Does the boycott of Israel's academy backlash? An analysis of publication patterns in the 'Lancet'

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Abstract

Numbers of publications from Israel in the 'Lancet' increase until 1999, and decrease since then. Although this trend approximately coincides with the first public calls for boycotting Israel's academics, it parallels a decrease in the total number of papers published by the 'Lancet'. In fact, since the calls for boycott, Israel's relative share among the papers published in the 'Lancet' increases despite the decreasing numbers of papers: more competition for space in the 'Lancet' does not seem to particularly harm Israel's academics. However, comparisons with other countries and publication numbers in the comparable 'New England Journal of Medicine' reveal that what might be a silent boycott halved the number of publications from Israel in the 'Lancet' from 1984 to 1999, before the public calls for a boycott. It is possible that the public calls for a boycott increased sensitivity to the issue, decreasing effects of silent boycotts. But having it as hard as others in difficult times (i.e. when competition for space is harsh) is poor consolation for having been disfavored in the past, when conditions were easier. Quantitatively speaking, the net result is that Israeli academics published less, and with more difficulties.

The first public calls for an academic boycott of Israel's scientists in 2001 raised the suspicion that silent boycotts, for example in the form of unfair review of submitted articles, existed already before the boycott.

Indeed, bibliometric analyses show that the yearly number of publications from Israel stagnates in 'Nature' from 1973 to 2002, despite a more than 3 fold increase in the total number of yearly publications from Israel during that period, and that in the comparable journal 'Science', the expected positive correlation between Israeli publications in 'Science' and Israeli publications 'at large' exists (Seligmann 2003a,b). Patterns in the 'British Medical Journal' are very similar to those from 'Nature', while those from 'JAMA – Journal of the American Medical Association' match those found for 'Science' (Seligmann 2005;

http://discardedlies.com/entries/2005/10/boycott_israeli_academics.php#more).

However, the situation might be in some cases more complex: publication from Israel might have dropped only after the first calls for a boycott were first publicized.

A superficial analysis of the yearly publication numbers from Israel in the 'Lancet' suggests so: there is a general trend for increase from 1984 to 1999, and a drop in publications from Israel since then (Figure 1). However, the yearly total number of scientific publications in the 'Lancet' parallels the trend for publications from Israel in the 'Lancet': that number increases until 1999 and decreases afterwards (Figure 1). In fact, the percentage of publications from Israel in the 'Lancet' slightly increases with the total number of publications from Israel at large. This means that despite harsher

competition for publishing in the 'Lancet', and ongoing calls for boycotting Israel's scientific products, the proportion of publications from Israel has increased over that period. During the same period, percentages for Switzerland and Denmark (countries comparable in population size, publication volume and quality) increase and stagnate, respectively (Figure 2).

I then compared the total amount of publications in the 'Lancet' with that in the comparable 'New England Journal of Medicine' (NEJM) for 35 countries, separately for the period from 1984 to 1999, and from 2000 to (September) 2005. Figure 3 shows for both periods the expected strong positive correlation between the number of publications from a country in the 'Lancet' and that in NEJM. The regression lines in Figure 3 mean that for any country, the number of publications from that country in one of these journals is a good predictor of the number in the other journal. The low variation around the line suggests that both journals publish all countries according to the same criteria.

However, there is one very clear exception, for the period from 1984 to 1999. This discrepancy accounts for 50% of all the variation that is unexplained by the regression line, which means that after excluding that exception form that analysis, the % of explained variation increases from 92 to 96 percent ($R^2 = 0.92$ means that 92% of the variation is explained by the regression line). That 'exception' country is Israel, for which there are from 1984 to 1999 584 less publications in the 'Lancet' than would be expected from numbers in NEJM.

This cannot be explained by positive bias in favor of publications from Israel in NEJM, rather than negative bias in the 'Lancet': the total number of publications (at large, in all 8600 journals covered by ISI) by a country correlates with the number of publications from that country in each journal (separately for each journal), and the numbers for Israel match well the regression line for NEJM.

Interestingly, for the period from 2000 to 2005, which is the period during which one would expect a boycott to have most influence, the effect is much weaker and is not statistically significant: Israel accounts for only 5% of the variation unexplained by the regression for that period, and the number of publications 'missing' in the 'Lancet', as compared to NEJM, is only 48, which is matched by numbers from France (48), Germany (40) and others.

The conclusions from these analyses are not simple. There is evidence for a bias against publications from Israel in the 'Lancet' for the period preceding the public calls for a boycott against Israel, but the evidence is much less clear for the period following the first calls.

It is possible that the increased competition for space in the 'Lancet', which more or less coincides with the latter period, actually causes the decrease in publication bias, even if there is an increased impetus for boycotting Israel: publication in 'Lancet' might follow more objective criteria than it did when competition was less harsh. One can also suggest that editors and reviewers, because of the atmosphere of boycott, are particularly careful when considering manuscripts from Israel, which also may have resulted in the decrease in apparent bias against Israel. In that sense, the public calls

for an academic boycott of Israel might have caused the decrease in the intensity of the silent boycott that existed before these calls.

Two other alternative interpretations exist: (a) the public initiative for boycott might result from increased competition, and serves the purpose to weaken at least one 'opponent', as suggested before (Kennedy 2002); (b) the calls for a boycott could be a counter-reaction to the fact that the silent boycott became less effective in that period, perhaps because of increased competition.

Nevertheless, this situation is likely to have negative impacts on the inner feeling of Israeli scientists. Indeed, even if relatively successful in coping with competition, Israeli scientists endure more difficulties in publishing, difficulties that coincide with the repeated calls for boycotting Israel. Because of these circumstances, Israel's scientists might confound difficulties in publishing, which are most probably due to increasing competition, with the effects of the boycott, even if those might have become minor, perhaps 'thanks' to the initiative to publicly call for a boycott.

Israel's scientists have good reasons for discontentment: the fact that (at least in the 'Lancet') they don't seem to suffer more than others when the situation is harsh for all, is poor consolation for having been disfavored when the situation was less difficult. Quantitatively speaking, the net result is that they can publish less, and with more difficulties.

Kennedy D (2002) When science and politics don't mix. Science 296: 1765. (http://www.sciencemag.org/cgi/content/summary/296/5574/1765)

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Seligmann H (2005) Boycott israeli academics? The numbers don't lie: they're already blacklisted, Http://www.Discardedlies.com. Accessed October 2005.

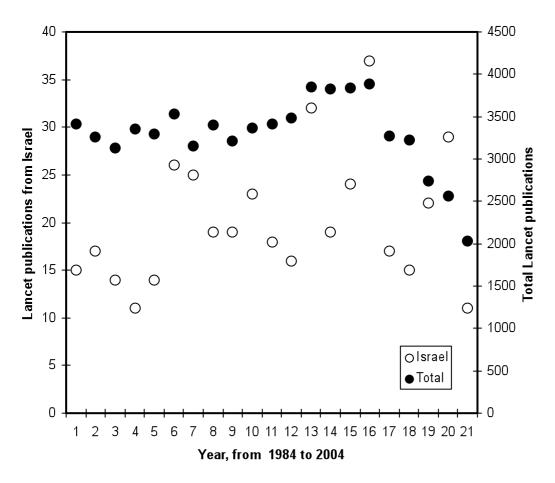


Figure 1. Numbers of publications from Israel in the 'Lancet' (left y axis) and total number of publications in the 'Lancet' (right y axis) as a function of the year. Data were compiled from the Web of Knowledge, expanded Science Citation Index http://isi1.isiknowledge.com).

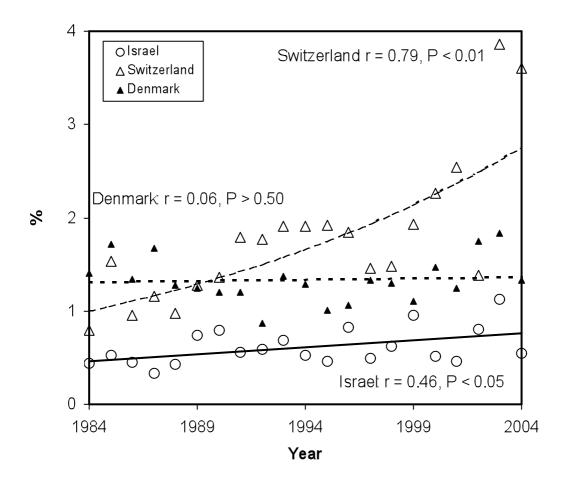


Figure 2. Percentage of publications from three countries from the toal number of publications in the 'Lancet' as a function of the year of publication. Lines are the least square regressions (linear for Israel and Denmark, exponential for Switzerland), r indicates their coefficient of determination, P indicates their statistical significance. Data were compiled from the Web of Knowledge, expanded Science Citation Index http://isi1.isiknowledge.com).

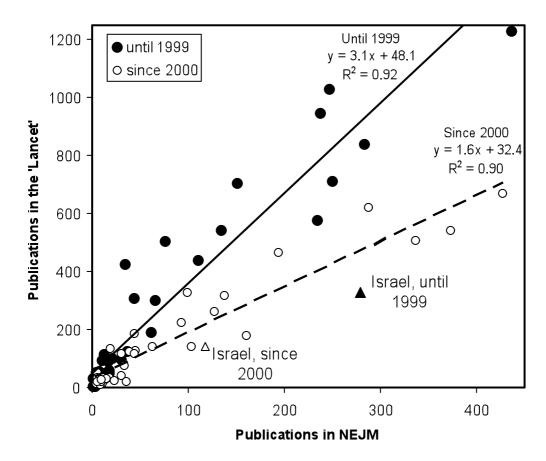


Figure 3. Numbers of publications from different countries in the 'Lancet' as a function of their numbers in the 'New England Journal of Medicine' (NEJM) for two periods, from 1984 to 1999 (continuous line, dark symbols), and from 2000 to September 2005 (discontinuous line, open symbols). Countries are the same as those for Seligmann 2003a, excluding Australia, Canada, the UK and the USA, Israel is indicated by triangles. The analyses include all remaining countries, but axes were truncated for clarity of presentation (the graph does not include for publications until 1999 data for Italy and the Netherlands).