

THE RELATIONSHIP BETWEEN PSYCHOLOGICAL CAPITAL AND GRIT: IMPLICATIONS FOR BUSINESS STUDENTS

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ABSTRACT

In 2007, Duckworth and colleagues introduced the construct of Grit, defined “as a trait-level perseverance and passion for long-term goals” [1, p. 1087]. In this seminal article, the authors noted that Grit entails the capacity to sustain both effort and interest in tasks that take long periods of time to complete. The authors also reported that Grit accounted for successful outcomes in the academic realm such as grade point average among Ivy League undergraduate students, the retention of cadets at West Point United States Military Academy, and rankings in the National Spelling Bee above and beyond ability (i.e., IQ) and the Big Five personality trait of conscientiousness.

Somewhat related but also distinct from Grit are the positive psychological resources that comprise Positive Psychological Capital, or simply PsyCap for short. The well-researched core construct of PsyCap consists of the positive psychological capacities of hope, self-efficacy, resilience, and optimism. PsyCap has regularly shown through scientific studies in the published literature to be positively related to a variety of employee attitudinal, behavioral, and performance outcomes [5]. Additionally, and of most relevance to this particular study, PsyCap has been demonstrated in empirical studies to have strong relationships with important outcomes in educational settings such as academic performance [3] and student engagement [6].

To date, however, there have been no empirical studies assessing the relationship between the seemingly related but distinct variables of Grit and PsyCap. One clear distinction is that Grit has been identified as being more “trait-like.” In other words, prior research has indicated that Grit is a relatively fixed compound trait comprising stamina in dimensions of interest and effort that are not open to development over time [2]. PsyCap, on the other hand, has been demonstrated to be more “state-like” and open to change [4] through a variety of development techniques. Given that the “trait-like” variable of Grit and “state-like” variable of PsyCap have both been found to explain significant variance related to measures of academic success, the purpose of this study was to determine if PsyCap is a predictor of Grit.

In order to explore this relationship, we surveyed 156 undergraduate business students and asked them to self-report their levels of Academic PsyCap and Grit. Academic PsyCap was measured with the 24-item survey validated by Luthans et al. [6] and adapted to college students for this study. Reliability, as measured by Cronbach’s alpha for Academic PsyCap in this sample, was $\alpha = .914$. Grit was assessed using the 12-item Grit Scale (Grit-S) [2]. The Cronbach’s alpha for the Grit-S scale was $\alpha = .732$. We also collected information related to a number of control variables which could potentially be correlated with Grit. These controls included the hours spent on school work, gender, ethnicity, age, part-time vs. full-time academic status, working a job, year in school, major and ACT score. Bivariate correlations were calculated and a significant relationship between the key study variables was found. In particular, the results indicated a significant and positive relationship between the self-reported levels of Academic

PsyCap and Grit ($r = .46, p < .01$) for the subjects in this study. The correlations and summary statistics for the focal and control variables are shown in Table 1.

Table 1- Summary Statistics and Correlations

	Mean	S.D.	Min	Max	1	2	3	4	5	6	7	8	9	10
1 Grit	3.54	0.59	1.75	4.63										
2 PsyCap	4.49	0.61	2.38	6	0.46									
3 School Hours	18.53	14.4	0	100	0.10	0.1								
4 Female	0.51	0.5	0	1	0.07	0.11	0.15							
5 Non-White	0.21	0.45	0	3	-0.01	0.08	0.01	0.11						
6 Age	23.33	5.75	18	51	0.09	0.08	0.07	0.01	-0.05					
7 Part-Time	0.02	0.15	0	1	0.05	0.05	-0.01	0.07	0.35	-0.02				
8 Not Working	0.19	0.39	0	1	0.06	0.03	0.01	-0.02	0.10	0.16	0.02			
9 Year School	3.22	0.77	0	4	0.06	0.04	0.14	0.14	-0.20	0.26	-0.19	-0.01		
10 Major	0.46	0.5	0	1	-0.06	0.00	-0.10	0.07	0.05	-0.01	0.01	0.11	-0.03	
11 ACT Score	22.26	3.62	11	33	-0.01	0.04	0.22	-0.19	-0.23	-0.04	-0.24	-0.09	-0.06	-0.16

N=156 Correlations >|0.15| are significant $p < .05$

To further evaluate this relationship, we ran a stepwise regression analysis with all the controls included in Model 1. This model explained 4.6% of the variance in Grit. In Model 2, we included Academic PsyCap. In this model, the coefficient for Academic PsyCap was positive and statistically significant ($p < .001$). Model 2 also explained an incremental 19% of the variance in Grit. In addition, the AIC and BIC fit statistics were lower values for Model 2 when compared to Model 1 suggesting Model 2 to be a better fit for explaining variance relative to the complexity of additional variables when compared to Model 1. These results suggest that Academic PsyCap is significantly related to Grit beyond the control variables included in this study.

Beyond ability and opportunity, prior research has established that PsyCap and Grit are important determinants in achieving academic success. Although these variables are distinct, the results from the present study suggest that PsyCap is a significant predictor of Grit within undergraduate business students. Given that prior research results have also established that Grit is a fixed personality trait while PsyCap levels are malleable and can be enhanced, it is suggested that the integration of PsyCap development activities within business school curricula could lead to greater academic achievement, engagement, and success above and beyond what could be explained by Grit alone.

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