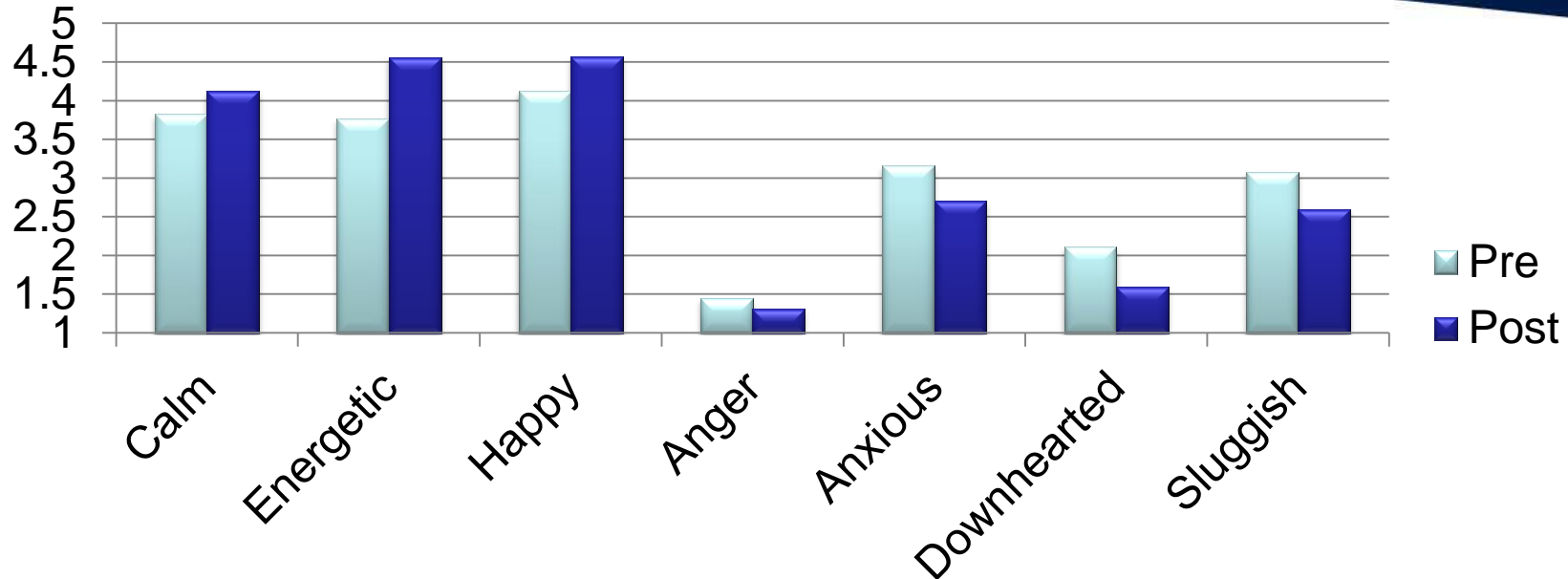
- “I plan to focus on the rhythm of my running”
- “I plan to think about my positive characteristics”
- “I plan to think of positive aspects of my situation”
- “I plan to dissociate with running for a while by humming the tune of selected songs in my head”



Psychological skills (control conditions)

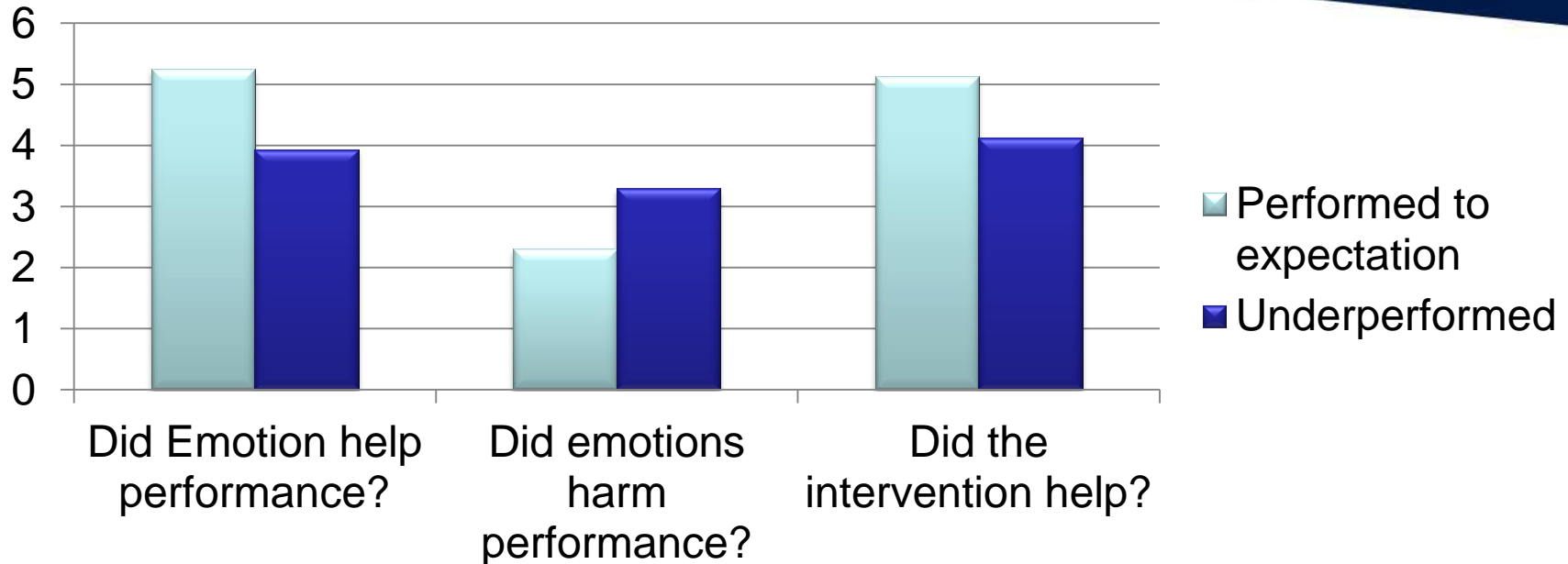
- “I plan to set a realistic but challenging goal for each run”
- “I plan to energize myself during each run”
- “During training runs, I aim to focus my attention effectively”
- “If things are going poorly in runs, I plan to stay in control of myself emotionally”
- “During runs, I am to let running flow naturally”

Results



- Significant pre and post test differences in emotions
- No significant interaction effect; both interventions were effective

Role of beliefs



- Athletes who believed emotions influence performance gained the most benefit from the intervention

Intervention: Conclusions

- Intervention associated with improved performance
- Increased use of emotion regulation strategies suggests runners made conscious effort to manage emotions
- Beliefs that emotions influence performance and the intervention can help was important factors contributing to this process
- Practical tips see



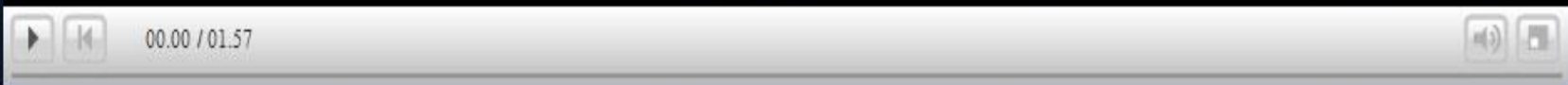
MarathonTALK

http://www.marathontalk.com/podcast/episode_166_ric_hard_whitehead.php



Current project

- Intervention study “Can you compete”
- Currently analysing data.....



If-then

This involves identifying a problem and preparing a solution



Self-talk

This involves changing your thoughts in a positive way



Visualisation

This involves imagining and preparing for different scenarios

The videos above show all the different psychological techniques being tested in 'Can you compete under pressure?' Psychological skills are highly personal – what works for one person may not work for another. So try the different techniques to see what works for you in the situations where you need to perform at your best.

- And so the message is clear:
- Identify emotions associated with best performance
- Identify strategies that help get you closer to that ideal state
- Use those strategies.....
 - BUT.....

Self-control and emotion regulation

- Self-control proposed to be fundamental for performance (Baumeister, et al., 1998)
- Self-control uses resources such as glucose ([Gailliot et al., 2007](#); Hagger et al., 2010)
- Emotion regulation is a form of self-control ([Niven, Totterdell et al., 2012](#))

Regulating emotions is effortful (Baumeister & Muraven, 2000)

Glucose
(mg/dL)

106
104
102
100

Using self-control lowers
blood glucose (Gailliot et
al., 2007)

Control Attention Watch Normally

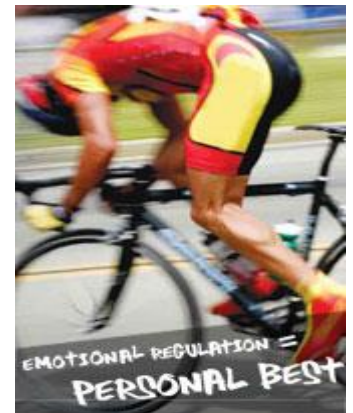
See

<https://www.youtube.com/watch?v=vefDeoXCBbk>

XCBbk

Key point

- If emotion regulation is an effortful process (Muraven & Baumeister, 2000), and uses glucose and other physiological factors then it uses the same physiological resources that are required for performance.



Emotions and physiological responses riding at lactate threshold for 2 hours

Applied Psychophysiology and Biofeedback

September 2011, Volume 36, Issue 3, pp 181-184

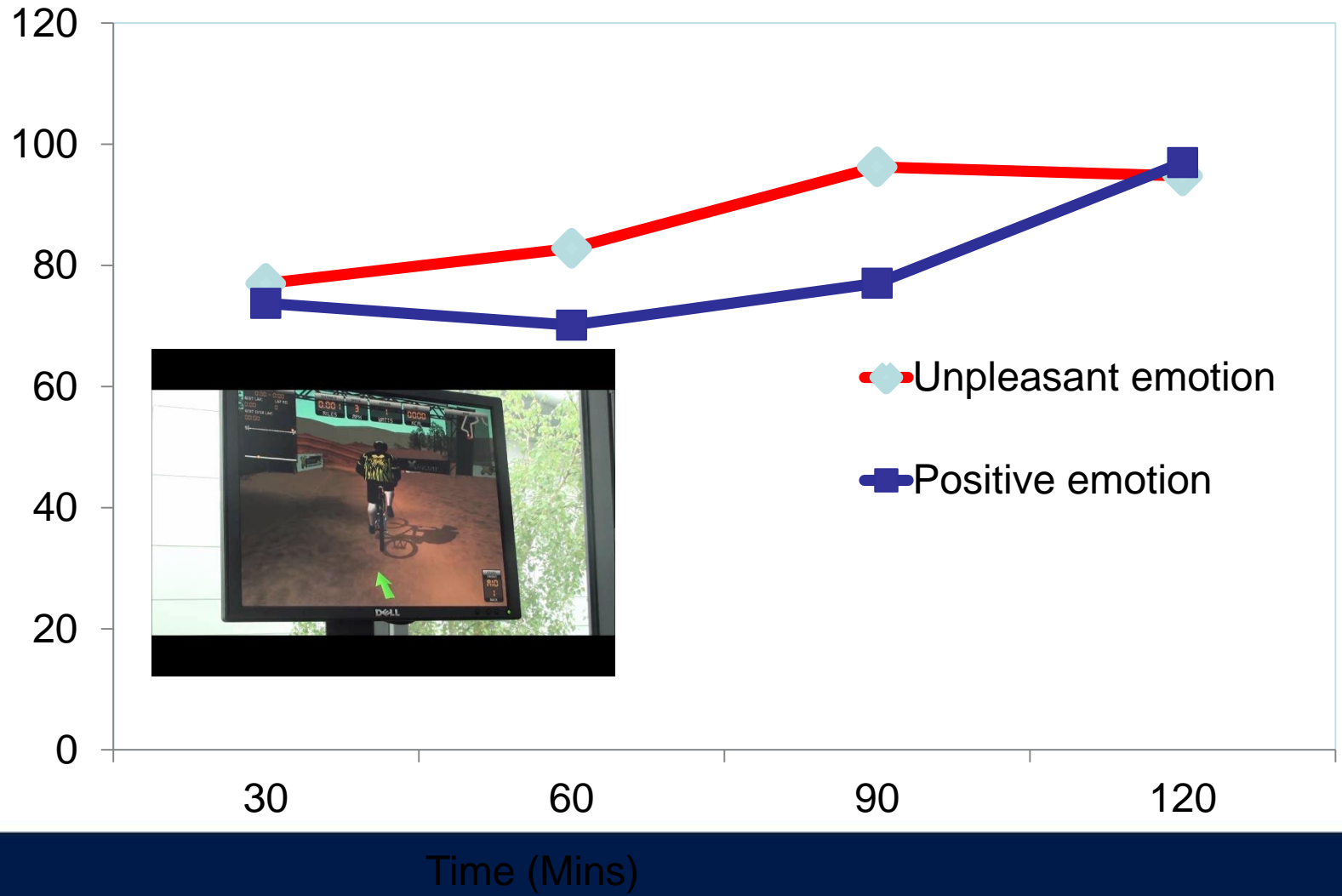
Physiological Correlates of Emotion-Regulation During Prolonged Cycling Performance

Andrew M. Lane, Mathew G. Wilson, Gregory P. Whyte, Robert Shave

Purchase on Springer.com



Ventilation over time



Conclusions

- Athletes who maintained pleasant emotions states during performance were able to increase efforts toward the end of performance
- If you maintain a pleasant emotions, you sustained performance
 - Keeping a positive belief about being able to keep going is important

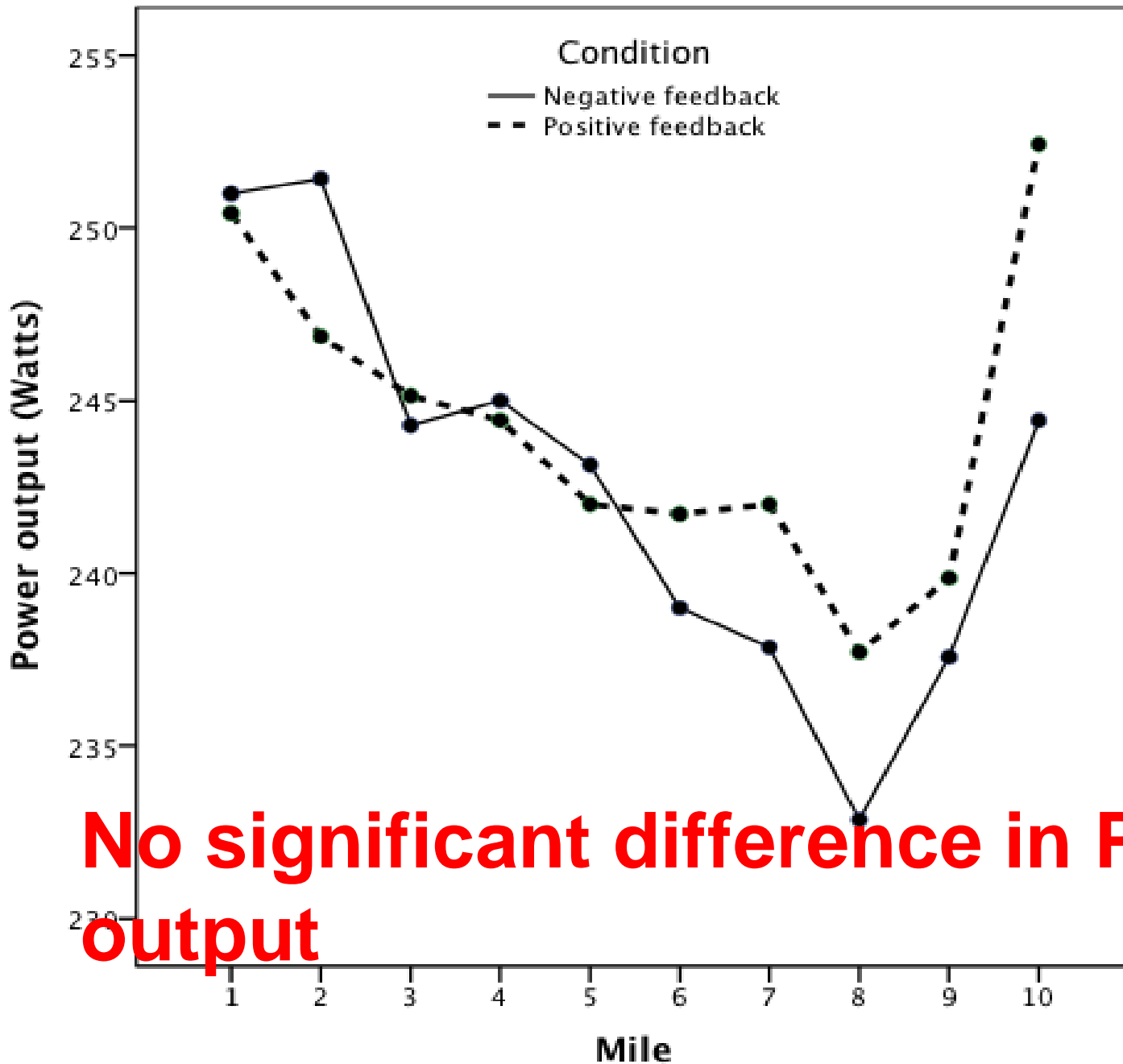
Study 2:

A Possible Role for Emotion and Emotion Regulation in Physiological Responses to False Performance Feedback in 10 Mile Laboratory Cycling

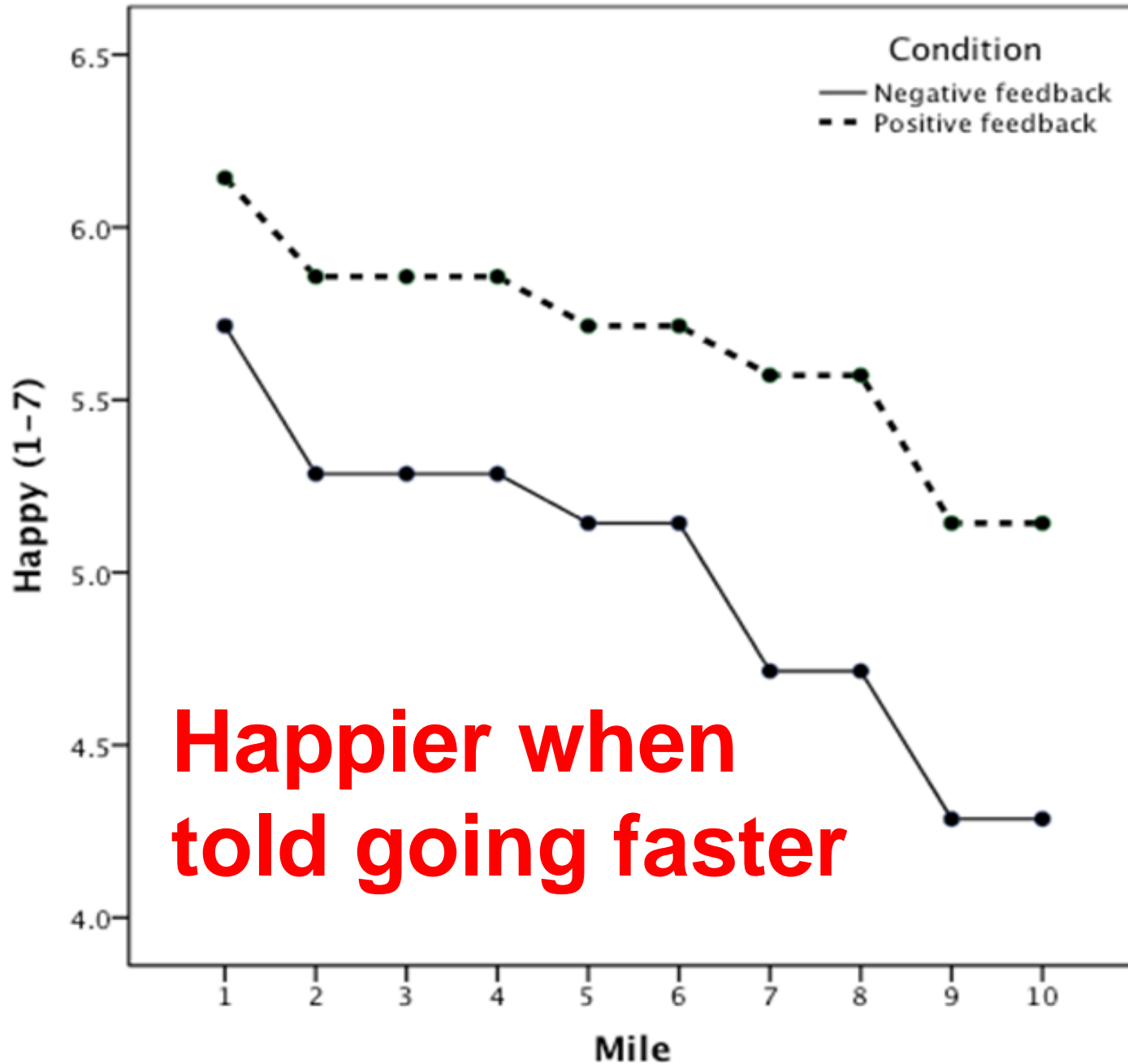
**Christopher J. Beedie, Andrew M. Lane
& Mathew G. Wilson**

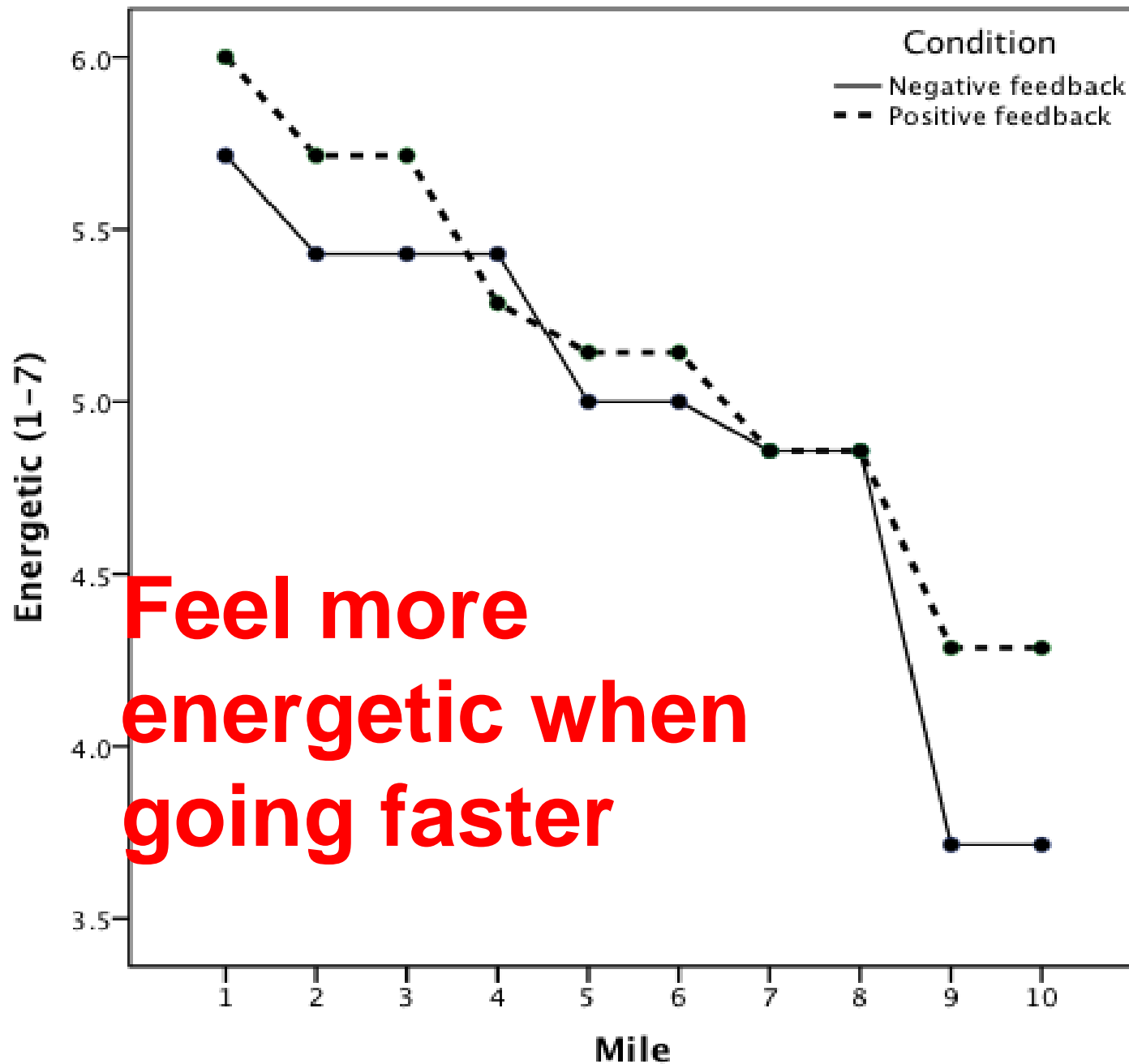
- Participants (n=7) completed four 10-mile time trials performance in laboratory conditions
 - Full feedback (Familiarisation)
 - Blind (no feedback)
 - Positive feedback
 - Negative feedback
- Feedback manipulated by giving false times;
 - 5% slower than actual performance
 - 5% faster than actual performance



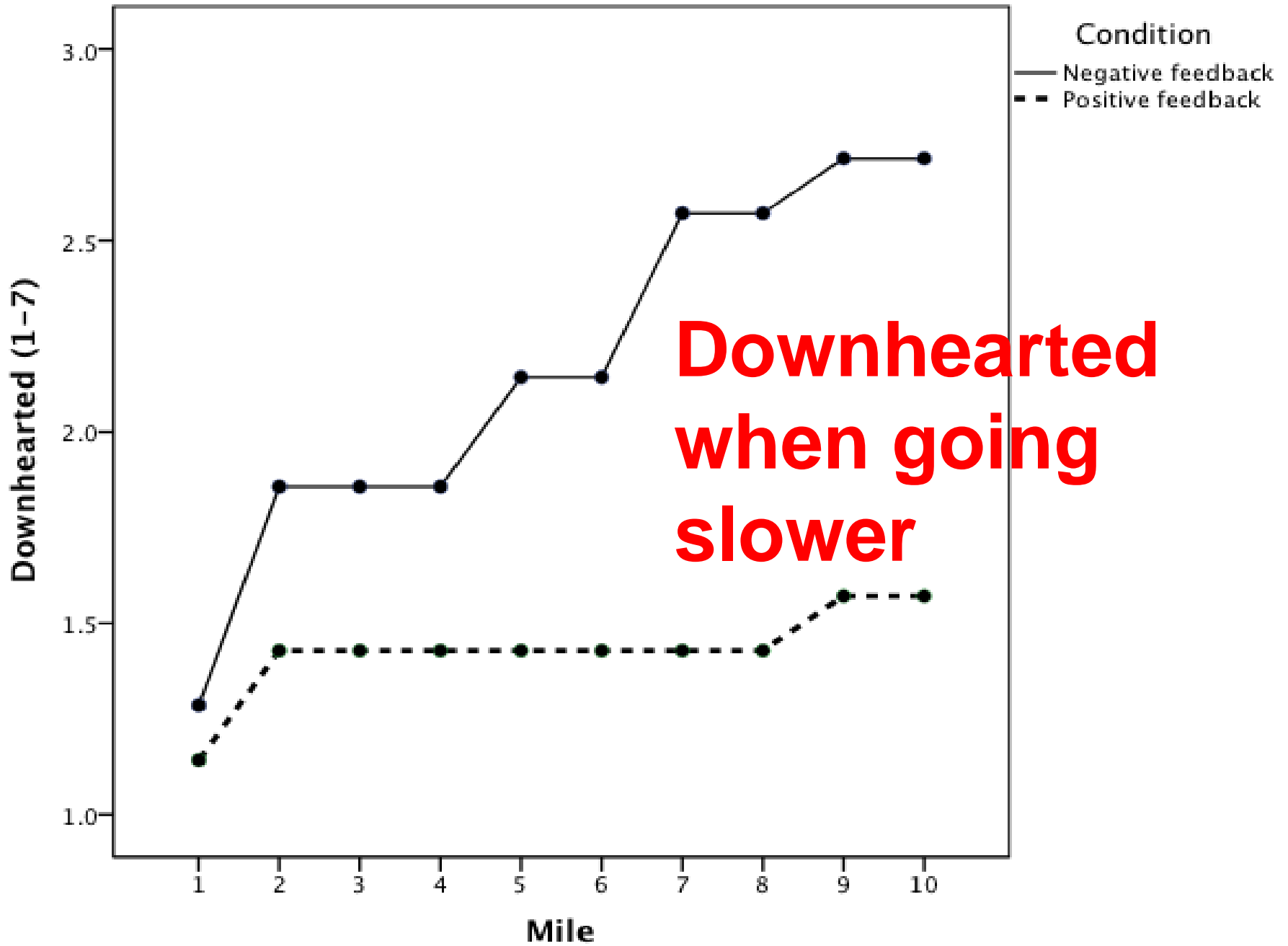


No significant difference in Power output

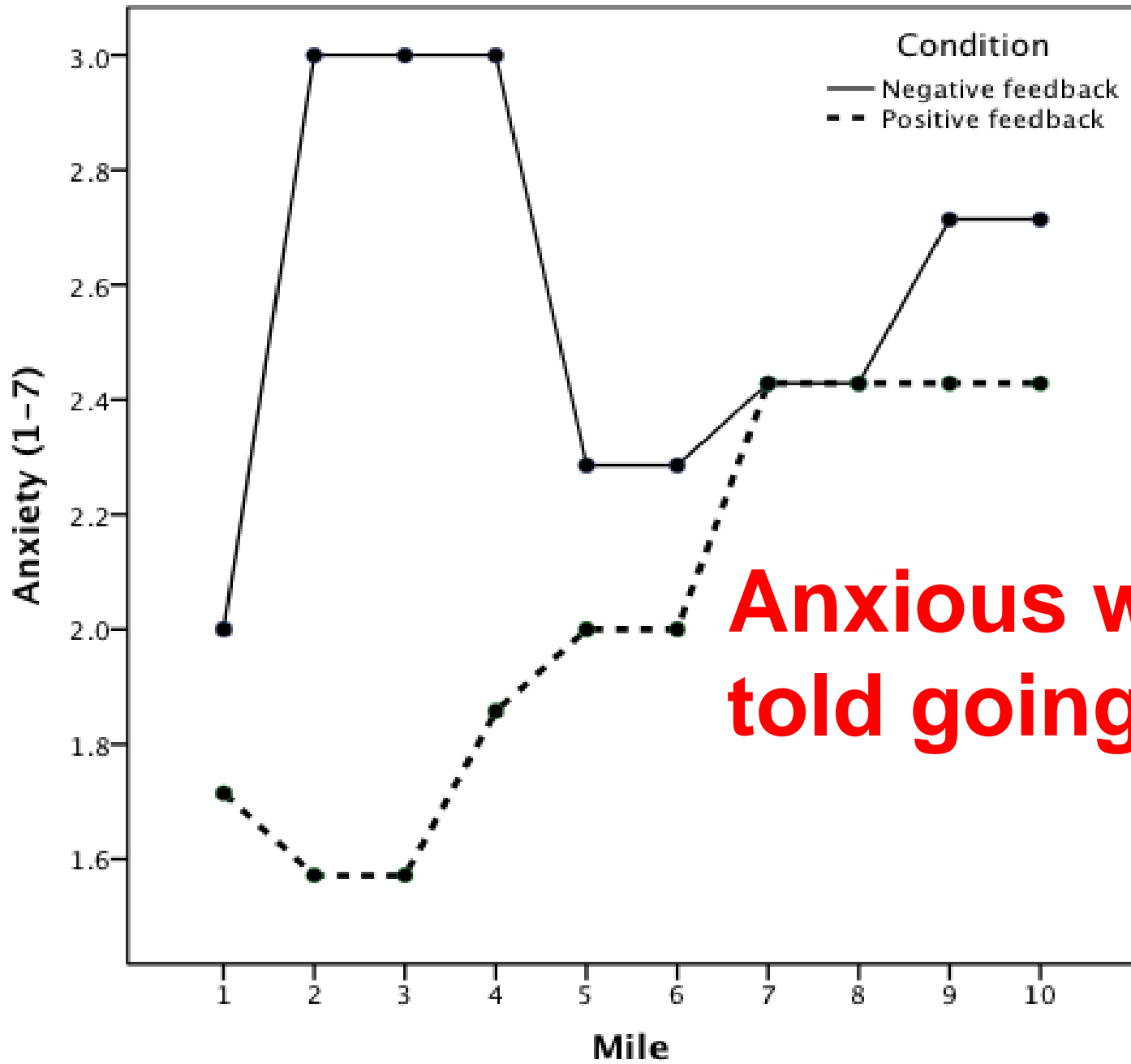




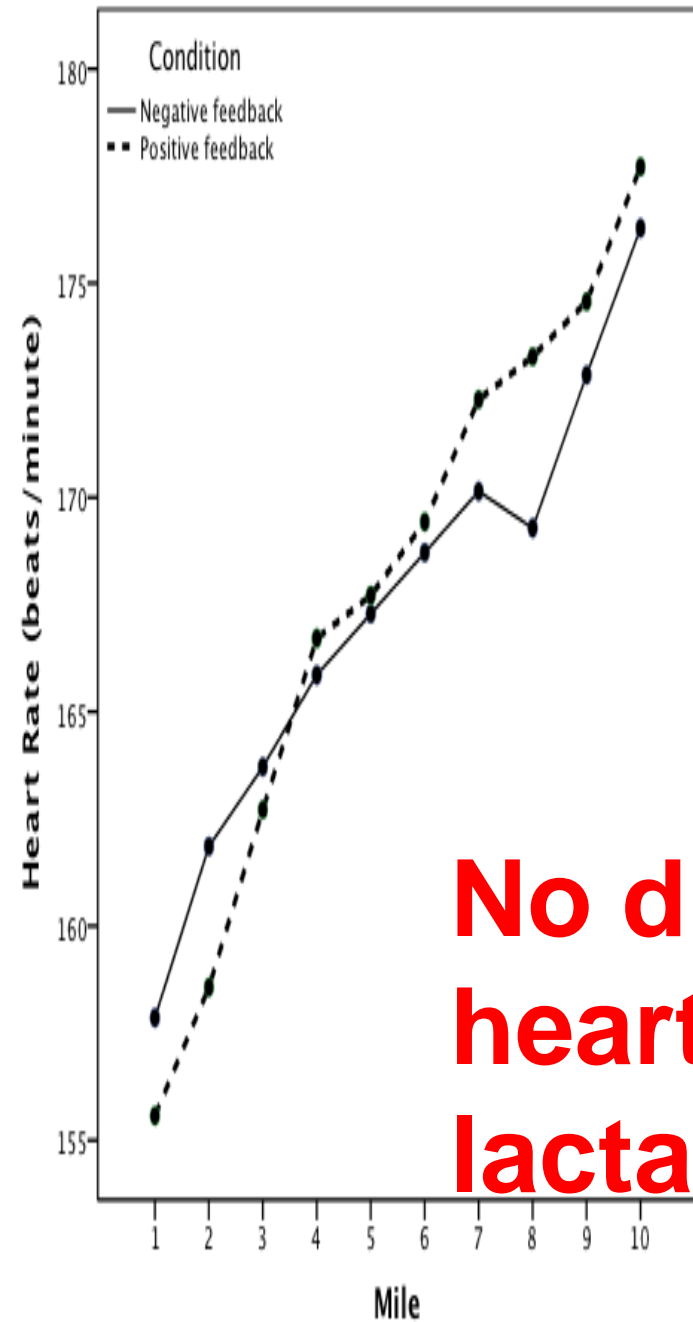
Feel more energetic when going faster



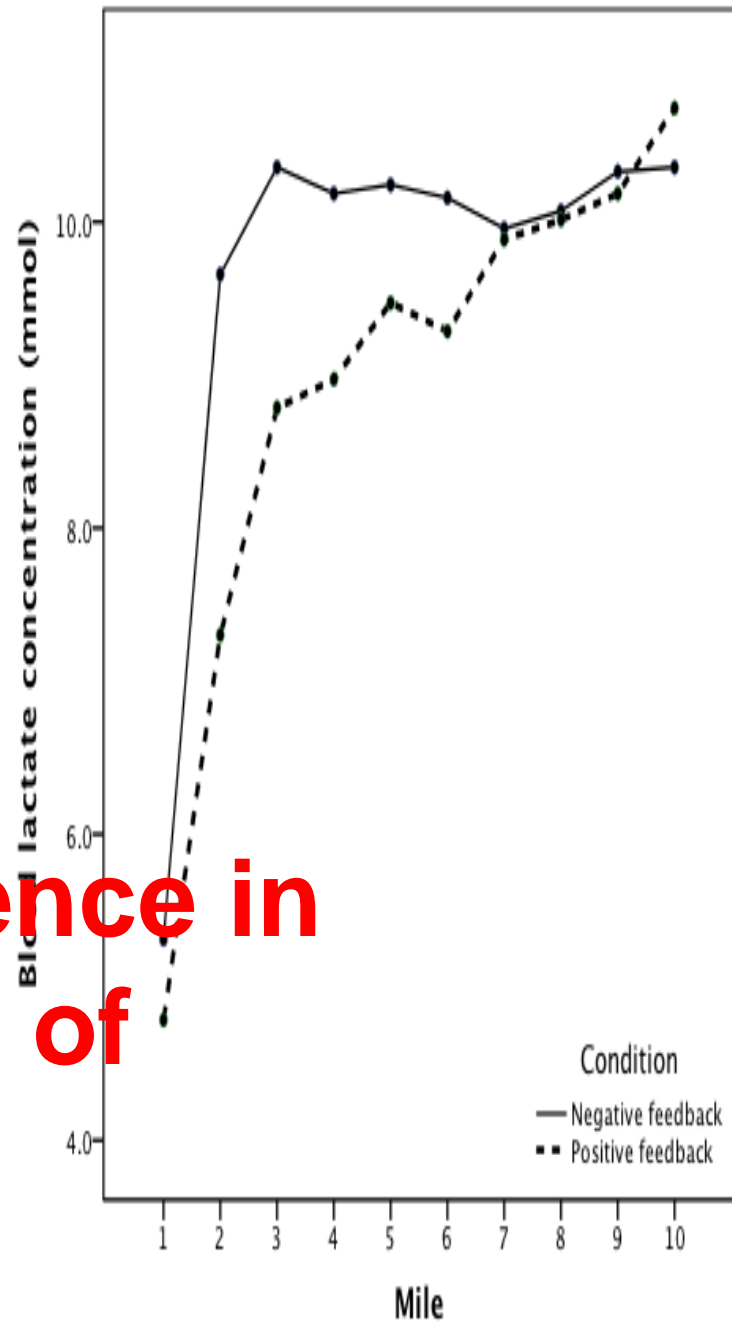
**Downhearted
when going
slower**

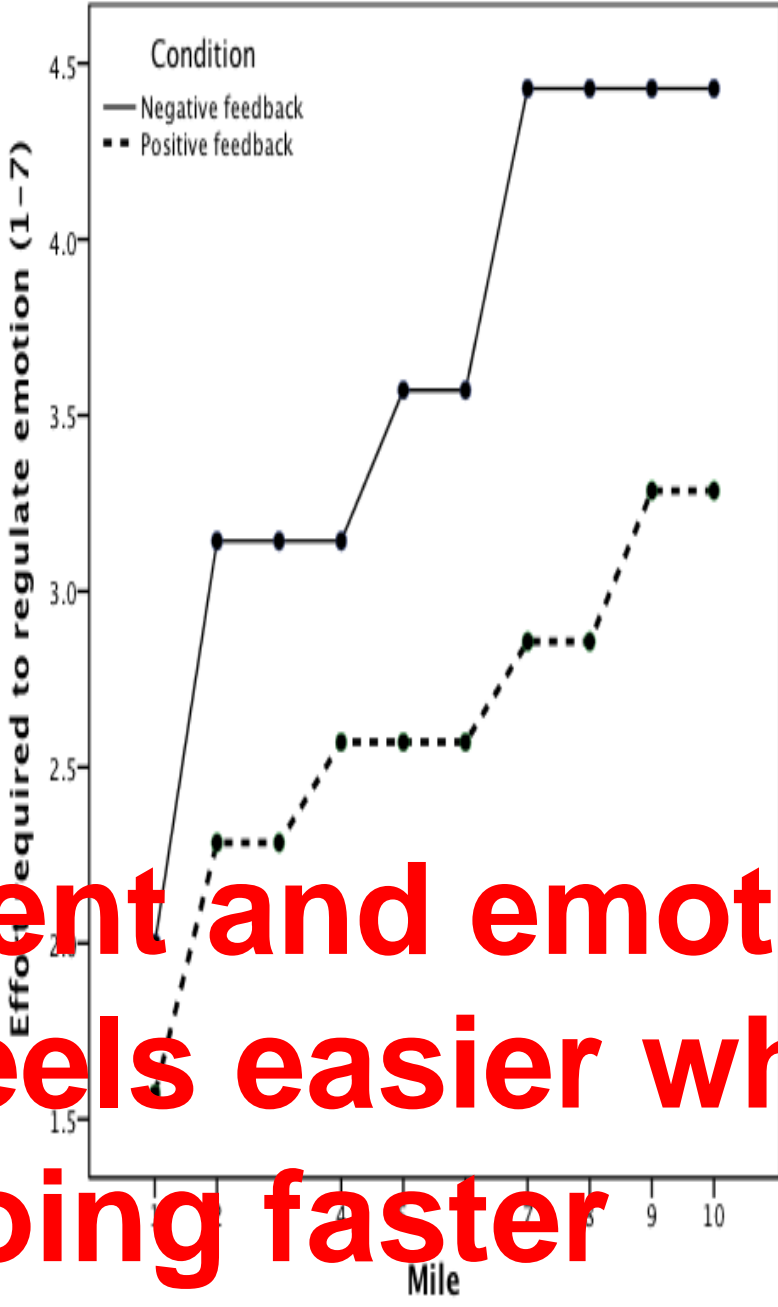
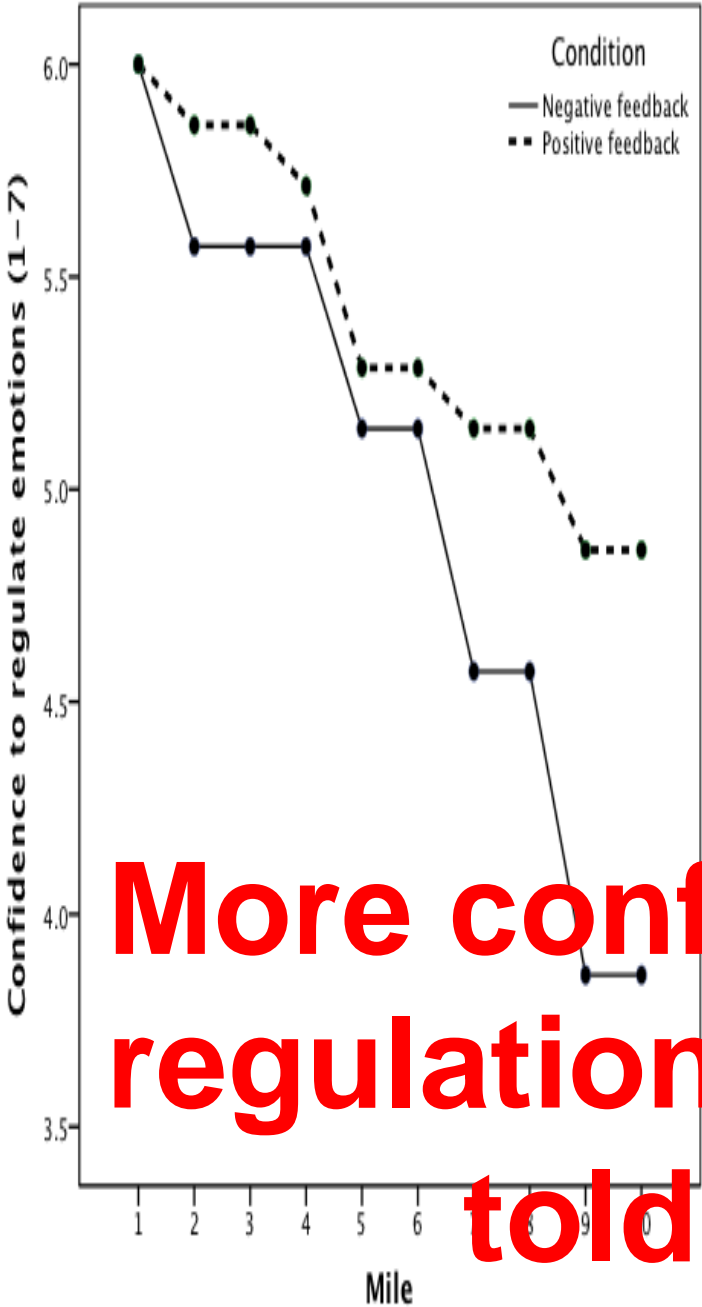


**Anxious when
told going slower**

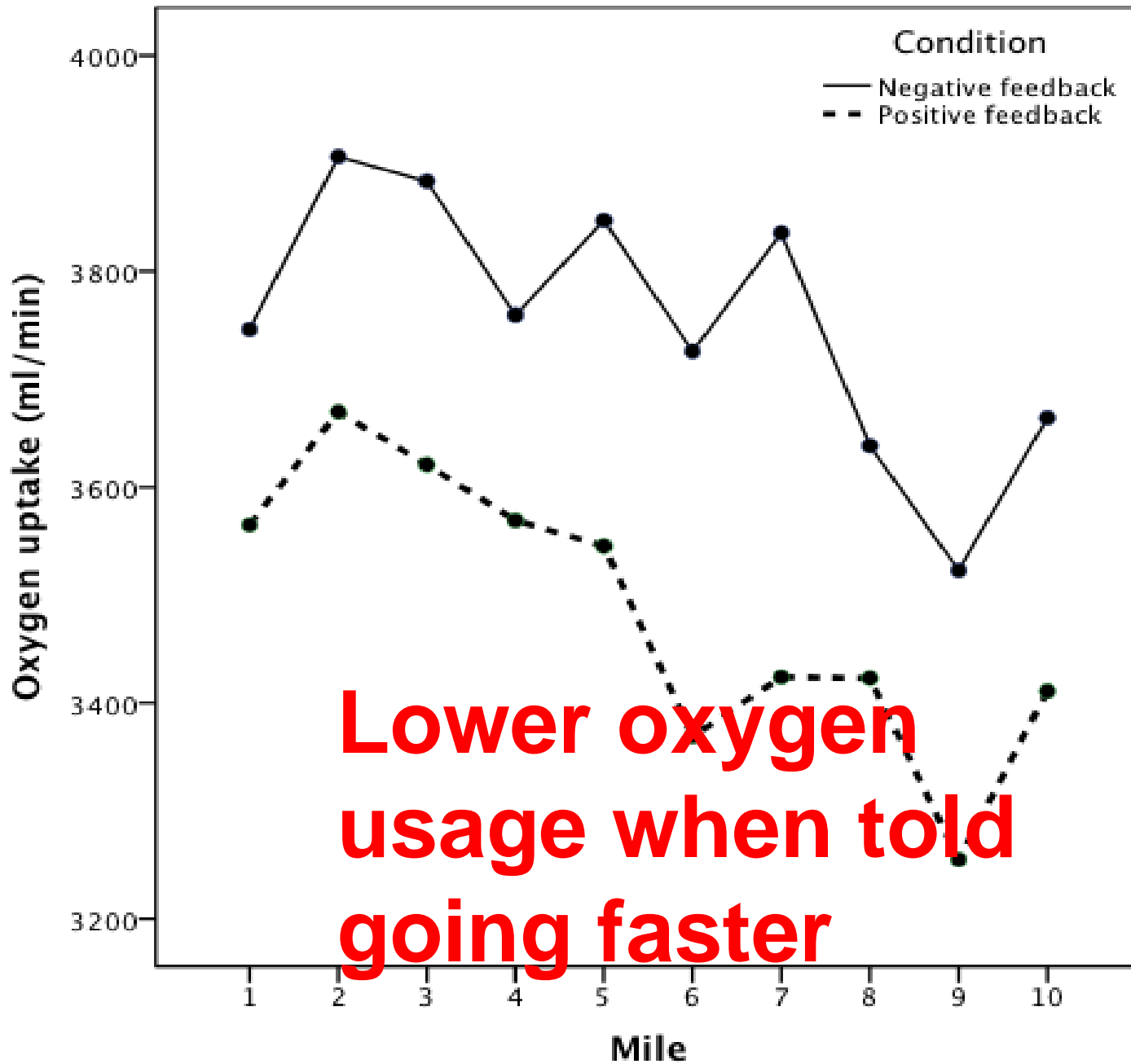


No difference in heart rate of lactate

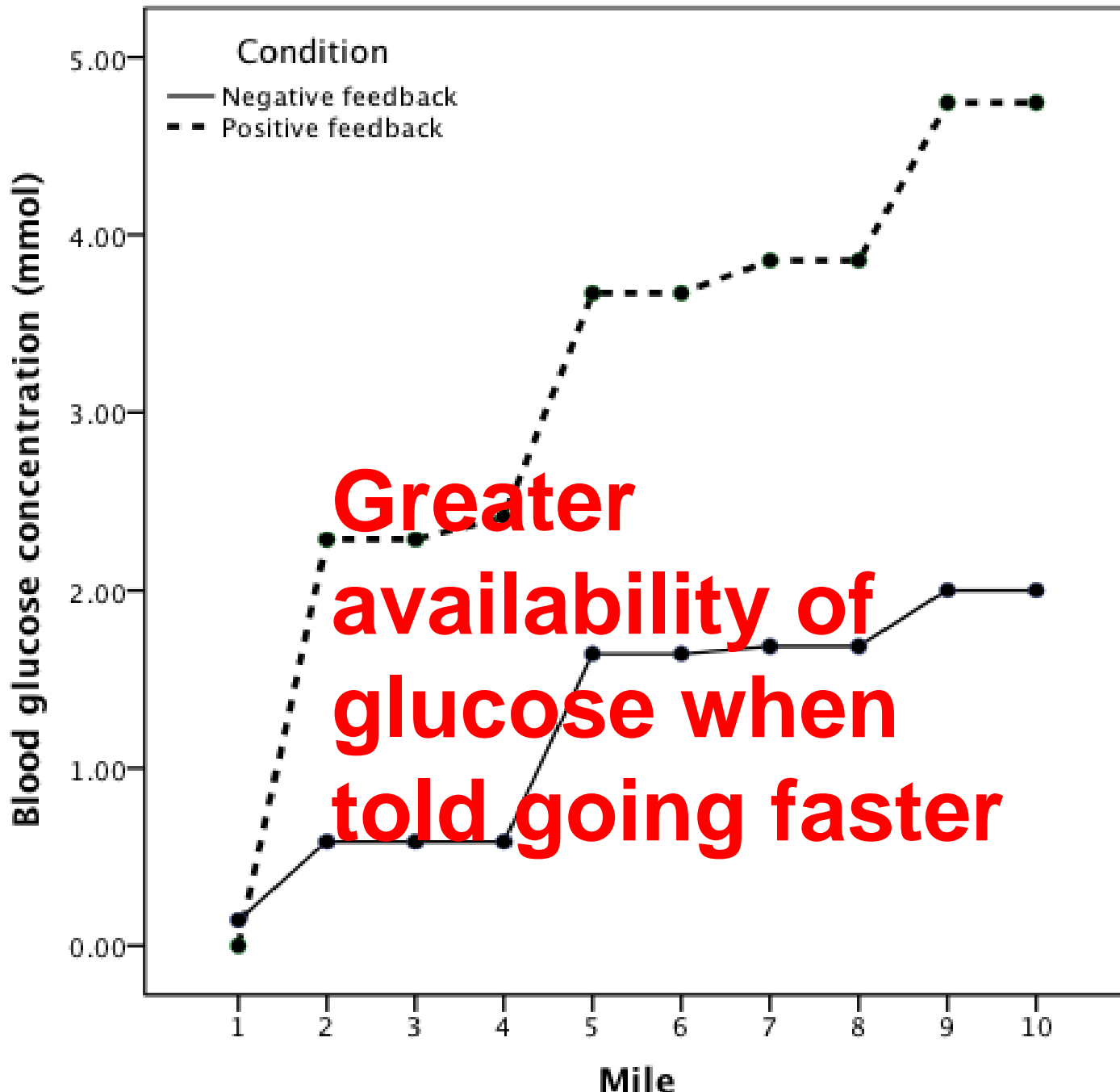


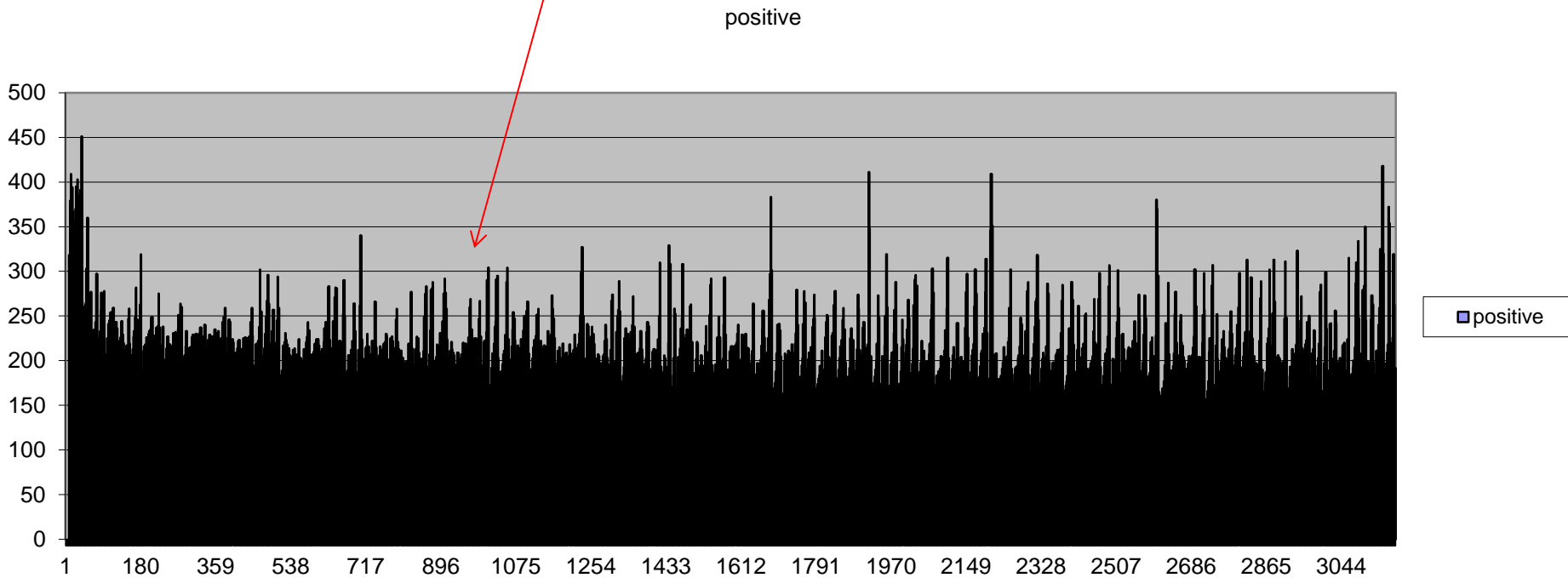
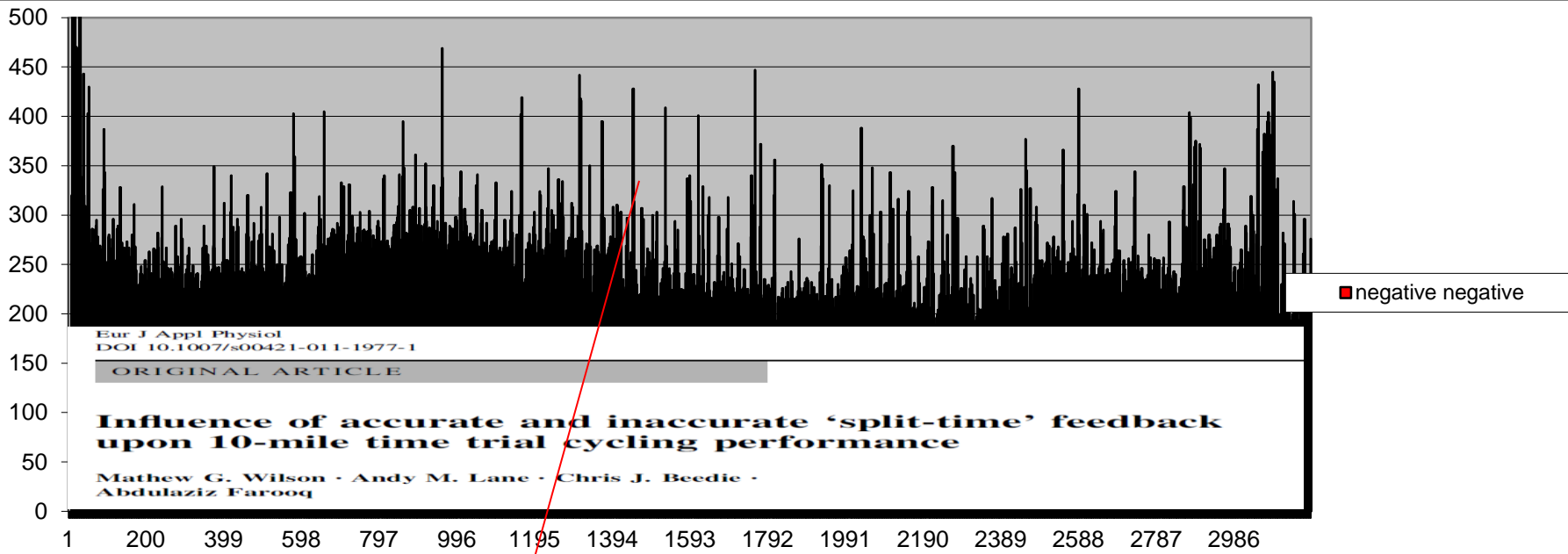


More confident and emotion regulation feels easier when told going faster



**Lower oxygen
usage when told
going faster**

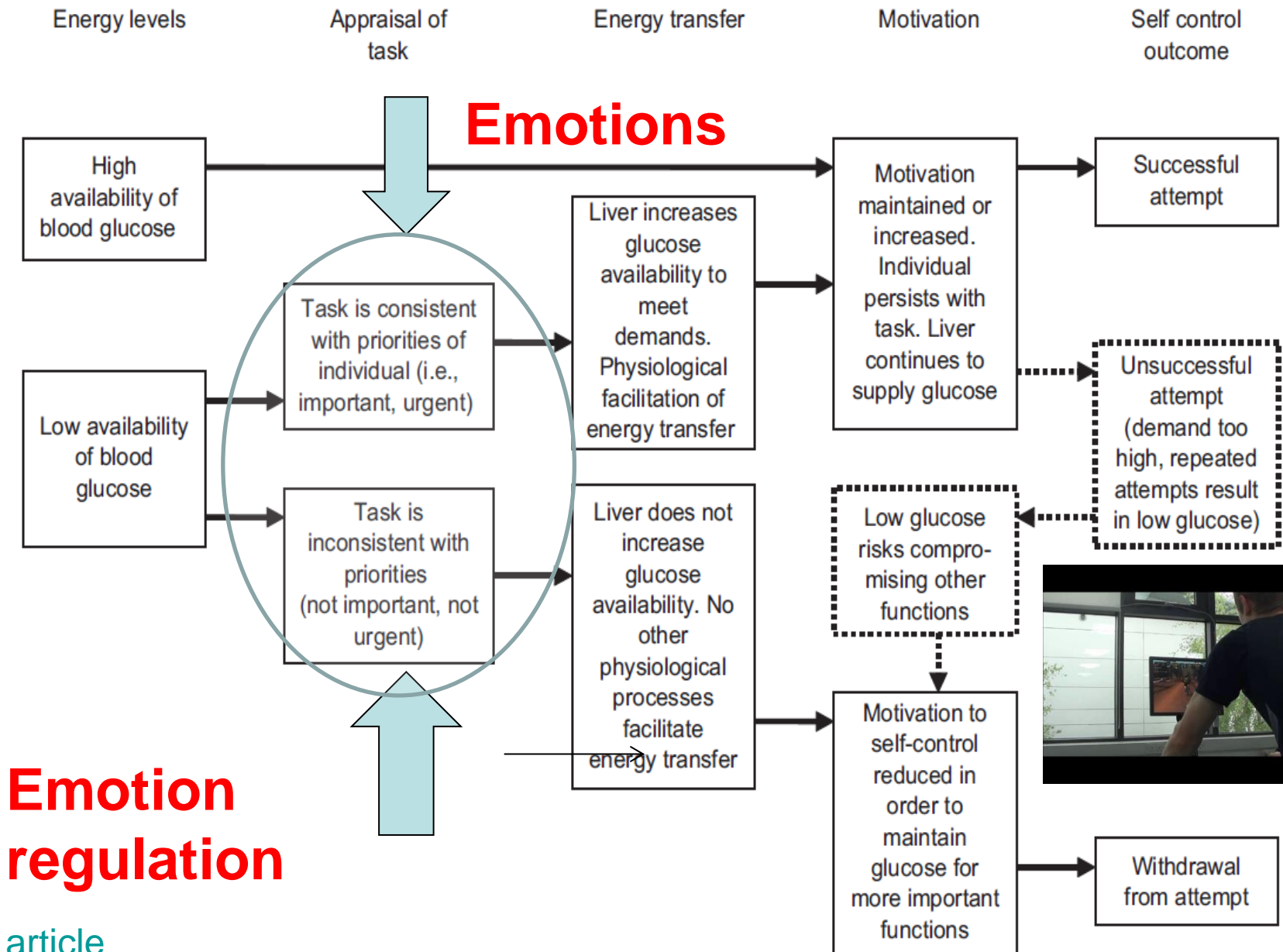




Conclusions

- Negative feedback associated with:
 - Unpleasant emotions
 - Lower VO and lower blood glucose
 - Attempts to regulate emotions by increasing effort resulting in an uneven pacing strategy
 - *And so if performance is not meeting expectations and unpleasant emotions are activated, be mindful of how you react to those emotions*
 - See <http://www.winninglane.com/cyclingstudy.html>

Revised model: Beedie and Lane, 2011



- *And so the message is clear:*
- *Identify emotions associated with best performance*
- *Identify strategies that help get you closer to that ideal state*
- *Use those strategies.....*
 - BUT.....
 - Sometimes it might be better to just let those emotions pass

How to regulate others emotions

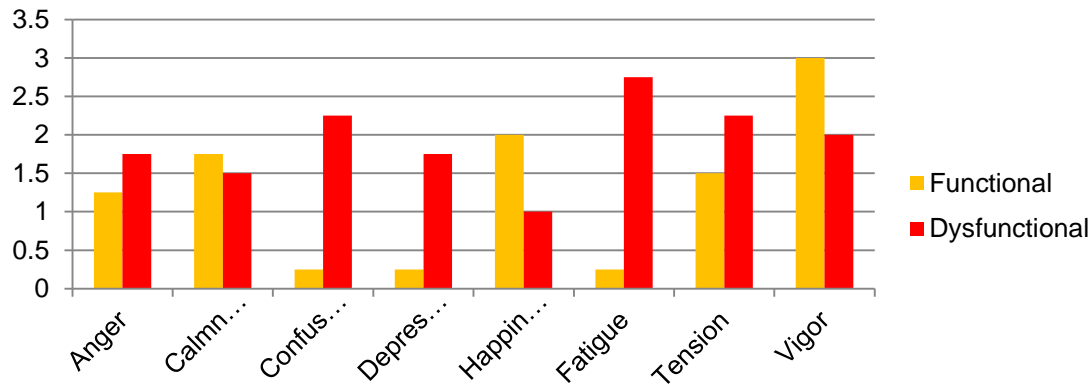
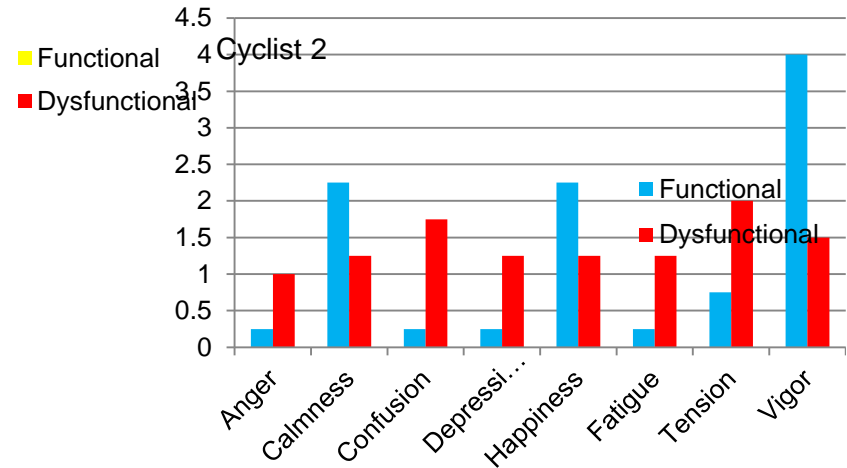
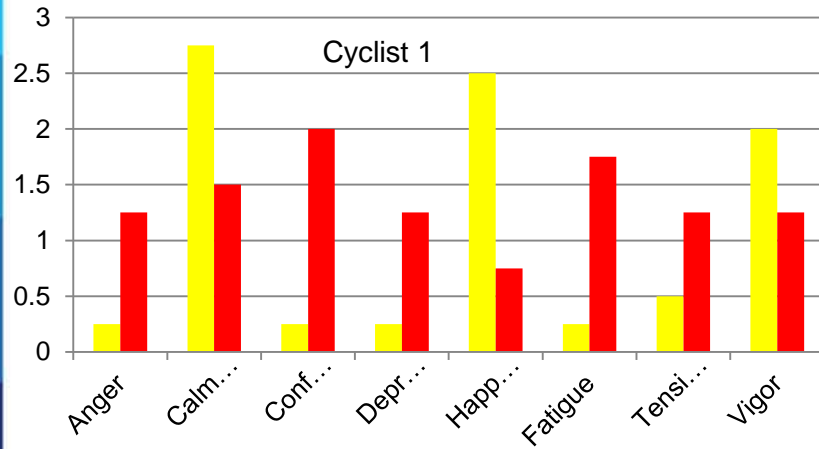
Case Study of emotion and
emotion regulation of a rider
completing the Ride Across
America

Lahart, Lane et al., in press,

<http://www.jssm.org/>

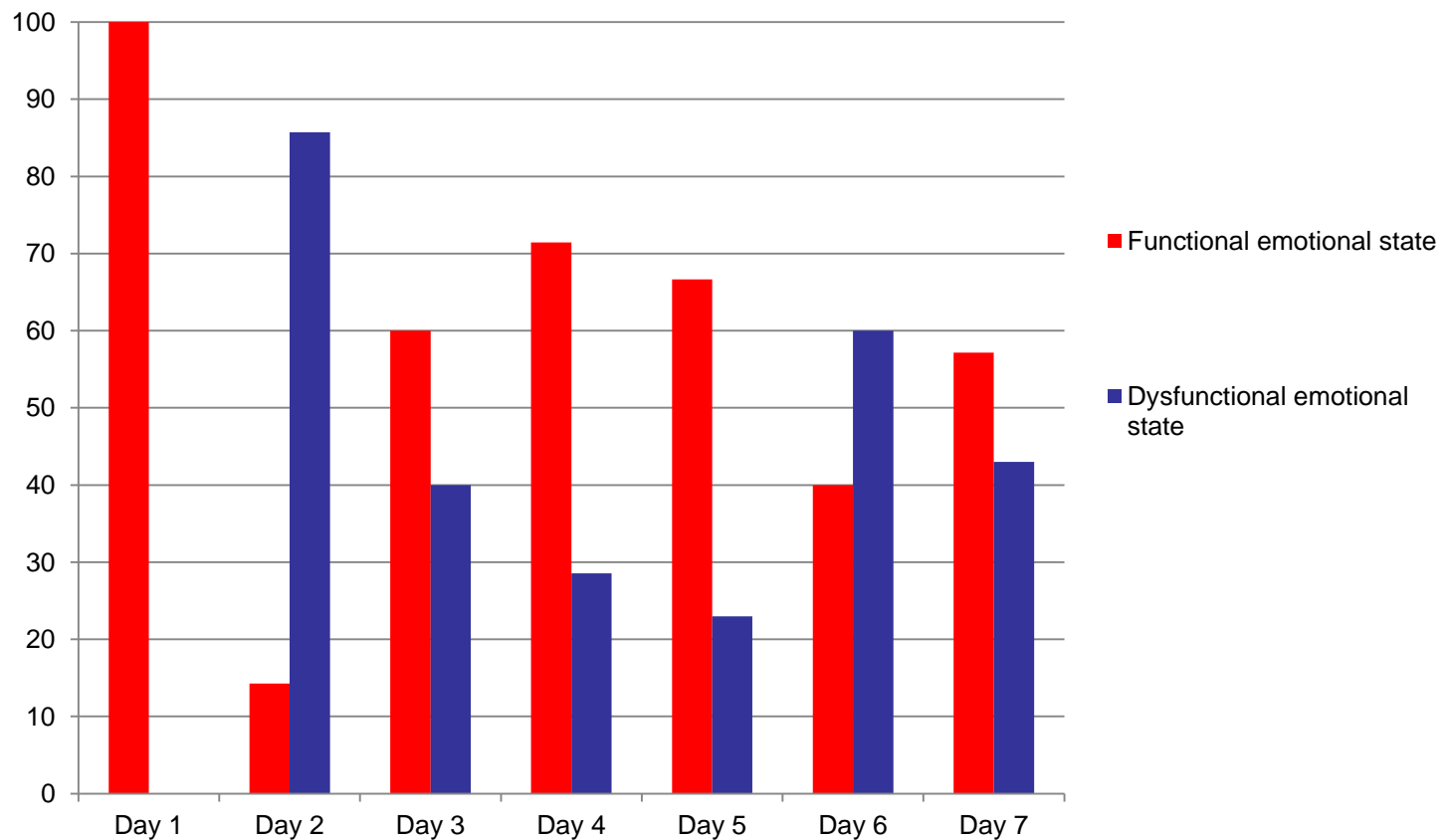


Figure 1: Emotions that riders experienced when performing successfully (Optimal-Functional) and unsuccessfully (Dysfunctional)



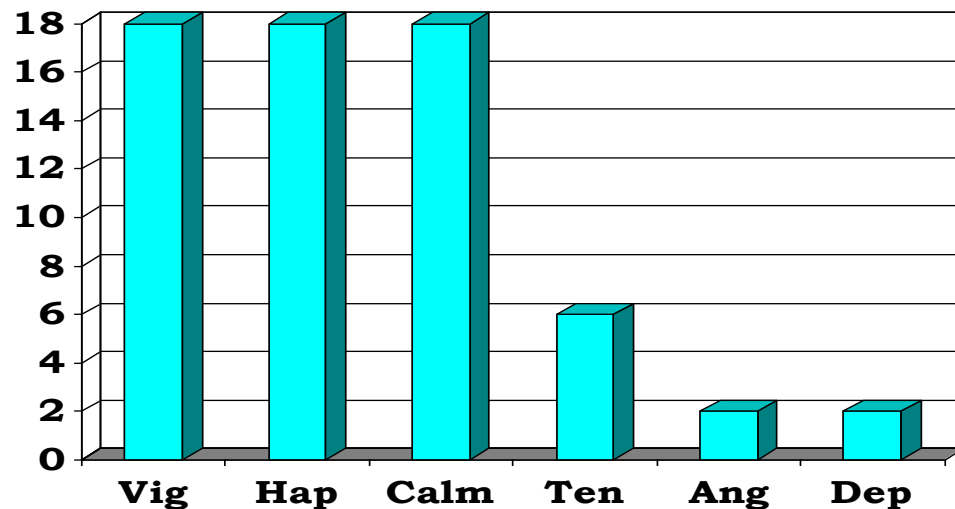
Cyclist 2's emotional profile associated with success is very different to cyclist 1 and cyclist 3

Percentage of assessment in either an Functional and Dysfunctional emotional states experienced during the RAAM



Performance related emotions

- *“My first big decent downhill in California - 25miles of hairpin madness”*
- *“62 miles per hour - lost the support vehicle behind - overtook 30 cars on the wrong side of the road” –*
 - *no pedalling - flat out pure **joy** –*
 - *so much gravel on the road almost went down once - very **scary**, in fact the closest I have ever come to death without exaggeration -*
 - *Just **magic!!***



Interpersonal emotion regulation

- **“Pure rage** - *how could the f***ers not understand that cyclists needed food – then they are taking the piss out of me just because I wanted proper food.”*
- **“I went to bed hungry and p****ed off.** *The only person who I found comfort from was XX (support crew) – they did not say a word, just made me some toast and rubbed my calves. Just a nod was good enough for me to realise that he knew what I was going through and that next time he would take control and get this done.”*
- **“My interaction with my crew and cyclist X.** *I had such a joyous time that I can put my hand on my heart and say that we did not have one cross word. When I was bolloxed cyclist X and crew would encourage me and vice versa”.*

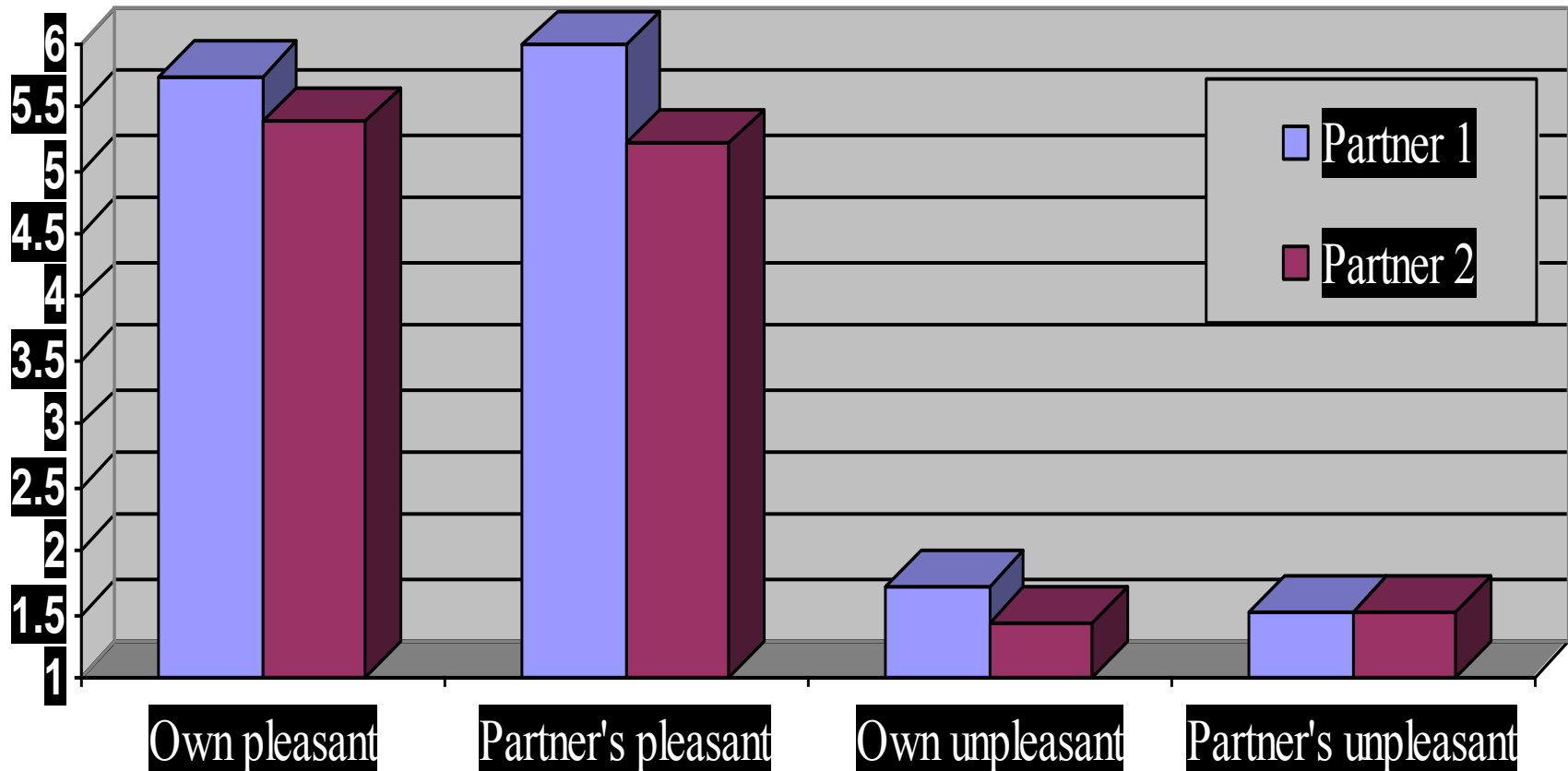
Implications

- Results that mismatch between optimal emotions and intended emotional change from support crew.
 - In an event where athletes and support members fatigue, emotion regulation training would be helpful.
 - Awareness of how your emotions will change; encourage use of self-regulating strategies to help
- Recent research from dyadic research has identified that trying to improve someone else's mood can also improve your own mood (Devonport & Lane, 2013)

**Emotions and emotion
regulation: A case study with a
same sex couple undergoing
assisted-reproduction treatment**

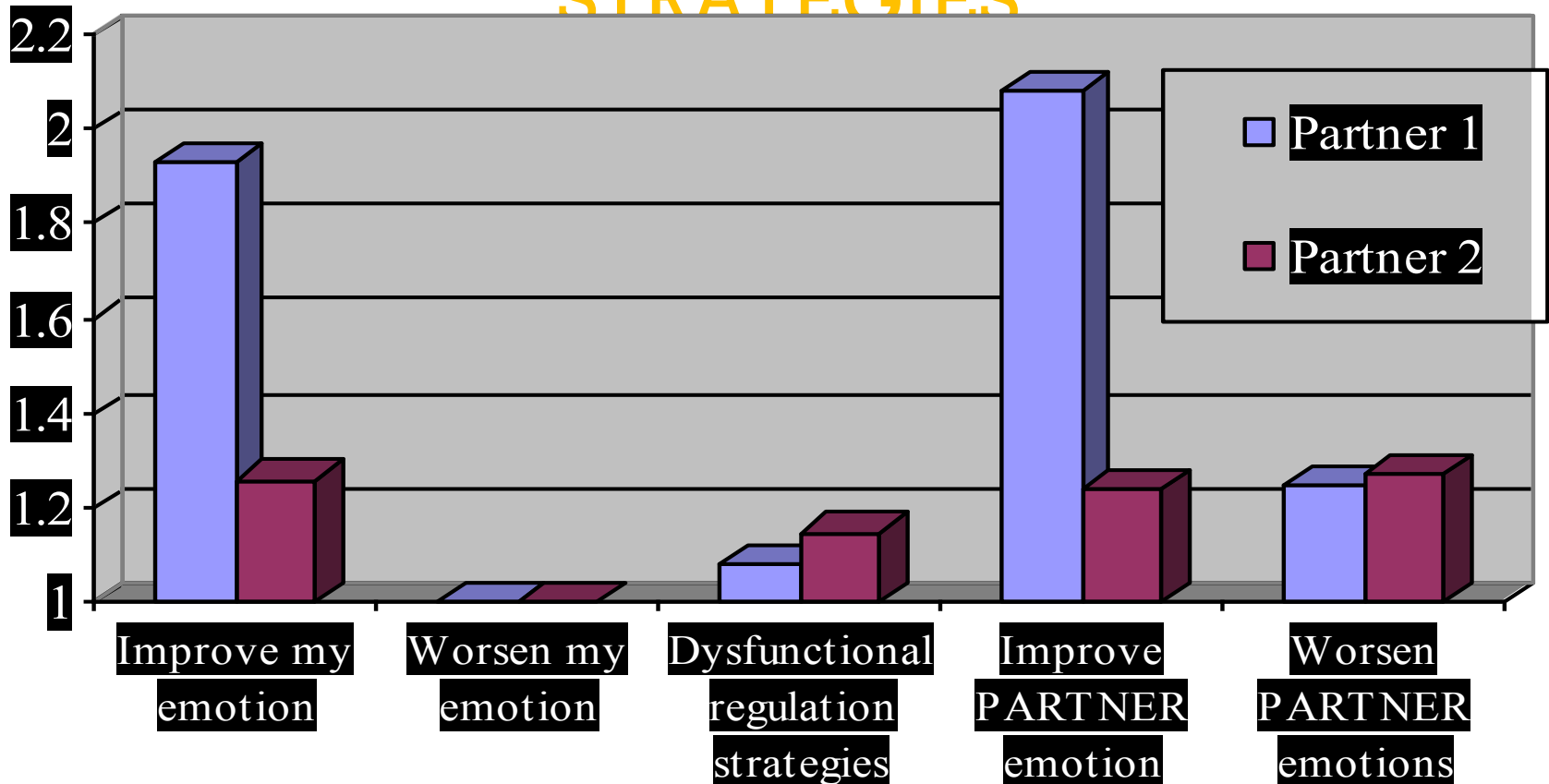
Tracey Devonport and Andy Lane

Self-rating versus others' rating of pleasant and unpleasant emotions



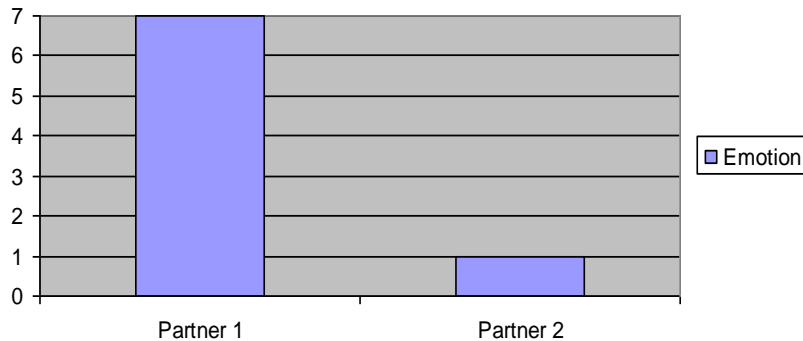
Results:

Self-rating versus others' rating of STRATEGIES



Partner 1: Scenarios for emotion regulation

Scenario 1: Partner 1 in a pleasant mood, partner 2 in an unpleasant mood

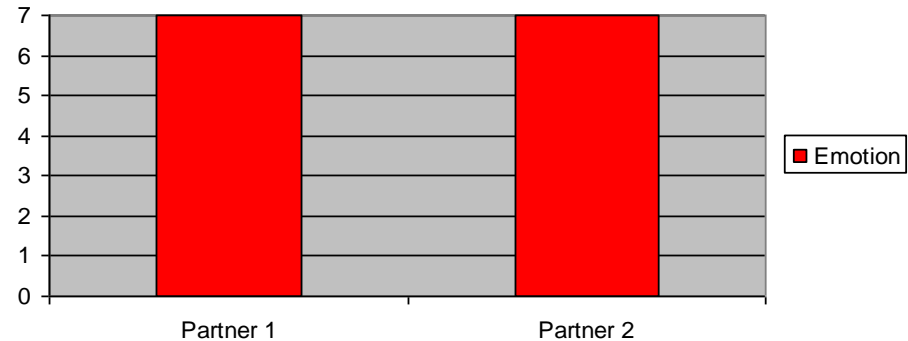


Scenario 1

Partner 1 seeks to sustain own and generate partners pleasant emotions.

Partner 2 tries to improve own emotions

Scenario 2: Partner 1 in a pleasant mood, partner 2 in a pleasant mood



Scenario 2

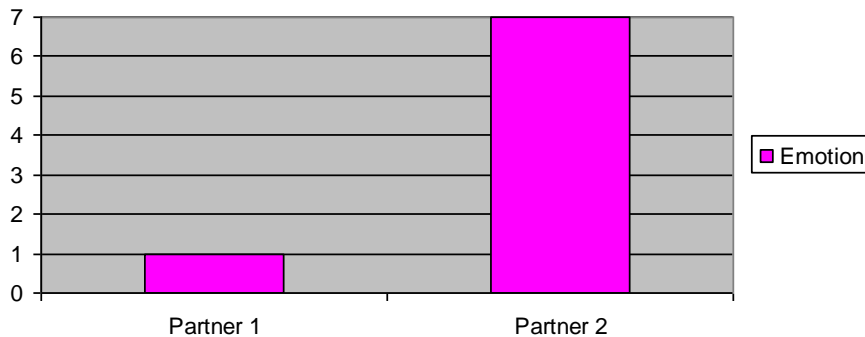
Partner 1 seeks to sustain own and partners pleasant emotions.

Remember, when partner 1 up-regulates when partner 2 is in a good mood.

Partner 2 tends to not use emotion regulating strategies

Partner 2: Scenarios for emotion

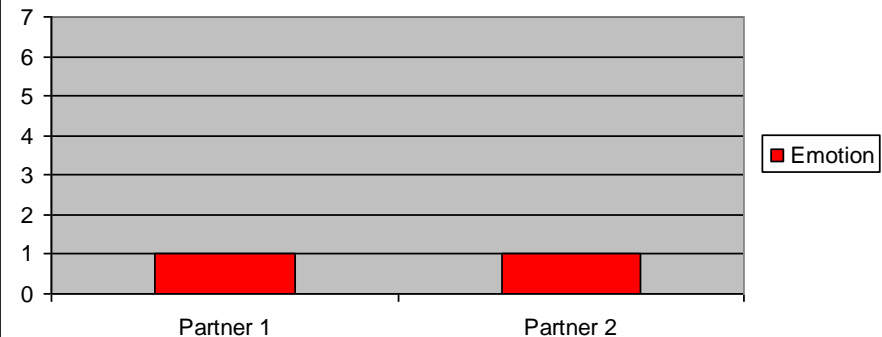
Scenario 3: Partner 1 in an unpleasant mood, partner 2 in a pleasant mood



Scenario 3:

- Partner 2 seeks to up-regulate partner 1 pleasant emotions.
 - Remember, partner 2 underestimates pleasant mood and so will begin this process early
- Partner 1 low usage of emotion regulation strategies when in an unpleasant mood

Scenario 4: Partner 1 and partner 2 in an unpleasant mood



Scenario 4:

Partner 2 seeks to up-regulate partners pleasant emotions and engages in strategies to enhance own emotions.

Partner 2 uses strategies to improve own emotions when experiencing unpleasant emotion

Final thoughts....



- Barrier to performance **“IF”**
 - **“If** my arms feels tired”
- Solution to barriers **“THEN”**
 - **“then** I’ll relax and focus on good technique”
- ***IF-THEN PLAN***
 - If my arm feels tired, **then** I’ll relax and focus on good technique!”

Summary

1. Identify and assess their current and desired emotional state,
2. Be able to identify strategies to use in that situation to change emotions, and hold beliefs that such a change in emotion is possible.
3. Be aware of the consequences of engaging of an emotion regulation strategy both on yourself and on others
4. Sometimes efforts to change your own emotions, also improve the emotions of others

- Please visit the EROS website:
www.erosresearch.org

- Lane, A. M., Beedie, C. J., Jones, M. V., Uphill, M., & Devonport, T. J. (2012). The BASES Expert Statement on emotion regulation in sport. *Journal of Sports Sciences*, 30(11), 1189-1195. DOI:10.1080/02640414.2012.693621. Based on the BASES expert statement.
www.bases.org.uk/BASES-Expert-Statements
- [See ESRC website for EROS publications:](#)
 - <http://www.esrc.ac.uk/my-esrc/grants/RES-060-25-0044/read>



Any Questions?

We have already received quite a number of questions and we will try and answer as many as possible in the time remaining.

Any that remain unanswered will be forwarded to Andy and he'll email you a reply in due course.

Thanks

Thank you to everyone for joining us today and thanks also to Andy for what I'm sure you will agree was a great presentation.

Please take a few moments when your webinar window closes to complete a short survey on today's webinar – we appreciate your feedback as it helps us continually improve our webinars.

We will email everyone a link to the recording of today's presentation, so you can view it yourself or pass it along to friends or colleagues.

Thank you again for your participation today and I hope you will join us for the next BASES/Human Kinetics webinar on Thursday, 27th June when Professor Jo Doust will present *[“You might be fit now but you'll be fat by forty: the inevitability of human sloth”](#)*.

Thank you again for your participation today and depending on where in the world you are, have a great morning, afternoon or evening.