

The Relationship Between Mental Toughness and Lifestyle Choices in University Students



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1. Introduction:

- ◆ Attending university can be a challenging time for students, and result in the adoption and maintenance of unhealthy lifestyle choices. **Physical activity** levels can decline, and **dietary choices** can become unhealthy.
- ◆ Some students manage to successfully cope with the adjustment to higher education, and adopt and maintain a healthy lifestyle, others do not. The ability to cope can be influenced through individual differences. One individual difference associated with coping is **mental toughness**.
- ◆ Mental toughness is a psychological determinant of how **challenges** and stressors are approached regardless of prevailing circumstances. Mentally tough individuals display **commitment** and **control** over stressful life events. This trait is beneficial for coping. High mentally tough individuals face challenges or new environments with **confidence** and see it as an opportunity to develop, not as a threat (see figure 1 for model)².

Aim: To identify the relationship between mental toughness and the adoption and maintenance of healthy lifestyle choices in undergraduate university students. Specifically focusing on physical activity and diet.

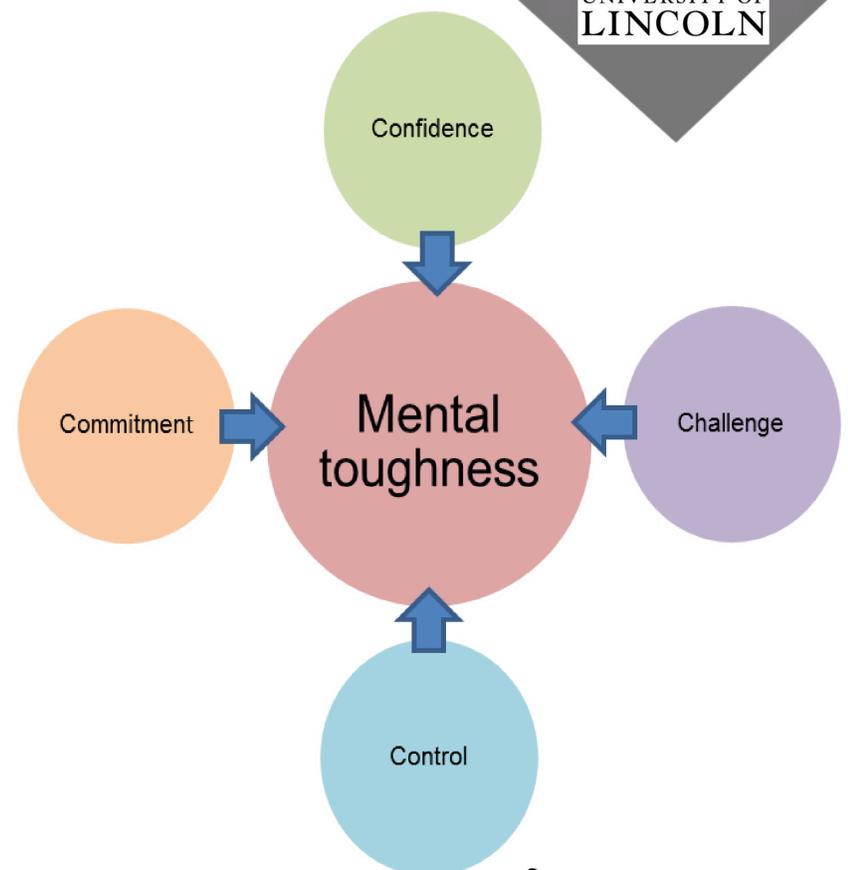


Figure 1: A model of mental toughness²

2. Method:

- ◆ Participants were 167 undergraduate university students studying across the U.K (Mean age: 21 years; SD = 3.37).
- ◆ Participants completed online questionnaires assessing mental toughness (MTQ48)², physical activity (IPAQ-SF)⁵, and eating identity (EITI)¹.
- ◆ Statistical analysis involved **bivariate correlational** analysis to assess the relationship between mental toughness and lifestyle variables. **Multiple linear regression** calculated the predictive capacity of mental toughness on lifestyle variables.

3. Results:

- ◆ Table 1 displays the multiple linear regression analysis for mental toughness predicting lifestyle variables

	Variable	R ² value
Physical activity	Vigorous exercise	0.08
	Walking	0.03
	Sitting	0.10
Diet	Healthy eating identity	0.11
	Emotional eating identity	0.02
	Meat eating identity	0.08
	Picky eating identity	0.07



4. Discussion:

- ◆ There were **no significant gender differences** between mental toughness or lifestyle variable scores, with the exception of healthy eating in which females scored significantly higher.
- ◆ **Mental toughness explains 8% of Variance in vigorous exercise.** Mental toughness is associated with higher pain tolerance during exercise³. Therefore mentally tough individuals will be able to withstand greater pain during physical activity, potentially enabling them to participate in high intensity exercise and not be deterred by the pain.
- ◆ **Mental toughness explains 11% of variance in healthy eating identity.** Fatty textured food is associated with low healthy eating scores and can aid in relieving stress⁴. Therefore if mental toughness is low, specifically in components such as emotional control, external stress relievers (i.e. fatty textured food) may be relied upon to aid coping, creating an unhealthy diet.
- ◆ Future research could involve a longitudinal study to identify a suitable intervention to enhance mental toughness. This may facilitate the adoption and maintenance of healthy lifestyle choices for students attending university.

5. Applied Recommendations:

- ◆ The MTQ48 could be used prior to university entry to identify low mentally tough students who maybe 'at risk' of adopting and maintaining an unhealthy lifestyle.
- ◆ These students can receive interventions, before and during higher education to enhance mental toughness. This could help students cope and remain in control of their lifestyle choices. Essen-

References:

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