

Bibliometric statistics concerning the *Journal of Cross-Cultural Psychology (JCCP)* over the period 1977-1993 are reported. Compared to other journals on cross-cultural psychology, the impact factor of *JCCP* has been fairly high over this 17-year period. The average impact factor of journals publishing exclusively or mainly cross-cultural studies is stable. The overall numbers of journals that are quoted in *JCCP* is high, yet most references (apart from self-references) are to social psychological journals, particularly *Journal of Personality and Social Psychology* and *Journal of Social Psychology*. The pattern is similar for the journals in which *JCCP* is quoted.

A BIBLIOMETRIC ANALYSIS OF THE JOURNAL OF CROSS-CULTURAL PSYCHOLOGY

FONS VAN DE VIJVER
Tilburg University

WALTER J. LONNER
Western Washington University

In the first issue of Volume 25 of the *Journal of Cross-Cultural Psychology (JCCP)*, Öngel and Smith (1994) presented the results of a content analysis of the first 25 years of *JCCP*. They reported an increase in the publication of articles dealing with social psychological topics, the use of more sophisticated types of data analysis, and a strong U.S. bias; most of the theories that have guided researchers, most of the participants (subjects) in the studies, and most of the researchers come from the United States. The same overrepresentation can be found in the 1994 *Membership Directory* of the International Association for Cross-Cultural Psychology (1994).

The U.S. "bias" (more accurately stated, perhaps, as the U.S. influence) can be understood at the international level, an influence that began during the 1930s when world events saw the center of gravity in Western psychology shift from Europe to the United States. However, a U.S. bias (or influence) presumably does not reflect the state of the cross-cultural research field. In

AUTHORS' NOTE: Address correspondence to Fons J. R. Van de Vijver, Department of Social Sciences, Tilburg University, P.O. Box 90153, 5000 LE Tilburg, The Netherlands (e-mail: fons.vandevijver@kub.nl) or Walter J. Lonner, Center for Cross-Cultural Research, Western Washington University, Bellingham, WA 98225 (e-mail: lonner@nessie.cc.wvu.edu). Comments on an earlier draft by John Adamopoulos, William Gabrenya, Yoshihisha Kashima, Daphne Keats, and Ype Poortinga are gratefully acknowledged.

JOURNAL OF CROSS-CULTURAL PSYCHOLOGY, Vol. 26 No. 6, November 1995 591-602
© 1995 Western Washington University

particular, non-Western studies and theories are conspicuously absent in *JCCP* (and other Western journals that routinely publish cross-cultural research).

Öngel and Smith (1994) presented an *internal* analysis of *JCCP* addressing its contents. Their analysis can be complemented by an *external* analysis that attempts to delineate the place of *JCCP* in the field of cross-cultural psychology (cf. Lonner, 1994). The present article provides such an analysis, mainly on the basis of bibliometric measures. More specifically, the following questions are addressed. First, how does *JCCP* perform when compared to other journals in the field of cross-cultural psychology and psychology in general? Second, is there, as it is often argued (e.g., Segall, Dasen, Berry, & Poortinga, 1990), an increased interest in cross-cultural research at all levels of psychology?

BIBLIOMETRIC MEASURES

The content analysis presented by Öngel and Smith (1994) was based on the first 25 volumes of *JCCP*. Our data were retrieved from the *Social Sciences Citations Index (SSCI)* and PsycLit (an electronic version of *Psychological Abstracts*). Neither source, however, is available starting from the first volume of *JCCP*. The *SSCI* began listing *JCCP* in 1977, and PsycLit started with the 1974 issue, a few years after *JCCP*'s inauguration in 1970.

The publication of the *SSCI* has given rise to a large set of statistics purportedly measuring the quality of individual researchers (Gordon & Vicari, 1992), departments (Endler, Rushton, & Roediger, 1978), and journals (Buffardi & Nichols, 1981; Haynes, 1983; Hirst 1978; Hogan & Hedgepeth, 1983). The present article focuses on the latter. The results are based on three widely used statistics. The first is the "impact factor" of a journal, a measure of journal quality. It is calculated by dividing the number of all citations of articles published in a particular journal during the previous 2 years by the number of articles the journal published during those years. Thus the impact rate of 1994 for *JCCP* is the number of references to *JCCP* in 1993 and 1994 in all the journals covered by *SSCI* (Institute for Scientific Information, 1993) divided by the number of articles appearing in *JCCP* during those years.

Despite its popularity, the use of impact factors as a measure of journal quality has not gone unchallenged. Thorne (quoted in Boor, 1982) has argued that the selection of citations by authors is often governed by factors other than quality. These include such things as conspirational cross-referencing among groups of authors, citing of obsolete references, overdetailed citations of the works of distinguished authors, and abundant use of self-references.

Further, as Boor (1982) notes, impact factors are not to be confused with long-term impact; Freud's writings were "cited only infrequently in the years following their publication but were cited extensively during ensuing decades" (p. 976).

Studies on the convergent validity of different measures of journal quality show inconclusive results. Boor (1982) reports low to moderate correlations between impact factors and ratings attributed to journals by psychology department chairpersons, whereas Gordon (1982) finds a strong relationship between rated journal quality (by library users) and impact factors. In an overview, Todorov and Glänzel (1988) argue that the range of correlations is too large to warrant a simple conclusion. In our view, impact factors may provide an allegedly imperfect although workable operationalization of journal quality that is used given the absence of viable alternatives.

The second and third measures of our study do not address journal quality but, rather, attempt to locate *JCCP* in the network of journals dealing with cross-cultural topics. The second measure examines journals to which authors in *JCCP* refer most frequently. Technically, this measure is the frequency per journal listed in the references of all *JCCP* articles during a particular period of time. For instance, how many references were there in 1992 to articles in the *Journal of Personality and Social Psychology*? The third measure is a kind of mirror image of the second: Which other journals refer most frequently to *JCCP*? The measure is defined as the frequency with which other journals listed in the *SSCI* contain references to *JCCP* articles.

As of 1995, the number of articles that appear in *JCCP* has increased. This will temporarily decrease the impact factor; the number of citable items has increased (the denominator of the impact factor) during the last year, but it will take a few years before these articles will be cited (the numerator).

Impact factors are relative measures. For a full appreciation of their value, a consideration of the values of other journals is required. The impact factors of *JCCP* are compared here to those of three sets of other journals. The first contains psychology journals that usually have high impact factors: *Psychological Review*, *Psychological Bulletin*, *American Psychologist*, *Journal of Abnormal Psychology*, and *Psychosomatic Medicine*. The second set comprises major journals in (cultural) anthropology: *Current Anthropology*, *American Ethnologist*, *Culture, Medicine and Psychiatry*, *American Anthropologist*, and *Ethos*. The last set compares *JCCP* to other journals that either give priority to or regularly publish nothing but cross-cultural studies: *International Journal of Psychology*, *Hispanic Journal of Behavioral Sciences*, *Behavioral Science Research*, and *Psychologia*. The latter list is incomplete. Thus *Psychology and Developing Societies* and the *Interamerican Journal of Psychology* could not be included because they are not listed in the *SSCI*.

The impact factors are available for the period 1977-1993. A smoothing procedure had to be applied to reduce the often strong year-to-year fluctuations and to be able to discern a trend from random noise. Therefore, moving averages instead of figures of individual years are presented. The moving average of a year is defined as the average impact factor of a particular year and the 2 preceding years; thus the impact factor of 1979 is the average of the impact factors of 1977, 1978, and 1979.

RESULTS AND DISCUSSION

The impact factors of the major psychology journals, the major anthropology journals, *JCCP*, and other journals that strongly feature cross-cultural research are given in Figure 1. The impact factors of major psychology journals—*Psychological Review*, *Psychological Bulletin*, *American Psychologist*, *Journal of Abnormal Psychology*, and *Psychosomatic Medicine*—are much higher than those of the other journals, as expected. On average, each article in these journals is quoted 3.68 times (range = 3.27-4.29). The anthropology journals have impact factors of slightly below 1 ($M = 0.88$, range = 0.60-1.15). The mean score of *JCCP* is 0.56; the moving averages of *JCCP* range from 0.45 to 0.76; this is slightly above 0.38, the average of the other cross-cultural journals. The moving averages of the latter range from 0.33 to 0.48.

The comparison between *JCCP* and the latter journals can be made at a more detailed level on the basis of Figure 2, in which the moving averages of all these journals are presented separately. The impact factors of *JCCP* seem to have slow fluctuations, with a lowest value in the beginning of the 1980s, followed by a peak at the end of the 1980s. The correlation between the impact factor and a sine transformation of the year of publication—more precisely, a sine with a period of 14 years, beginning in 1979: $\sin[-(\text{year} - 1979) \times (2 \times \pi/14)]$ —was .90, $p < .01$.

JCCP tends to have the highest impact factors of the journals that predictably contain cross-cultural articles. The average value of *Psychologia* is 0.14 (range = 0.09-0.21); the *International Journal of Psychology* has an average of 0.40 (range = 0.24-0.54). The youngest journal, the *Hispanic Journal of Behavioral Science*, has a mean score of 0.39 (range = 0.23-0.54). The impact factor of the latter has been increasing almost consistently since its first year of publication. The *American Behavioral Scientist* has an average of 0.37 (range = 0.18-0.51). The average impact factor of all journals of Figure 2 is stable, indicating that in general cross-cultural publications have fairly constant citation rates.

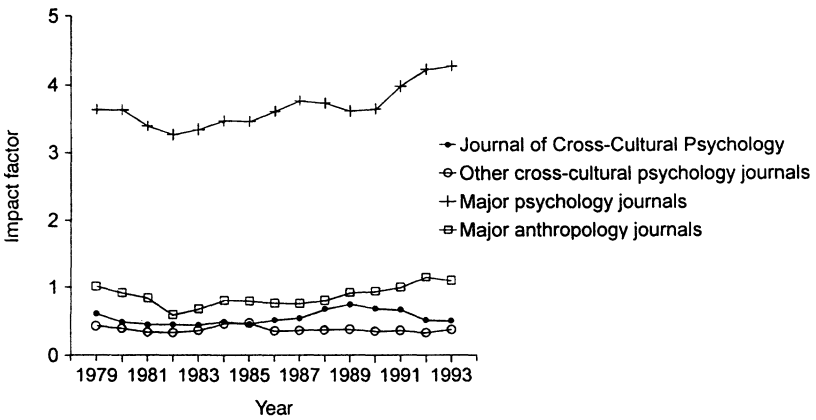


Figure 1: Moving Averages of the Impact Factors of the *Journal of Cross-Cultural Psychology*, Other Cross-Cultural Psychology Journals, and Major Psychology and Anthropology Journals During the Period 1979-1993

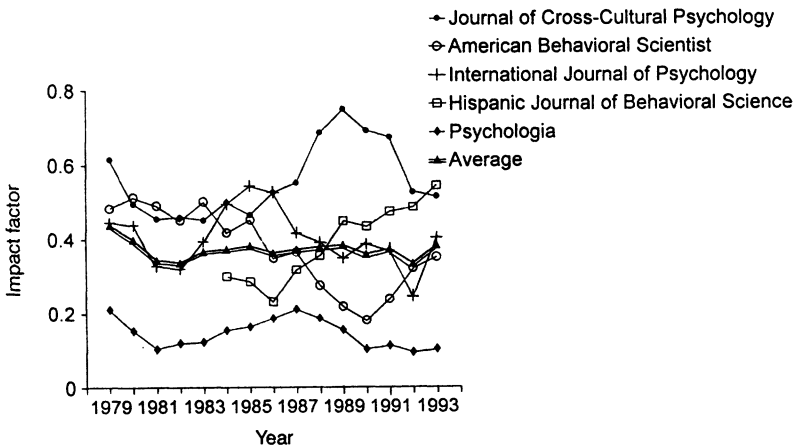


Figure 2: Moving Averages of the Impact Factors of Cross-Cultural Psychology Journals During the Period 1979-1993

The question can be raised as to how the data for *JCCP* and, in general, journals that have a substantial cross-cultural focus are to be evaluated. Are the values low, as Figure 1 might suggest? Even though there may be ample room for improvement of the *JCCP* figures, it may be unrealistic to assume

that journals that publish only culture-related articles would ever be able to maintain stable impact factors between 3 and 4. There are at least three factors that will make the attainment of such high values unlikely. First, there are hundreds of "general" psychology journals, all of which can publish manuscripts with a cross-cultural focus if they receive them and if they wish. In fact, as somewhat of an "in" thing to do, many of psychology's main journals give priority to cross-cultural manuscripts. The opposite is not true. For instance, *JCCP* has never published a manuscript that did not have some culture-related feature. The realistic demands placed on many academic psychologists in competition for tenure and promotion force them to seek publication in one of the dozens of mainstream journals that have more visibility and historical "prestige." This virtually guarantees that culture-related manuscripts will be diffused across a wide spectrum of publications. Second, cross-cultural psychology is a diversified and still-emerging field, and this is reflected in the articles appearing in *JCCP*. Studies often do not elaborate on each other but explore new territories. Journals that cover fields with more concerted research efforts will yield higher impact factors. Third, cross-cultural psychology is a specialized field of research, and journals that have such a focused field of application usually have fairly low impact factors (as compared to review journals that often have high impact factors). Another consideration that will have a certain yet unknown impact on these bibliometric indexes is the recent inauguration of even more publications whose policies encourage the submission of manuscripts that emphasize culture-related phenomena.

To appreciate the place of *JCCP* in the gamut of psychology journals, it is relevant to know which journals often contain references to *JCCP* and to which journals authors of articles in *JCCP* most frequently refer. An overview of the 10 periodicals that are mentioned most frequently in references in *JCCP* articles is given in Table 1. The most frequently cited journal is *JCCP* itself; such a high self-citation rate is commonly found. Two other journals often publishing cross-cultural studies are in the list, namely the *International Journal of Psychology* and the *International Journal of Intercultural Relations*. Two periodicals publishing reviews, the *Annual Review of Psychology* and the *Psychological Bulletin*, are also frequently cited. Further, two social psychological journals are in the list, namely the *Journal of Personality and Social Psychology* and the *Journal of Social Psychology*. This finding is in agreement with Öngel and Smith (1994), who identified social psychological studies as the main study topic in *JCCP* articles.

The listing of most frequently cited journals in *JCCP* should not obscure the fact that the list of journals mentioned in *JCCP* references is impressively

TABLE 1
Ten Most Frequently Cited Journals
in the *Journal of Cross-Cultural Psychology*

<i>Journal</i>	<i>Frequency</i>	<i>Proportion</i>
1. <i>Journal of Cross-Cultural Psychology</i>	585	.13
2. <i>International Journal of Psychology</i>	222	.05
3. <i>Annual Review of Psychology</i>	143	.03
4. <i>Journal of Social Psychology</i>	104	.02
5. <i>Journal of Personality and Social Psychology</i>	93	.02
6. <i>International Journal of Intercultural Relations</i>	71	.02
7. <i>Psychological Bulletin</i>	48	.01
8. <i>Annals of the New York Academy of Sciences</i>	42	.01
9. <i>International Journal of Behavioral Development</i>	38	.01
10. <i>Psychological Reports</i>	37	.01
Other journals	3,090	.69

large and diverse in content; even *JCCP* itself is cited in 13% of the journal references, whereas the journals not listed in the top 10 make up 69% of the references.

An even larger diversity can be seen in Table 2, which presents the 10 journals citing *JCCP* most frequently. The journals not listed together contain 82% of the references to *JCCP*. Table 2 also shows that the emphasis on social psychological research in *JCCP* is shared by publication outlets referring to *JCCP* publications. In addition, there are many references to *JCCP* in journals in developmental psychology (*Child Development* and *Developmental Psychology*) and in clinical psychology (the *Journal of Consulting and Clinical Psychology* and the *Journal of Abnormal Psychology*).

It seems to be taken for granted that cross-cultural psychology has gained in both importance and prestige during the past two decades in terms of being a recognized and respectable domain within psychology. Various developments, often of worldwide significance, are assumed to enhance its interest and relevance: Previously firmly sealed borders become more permeable; more companies than ever before operate at a global level; huge streams of migrants have, either voluntarily or involuntarily, changed essentially monocultural societies into multicultural societies; and so on. Are these developments also reflected in a larger number of cross-cultural studies reported in the literature? The question was addressed by compiling a list of articles from 1977 onward in which "cross-cultural differences" appeared as a descriptor in PsycLit (a descriptor is a small set of key words to characterize

TABLE 2
Ten Journals Most Frequently Citing the
Journal of Cross-Cultural Psychology

<i>Journal</i>	<i>Frequency</i>	<i>Proportion</i>
1. <i>Journal of Cross-Cultural Psychology</i>	566	.05
2. <i>Journal of Personality and Social Psychology</i>	467	.04
3. <i>Journal of Social Psychology</i>	215	.02
4. <i>Child Development</i>	210	.02
5. <i>International Journal of Psychology</i>	146	.01
6. <i>Developmental Psychology</i>	127	.01
7. <i>Journal of Consulting and Clinical Psychology</i>	124	.01
8. <i>Psychological Bulletin</i>	82	.01
9. <i>American Psychologist</i>	67	.01
10. <i>Journal of Abnormal Psychology</i>	55	.01
Other journals	9,668	.82

a study). The proportion of these articles per year is represented in Figure 3. It can be seen clearly that after an initial peak at the end of the 1970s, the proportion of cross-cultural studies has increased steadily since the beginning of the 1980s. Nowadays, just over 1% of all articles appearing in psychological periodicals address cross-cultural differences. As an aside, it may be noted that there is no entry of "cross-cultural similarities" in the descriptor of PsycLit. The popular, although somewhat one-sided, idea that cross-cultural differences are more important than cross-cultural similarities may account for this absence.

The question as to where articles reporting cross-cultural comparisons are published was addressed by first compiling a list of 1992 articles in PsycLit in which "cross-cultural differences" appeared as an entry in the descriptor. Only articles that appeared in 1992 were considered to keep the size of the data set manageable. The impact factors of all journals with the articles listed were recorded. The results are presented in Figure 4. The distribution of impact factors is positively skewed. As might be expected, the range of impact factors is considerable. The mode of the distribution is fairly close to the impact factor of *JCCP*.

To show how the impact factors of the journals compare to the overall figures of the *SSCI*, a second graph is drawn in Figure 4. A random sample of impact factors of the entire list in the index was drawn. By comparing the distribution of the random sample to the distribution of impact factors of journals in which articles on cross-cultural differences appeared, the question

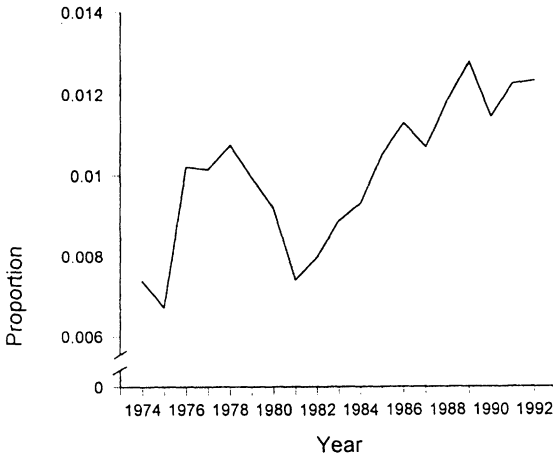


Figure 3: Proportion of Articles on Cross-Cultural Comparisons During the Period 1974-1992 in PsycLit

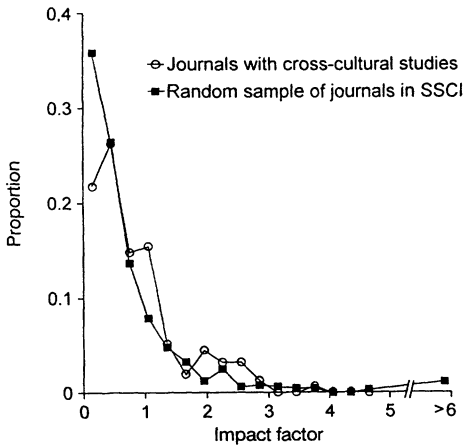


Figure 4: Distribution of Impact Factors of Journals Publishing Cross-Cultural Studies as Compared to Impact Factors of a Random Sample of Journals of the Social Sciences Citation Index (SSCI)

can be addressed as to whether cross-cultural studies tend to appear in relatively high-impact journals or in relatively low-impact journals. A Pearson chi-square test of equal relative frequencies of both impact factors yielded a highly-significant value of 41.13, $df = 15$, $p < .01$. A fairly large difference

between the distribution is found at the left tail; relatively few journals with very low-impact factors that publish cross-cultural studies were found. The underrepresentation of low-impact journals with cross-cultural studies can be explained simply. Not all journals that refer to *JCCP* will have their impact factors listed in the *SSCI*. At least three reasons can account for this absence: Some journals may not yet be listed, other journals (e.g., medical journals) fall outside the scope of the *SSCI*, and most of the journals are not listed because of low citation rates. If the impact factors of the latter journals are set to some arbitrary small value (say 0.05) and included in Figure 4, the graph would become even more skewed and its mode would become closer to the mode of the random sample of journals covered by the *SSCI*.

IMPLICATIONS

Now in its 26th year, *JCCP* is second in age only to the *International Journal of Psychology* (inaugurated in 1966) among the several psychology journals that either feature cross-cultural research or, as *JCCP* does, devote all of their space to such research. This longevity suggests not only that the bibliometric data contained in this report are quite stable for *JCCP* but also that domain-specific (specialized) journals will be hard-pressed to compete with the older, larger, and more general journals with respect to overall impact on the field of psychology. This pattern will continue to be true as long as the much smaller number of publishable cross-cultural manuscripts (compared to the great quantity of more or less routine monocultural manuscripts) find their way into one of hundreds of journals, only a tiny fraction of which are committed to the publication of such research.

Moreover, as long as *JCCP* and related publications continue to foster the testing of hypotheses in other societies, and as long as pioneering efforts are encouraged, such specialty journals will apparently have to live with this situation. There is also an element of the old adage that the "rich get richer" by virtue of the huge proportion of the academic marketplace that the older, venerated psychology journals tend to control and enjoy. There is hardly a library, research institute, or psychology department in the Western world that does not have such journals as the *American Psychologist* or the *Psychological Bulletin*; in most cases, these journals would be the last to be canceled during periods of budgetary cutbacks. This common knowledge among psychologists has the effect of securing the future of the larger publications. This is analogous to the psychology of the stock market. The very large and stable companies attract buyers who prefer the predictability of conservative

holdings, and the smaller “speculative” companies are left to rely on the more daring investors.

It could be argued that the impact, as operationalized by citation frequency, is of limited value to determine the influence of *JCCP* on the field of cross-cultural psychology because the *SSCI* figures are based on mainstream psychology journals, whereas *JCCP* has a broader scope, covering areas outside the mainstream of psychology. In this reasoning, *SSCI* impact figures underestimate the true impact of *JCCP*. The assertion, although basically valid, could be easily overstated. The strong U.S. bias in publications in *JCCP* and in membership of the International Association for Cross-Cultural Psychology makes it unlikely that the use of mainstream psychology as a frame of reference exemplified by the *SSCI* is inadequate and that the real impact of *JCCP* lies elsewhere.

Some of the data contained in this report, understood in conjunction with certain aspects of Öngel and Smith’s (1994) analysis, have serious implications for *JCCP*’s publication policies. Öngel and Smith supported with data what has been observable for many years: that the majority of the articles published in *JCCP* over the years fall under the broad umbrella of social psychology. Although parallel data for the other culture-oriented journals do not exist so that comparisons cannot be made, we believe that social psychological topics would be found to dominate their pages as well. There is nothing inherently “bad” about this pattern. After all, most of the important ways in which cultures differ fall within the scope of social psychology. However, when *JCCP* was founded in 1970, its intent was to open its pages to the entire range of topics within psychology. As noted in the preceding editorial by Lonner, we reaffirm this extremely important aspect of our policies. We firmly believe that *JCCP* will continue to have a noticeable impact on psychology and that this impact will be greatest if the widest possible range of psychological topics graces its pages in years to come.

The observation that the impact rates of all cross-cultural journals are pretty stable could be erroneously taken to mean that there is no room for improving them. This is certainly not the message we want to convey. In line with the preceding editorial, we would like to emphasize that good journals are the work of competent people. High impact factors are engendered by the joint efforts of editors, editorial boards, consulting editors, and—last but not least—authors. It is only through their collaborative effort that journals that feature cross-cultural psychological research to varying extents can make an impact on the field of psychology. If their efforts are muted, if they are not bold, and if those who believe strongly in the importance of cross-cultural research and its importance to the discipline of psychology do not energeti-

cally pursue the goals of cross-cultural psychology, then one can hardly expect anything more than weak and unremarkable impact factors.

REFERENCES

- Boor, M. (1982). The citation impact factor: Another dubious index of journal quality. *American Psychologist*, 37, 975–977. (Comment)
- Buffardi, L. C., & Nichols, D. P. (1981). Citation impact, acceptance rate, and APA journals. *American Psychologist*, 36, 1453–1456. (Comment)
- Endler, N. S., Rushton, J. P., & Roediger, H. L., III. (1978). Productivity and scholarly impact (citations) of British, Canadian, and U.S. departments of psychology (1975). *American Psychologist*, 33, 1064–1082.
- Gordon, M. D. (1982). Citation rankings versus subjective evaluations in the determination of journal hierarchies in the social sciences. *Journal of the American Society for Information Science*, 33, 55–57.
- Gordon, R. A., & Vicari, P. J. (1992). Eminence in social psychology: A comparison of textbook citation, Social Sciences Citations Index, and research productivity rankings. *Personality and Social Psychology Bulletin*, 18, 26–38.
- Haynes, J. P. (1983). An empirical method for determining core psychology journals. *American Psychologist*, 38, 959–961. (Comment)
- Hirst, G. (1978). Discipline impact factors: A method for determining core journal lists. *Journal of the American Society for Information Science*, 29, 171–172.
- Hogan, J. D., & Hedgepeth, R. (1983). Journal quality: The issue of diversity. *American Psychologist*, 38, 961–962. (Comment)
- Institute for Scientific Information. (1993). *Journal citation reports*. Philadelphia: Author.
- International Association for Cross-Cultural Psychology. (1994). *Membership directory*. Winston-Salem, NC: Author.
- Lonner, W. J. (1994). Reflections on 25 years of JCCP. *Journal of Cross-Cultural Psychology*, 25, 8–24.
- Öngel, Ü., & Smith, P. B. (1994). Who are we and where are we going? JCCP approaches its 100th issue. *Journal of Cross-Cultural Psychology*, 25, 25–53.
- Segall, M. H., Dasen, P. R., Berry, J. W., & Poortinga, Y. H. (1990). *Human behavior in global perspective: An introduction to cross-cultural psychology*. New York: Pergamon.
- Todorov, R., & Glänzel, W. (1988). Journal citation measures: A concise review. *Journal of Information Science*, 14, 47–56.

Fons Van de Vijver is affiliated with the Department of Social Sciences, Tilburg University, in the Netherlands.

Walter J. Lonner, Senior Editor of JCCP, is affiliated with the Department of Psychology and the Center for Cross-Cultural Research, Western Washington University.