

UNDERSTANDING PASSION, GRIT, AND MINDSET IN PORTUGUESE UNDERGRADUATE SPORT SCIENCES STUDENTS

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BACKGROUND

Passion, grit and mindset are three important concepts in sports psychology.
(Duckworth, Kirby, Tsukayama, Berstein, & Ericsson, 2011; Dweck, 2008; Vallerand & Miquelon, 2007)

Research has suggested that these variables may be critical in helping an individual become excellent in different areas, themes, and skills.

PASSION	Is important to understand the drop out of athletes, because passionate athletes are less likely to dropout and more likely to achieve a specific goal. (Vallerand & Miquelon, 2007)
GRIT	Important to accomplish certain objectives, reflecting the passion and perseverance for long-term goals. (Hernández, Moreno-Murcia, Cid, Monteiro, & Rodrigues, 2020)
MINDSET	Found to be crucial by playing an important role in motivation and helping individuals to have a coping-oriented answer to challenges. (Dweck, 1986; Dweck, Chiu, & Hong, 2009)

- AIM
- to compare passion, grit and mindset between sexes;
 - to analyze the relationships between passion, grit and mindset.

METHODS

Sample

n = 106

sports sciences, undergraduate students

 n = 58
(age: 20.10±2.70 years old)

 n = 48
(age: 19.27±4.10 years old)

Measures

- PASSION**
Passion scale
(Sigmundsson, Haga, & Hermundsdottir, 2020)
- GRIT**
Short Grit Scale – Grit S
(Duckworth & Quinn, 2009)
- MINDSET**
Theories of intelligence scale (TIS)
(Dweck, 1999)

RESULTS

- Analysis of variation between sexes did not found significant differences in the **Passion** scores. Moreover, none of the differences had meaningful effects.

	Men (N=58) Mean±SD	Women (N=42) Mean±SD	p	r magnitude
I have an area/theme/skill I am really passionate for	4.6±0.5	4.5±0.7	0.813	-0.024, trivial
I would like to use much time to become good in that area/theme/skill	4.5±0.6	4.5±0.6	0.724	-0.035, trivial
I think I could be an expert in one area/theme/skill	4.6±0.5	4.4±0.6	0.182	-0.133, trivial
I have a passion enough to become very good in the area/theme/skill I like	4.5±0.6	4.6±0.6	0.195	-0.130, trivial
I work hard enough to fulfil my goals	3.8±0.8	4.0±0.6	0.247	-0.116, trivial
I have burning passion for some areas/theme/skills	4.2±0.7	4.3±0.7	0.614	-0.050, trivial
I use a lot of time on the projects I like	4.1±0.7	4.1±0.7	0.886	-0.014, trivial
My passion is important for me	4.6±0.6	4.8±0.5	0.096	-0.167, trivial
Mean	4.5±0.6	4.5±0.5	0.960	-0.005, trivial
Total Passion Score	35.0±3.5	35.3±3.1	0.739	-0.033, trivial

Table 1. Descriptive statistics (mean±standard deviation [SD]) of the scores in the Passion questionnaire.

- Comparisons in the **Grit** items revealed no significant differences between sexes. Moreover, only trivial magnitude of changes was found between sexes.

	Men (N=56) Mean±SD	Women (N=39) Mean±SD	p	r magnitude
New ideas and projects sometimes distract me from previous ones	2.7±1.0	2.7±2.4	0.980	-0.003, trivial
Setbacks don't discourage me	3.9±0.7	3.9±0.7	0.973	-0.003, trivial
I have been obsessed with a certain idea or project for a short time but later lost interest	3.0±1.1	2.9±1.1	0.702	-0.039, trivial
I am a hard worker.	4.0±0.7	4.2±0.6	0.376	-0.090, trivial
I often set a goal but later choose to pursue a different one	3.3±1.2	3.4±1.0	0.645	-0.047, trivial
I have difficulty maintaining my focus on projects that take more than a few months to complete	3.1±1.1	3.5±1.1	0.082	-0.179, trivial
I finish whatever I begin	4.2±0.6	4.3±0.7	0.688	-0.041, trivial
I am diligent	3.9±0.7	3.9±0.7	0.796	-0.026, trivial
Mean	3.6±0.5	3.7±0.5	0.302	-0.106, trivial
Grit Score	28.1±3.4	28.9±3.7	0.398	-0.086, trivial

Table 2. Descriptive statistics (mean±standard deviation [SD]) of the scores in the Grit questionnaire.

- Comparisons in **Mindset** reveled no significant differences, and all the changes presented trivial effect sizes.

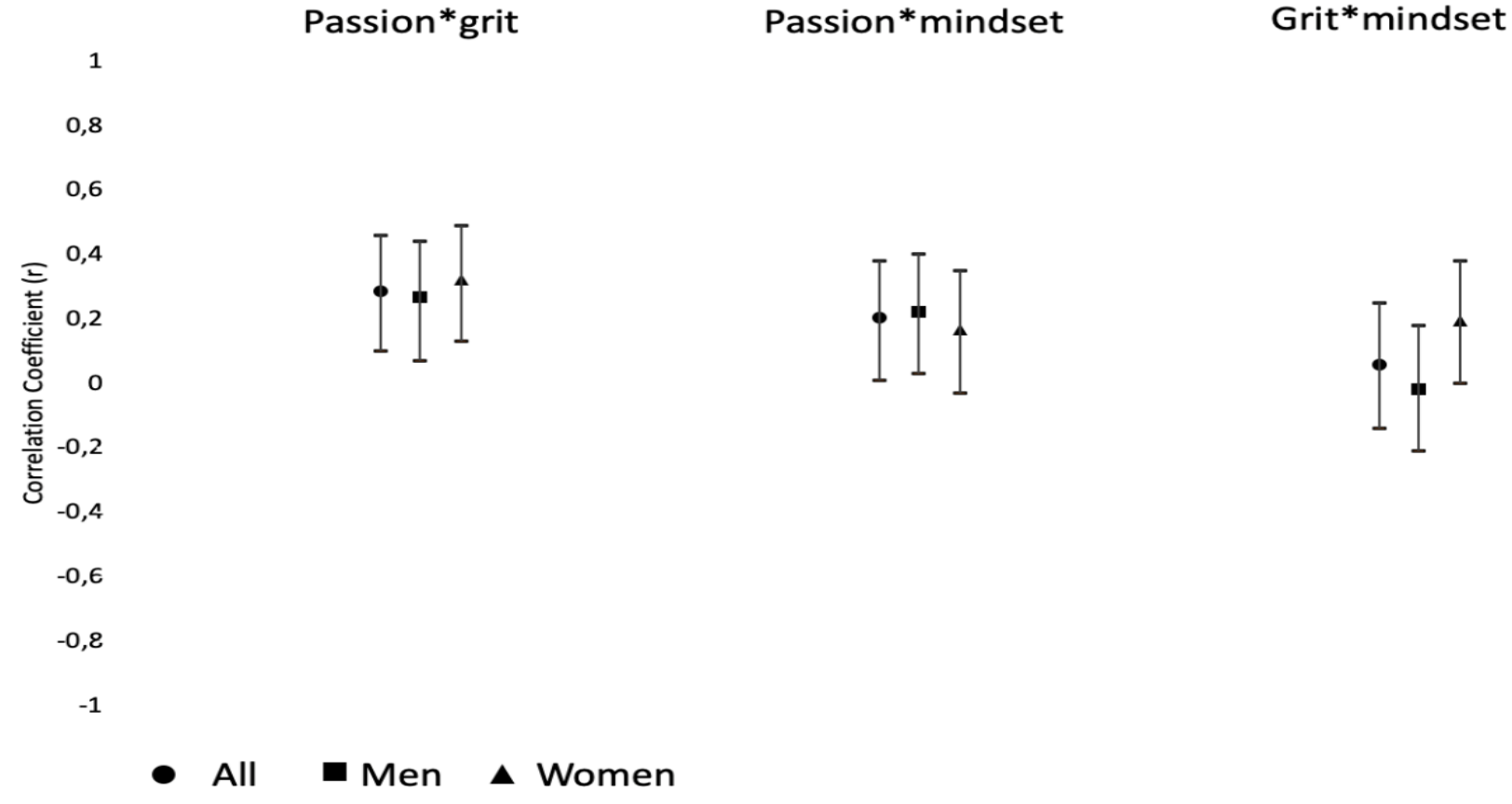
	Men (N=56) Mean±SD	Women (N=41) Mean±SD	p	r magnitude
You have a certain amount of intelligence, and you can't really do much to change it	3.9±1.5	3.8±1.2	0.523	-0.065, trivial
Your intelligence is something about you that you can't change very much	4.0±1.5	3.8±1.2	0.446	-0.077, trivial
No matter who you are, you can significantly change your intelligence level	5.0±0.8	5.0±0.7	0.788	-0.027, trivial
To be honest, you can't really change your basic intelligence	4.1±1.5	4.2±1.5	0.708	-0.038, trivial
You can always substantially change how intelligent you are	4.9±0.8	4.8±0.6	0.595	-0.054, trivial
You can learn new things, but you can't really change your basic intelligence	3.9±1.4	4.1±1.3	0.228	-0.122, trivial
No matter how much intelligence you have, you can always change it quite a bit	5.0±0.8	5.0±0.7	0.904	-0.012, trivial
You can change your basic intelligence level considerably	4.9±0.7	4.8±0.7	0.556	-0.060, trivial
Mean	4.6±0.9	4.7±0.7	0.380	-0.089, trivial
Mindset Score	35.7±6.5	35.5±4.9	0.916	-0.011, trivial

Table 3. Descriptive statistics (mean±standard deviation [SD]) of the scores in the Mindset questionnaire.

CONCLUSION

The present study **did not find significant differences** in passion, grit and mindset between sexes in undergraduate sports sciences students. Additionally, it was verified that relationships between passion, grit and mindset are small in this population.

Figure 1. Correlation coefficient [mean, 95%CI] between passion, grit, and mindset in all undergraduate and split by sexes.



Overall (both sexes considered), correlations presented small magnitudes in the pair's passion*grit (r = 0.28; 95%CI [-0.07;0.31]; p = 0.004), passion*mindset (r = 0.203; 95%CI [0.01;0.38]; p = 0.043) and grit*mindset (r = 0.06; 95%CI [-0.14;0.25]; p = 0.574).