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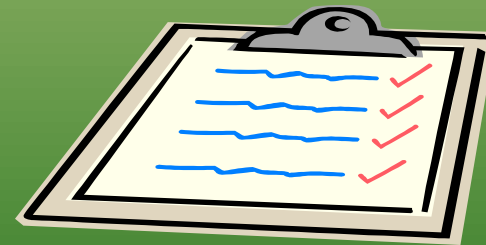
The Psychology of Paralympians



Amsterdam
Institute
of Sport
Science

Presentation Roadmap

- **Why Psychology and Paralympians.**
- **Athlete and Sport Psychologist's Views**
- **The Science:**



Why Sport Psychology?

Healthy and Fit for Optimal Performance



Athlete Perspective

I haven't just been out here training for the last month on the gold coast, I've been training hard for 4 years: It's the mentally toughest athlete that will win gold, and I know I'm the mentally toughest (Simon Jackson, Paralympic Gold Medalist)



Sport Psychology Perspective

The Paralympic environment is an intense, exciting, unremitting emotional roller coaster. It is also unforgiving and abrasive and (Katz, 2004).



Personal Developmental Model

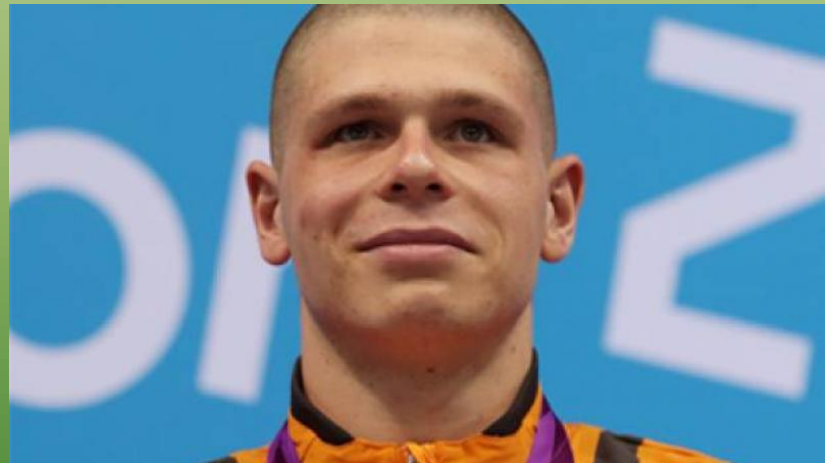
(Martin, 1999; 2005; 2012; 2019)



The Research

A sampler spanning:

- **Personality**
- **Mood**
- **PTLID (e.g., grit)**
- **Emotion**



Personality and Mood



Martin, J. J., Malone, L. A., & Hilyer, J. C. (2011). Personality and mood in women's Paralympic basketball champions. *Journal of Clinical Sport Psychology*, 5, 197-210.

Personality and Mood of Paralympic Women's Basketball Gold Medalists

Variable	Team Members		Nonqualifiers		Club		Effect Sizes	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>Cohen's D</i>	<i>Effect Size r</i>
Personality								
TM*	5.7	1.7	4.3	1.0			1.12	0.49
AX*	5.6	1.9	7.8	0.7			-1.69	-0.65
EX	5.3	1.9	6.0	1.0			-0.82	-0.38
SC	5.2	2.1	6.5	0.9			-0.57	-0.28
Mood								
TN	8.6	4.1	10.9	4.2	9.6	5.7	-0.61	-0.29
DP*	3.9	3.2	6.7	2.5	8.7	4.4	-0.98	-0.44
AG	5.8	4.0	7.4	4.3	9.9	6.2	-0.46	-0.22
VG*	19.5	4.3	14.8	2.6	15.6	18.5	1.34	0.56
FT	5.4	3.5	8.1	3.2	8.2	5.4	-0.67	-0.32
CF*	5.5	2.2	7.5	2.3	7.4	4.0	-0.91	-0.41

Note. Personality: TM = Tough Mindedness, AX = Anxiety, IN = Independence, EX = Extraversion, SC = Self-control. Mood: TN = Tension, DP = Depression, AG = Anger, VG = Vigor, FT = Fatigue, CF = Confusion.

Personality and Mood of Paralympic Women's Basketball Gold Medalists

A Summary:

Personality: Gold medalists were more **tough-minded** and **less anxious**

Mood: Gold medalists expressed more **vigor** and less **confusion** and **depressed mood**.

Differences: Moderate to Large Effect Sizes

Mental Skills and Sport Engagement



Martin, J. J., & Malone, L. A. (2013). Elite wheelchair rugby players' mental skills and sport engagement. *Journal of Clinical Sport psychology*, 7, 253-263.

Standard Multiple Regression Results Predicting Sport Engagement

<u>Variable</u>	<u>B</u>	<u>SE</u>	<u>B</u>	<u>t</u>	<u>p</u>
Imagery	-.01	.12	-.02	-.07	.94
Self-talk	.00	.09	-.00	-.01	.99
Coping skills	.72	.28	.72	2.54	.03

Gritty, hardy, & resilient?



Martin, J. J., Byrd, B., Watts, M. L., & Dent, M. (2015). Gritty, hardy, and resilient: Predictors of sport engagement and life satisfaction in wheelchair basketball players. *Journal of Clinical Sport Psychology*, 9, 345-359.

Standard Multiple Regression Results Predicting **Life Satisfaction**

<u>Variable</u>	<u>B</u>	<u>SE</u>	<u><i>B</i></u>	<u><i>t</i></u>	<u><i>p</i></u>
Hard	1.28	.38	.40	3.39	.001*
Resil	.39	.23	.21	1.71	.09*
Grit	-.08	.19	-.05	-.41	.68

Note: Hard = Hardiness; Resil = Resilience

Standard Multiple Regression Results Predicting Sport Engagement

<u>Variable</u>	<u>B</u>	<u>SE</u>	<u>B</u>	<u>t</u>	<u>p</u>
Hard	.04	.16	.03	.25	.81
Resil	.18	.10	.22	.79	.08*
Grit	.21	.08	.31	.60	.01

Note: Hard = Hardiness; Resil = Resilience

Gritty, hardy, resilient & socially supported?



Atkinson, F., & Martin, J. J. (in press). Gritty, hardy, resilient and socially supported: A replication study. *Disability and Health*.

											Coefficients		
Step	Variable	R	R ²	ΔR ²	F	p	ΔF	p	b	SE (b)	β	t(x)	p
1	Grit	.57	.32	.29	F(4, 81)=9.67	p<.001	9.67	.05	.06	0.19	.03	.33	.75
	Hardiness								.89	0.63	.15	1.41	.16
	Resilience								.99	0.24	.46	4.08	.001**
	Athlete support								.09	0.14	.06	.64	.53

Multiple Regression Results Predicting Life Satisfaction

											Coefficients		
Step	Variable	R	R ²	ΔR ²	F	p	ΔF	p	b	SE (b)	β	t(x)	p
1	Grit	.61	.37	.34	F(4, 81)=12.08	p<.00 1	12.08	.05	.10	0.05	.21	2.12	.04*
	Hardiness								.42	0.16	.27	2.61	.01*
	Resilience								.13	0.06	.23	2.12	.04*
	Athlete support								.09	0.03	.25	2.71	.008*

Multiple Regression Results Predicting Sport Engagement

Paralympic Swimmer's Happiness



Martin, J., Vassallo, M., Carrico, J., & Armstrong, E. (2019). Predicting Happiness in Paralympic Swimming Medalists. *Adapted Physical Activity Quarterly*, 36, 309-324.

Descriptive Statistics for Happiness

	Total Sample		Female		Male	
<u>Medal</u>	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
Gold	6.55	2.37	6.61	2.48	6.50	2.35
Silver	5.74	2.42	6.52	2.62	5.15	2.14
Bronze	5.18	2.21	5.22	2.31	5.13	2.20

- **Multiple regression results predicting Happiness:**
- **Model Summary**

Variable	β	Std Error	t	$p <$
Medal	-.551	.293	-1.88	.06
Time	.097	.327	.298	.22
Place	.551	.343	1.61	.10

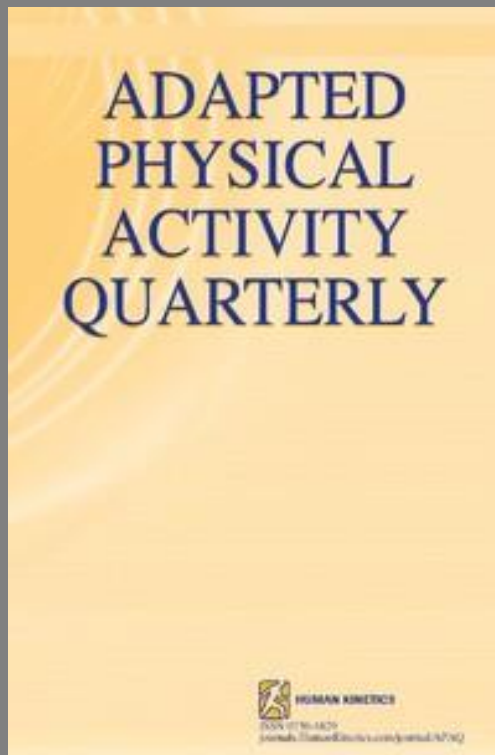
- *Note.* Medal = Gold, Silver, Bronze; Time = Paralympic finish was better, same, or worse than 2015 rank; Place = Race time was better, same, worse than 2015 best time

Summary

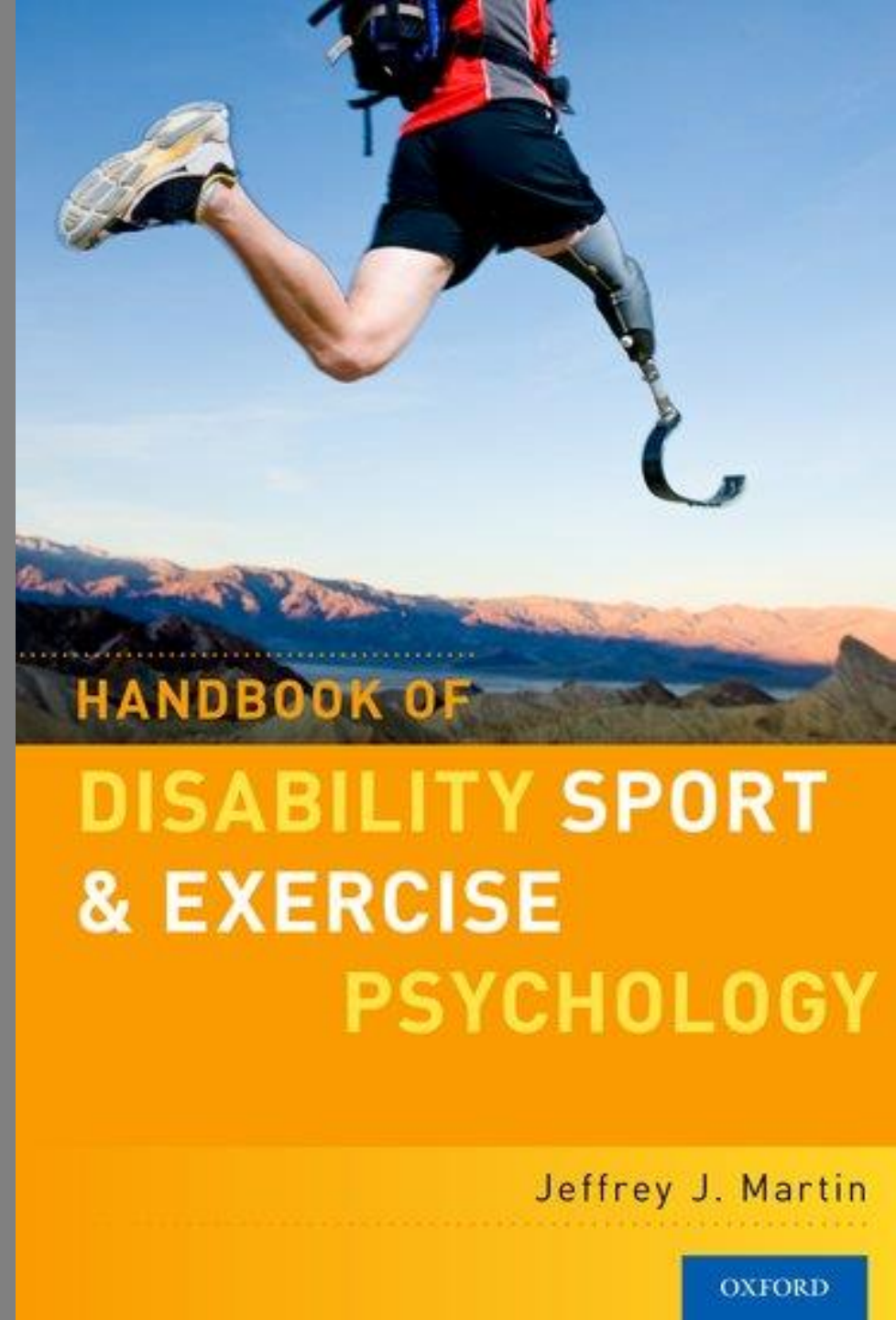
- Evidence supporting the following
- Trait: Personality
- Trait-State: Mood
- PTLIDs: Grit, Hardiness, & Resilience.
- Immediate: Emotion
- Psychological Skills:



To Learn More

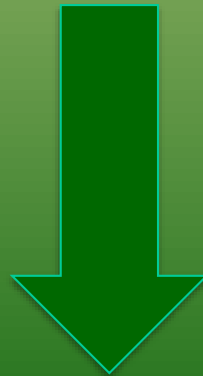


Editor: 2017-2022



Thank you for attending!

- Questions?
- Dr. Jeffrey Martin
- Email: aa3975@wayne.edu
- Research Recruitment



Participants Needed: The Effect of a Psychological Skills Training Program on Youth Athletes' with a Disability Well-Being in Sport and Life



Athletes with a disability

Evidence-based



8 Online modules

Interested? Contact
Dr. Krista Munroe-Chandler
chandler@uwindSOR.ca OR
Dr. Jeffrey Martin
aa397@wayne.edu

Psychological Skills Training



Goal Setting

Specific
Measurable
Adjustable
Realistic
Timely
Support



Imagery is Multisensory



Self-Talk should be:

POSITIVE

MEANINGFUL

MOTIVATING

EASY TO REMEMBER

Routines help you:

Control Emotions

Focus on the Task

Get in the Zone

Concentration

Use Simulation Training in Practice



Managing Emotions

View a difficult situation as a challenge

Coping Strategies: Problem-focused or Emotion-focused

Strategies to Psych Up:

Pep Talks
Pre-Competition Workout
Music



Strategies to Relax:

Breathing
Progressive Relaxation
Meditation

