Assessing the Predictive Power of the H Index across Multiple Fields

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Abstract

A number of metrics are available for measuring scholarly output. Publication counts are typically used to measure quantity, and citation counts quality. The h index (also known as the Hirsch index or Hirsch number) is designed to measure both. Jorge Hirsch has demonstrated that this indicator surpasses more traditional metrics (e.g. publication and citation counts) in its ability to predict the future scientific achievement of scholars. While the h index has been traditionally used to assess the performance of individuals, it can also be applied at higher levels of aggregation—e.g. department and institutional levels. The author has written a script that applies this index to any given data field in VantgePoint. Using this macro he proposes assessing whether departmental and university awards correlate with h index scores as strongly as they do with awards (or scientific achievement) at the individual author level.