

# Yeni Nesil Arařtırma Deęerlendirme Yöntemleri

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Akademik Yayıncılık Semineri II  
7 Mayıs 2019

Ankara Üniversitesi  
Siyasal Bilgiler Fakültesi



“Bir ölçev hedef haline  
geldiğinde iyi bir ölçev  
olmaktan çıkar”

Goodhart, 1984

# $h_\alpha$ : An index to quantify an individual's scientific leadership

J. E. Hirsch

(Submitted on 3 Oct 2018)

The  $\alpha$  person is the dominant person in a group. We define the  $\alpha$ -author of a paper as the author of the paper with the highest  $h$ -index among all the coauthors, and an  $\alpha$ -paper of a scientist as a paper authored or coauthored by the scientist where he/she is the  $\alpha$ -author. For most but not all papers in the literature there is only one  $\alpha$ -author. We define the  $h_\alpha$  index of a scientist as the number of papers in the  $h$ -core of the scientist (i.e. the set of papers that contribute to the  $h$ -index of the scientist) where this scientist is the  $\alpha$ -author. We also define the  $h'_\alpha$  index of a scientist as the number of  $\alpha$ -papers of this scientist that have  $\geq h'_\alpha$  citations.  $h_\alpha$  and  $h'_\alpha$  contain similar information, while  $h'_\alpha$  is conceptually more appealing it is harder to obtain from existing databases, hence of less current practical interest. We propose that the  $h_\alpha$  and/or  $h'_\alpha$  indices, or other variants discussed in the paper, are useful complements to the  $h$ -index of a scientist to quantify his/her scientific achievement, that rectify an inherent drawback of the  $h$ -index, its inability to distinguish between authors with different coauthorships patterns. A high  $h$  index in conjunction with a high  $h_\alpha/h$  ratio is a hallmark of scientific leadership.

Subjects: **Digital Libraries** (cs.DL); Other Condensed Matter (cond-mat.other); Physics and Society (physics.soc-ph)

Cite as: **arXiv:1810.01605** [cs.DL]

(or **arXiv:1810.01605v1** [cs.DL] for this version)

# $h\alpha$ : The Scientist as Chimpanzee or Bonobo

Loet Leydesdorff, Lutz Bornmann, Tobias Opthof

(Submitted on 16 Oct 2018 (v1), last revised 17 Oct 2018 (this version, v2))

In a recent paper, Hirsch (2018) proposes to attribute the credit for a co-authored paper to the  $\{\alpha\}$ -author--the author with the highest h-index--regardless of his or her actual contribution, effectively reducing the role of the other co-authors to zero. The indicator  $h\{\alpha\}$  inherits most of the disadvantages of the h-index from which it is derived, but adds the normative element of reinforcing the Matthew effect in science. Using an example, we show that  $h\{\alpha\}$  can be extremely unstable. The empirical attribution of credit among co-authors is not captured by abstract models such as  $h$ ,  $h_{\text{bar}}$ , or  $h\{\alpha\}$ .



Bonobo



Şempanze



***Halil İnalçık***

*h-indeks: 1 / yayın sayısı: 13 / atıf sayısı 52 - Kaynak: Web of Science Core Collection*



***Tosun Terzioğlu***

*h-indeks: 7 / yayın sayısı: 37 / atıf sayısı 181 - Kaynak: Web of Science Core Collection*

## Peter Higgs

Decca Aitkenhead

Fri 6 Dec 2013 17:37 GMT



92,494 151

🕒 This article is over 4 years old

# Peter Higgs: I wouldn't be productive enough for today's academic system

Physicist doubts work like Higgs boson identification achievable now as academics are expected to 'keep churning out papers'



▲ Peter Higgs: 'Today I wouldn't get an academic job. It's as simple as that'. Photograph: David Levene for the Guardian

Peter Higgs, the British physicist who gave his name to the [Higgs boson](#), believes no university would employ him in today's academic system because he would not be considered "productive" enough.

The emeritus professor at Edinburgh University, who says he has never sent an email, browsed the internet or even made a mobile phone call, published fewer than 10 papers after his groundbreaking work, which identified the mechanism by which subatomic material acquires mass, was published in 1964.

# Energy Education Science and Technology

ISSN: 1301-8361

SILA SCIENCE

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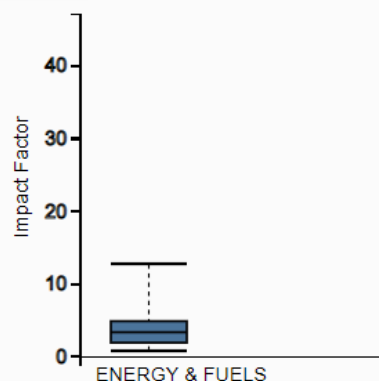
[Go to Journal Table of Contents](#)

Etki faktörü:  
31.667

## JCR Impact Factor

| JCR<br>Year ▼ | ENERGY & FUELS |          |                |
|---------------|----------------|----------|----------------|
|               | Rank           | Quartile | JIF Percentile |
| 2011          | 1/81           | Q1       | 99.383         |
| 2010          | 3/79           | Q1       | 96.835         |

### Category Box Plot



### CATEGORY BOX PLOT

The Impact Factor box plot depicts the distribution of Impact Factors for all journals in the category. The horizontal line that forms the top of the box is the 75th percentile ( $Q_1$ ). The horizontal line that forms the bottom is the 25th percentile ( $Q_3$ ). The horizontal line that intersects the box is the median Impact Factor for the category.

Horizontal lines above and below the box, called *whiskers*, represent maximum and minimum values. The top whisker is the smaller of the following two values:  
the maximum Impact Factor (IF)  
 $Q_1 \text{ IF} + 3.5(Q_1 \text{ IF} - Q_3 \text{ IF})$

The bottom whisker is the larger of the following two values:  
the minimum Impact Factor (IF)  
 $Q_1 \text{ IF} - 3.5(Q_1 \text{ IF} - Q_3 \text{ IF})$



# Sorular

Nasıl ölçeceğiz?

Sayılarla ölçmek şart mı?





Akran değerlendirmesi

## Yeni nesil niteliksel analizler



# Farkındalık alıřmaları



# Ör. Leiden Manifesto ve DORA



## The Leiden Manifesto for research metrics

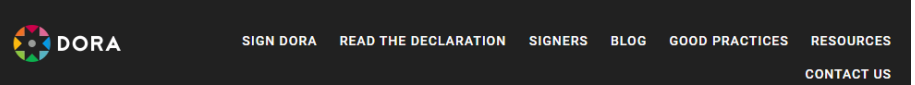
Use these ten principles to guide research evaluation, urge **Diana Hicks, Paul Wouters** and colleagues.

Data are increasingly used to govern science. Research evaluations that were once bespoke and performed by peers are now routine and reliant on metrics<sup>1</sup>. The problem is that evaluation is now led by the data rather than by judgement. Metrics have proliferated: usually well intentioned, not always well informed, often ill applied. We risk damaging the system with the very tools designed to improve it, as evaluation is increasingly implemented by organizations without knowledge of, or

advice on, good practice and interpretation. Before 2000, there was the Science Citation Index on CD-ROM from the Institute for Scientific Information (ISI), used by experts for specialist analyses. In 2002, Thomson Reuters launched an integrated web platform, making the Web of Science database widely accessible. Competing citation indices were created: Elsevier's Scopus (released in 2004) and Google Scholar (beta version released in 2004). Web-based tools to easily compare institutional research productivity and impact

were introduced, such as InCites (using the Web of Science) and SciVal (using Scopus), as well as software to analyse individual citation profiles using Google Scholar (Publish or Perish, released in 2007). In 2005, Jorge Hirsch, a physicist at the University of California, San Diego, proposed the *h*-index, popularizing citation counting for individual researchers. Interest in the journal impact factor grew steadily after 1995 (see 'Impact-factor obsession'). Lately, metrics related to social usage ▶

ILLUSTRATION BY DAVID WATKINS



## Araştırma Değerlendirmesi üzerine San Francisco Deklarasyonu

Fon sağlayıcılar, akademik kurumlar ya da diğer kuruluşlar tarafından değerlendirilen bilimsel araştırma çıktıların değerlendirilme yollarının geliştirilmesine yönelik acil ihtiyaç vardır. Bu sorunu adreslemek amacıyla 16 Aralık 2012 tarihinde San Francisco'da gerçekleştirilen Amerikan Hücre Biyolojisi Derneği (ASCB) Yıllık Toplantısı sırasında bir grup akademik dergi yayıncı ve editörleri bir araya gelmiştir. Bu grup *Araştırma Değerlendirmesi üzerine San Francisco Deklarasyonu* adını verdikleri bir dizi öneri geliştirmiştir. Bu bağlamda, tüm bilimsel disiplinlerden ilgili kişi veya kuruluşları Deklarasyona isimlerini ekleyerek destek vermeye davet ediyoruz.

Bilimsel araştırmalardan elde edilen çıktılar; yeni bilgi, veri, reaksiyon ve yazılımı raporlayan araştırma makaleleri, entelektüel mülkiyet ve oldukça eğitilmiş genç araştırmacıları içerecek şekilde çok ve çeşitlidir. Fon sağlayıcılar, bilim insanlarını istihdam eden kuruluşlar ve bilim insanlarının bizzat kendileri bilimsel çıktıların kalitesi ve etkisini değerlendirmek için istek ve ihtiyaç duymaktadırlar. Bu nedenle bilimsel çıktıların doğru olarak ölçülmesi ve akıllıca değerlendirilmesi şarttır.

Dergi etki faktörü, bireylerin ve kurumların bilimsel çıktıların karşılaştırılması amacıyla sıklıkla kullanılan önemli parametrelerden biridir. Thomson Reuters\* tarafından hesaplanan dergi etki faktörü, aslen, bilimsel araştırma kalitesinin bir ölçüsü olarak değil, kütüphanecilerin satın alacakları dergileri belirlemelerine yardımcı olacak bir araç olarak ortaya çıkmıştır. Bunu göz önünde bulundurarak, dergi etki faktörünün araştırma değerlendirmeleri için bir araç olarak kullanıldığında ortaya çıkan ve yazılı kanıta dayanan bir takım eksikliklere sahip olduğunu anlamak çok önemlidir. Bu

العربية  
中文  
Deutsch  
English  
Español  
Ελληνικά  
Français  
हिन्दी  
Italiano  
Lietuvių kalba  
Nederlands  
Português Brasi  
Slovenčina  
Suomen kieli  
Türkçe  
Українська

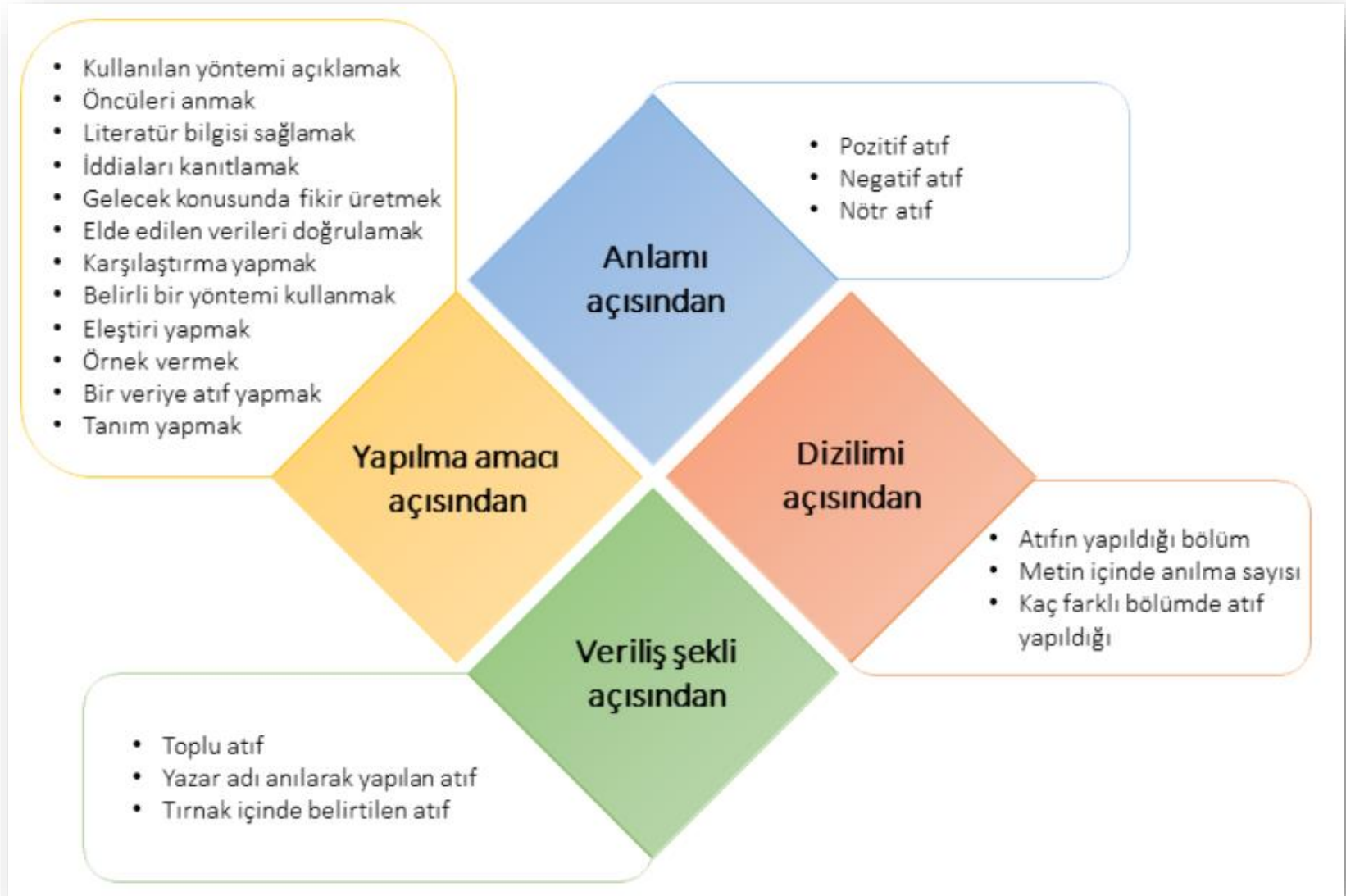
Ör. Açık bilim, açık erişim ve altmetri

# **Next-generation metrics:**

## **Responsible metrics and evaluation for open science**

Report of the European Commission Expert Group on Altmetrics

# Ör. İçerik tabanlı atıf analizi



# Ör. Projeler



## Evaluation Game in Academia

### Description of the project

New models of the research and science management focus on the accountability of the research results. All scientists should not only to investigate and describe the world and society but they should also publish their results in the most recognized top-tier channels of scholarly communication. In this way, science in XXI-century has become the "Speed Academia" where the main rule is "Publish or Perish". The measurement of the scientist productivity has created the research evaluation systems both on the national and the local levels. In several Europeans countries (e.g., Denmark, Norway, United Kingdom, Poland), such national systems have been implemented.

**The main goal of this project is to investigate how copying the regulations of the national research evaluation system in Poland into the local regulations of universities and faculties has produced the *parametric game* ('punktoza' in Polish) and transformed the publication patterns of scholars in the field of social sciences and humanities.**

# Son söz

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Sayılar söz konusu olduğunda sistemlerle oyun oynamak kolay

"Hangi puanlama kriterlerini koyarsanız koyun, adaylar bu kriterlere göre dosya hazırlamayı düşünecekler veya bu sistemi yenmenin yollarını arayacaklar"\*

Alternatif bulunması şart

"Araştırmanın niteliğinin otomatik olarak değerlendirilmesi mümkün değil ve böyle değerlendirmenin birçok sakıncası var"\*

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