

## Musical and physical activities and their relationships with school engagement, social and academic self-concepts and theory of intelligence



Hannah Leddy  
hledd001@alumni.gold.ac.uk

### Background

- Musical and physical activities are positively associated with a range of academic and social abilities in school students.
- We aim to investigate the relationships between participation in these activities and school engagement and whether these relationships are influenced by students' social and academic self-concepts and theory of intelligence.

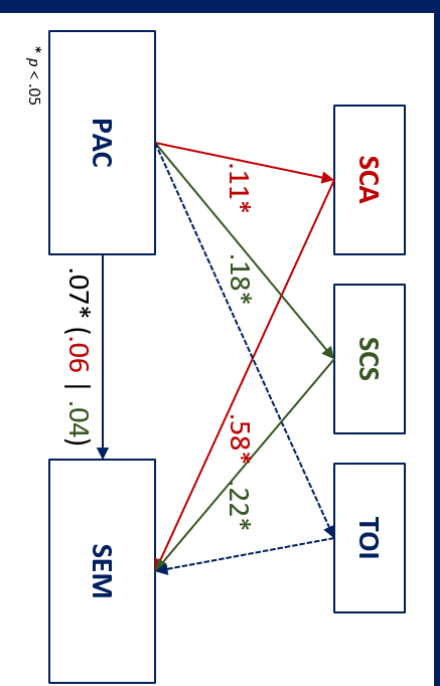
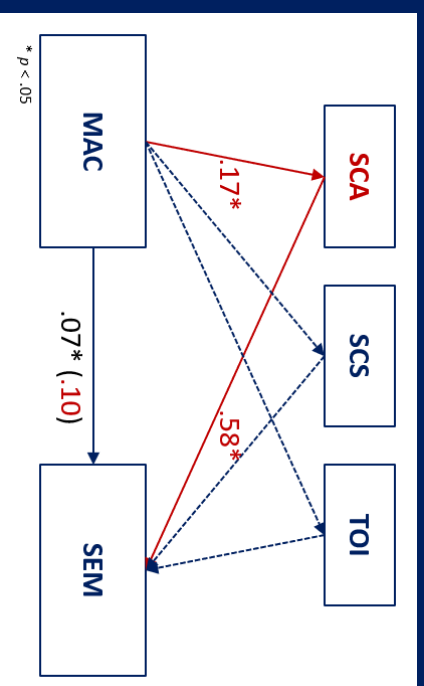
### Sample

- 3903 students (59.3% female, 1.7% others, age: M=12.5, SD=2.0, 5th to 11th grade) from German and UK secondary schools.

### Results

- Effects of participation in musical and physical activities on school engagement were partly mediated by academic and social self-concepts, but not by theory of intelligence.
- Total effects for both activities on school engagement are similar.
- Social self-concept substantially mediates the relationship between physical activities and school engagement.

## Associations between students' participation in musical and physical activities and school engagement are influenced by their social and academic self-concepts



### SELF-REPORT MEASURES

- |                             |                                |
|-----------------------------|--------------------------------|
| Activities                  | Self-concepts                  |
| • Musical activities (MAC)  | • Academic self-concept (SCA)  |
| • Physical activities (PAC) | • Social self-concept (SCS)    |
| Engagement (SEM)            | • Theory of intelligence (TOI) |
| • School engagement (SEM)   |                                |

This data was originally collected as part of the LongGold project



Pearson's correlations between musical and physical activities, social and academic self-concepts, theory of intelligence, and school engagement

	MAC	PAC	SCA	SCS	TOI
PAC	.09*				
SCA	.18*	.13**			
SCS	.03	.18**	.30**		
TOI	.05*	.07**	.09*	.08*	
SEM	.15**	.16**	.54**	.34**	.10**

Note: \* indicates  $p < .05$ . \*\* indicates  $p < .01$ .



Hannah Leddy, Lucia Bertello, Daniel Fiedler, Alice Jones Bartoli & Daniel Müllensiefen