

# The Role of Grit in Academic Engagement

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- Grit is an essential concept of Positive Psychology that was first presented by Angela Duckworth and colleagues. As originally proposed, Grit included two dimensions—Perseverance and Consistency—although in later studies some have argued that Grit has only a single dimension.
- Perseverance is visible in the individual who pushes himself or herself to accomplish long-term goals that are grounded in his or her passions. Consistency is visible in the individual who achieves short-term goals but is also engaged in numerous activities, some for just a short time and others for longer periods. It is easy to see how Grit is essential for an individual's plans to achieve success.
- For example, high levels of Grit have been shown to be related to high levels of conscientiousness, the likelihood of completing a graduate-level of education, the retention of cadets at the United States Military Academy, the likelihood of advancing to the final rounds of the Scripps National Spelling Bee, and to facilitating the academic performance of African-American students at predominately Caucasian colleges and universities.
- The present study was undertaken to examine the role of Grit in moderating behaviors related to self-control, positive and negative affect, and engagement and disaffection—these being behaviors related to classroom learning and engagement.

## Participants

Complete data were collected from 522 participants. The modal participant was 22.68 years old (SD = 8.43; Range = 43), female, and in her junior year of college.

## Procedure

Participants completed an informed consent statement, the 12-item Grit Scale, the Brief Self-Control Scale, measures of academic engagement and disaffection, the Positive and Negative Affect Scale, and a short set of demographic items.

## Results

- Factor analysis of the 12 Grit items yielded two factors as seen in the graphic to the right. The factors were labeled Perseverance and Consistency, and the median Cronbach alpha was 0.83.
- Mean scores on the two scales were not related,  $r(521) = -.034, p = .422$ .
- Mean scores on the Consistency scale ( $M = 2.82, SD = 0.75$ ) were significantly lower than those on the Perseverance scale ( $M = 3.79, SD = 0.75$ ),  $t(521) = -20.58, p < .0001$ .

	Component	
	1	2
I am a hard worker.	.803	
I am diligent.	.769	
I finish whatever I begin.	.768	
I have achieved a goal that took years of work.	.764	
I have overcome setbacks to conquer an important challenge.	.702	
Setbacks don't discourage me.	.524	
I often set a goal but later choose to pursue a different one.		.801
My interests change from year to year.		.778
I have difficulty maintaining my focus on projects that take more than a few months to complete.		.754
I have been obsessed with a certain idea or project for a short time but later lost interest.		.717
New ideas and projects sometimes distract me from previous ones.		.670
I become interested in new pursuits every few months.		.645

### Consistency, Self-Control, Affect, and Engagement

- Consistency scores were positively related to Negative Affect, Distractibility, and Disaffection scores—all unfavorable for learning. Consistency scores were negatively related to Positive Affect, Determination, and Engagement scores—also all unfavorable for learning.

Pearson Correlations		Consistency		Pearson Correlations		Perseverance	
Consistency	Pearson's r	—	—	Perseverance	Pearson's r	—	—
	p-value	—	—		p-value	—	—
PANASNegative	Pearson's r	0.320		BSCSDistractability	Pearson's r	-0.207	
	p-value	< .001			p-value	< .001	
BSCSDistractability	Pearson's r	0.474		PANASNegative	Pearson's r	-0.257	
	p-value	< .001			p-value	< .001	
DisaffectionTotal	Pearson's r	0.454		DisaffectionTotal	Pearson's r	-0.278	
	p-value	< .001			p-value	< .001	
Pearson Correlations		Consistency		Pearson Correlations		Perseverance	
Consistency	Pearson's r	—	—	Perseverance	Pearson's r	—	—
	p-value	—	—		p-value	—	—
BSCSDetermination	Pearson's r	-0.126		BSCSDetermination	Pearson's r	0.384	
	p-value	0.004			p-value	< .001	
PANASPositive	Pearson's r	-0.072		PANASPositive	Pearson's r	0.561	
	p-value	0.099			p-value	< .001	
EngagementTotal	Pearson's r	-0.107		EngagementTotal	Pearson's r	0.455	
	p-value	0.014			p-value	< .001	

### Perseverance, Self-Control, Affect, and Engagement

- Perseverance scores were negatively related to Negative Affect, Distractibility, and Disaffection scores—all favorable for learning. Perseverance scores were positively related to Positive Affect, Determination, and Engagement scores—also all favorable for learning.

## Discussion

- Grit was found to have two distinct dimensions—Consistency and Perseverance. The Cronbach alpha value indicates that the two scales should be easily reproducible in future studies.
- The two dimensions (Consistency and Perseverance) were not statistically-related and participants scored significantly higher on Perseverance than on Consistency. No sex differences were observed.
- The two Grit components—Consistency and Perseverance—were found to have opposite relationships with behaviors that promote classroom learning and engagement. Consistency was positively related to behaviors that do not promote learning and engagement while Perseverance was positively related to behaviors that promote learning and engagement. Collectively, Perseverance was the most proactive factor.