

The Relative Citation Ratio: Examining a Novel Measure of Research Productivity among Plastic and Orthopedic Hand Surgeons

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PURPOSE: Hirsch index (h-index) is widely utilized as an academic measure. However, it has limitations since it is not field normalized and therefore incurs subsequent inaccurate cross-specialty comparisons. The relative citation ratio (RCR) was developed by the NIH to more effectively and accurately describe academic output for each medical specialty. The aim of this study is to assess the correlation of RCR to H-index within academic hand surgeons.

METHODS: 200 hand surgeons associated with American Society for Surgery of the Hand and Accreditation Council for Graduate Medical Education certified hand surgery fellowships were included. Weighted RCR, mean RCR, max RCR were quantified using mean and weighted RCR data queried from the iCite database. H-indices were all determined from publicly available sources.

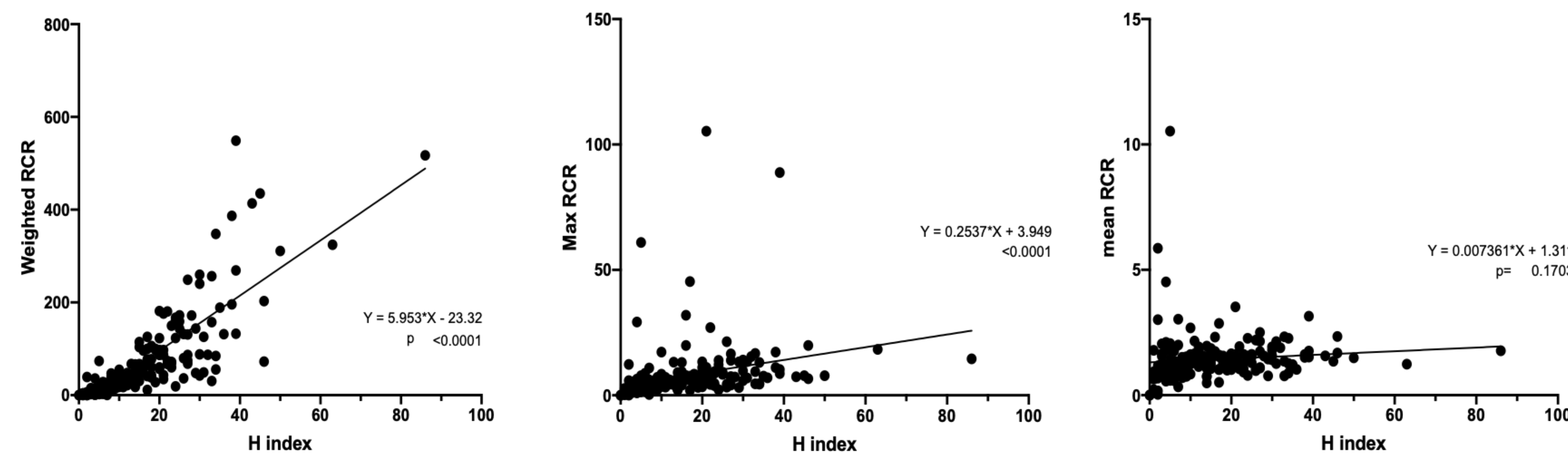


Figure 1: Association of H index and weighted, max, and mean RCR

RESULTS: There is significant association between H-index and weighted RCR (Fig 1). Additionally, increased h-index and weighted RCR is significantly associated with elevated academic rank (Fig 2). There were no significant difference seen in the mean RCR across ranks.

CONCLUSIONS: Measurement of academic output by surgeons is a major factor in the awarding research funding and promotion. For hand surgeons, the RCR appears to function similarly to the h-index, identifying increased output associated with elevated academic rank. The lack of difference in mean RCR by rank may suggest that volume of publications remains incentivized in academic surgery.

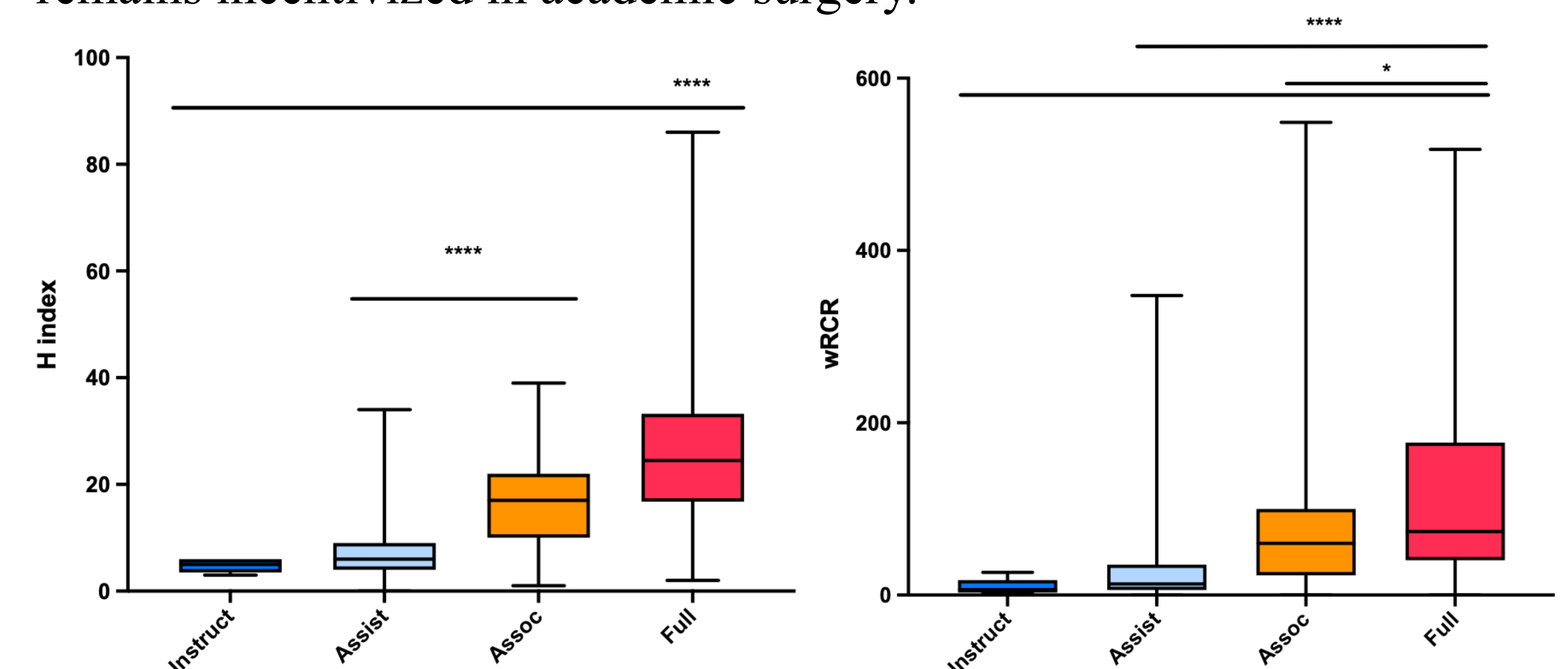


Figure 2: Academic rank, H index, and weighted RCR