



Ad Hoc Committee - Examining the Efficacy of the GRE

Response to Charge S-2203

August 22, 2022

Charge Number: S-2203

Title- Examining the Efficacy of the GRE

Description- *Examine the effectiveness of the Graduate Record Examination (GRE) and its impact on Rutgers University graduate programs. Investigate other peer aspirants.*

Abstract

The committee's overriding concerns are the cost of taking the GRE exam as well as how it creates barriers for underrepresented groups and often fails to predict graduate school completion. Rutgers Graduate Admissions on each of the campuses are allowing for the GRE to be optional in many of their program offerings. In response to this recent charge, an Ad Hoc Committee was created to examine the current practices among leading national institutions, and to review the formal literature review that examines the correlation between GRE scores and success in graduate school performance and retention.

Background

An Ad Hoc Committee was convened to explore the current research literature examining the Graduate Record Examination (GRE) as a data point in securing admissions to a graduate school program for masters' programs and PhD programs, primarily in the STEM field. The LSAT and MCAT examinations were excluded for the purposes of addressing this charge. Ashley Bernstein, a PhD candidate in Chemistry and a former senator, submitted this Charge with the hope of Rutgers examining its reliance on the GRE tests for entry into STEM PhD degree programs.

Holistic Review Process is a mission-aligned admissions or selection processes that takes into consideration applicants' experience, attributes, and academic metrics as well as the value an applicant would contribute to learning, practice, and teaching. The Holistic Review process involves the review of everything a candidate has submitted, understanding of the presence and impact of unconscious biases, and deliberate awareness of inequities in access and opportunity. Extracurricular activities, the rigor of college level courses, letters of recommendation,

demonstrated interest, and college interviews may be important factors in a Holistic Review process. Holistic Review is utilized as an alternative review admissions process when either the GRE is optional or when GRE scores fall below benchmarked mean ranges for a given discipline or program. Holistic Review is currently in use at Rutgers University because of a reduced availability of GRE scores for applicants. When faced with the challenges of reduced data sources, Holistic Review has been viewed as a component solution to provide alternative data points to review the quality of applicants.

The GRE is a standardized test that provides substantial normalized data on academic performance. The GRE and other standardized examinations, like the LSAT and the MCAT, have been used as an assessment of an applicant's cognitive abilities and skill sets in preparation for graduate study. Thus, admissions committees have historically relied heavily on the use of GRE score to select students because students with higher scores were deemed more likely to succeed (Kuncel & Hezlett, 2007; Kuncel, Hezlet, & Ones, 2001; Kuncel, Wee, Searfin, & Hezlett, 2010).

There are, however, problems with utilizing the GRE to select the highest caliber students in admissions, specifically related to impeding enrollment of a diverse student body (Durka, 1999; Pruitt, 1998; & Toyama, 1999) The GRE quantitative portion correlates positively with male gender, Caucasian, and Asian American ethnicity. Specifically, women perform 80 points below average, while African Americans perform 200 points below the mean (ETS, 2014); (2015a) & 2015 b). There are also problems with utilizing the GRE to predict success. There is no correlation between persistence rates and women who score well. Men scoring in the higher 25% in the GRE quantitative portion were also more likely to leave school without a degree than those who scored in the lowest 25% (Halford, 2019).

Rutgers' utilization of GRE scores as an important factor in graduate admissions appears problematic because of its biases against female and underrepresented minority (URM) students and its questionable prediction of success. The committee does not support eliminating the use of the GRE, nor is this a call to admit academically unqualified students in favor of a more diverse student body in graduate programs. The committee does seek to facilitate development and use of alternative pathways in graduate admission processes that involve innovative, augmented processes that utilize proven success markers and program completion with a diminished reliance on GRE data points.

Nationwide, Graduate Schools have been working to expand program access to a more diverse group of applicants. However, the dependency on GRE quantitative scores remains steadfast. The committee reviewed several journal publications (Wilson, M. Odem, M., Walters, T, Depass, A., & Bean, A. (2019); Miller & Stassum, (2014); Cantwell, Canche, M.; & Sutton, F., (2010); Kuncel, N.R., Ones, D. S. A, (2001) & MacLachlan, A.J., (2017).

Discussion and Considerations

The committee utilized a two-prong approach to explore this charge. First, the committee conducted a detailed review of admissions-related literature on the GRE within the past 10 years.

Next, key Graduate School staff representatives from each campus were invited to outline their admissions-related processes and, when applicable, the Holistic Review processes instituted during the 2020-21 pandemic year when GRE testing became optional.

Invited guests included Richard Welsh, Jennifer Soyka, & Julianne Apostolopoulos from the Office of General Counsel, Vice Chancellor Courtney McAnuff, and Assistant Chancellor Marco Dinovelli, Dean Taja-Nia Henderson, Newark, & Dean Henrik Pedersen, New Brunswick.

Both Dr. McAnuff and Dinovelli outlined a well-defined holistic review practice conducted at Rutgers University Undergraduate admissions since the pandemic Spring 2020 semester. It should be noted this was the inception of a SAT and GRE optional phase because of students' inability to complete testing during New Jersey state test facility closures. The selection of students was and is still based on specific individualistic criteria when test scores were submitted were slightly below the mean range. The Holistic review criteria included a student's academic record, letters of recommendation, personal qualities involving leadership experiences, enrollment in a precollege program, research experience, military experience, coupled with any socioeconomic or environmental factors that the student experienced during their education and upbringing. Additionally, information regarding the level of parents' college achievement and household income provided the admission committee with a gauge for students drive to succeed, learn and inhabit a sense of grit. A rubric was developed and annually updated for this team to score as much as possible to address some implicit bias. It is understood that substituting a GRE score for other viable options within a holistic review will not eradicate bias entirely. It was suggested the university train as many admissions counselors and volunteer staff in this methodology for the holistic review process.

Dean Taja-Nia Henderson and Dean Henrik Pedersen have outlined similar approaches for specific programs utilizing a holistic review process and have additionally offered webinar training sessions to faculty to enlist their support and understanding of this process. While many programs have agreed to this methodology, several PhD program directors are maintaining their steadfast support of the GRE quantitative scores as degree completion indicators for the PHD. Dean Henderson posited more frequent and timely data from OIRAP to uphold this claim. The committee members argue the GRE scores simply do not indicate how successful a student will be in their programs when 50 percent leave halfway through their degree pathways.

Literature suggests statistically significant increases in diversity within doctoral programs when holistic review is used (Kent, J.D., & McCarthy, M.T., (2016); Okahana, H., Zhou, E. (2017); Paceheco, W.I., Porter, J., & Appleyard, C.B. (2015); Posselt, J.R., (2016); Scott, L.D., & Zerwic, J. (2015); & Wilson, M.B., Depass, A, (2018). The committee discussed adding a prerecorded interview submission from a standardized list of questions. For example, "Spark Hire" is currently in use at specific Rutgers programs with some positive results in its ease of use in conducting interviews remotely, eliminating interview scheduling challenges, and screening graduate applicants in a time sensitive manner.

Dr. Eduardo Molina, VP of OIRAP attended a scheduled meeting with our committee on September 20, 2022. The discussion points included:

- Identifiable Success markers as defined by each department.
- Tracking data that is meaningful and useful
- Holistic Review along coupled with a series of student support resources that aligns with student retention and degree completion
- Develop customizable dashboards that have department identified success markers
- Incorporate quantitative and qualitative data points

University of Michigan/Rackham Graduate School, Dean Michael Solomon attended one of our scheduled meetings on October 3, 2022 at 9:30 am to explain the multitiered process in removing GRE from its admissions process through several faculty open forums. The University of Michigan's Rackham graduate school had decided to stop using the GRE in any of its internal decisions about fellowships, program review, program quality, etc. It left the choice about using the GRE with each individual program. It also hosted numerous workshops in which it reviewed the evidence about GRE efficacy and its potential impact on access to doctoral education. It is noted that 10% of the U. of Michigan's graduate programs voted against removing the GRE. In these years, many programs on their own stopped using the GRE. The graduate school asked all programs to stop using the GRE during the pandemic, and most did. Some of the graduate programs' chairs reported positive admissions outcomes in this period. It was in this context that the proposal was made to the established Executive Board. The U. of Michigan instituted an Executive Board of elected faculty members for a three-year term to conduct ongoing programmatic admission reviews. All Rackham doctoral programs use a common application; they can add a supplemental page that requests department specific information. Within the bounds of the law, all programs then conduct their admissions processes independently; however, programs are accountable to their admissions practices considering the goals of their programs and this is a discussion point in U. of M. Rackham Program Review. The action of the Executive Board here was to agree to adopt a common approach for doctoral programs to not use the GRE. Finally, U. of M. Rackham reviews each graduate program on a five-year cycle. The review is accomplished by a team of Rackham associate deans and staff. Instead of formally reviewing admissions practices we offer support through holistic admissions workshops and consultation services.

Summary and Synthesis

The issues discussed in the biweekly sessions throughout the summer months were as follows:

- Predictive validity of GRE and its utility in graduate admissions. Removing barriers for underrepresented students without jeopardizing the academic caliber of applicants.
- GRE preparatory courses incur a high cost to many impoverished students.

-Compare and contrast traditional quantitative measures, such as GRE and grade point average (GPA), with Holistic Review.

-Holistic Review as a practice tends to minimize dependence on one specific data point, for example the GRE score, and signal other areas of strengths in the- students' application.

Recommendations

Be it resolved, the University Senate recommends

1. University-wide graduate school deans shall advise graduate program directors on the strengths and weaknesses of the GRE in predicting graduate student success, as well as on the strengths of holistic review, before the end of the Spring 2023 semester.
2. Graduate admission committees need to decide on whether to require, eliminate, or maintain the GRE as optional for the admissions process for the incoming class of 20242025 AY.
3. If programs decide to use the GRE, it should be part of a holistic review process. In addition, programs should define explicitly how the GRE is used, why it is used, and which candidates shall be asked to take the GRE. This information should be easily accessible to graduate student applicants.
4. In the event a program chooses to use the GRE, the University should provide financial support, such as free or low-cost GRE preparation materials, to address financial inequities and reduce barriers.
5. The Office of Institutional Research and Academic Planning (OIRAP) shall establish a program-specific reporting system on the indicators of graduate student outcomes to evaluate graduate education efforts relative to aspirant peer institutions and similar departments across the University.

Respectfully submitted,

Ad Hoc Committee Chairs

Richard Dool, New Brunswick SC&I-Faculty

Adam Kustka, School of Arts and Sciences-Newark Faculty

Suja Patel, Newark-Staff

Lucille Foster, Newark RBS, Vice Chair University Senate

Ad Hoc Committee Members

Gloria Bachmann, Faculty, Robert Wood Johnson Medical School

Joseph T. Barbarese, Faculty, Camden, English Department

Ashley Bernstein, Graduate Student, former SGS Senator, New Brunswick

Robert Boikess, Executive Committee Member, Faculty-School of Arts and Sciences

Alison Clarke, RBHS-New Brunswick Staff

Jon Oliver, Immediate Past Chair-University Senate, Staff New Brunswick

Adrienne Simonds, Chair-University Senate, Faculty-School of Health Professions

Jose Torres, PTL Camden Faculty

Michael Van Stine, Graduate Student Camden

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