International Journal of Internet Science
2008, 3 (1), 1–6

ISSN 1662-5544

International Journal of Internet Science

IJIS.NET

High impact of a start-up journal – surprisingly so?

Ulf-Dietrich Reips[1], Uwe Matzat[2]

[1]University of Zürich, Switzerland, [2]Eindhoven University of Technology, The Netherlands

---

Introduction

We are proud to present to you the third issue of the International Journal of Internet Science. Much of the fate of a start-up journal depends on its attractiveness to authors and their willingness to submit high quality manuscripts. Part of authors' decision relies on a journal's impact - that is, how widely it is read and how often its messages and findings are built upon in the relevant scientific community.

In an attempt to measure a journal's influence, the *journal impact factor* (Impact factor, 2008; The Thomson Corporation, 2008) describes how often the average article in a journal is cited. Technically, the journal impact factor is calculated based on a two-year period. It can be viewed as the average number of citations in a year given to those articles in a journal that were published during the two preceding years. Thus, a journal's impact factor can only be calculated after it has been appearing for three full years.

With its first issue in March 2006, the International Journal of Internet Science has now reached this minimum criterion of three full volumes. Still, as a new journal, its first impact factor can't be calculated reliably, because many citing articles from 2008 are not yet known (this is why Thomson Corporation publishes its ISI journal citation reports for any given year only about half a year after that year ends). However, we can use known citations to early articles to calculate an estimate. According to *Google Scholar* (http://scholar.google.com/), the six articles that appeared in 2006 in the International Journal of Internet Science were cited 14 times in 2007 (2.33 citations/article). If we weed out some unqualified citations (department reports etc.) and add references missed by Google Scholar (see below), then we find 17 citations. The journal will thus have an impact of 2.83 (1.17 by ISI journal selection only), if this rate holds. Furthermore, with the end of the third year approaching, we are now able to report estimates of the journal's impact that are based on a larger set of empirical data.

Citation analysis

There are basically three Web services that can be used to find citing articles and estimate journal impact: *Google Scholar*, *Scopus*, and *ISI Web of Knowledge* by Thomson (ISI, http://www.isiknowledge.com/) with Web of Science (WoS) and Journal Citation Reports (JCR). Scopus is a product by the publisher Elsevier and contains its abstract and citation database. It finds more sources than ISI Web of Knowledge, partly because it includes more than 3000 open access journals, but only for the relatively short period it covers (Bakkalbasi, Bauer, & Wang, 2006). ISI Web of Knowledge is based on databases that were developed over a long period of time, i.e. the Social Science Citation Index (going back to 1900), the Science Citation Index, the Arts & Humanities Citation Index, and the Conference Proceedings Citation Indices for Science and Social Science & Humanities. All three services have certain benefits and some limitations. For new sources, Google Scholar seems to be most comprehensive and it is open access, so we chose to use it as the base for our research, and add citations found with the other services and additional sources like *PsychInfo*, *OvidSP*, and *Scirus*.

Please direct all correspondence regarding this editorial to Ulf-Dietrich Reips (u.reips@psychologie.uzh.ch), Universität Zürich, Sozial- und Wirtschaftspsychologie, Binzmühlestrasse 14 Box 13, 8050 Zürich, Switzerland.

Looking up "International Journal of Internet Science" in Google Scholar returns 50 references (December 15, 2008). Using *scHolar index* (http://insitu.lri.fr/~roussel/projects/scholarindex/index.cgi) these can be ordered by number of citations. Immediately, it becomes apparent that two articles from the first issue were cited very frequently – the IJIS article by Göritz (2006b) by Amar (2008), Baumgartner (2007), Fricker (2006), Gnambs and Strassnig (2007), Göritz (2005, 2006a, 2007, 2008), Göritz and Stieger (2008), Göritz and Wolff (2007), Göritz, Wolff, and Goldstein (2008), Heerwegh (2006), Llauradó (2006), Marcus, Bosnjak, Linder, Pilischenko, and Schütz (2007), Reips (2008), Shih and Fan (2007, 2008b), and Swanson and Barlage (2006), and the IJIS article by Smyth, Dillman, Christian, and Stern (2006) by Abela (2008), Christian, Dillman, and Smyth (2007), Christophersen (2006), Creux (2007), Dillman and Smyth (2007), Funke and Reips (2007), Reips (2008), Reips and Funke (2008), Smyth, Dillman, and Christian (2007), and Stern (2006, 2008)[1]. That is, 28 references generated by two articles: one in 2005, seven in 2006, eleven in 2007, and nine in 2008, so far. The other IJIS articles from 2006 by Korupp, by Krysan and Couper, by Mesch and Talmud, and by Ollesch, Heineken, and Schulte together were cited seven times (Creux, 2007; Honing & Reips, 2008; Livingstone & Helsper, 2007; Peacock, 2007; Peacock & Künemund, 2007; Vaughan, 2007; Wittchen, Schlereth, & Hertel, 2007).

From the 2007 volume, the IJIS article by Wittchen, Schlereth and Hertel with six citations is the one most cited (Gockel, Kerr, Seok, & Harris, 2008; Hertel, Niemeyer, & Claus, 2008; Kerr, Messé, Seok, Sambolec, Lount Jr., & Park, 2007; Lount Jr., Kerr, Messé, Seok, & Park, 2008; Lount Jr., Park, Kerr, Messé, & Seok, 2008; Weber & Hertel, 2007). Notably, this paper is cited in high impact journals like the *Journal of Experimental Social Psychology,* the *Journal of Personality and Social Psychology* and the *Personality and Social Psychology Bulletin*, so the likelihood of further citations seems high. The IJIS article by Szillis and Stahlberg (2007) is cited by Marshall (2007) and Szillis (2007); Shih and Fan (2007) by Mackety (2007) and Shih and Fan (2008a), Gesell, Drain, & Sullivan (2007) by Claerhout (2008), and the IJIS article by Puig-i-Abril and Rojas (2007) is cited by Robbin and Buente (2008). Cover (2006) and Shih and Fan (2008a) cite the journal as a whole.

Presently known citations in 2008 of papers published in 2007 alone would yield an impact of 1.60. If we apply the definition of the journal impact factor and calculate an estimate, we find 18 citations in 2008 for the eleven articles that appeared in 2006 or 2007. Thus, the International Journal of Internet Science's first impact factor will be 1.64 or higher. These figures are not directly comparable to those by ISI Thomson, because ISI only includes journals in its calculations that are already in its database. ISI's calculations would lead to a 2008 impact of 0.73 for the International Journal of Internet Science, if it is not counted as part of the database, and of 0.82 if it is. Importantly, all current figures are conservative estimates, as more citing articles published in 2008 might surface later that couldn't yet be found and included in the present analysis[2].

Reasons for high impact

Compared with other, long-standing, journals in our field, the International Journal of Internet Science achieved a surprisingly high impact. *Behavior Research Methods* has an ISI impact of 0.96, *Cyberpsychology & Behavior* one of 1.37, *New Media & Society* one of 0.49, *Social Science Computer Review* one of 0.41 and *The Information Society* has an ISI impact of 0.72 (2007 JCR Social Science Edition)[3].

A chief reason for the comparatively high impact of this start-up journal certainly is our attempt to achieve high quality via extensive anonymous peer review in combination with a high rejection rate. We rather publish few articles of high quality. Secondly, in IJIS's scope are methodological articles that naturally find a wider audience than many from content domains. Thirdly, the Internet continues to be one of the hot topics in research. Fourthly, open access journals tend to receive more citations than those limited in access. Finally, we were so fortunate to draw manuscripts with meta-analyses and from very active groups of authors. This activity is also expressed in the IJIS's high *journal immediacy index*[4] of 1.17 in 2006 and 0.71 in 2007 (when the issue appeared in December), if we include all citations, and 0.17 (2006) and 0.40 (2007), if we restrict to ISI journals only. The *Journal of Personality and Social Psychology* has an ISI immediacy index of 0.40, *Cyberpsychology & Behavior* has one of only 0.05, *Behavior Research Methods* one of 0.23, and all other journals in our field mentioned above that are directly competing with IJIS achieved between 0.07 and 0.16 in 2007.

[1] Some of these references were not found by Google Scholar.

[2] Note that this editorial will formally raise the journal's impact factor substantially, if self-citations in editorials are counted (a citation inflation procedure that is part of ISI Thomson's JCR).

[3] Note these are 2007 ISI figures, thus from a completed count but limited to citations (not articles!) in ISI-listed sources.

[4] The immediacy index indicates how quickly articles in a journal are cited. It is calculated by dividing the number of citations to articles published in a given year by the number of articles published in that year.

Facts and figures from the editorial office

The International Journal of Internet Science has an *International Standard Serial Number* (ISSN) of 1662-5544 and is listed in the *Directory of Open Access Journals* (DOAJ, http://www.doaj.org/) and in the *Index of Information Systems Journals* (http://lamp.infosys.deakin.edu.au/journals/). Currently, there are 14 articles that were published in the International Journal of Internet Science, with 56 rejected manuscripts and five being subject to revision or currently under review. (Editorials and book reviews are counted separately, as they are not subject to a rigorous reviewing process.) Consequently, our rejection rate is at 77% (one percentage point up from last year), our acceptance rate is at 20%, and 3% of all submitted manuscripts are being worked on. Thus, we are still a bit away from being allowed to call any published article "the tip of an iceberg", as one out of five manuscripts makes it to the viewable stage and not one tenth, as the metaphor suggests. On the other hand, given the International Journal of Internet Science's relatively high impact and immediacy index, we believe a 20% chance is attractive for those authors willing to invest some time and work to follow our reviewers' recommendations.

The present issue

The third issue includes three original research articles and one review of a book in the field of Internet science. The topics covered are the quality of search engine count estimates, factors that determine Internet adoption in businesses, and the question of true e-democracy in e-governance. Tom Buchanan reviews the book 'Psychological Aspects of Cyberspace: Theory, Research, Applications' by Azy Barak.

Dietmar Janetzko (National College of Ireland, Dublin, Ireland), one of the pioneers in Internet-based measurement, presents a series of six studies on the *Objectivity, Reliability, and Validity of Search Engine Count Estimates*. Search engine count estimates (SECEs, "hits") are used as relative measures in many different domains, for example to measure the importance of political events or to estimate the size of populations in geographic entities. So far, the quality of SECEs had not been determined in terms of classical measurement criteria. Janetzko shows empirically that SECEs are of value for most kinds of browsers, search engines, and types of Boolean searches and describes some limitations of the objectivity, reliability and validity of SECEs.

Jesse W. J. Weltevreden and Ron A. Boschma (Utrecht University, The Netherlands) present *The Influence of Firm Owner Characteristics on Internet Adoption by Independent Retailers: A Business Survey*. Independent retailers make up a large proportion of all retail outlets (e.g. ca. 56% in The Netherlands), but their Internet adoption so far has been largely ignored in the literature. To close the gap, the authors conducted a business survey among 686 independent retailers in eight city centers. Remarkably, the retailers were contacted individually and personally on site, which explains that the authors achieved a response rate of 97.2 percent. The authors were thus able to collect a dataset about the Web site and domain name adoption of 3'274 retail outlets that likely is representative for all independent retailers in The Netherlands. Results showed that firm owners and their family/friends play an important role in developing and managing the Web site of independent retail businesses. Results further indicated that age, ethnic background, personal Internet experience, and perceived competitive pressure of the firm owner are important explanatory variables for domain name registration and/or Web site adoption among independent retail organizations.

Bertil Rolandsson and Ulric Björck (University College of Borås, Sweden), in their contribution *Being an Efficient or Dialogue-Oriented Rural Municipality on the Net: Framing Civil Servants' Confidence in E-services,* examine civil servants who offer e-governance services in a rural municipality. The authors focus on the ways the civil servants see themselves and their work. One most remarkable result is that they do not perceive their e-governance services as a tool for democratic dialogue, but just as a rationalizing technological system. The authors relate this to the fact that many of the employees already have direct contacts to citizens. The finding underlines the importance of taking into account the social context in the study of e-governance services.

Acknowledgements

As no surprise, IJIS and the current issue would not be possible without the devotion, time, and effort of many individuals and institutions that support and help us. Our editorial assistant, Frederik Funke, is the most important pillar in the journal's daily business. He handled the office work, as usual, in an extremely professional way. Moreover, we thank Natalie Zinko (University of Toronto) for her copy-editing support. Many thanks to Globalpark AG for financially supporting the journal with a five year grant and to the German Society for Online Research (DGOF) for its recently renewed financial support. Grateful acknowledgement goes to the University of Zürich, the Eindhoven University of Technology, and the Social Science Information Centre in Bonn for their institutional support of the journal. And of course, we very much would like to thank the members of IIJS's Editorial Board and Panel and its many reviewers for their valuable contributions to the quality of this journal.

References

Abela, J. A. (2008). *Sociología e Investigación en Internet 2007-2008*. Retrieved December 15, 2008, from http://www.departamentosociologiagranada.org/cufiles/asig0708102.pdf

Amar, A. F. (2008). Successful links for electronic surveys. *Journal of Forensic Nursing, 4*, 138-140.

Bakkalbasi, N., K. Bauer & L. Wang (2006). Three options for citation tracking: Google Scholar, Scopus and Web of Science. *Biomedical Digital Libraries 3*(7). http://dx.doi.org/10.1186/1742-5581-3-7.

Baumgartner, J. C. (2007). Humor on the next frontier. *Social Science Computer Review, 25*, 319–338.

Christian, L. M., Dillman, D. A., & Smyth, J. D. (2007). Helping respondents get it right the first time: The influence of words, symbols, and graphics in web surveys. *Public Opinion Quarterly, 71*(1), 113-125.

Christophersen, T. (2006). *Usability im Online-Shopping: Entwicklung eines Fragebogeninstrumentes (ufosV2) unter Berücksichtigung formativer und reflektiver Messmodelle*. Unpublished dissertation, Christian-Albrechts-Universität zu Kiel.

Claerhout, S. (2008). *Het Erasmusleven aan de Universiteit Gent: Een exploratieve studie*. Unpublished master's thesis, Universiteit Gent.

Cover, J. K. (2006). About the authors. *City & Community, 5*, 463–463.

Creux, G. (2007). Comparaison et influence de deux méthodes de recueil de données différentes sur les résultats globaux d'une enquête quantitative. *Bulletin de Méthodologie Sociologique, 96*, 50–70.

Dillman, D. A., & Smyth, J. D. (2007). Design effects in the transition to web-based surveys. *American Journal of Preventive Medicine, 32*(5), 90–96.

Fricker, R. D. (2008). Sampling methods for web and e-mail surveys. In N. Fielding, R. M. Lee, & G. Blank (Eds.), *The SAGE handbook of online research methods* (pp. 195-216). London: Sage.

Funke, F. & Reips, U.-D. (2007). Messinstrumente und Skalen [Measuring devices and scales]. In M. Welker & O. Wenzel (Eds.), *Online-Forschung 2007: Grundlagen und Fallstudien* (pp. 52-76). Köln: Halem.

Gesell, S. B., Drain, M., & Sullivan, M. P. (2007). Test of a web and paper employee satisfaction survey: Comparison of respondents and non-respondents. *International Journal of Internet Science, 2*(1), 45–58.

Gnambs, T. & Strassnig, B. (2007). Experimentelle Online-Untersuchungen [Experimental online studies]. In M. Welker & O. Wenzel (Eds.), *Online-Forschung 2007: Grundlagen und Fallstudien* (pp. 233-250). Köln: Halem.

Gockel, C., Kerr, N., Seok, D.-H., & Harris, D. W. (2008). Indispensability and group identification as sources of task motivation. *Journal of Experimental Social Psychology, 44*, 1316–1321.

Göritz, A. S. (2005). Incentives in Web-based studies: What to consider and how to decide. *WebSM Guide, 2, 1-6*.

Göritz, A. S. (2006a). Cash lotteries as incentives in online panels. *Social Science Computer Review, 24*, 445–459.

Göritz, A. S. (2006b). Incentives in Web studies: Methodological issues and a review. *International Journal of Internet Science, 1*(1), 58–70.

Göritz, A. S. (2007). Belohnungen in Online-Befragungen [Incentives in online surveys]. In M. Welker & O. Wenzel (Eds.), *Online-Forschung 2007: Grundlagen und Fallstudien* (pp. 119-131). Köln: Halem.

Göritz, A. S. (2008). The long-term effect of material incentives on participation in online panels. *Field Methods, 20*, 211–225.

Göritz, A. S., & Stieger, S. (2008). The high-hurdle technique put to the test: Failure to find evidence that increasing loading times enhances data quality in Web-based studies. *Behavior Research Methods, 40*, 322–327.

Göritz, A. S., & Wolff, H.-G. (2007). Lotteries as Incentives in Longitudinal Web Studies. *Social Science Computer Review, 25*, 99–110.

Göritz, A. S., Wolff, H.-G. & Goldstein, D. G. (2008). Individual payments as a longer-term incentive in online panels. *Behavior Research Methods, 40*, 1144-1149.

Griffiths, M. D. (2007). Internet psychology, a very personal reflection: Review of the Oxford handbook of Internet psychology. *International Journal of Internet Science, 2*(1), 83–87.

Heerwegh, D. (2006). An investigation of the effect of lotteries on web survey response rates. *Field Methods, 18*, 205-220.

Honing, H., & Reips, U.-D. (2008). Web-based versus lab-based studies: A response to Kendall (2008). *Empirical Musicology Review, 3*(2), 73-77.

Hertel, G., Niemeyer, G., & Clauss, A. (2008). Social indispensability or social comparison: The why and when of motivation gains of inferior group members. *Journal of Applied Social Psychology, 38,* 1329–1363.

Impact factor (2008, December 9). In *Wikipedia, The Free Encyclopedia*. Retrieved December 15, 2008, from http://en.wikipedia.org/w/index.php?title=Impact_factor&oldid=260734209

Kerr, N. L., Messé, L. A., Seok, D.-H., Sambolec, E. J., Lount Jr., R. B., & Park, E. S. (2007). Psychological mechanisms underlying the Köhler motivation gain. *Personality and Social Psychology Bulletin, 33*, 828–841.

Korupp, S. E. (2006). No man is an island: The influence of knowledge, household settings, and social context on private computer use. *International Journal of Internet Science, 1*(1), 45–57.

Krysan, M., & Couper, M. P. (2006). Race of interviewer effects: What happens on the web? *International Journal of Internet Science, 1*(1), 17–28.

Livingstone, S., & Helsper, E. J. (2007). Taking risks when communicating on the Internet: The role of offline social-psychological factors in young people's vulnerability to online risks. *Information, Communication & Society, 10*, 619–644.

Llauradó, O. (2006). El trabajo de campo online: Qué hemos aprendido en los últimos 10 años. *Investigación y Marketing, 91*, 25–33.

Lount, R. B., Kerr, N. L., Messé, L. M., Seok, D.-H., & Park, E. S. (2008). An examination of the stability and persistence of the Köhler motivation gain effect. *Group Dynamics: Theory, Research, and Practice, 12*, 279-289.

Lount Jr., R. B., Park, E. S., Kerr, N. L., & Messé, L. A., & Seok, D.-H. (2008). Evaluation concerns and the Köhler effect. *Small Group Research, 39*, 795-812.

Mackety, D. M. (2007). *Mail and web surveys: A comparison of demographic characteristics and response quality when respondents self-select the survey administration mode*. Unpublished dissertation, Western Michigan University.

Marcus, B., & Bosnjak, M., Linder, S., Pilischenko, S., & Schütz, A. (2007). Compensating for low topic interest and long surveys. *Social Science Computer Review, 25*, 372–383.

Marshall, J. P. (2007). Gender in online worlds: An introduction to, and summary of, cybermind research. *Transforming Cultures eJournal, 2*(2), i–xxxv.

Mesch, G. S., & Talmud, I. (2006). Online friendship formation, communication channels and social closeness. *International Journal of Internet Science, 1*(1), 29–44.

Ollesch, H., Heineken, E., & Schulte, F. P. (2006). Physical or virtual presence of the experimenter: Psychological online-experiments in different settings. *International Journal of Internet Science, 1*(1), 71–81.

Peacock, S. E. (2007). *Challenges to modernity: The digital divide*. Unpublished habilitation, Universität Erfurt.

Peacock, S. E., & Künemund, H. (2007). Senior citizens and Internet technology. *European Journal of Ageing, 4*(4), 191–200.

Puig-i-Abril, E. & Rojas, H. (2007). Being early on the curve: Online practices and expressive political participation. *International Journal of Internet Science, 2*(1), 28–44.

Reips, U.-D. (2008). How Internet-mediated research changes science. In A. Barak (ed.). *Psychological aspects of Cyberspace*, (pp. 268–294). Cambridge: Cambridge University Press.

Reips, U.-D., & Funke, F. (2008). Interval-level measurement with visual analogue scales in Internet-based research: VAS generator. *Behavior Research Methods, 40*, 699–704.

Robbin, A., & Buente, W. (2008). Internet information and communication behavior during a political moment: The Iraq war, March 2003. *Journal of the American Society for Information Science & Technology, 59*, 2210-2231.

Shih, T.-H., & Fan, X. (2007). Response rates and mode preferences in web-mail mixed-mode surveys: A meta-analysis. *International Journal of Internet Science, 2*(1), 59–82.

Shih, T.-H., & Fan, X. (2008a). Comparing response rates from web and mail surveys: A meta-analysis. *Field Methods, 20*, 249-271.

Shih, T.-H., & Fan, X. (2008b). Comparing response rates in e-mail and paper surveys: A meta-analysis. *Educational Research Review, 3*(3).

Smyth, J. D., Dillman, D. A., & Christian, L. M. (2007). Context effects in Internet surveys: New issues and evidence. In A. Joinson, K. McKenna, T. Postmes & U.-D. Reips (Eds.), *The Oxford handbook of Internet psychology* (pp. 429-446). Oxford, UK: Oxford University Press.

Smyth, J. D., Dillman, D. A., Christian, L. M., & Stern, M. J. (2006). Effects of using visual design principles to group response options in web surveys. *International Journal of Internet Science, 1*(1), 6–16.

Stern, M. J. (2006). *How use of the Internet impacts community participation and the maintenance of core social ties: an empirical study*. Unpublished dissertation, Washington State University.

Stern, M. J. (2008). The use of client-side paradata in analyzing the effects of visual layout on changing responses in web surveys. *Field Methods, 20*, 377–398.

Swanson, C. B., & Barlage, J. (2006). *Influence: A study of the factors shaping education policy*. Bethesda: Editorial Projects in Education Research Center.

Szillis, U. (2007). *Der zu grunde liegenden Prozesse des Face-ism Effekts und des Face-ism Phänomens*. Unpublished dissertation, Universität Mannheim.

Szillis, U., & Stahlberg, D. (2007). The face-ism effect in the Internet differences in facial prominence of women and men. *International Journal of Internet Science, 2*(1), 3–11.

The Thomson Corporation (2008). *Journal Citation Reports 2007*. Retrieved December 15, 2008, from http://isiknowledge.com/jcr

Vaughan, K. (2006). *Finding home knowledge, collage, and the local environments*. Unpublished dissertation. York University, Canada.

Weber, B.; & Hertel, G. (2007). Motivation gains of inferior group members: A meta-analytical review. *Journal of Personality and Social Psychology, 93*, 973-993.

Wittchen, M., Schlereth, D., & Hertel, G. (2007). Social indispensability in spite of temporal and spatial separation: Motivation gains in a sequential task during anonymous cooperation on the Internet. *International Journal of Internet Science, 2*(1), 12–27.