# Application of the *h*-index in Academic Plastic Surgery

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## Abstract

### **Background:**

The *h*-index is a measure designed to assess the quantity and significance of an individual's academic contributions. The objective of this study was to determine whether the *h*-index of academic plastic surgeons correlates with academic rank at their home institution and whether there is a difference based on geographic region, faculty size, residency training model, or departmental status.

### Methods:

A database of all US academic plastic surgeons at institutions with active plastic surgery residencies (per FRIEDA) was created. The academic rank (Assistant Professor, Associate Professor, Professor) of each surgeon was obtained, as were characteristics of their plastic surgery program, such as region, size of the faculty, model of the residency program (Integrated or Traditional), and departmental status. Those surgeons who were listed as adjunct faculty, clinical faculty, or research faculty were excluded. The Scopus database was queried to determine the *h*-index and the number of publications of each of the plastic surgeons that met inclusion criteria, and subsequent data analysis was performed.

#### **Results:**

The 592 plastic surgeons in our database had accumulated 27,157 publications upon query to the Scopus database in October 2013. The mean *h*-index for these plastic surgeons was 8.97, with an average of 45 publications each. The mean *h*-index increased significantly with academic rank (p < 0.05): 4.59 for assistant professors, 9.10 for associate professors, and 15.30 for professors. There was no significant difference in the *h*-index between chairpersons and chiefs. Plastic surgeons on faculty in integrated plastic surgery programs had significantly higher *h*-indices (9.64) compared to those in traditional programs (6.28) (p < 0.05). Male plastic surgeons had higher *h*-indices (9.57) than females (6.07) (p < 0.05). There was no correlation between the *h*-index and program size, location, or departmental status.

#### **Conclusions:**

The *h*-index of plastic surgeons appears to correlate with academic rank and has potential as a tool to measure academic productivity within plastic surgery. Plastic surgeons on faculty in integrated plastic surgery programs, as well as male plastic surgeons, tend to have higher *h*-indices. There does not appear to be a difference in *h*-indices when considering region, faculty size, or departmental status.

#### **References:**

None.

## **Disclosure/Financial Support:**

None of the authors have any disclosures or financial interests related to this manuscript.