

P8158 - Final Project
Effects of Athletic Identity, Resilience, and
Healthy Lifestyle on Emotional Well-being during
COVID-19

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Motivation

- ▶ The onset of COVID-19 affected almost every sphere of work and leisure.
- ▶ We are interested in investigating the impact one's athletic identity may have on mental well-being, particularly as the context of a global pandemic may have dramatically impacted one's experience of playing a sport.

Resilience, Healthy Lifestyle, and Athletic Identity



Methodology

1. Conduct EFA and CFA to determine which observed variables underlie our latent variables of interest.
2. Evaluate reliability with Chronbach's alpha.
3. Create a SEM to quantify the relationship between our constructed latent variables and mental health score.

Data: Athlete Mental Healthy Survey

- ▶ Collected in the UK after their first COVID-19 lockdown
- ▶ Several surveys administered including: – Athletic Identity Scale (AIMS) – The Brief Resilience Scale – Mental Health Continuum Short Form (MHC-SF)
- ▶ In total, 753 individuals were interviewed (363 athletes and 390 non-athletes)

Latent Variable 1: Athletic Identity

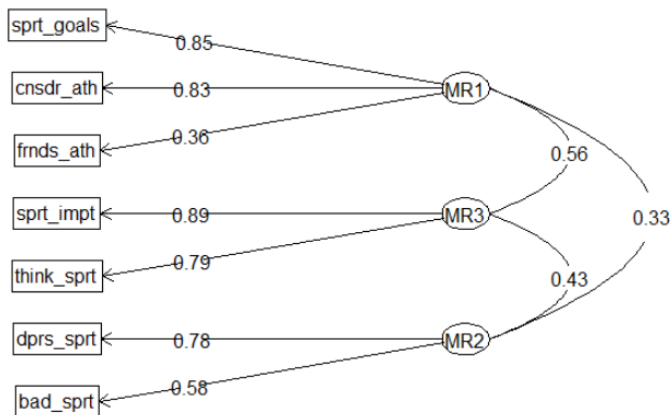
► Athletic Identity Scale (AIMS)

First Order Factors	AIMS Items
Social identity	
AIMS 1	I consider myself an athlete. CNSDR-ATH
AIMS 2	I have many goals related to sport. SPRT-GOALS
AIMS 3	Most of my friends are athletes. FRNDS-ATH
Exclusivity	
AIMS 4	Sport is the most important part of my life. SPRT-IMPT
AIMS 5	I spend more time thinking about sport than anything else. THINK-SPRT
Negative affectivity	
AIMS 6	I feel bad about myself when I do poorly in sport. BAD-SPRT
AIMS 7	I would be very depressed if I were injured and could not compete in sport. DPRS-SPRT

Note: Participants respond to the 7-items of the Athletic Identity Measurement Scale (AIMS) on a Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

Latent Variable 1 (Athletic Identity): EFA

- ▶ Parallel component analysis recommends 2 components.
- ▶ EFA suggests the following latent variable structure:



Latent Variable 1 (Athletic Identity): EFA

The three latent variables underlying the AIMS variables are as follows:

- ▶ external_identity (comprised of `sprt_goals`, `cnsdr_ath`, `frnds_ath`)
- ▶ internal_value (comprised of `sprt_impt`, `think_sprt`)
- ▶ negative_events (comprised of `dprs_sprt`, `bad_sprt`)

The construct we are interested in is reflected in these three latent variables.

Latent Variable 2: Resilience

► The Brief Resilience Scale

Please respond to each item by marking <u>one box per row</u>		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
BRS 1	I tend to bounce back quickly after hard times <i>BOUNCE</i>	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
BRS 2	I have a hard time making it through stressful events. <i>STRESS-EVENT</i>	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
BRS 3	It does not take me long to recover from a stressful event. <i>STRESS-RECOVER</i>	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
BRS 4	It is hard for me to snap back when something bad happens. <i>SNAP-BACK</i>	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
BRS 5	I usually come through difficult times with little trouble. <i>DIFFICULT</i>	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
BRS 6	I tend to take a long time to get over set-backs in my life. <i>SETBACKS</i>	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1

Latent Variable 2 (Resilience): PCA

- ▶ Parallel component analysis recommended 1 component.

Latent Variable 3: Healthy Lifestyle

- ▶ Indicators of healthy lifestyle
 1. Five Fruit and Vegetables: Yes/No
 2. Smoking Status: 7-point Likert scale
 3. Hour Sleep: numerical variable
- ▶ Higher sum score indicates healthier lifestyle

Outcome Variable: Well-Being Composite Score

- ▶ The Mental Health Continuum Short Form (MHC-SF)
- ▶ Assess three components of well-being – Emotional – Social – Psychological
- ▶ Higher scores indicate greater levels of positive well-being (scores range from 0 to 70)

Discussion

Resources

1. Hu, T., Zhang, D., & Wang, J. (2014, December 13). A meta-analysis of the Trait Resilience and Mental Health. Personality and Individual Differences. <https://www.sciencedirect.com/science/article/pii/S0191886914006710>
2. Dale, H., Brassington, L., & King, K. (2014, March 5). The impact of healthy lifestyle interventions on Mental Health and Wellbeing: A systematic review. Mental Health Review Journal. <https://www.emerald.com/insight/content/doi/10.1108/MH-RJ-05-2013-0016/full/html>
2. <https://www.tandfonline.com/doi/full/10.1080/10413200802415048>
2. <https://measure.whatworkswellbeing.org/measures-bank/brief-resilience-scale/>
3. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7068432/#B17-ijerph-17-01265>
4. <https://www.hsph.harvard.edu/health-happiness/mental-health-continuum-short-form/>
5. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7147210/>