



## ***GRE® Test Validity: Putting It in Perspective***



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There are many myths that are widely thought of as true, but actually are not. And yet other, actual facts are treated as myths. A good example is the myth that the correlations of GRE® scores with grades are so low as to suggest that the GRE General Test is of no value. This myth may come from the perception among some academics that the correlations between GRE scores and graduate GPA should be as high as the correlations they see in their own fields of study, such as medical research, aeronautics or chemical engineering.

In reality, in the field of educational measurement, the correlations between GRE scores and grades are quite meaningful. In fact, the correlations are stronger than many claims that are commonly believed to be ironclad truths.

For example, would it surprise you to learn that GRE General Test scores correlate more highly with students' cumulative graduate GPA than smoking is likely to predict lung cancer? How about scores from the GRE Analytical Writing section are better predictors of a biological and biomedical science doctoral program student's grades than taking hypertension medication is of a reduced risk of stroke?

## How GRE Scores Stack Up<sup>1</sup>

<i>r</i> - Coefficient of Correlation	Measures Correlated
.03	hypertension medication & reduced risk of stroke
.08	bypass surgery for heart disease & survival for at least 5 years
.08	ever smoking & incidence of lung cancer within 25 years
.09	alcohol use during pregnancy & premature birth
.12	low-level lead exposure & reduced childhood IQ
.22	<b>GRE Verbal Reasoning scores &amp; cumulative graduate GPA in Health Professions &amp; Clinical Sciences Master's Programs</b>
.23	alcohol use & aggressive behavior
.27	<b>GRE Analytical Writing scores &amp; cumulative graduate GPA in Biological &amp; Biomedical Science Doctoral Programs</b>
.30	sleeping pills & short-term improvement in chronic insomnia
.32	psychotherapy & subsequent well-being
.34	Viagra use & improved male sexual functioning
.34	elevation above sea level & lower daily temperatures
.37	<b>GRE Quantitative Reasoning scores &amp; cumulative graduate GPA in MBA Programs</b>
.40	habitat size loss & species decline
.44	weight & height for U.S. adults

The truth is that the GRE General Test is more highly correlated with graduate-level academic readiness and performance than many commonly accepted correlations curated from popular psychology, medicine and everyday life. Yet despite dozens of studies validating the GRE tests by external, independent researchers, ETS continues to encounter criticisms based on unrealistic expectations that correlations between GRE scores and graduate GPA — a relationship that is greatly affected by grade inflation — should compare favorably with correlations observed in other fields.

### **Our own misperceptions can be the most difficult beliefs to change.**

GRE scores serve a critical function as the only common, objective measures that allow faculty committees to compare applicants from different educational, social and cultural backgrounds. The test is proven to be highly valid in measuring what it says it was designed to measure: graduate school readiness. It's also proven to be a reliable predictor of what it claims it can predict — first-year GPA — as well as outcomes beyond that, such as cumulative graduate GPA and faculty ratings of student performance. And this is true for both master's and doctoral program students, according to a **meta-analysis of more than 100 research studies by University of Minnesota researchers.**



