## The Impact Factor: The Archives Breaks From the Pack

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In two previous editorials, we have discussed the impact factor (IF) metric, with a particular focus on sex and gender-related journals (Zucker & Cantor, 2003, 2005). Although the IF has been around for a long time now, not everyone is familiar with it, so we will provide its operational definition for the newly curious. Calculated each year by the Institute for Scientific Information, a journal's IF for a given year is a measure of the frequency with which its recent articles are cited on average during that year. "Recent" refers to the two prior calendar years. Thus, a journal's IF for a year is calculated as the total number of times any article from the journal is cited over the two prior years, divided by the total number of articles that the journal published during those 2 years. For example, to calculate the IF for Journal X for 2004, one would count the number of times articles from Journal X were cited in 2002 and 2003 and divide it by the number of articles that Journal X published in 2002 and 2003. Although the IF is the best known metric for citation analysis, there are other measures, including the Immediacy Index (II) and the Cited Half-Life (CHL). The II is a measure of how frequently the journal's "average article" is cited the same year in which it is published. Thus, the II for a year is calculated as the number of times articles from that journal are cited during that year, divided by the number of articles that journal published that year. The CHL is a measure of the longevity of the frequency of citations to the journal, that is, for how long the average article maintains its currency. The CHL for a year is determined by the number of prior publication years required to account for a cumulative total of 50% of that year's citations to the journal.

At the beginning of the twenty-first century, there were a lot of sex and gender journals floating around: about 75 of them (Zucker, 2002). Some of these journals have since ceased publication, but a few new journals have appeared on the scene (see Zucker & Cantor, 2005). Since last year's Editorial, we are aware of two additional new journals, *Journal of Sexual Offender Civil Commitment:* Science and the Law and Gender Medicine (Vol. 1 = 2004), and a relatively new journal, Sex Education: Sexuality, Society and Learning (Vol. 1 = 2001), has also come to our attention. In addition, the International Journal of Transgenderism (Vol. 8 = 2005) is now available in print form.

As noted by Zucker and Cantor (2003), however, only about 40% of the journals that were listed in Zucker's (2002) editorial are covered by Current Contents (CC), the weekly compendium of journal contents issued by the ISI. In our view, it remains a pity that some of the more interesting sexology journals that have appeared in recent years continue to be missing from CC, including Sexualities (Vol. 1 = 1998), Sexualities, Evolution & Gender (Vol. 1 =1999),<sup>4</sup> and Psychology of Men & Masculinity (Vol. 1 =2000). One other long-standing sexology journal, Journal of Psychology & Human Sexuality (Vol. 1 = 1988), has never been picked up by CC. Two journals, Sexual Abuse: A Journal of Research and Treatment (Vol. 6 = 1994)<sup>5</sup> and AIDS and Behavior (Vol. 1 = 1997), have now been added to the ISI database, but information on their IF is not yet available.

Table I shows the IF of 29 journals for the year 2004. Many scholars have noted that a common method by which one can evaluate the relative strength of a journal's IF is to compare it with other journals within the same specialty area. For example, Cole (2000) showed that, in the field of physics, the most frequently cited

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<sup>&</sup>lt;sup>4</sup>Originally published as *Psychology, Evolution & Gender*.

<sup>&</sup>lt;sup>5</sup>Originally published as *Annals of Sex Research* (Vol. 1 = 1988), which ceased publication in 1992.

Table I. Impact Factor of 29 Journals for the Year 2004

Journal	Impact factor	2004 Total cites	2004 Articles	Immediacy index	Cited half-life
Archives of Sexual Behavior	2.294	1150	49	0.163	9.7
Hormones and Behavior	3.649	3341	112	0.464	6.5
Psychoneuroendocrinology	2.967	2943	117	0.624	6.8
Evolution and Human Behavior	2.523	620	35	0.257	4.3
International Journal of Impotence Research	1.987	1478	114	0.263	3.9
AIDS Care	1.559	1209	101	0.158	5.1
Journal of Sex Research	1.221	802	36	0.167	8.7
Journal of Women's Health and Gender- Related Medicine	1.165	597	N/A	N/A	3.9
Psychology of Women Quarterly	1.014	1070	41	0.049	9.1
Journal of Sex & Marital Therapy	1.000	593	26	0.423	6.3
Journal of Psychosomatic Obstetrics and Gynecology	0.868	488	28	0.036	7.8
Gender and Education	0.776	213	28	0.179	5.8
Signs	0.772	690	39	0.128	>10.0
Sex Roles	0.639	2182	131	0.099	9.9
Gender and Society	0.607	741	36	0.056	9.4
Feminist Review	0.512	177	35	0.029	9.7
Feminism and Psychology	0.351	207	53	0.346	5.8
Australian Feminist Studies	0.324	42	24	0.000	N/A
Culture, Health, and Sexuality	0.321	77	29	0.241	N/A
Sexuality and Disability	0.294	110	11	0.091	8.2
Journal of the History of Sexuality	0.263	85	8	0.000	N/A
Journal of Homosexuality	0.242	457	42	0.024	>10.0
Women's Studies International Forum	0.242	294	38	0.053	7.2
GLQ: A Journal of Gay and Lesbian Studies	0.231	93	13	0.400	N/A
European Journal of Women's Studies	0.163	54	28	0.036	N/A
Women and Therapy	0.146	176	27	0.333	9.5
Journal of Gender Studies	0.100	46	18	0.111	N/A
Feminist Studies	0.038	238	30	0.000	>10.0
Frontiers: Journal of Women's Studies	0.035	69	32	0.000	N/A

Note. Total cites means the number of references cited in the articles published in the journal.

articles were concentrated in just two journals. Thus, it is reasonable to ask how, within the field of sex and gender research, the *Archives of Sexual Behavior* fares.

In 2004, the IF of the *Archives* rose to 2.29, a solid increase from 1.71 in 2003 and 1.03 in 2002, respectively. It can be seen in Table I that the *Archives* has moved well-ahead of the other core sex and gender journals. It is even beginning to move closer to a few other journals that have a somewhat broader focus than the sex- and gender-related journals, such as *Hormones and Behavior* and *Psychoneuroendocrinology*. Indeed, in a broader perspective, of the 1,712 social science journals ranked by the ISI, *Archives* ranked 115th, which means that it had a higher rating than about 85% of these periodicals. Of 84 journals categorized under Psychology (Clinical), *Archives* ranked 10th. In our view, this is very good news.

How can we account for the clear increase in the IF of Archives over the past 2 years? We are not sure that there is an easy explanation or set of explanations, but here are some that we have considered and discussed with colleagues. First, the Archives is one of the oldest sex and gender journals on the contemporary scene and, as the official publication of the International Academy of Sex Research, has an historically good reputation. This is likely reflected in its high Cited Half-Life score. Second, with many new members of the Editorial Board since 2002, perhaps this "new blood" has injected more enthusiasm into the review process, which has had some kind of feedback effect on contributors. Third, an increased number of pages published per year (715 last year) may have helped reduce the lag time to publication. And, fourth, there is the potential role of easier access to the Journal via electronic downloading, which has been a strong priority of the publisher. Whatever the explanation, the data speak for themselves. Compared with other sex and gender journals, the *Archives* has broken from the pack. We hope it stays that way.

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## REFERENCES

- Cole, S. (2000). The role of journals in the growth of scientific knowledge. In B. Cronin & H. B. Atkins (Eds.), *The web of knowledge: A festschrift in honor of Eugene Garfield* (pp. 109– 142). Medford, NJ: Information Today (ASIS Mongraph Series).
- Zucker, K. J. (2002). From the Editor's desk: Receiving the torch in the era of sexology's renaissance. *Archives of Sexual Behavior*, *31*, 1–6.
- Zucker, K. J., & Cantor, J. M. (2003). The numbers game: The impact factor and all that jazz [Editorial]. Archives of Sexual Behavior, 32, 3–5.
- Zucker, K. J., & Cantor, J. M. (2005). The impact factor: "Goin' up" [Editorial]. Archives of Sexual Behavior, 34, 7–9.