

Introduction

- The challenges of medical student recruitment to vascular surgery are distinct – exposure prior to clerkships may be limited, vascular surgery is not a core rotation, the integrated track is by definition a narrow training pathway in comparison with general surgery, and persistent concerns regarding lifestyle.
- Vascular Surgery Interest Groups (VSIGs) have arisen to promote early specialty exposure with benefits to numerous domains influencing student career trajectory. However, prior reports have identified a persistent paucity of VSIGs at even medical schools with vascular surgery training programs.

GOAL:

Evaluate the impact of a VSIG within an applicant's medical school on national application volume to integrated vascular surgery residency and match performance



HYPOTHESIS:

We hypothesized that presence of a VSIG leads to increased applicant volume and success in the match.

Methods

- U.S. allopathic medical schools with VSIGs were identified via active Society for Vascular Surgery (SVS) registration dated July 1, 2025
- A data request was subsequently submitted to the NRMP and the list of VSIG institutions cross referenced with allopathic medical schools participating in the NRMP between 2020 – 2025
- 88 institutions** were identified for inclusion for an aggregate data request with a total of 164 institutions participating in the 2025 NRMP (**76 non-VSIG**)
- Data were provided by the NRMP in an iterative fashion in accordance with a strict privacy policy that prohibits any individual or school level data, contiguous rank data, distinct specialties data, or United States Medical Licensing Examination (USMLE) metrics. Data were provided at an aggregate-level (VSIG vs non-VSIG) for each year across the study period.

Results

Aggregate NRMP applicant volume and match outcomes from 2020 – 2025

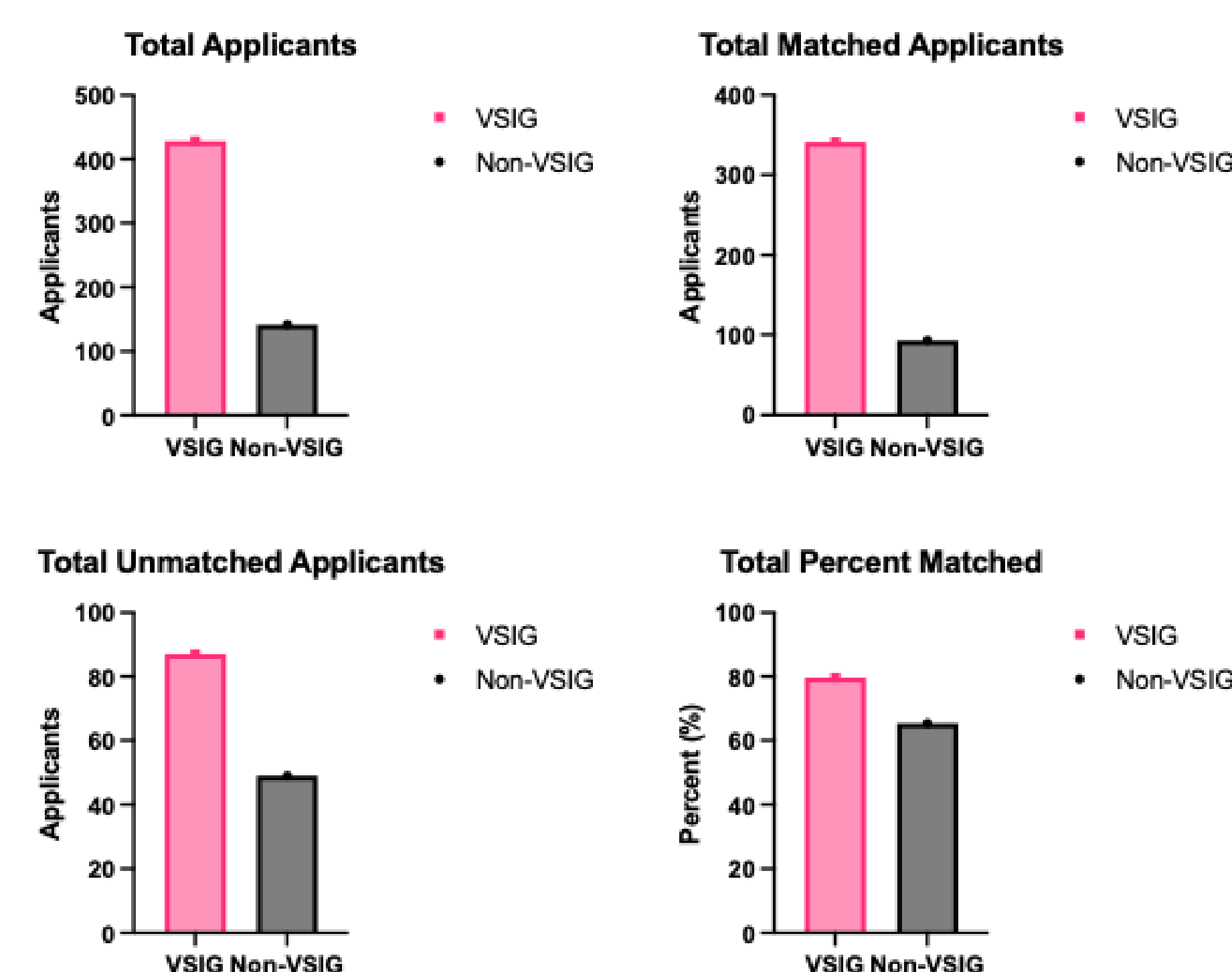


Figure 1: Total applicants from VSIG institutions versus non-VSIG institutions (top left). Total matched applicants from VSIG institutions versus non-VSIG institutions (top right). Total unmatched applicants from VSIG institutions versus non-VSIG institutions (bottom left). Overall percent matched from from VSIG institutions versus from non-VSIG institutions (bottom right)

Results

Comparison of mean and normalized applicant volume and match performance with annual trends

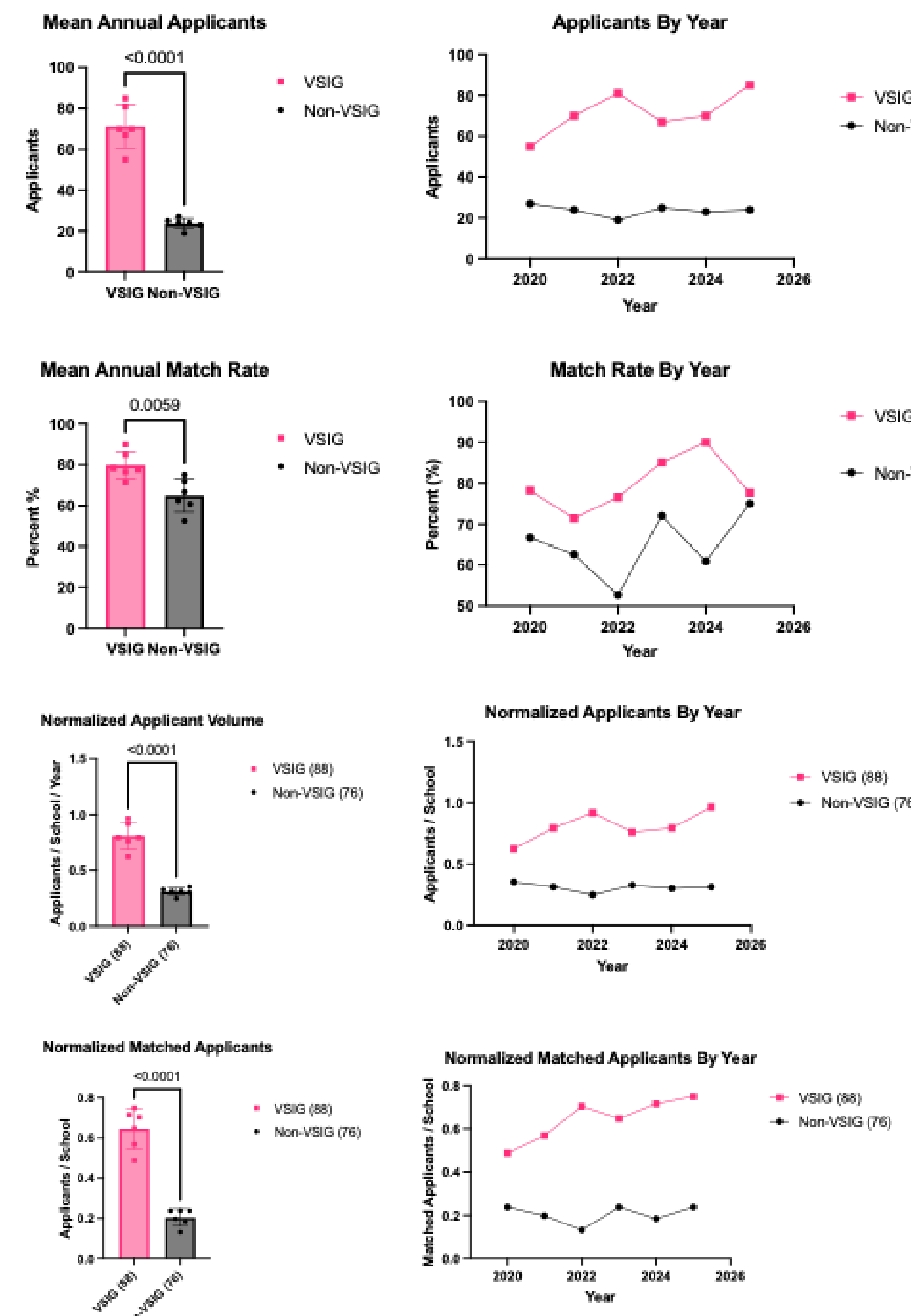


Figure 2: Mean annual applicants from VSIG institutions versus non-VSIG institutions and annual trend of application volume from VSIG institutions versus non-VSIG institutions (top row). Mean annual match rate from VSIG institutions versus non-VSIG institutions and annual trend of match rate from VSIG institutions versus non-VSIG institutions (second row). Normalized annual applicants per VSIG institution versus non-VSIG institution and annual trend of normalized annual applicants per VSIG institution versus non-VSIG institution (third row). Normalized annual matched applicants per VSIG institution versus non-VSIG institution and annual trend of normalized annual matched applicants per VSIG institution versus non-VSIG (bottom row).

Comparison of mean student experiences and scholarly output with annual trends



Results

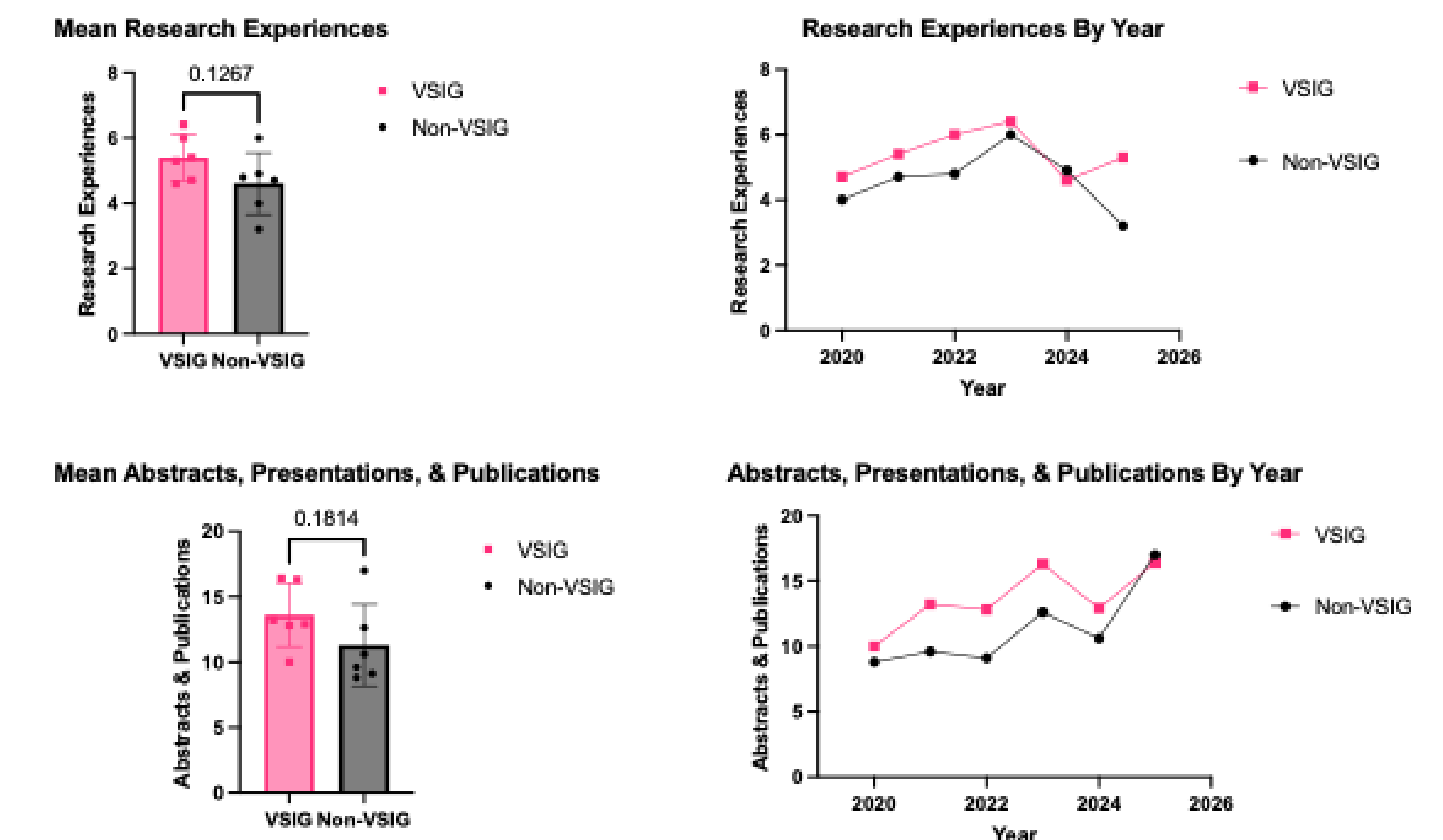


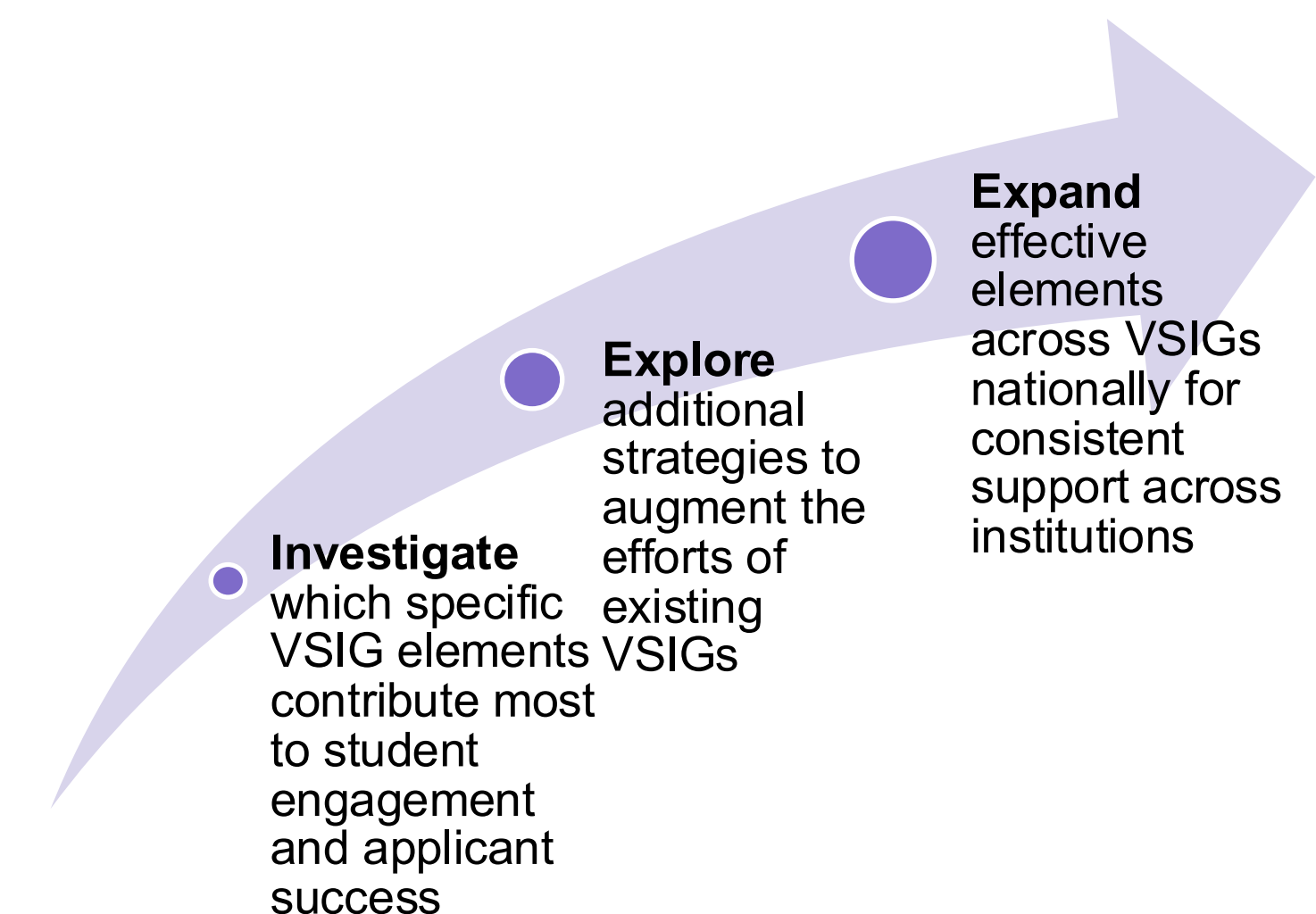
Figure 3: Mean number of work experiences of applicants from VSIG institutions versus non-VSIG institutions and annual trend of mean work experiences of applicants from VSIG institutions versus non-VSIG institutions (first row). Mean number of volunteer experiences of applicants from VSIG institutions versus non-VSIG institutions and annual trend of mean volunteer experiences of applicants from VSIG institutions versus non-VSIG institutions (second row). Mean number of research experiences of applicants from VSIG institutions versus non-VSIG institutions and annual trend of mean research experiences of applicants from VSIG institutions versus non-VSIG institutions (third row). Mean number of abstracts, presentations, and publications of applicants from VSIG institutions versus non-VSIG institutions and annual trend of mean number of abstracts, presentations, and publications of applicants from VSIG institutions versus non-VSIG institutions (fourth row).

Conclusions

- Growth:** Continued national growth in applicant volume to integrated vascular surgery residencies is driven predominantly by VSIG institutions
- Outcomes:** Presence of a VSIG was associated with higher normalized applicant volume and improved match outcomes
- Applicant Characteristics:** Evaluation of VSIG and non-VSIG student experiences did not reveal significant differences between cohorts
- Application Trends:** Annual trends suggest a decline in work and volunteer experiences alongside an increasing emphasis on research productivity

IMPACT:

These findings support the establishment of VSIGs as a structured mechanism for early specialty exposure and enhanced recruitment into vascular surgery. Continued efforts are warranted to identify specific VSIG programmatic elements that most effectively support student engagement and match success.



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