Is Science Inherently Boring?

Characteristics of the Public's Interaction With Science-Related News Items on Leading News Sites in Israel

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Background

The modern world requires non-scientists to make science related decisions affecting quality of life. In many countries, the public's main source of information about science and technology is the mass media. Unfortunately, in recent years we witness the collapse of traditional journalism, and one major casualty of this is science journalism. One potential solution is to encourage scientists to write about science for the public.

Research Question

Is there a difference in the public engagement with science items written by early career scientists and general items written by the website's organic reporters published on the same platform?

Research Field

Online news sites:

'Ynet' is the largest news site in Israel. Published by "Yediot Aharonot" media group

'Mako' is an Israeli News and Entertainment site. Owned and operated by Keshet, Israel's largest TV broadcast company.

Scientists as Science Reporters:

About 30 graduate science students trained to contribute popular science stories by the Davidson Institute of Science Education reporters program. The items are edited by an experienced former science reporter and published with no further editing by the news editors of the news sites.

Methodology

Database: 67 science items written by graduate students and published on 'Mako' or 'Ynet' websites on different channels and topics.

בריאות | מבית קשת mako | תרבות | מבית קשת mako | חופש | HIX תעביר את זה הלאה

בריאות health | דיגיטל digital | מדע science | animals | בעלי חיים

Publication period: 'Mako' – July 2015 to April 2016, n=32; 'Ynet' – January 2016 to September 2016, n=35

Data mining: Each science item was paired with an organic 'Mako' or 'Ynet' corresponding item, published on the same channel and at the same time (54% of the items were published on the same day, the rest were published -/+3 days). Paring was based on time and channel of publication solely, and **not** on item content

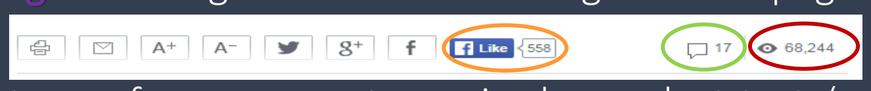
For each pair of items quantitative data was collected via Google Analytics on each news website as indication for public engagement.

Views – Number of clicks or entries for each item

Likes – Number of 'Like' indicators or Facebook recommendations (connected with user's Facebook account)

Comments – Number of comments left at the bottom of the item

Time on page – Average duration of viewing the item page



For each type of engagement a paired sample t-test (α=0.05) was conducted to answer our research question.

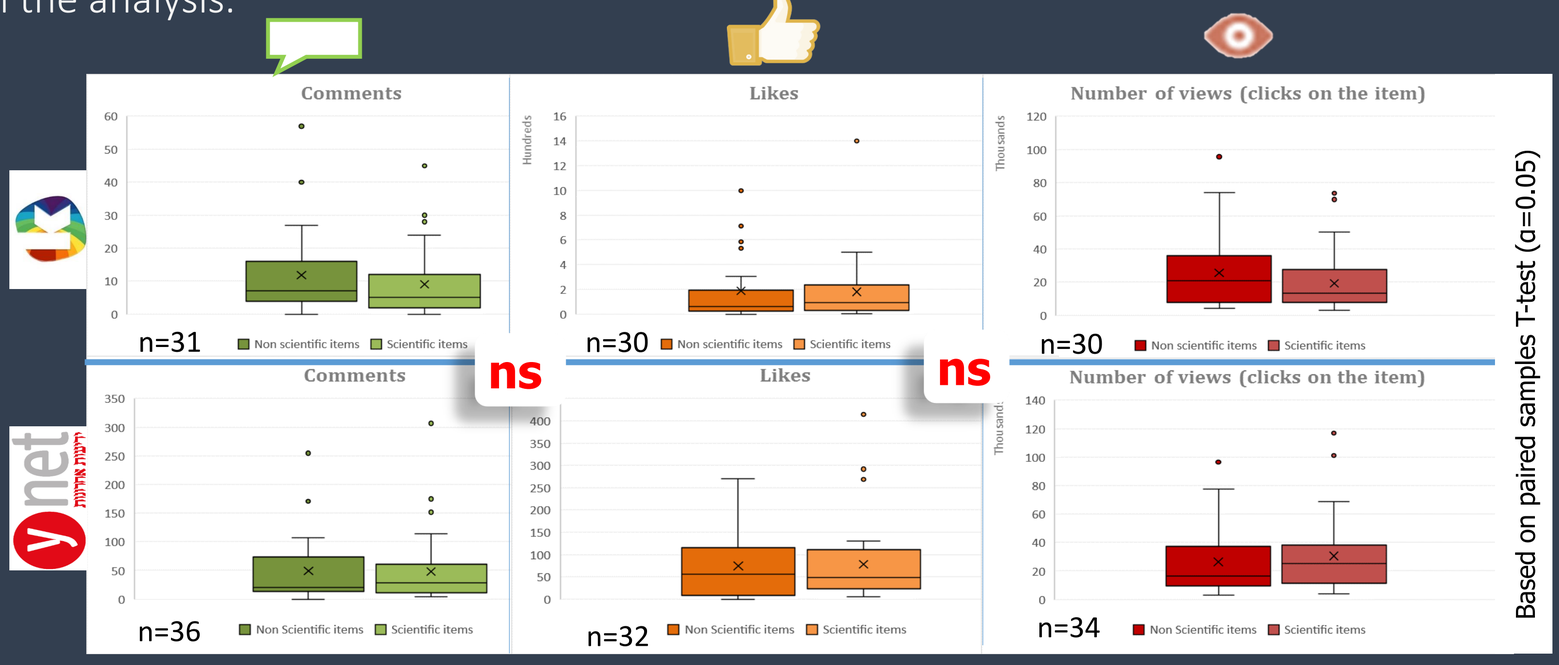
Results

No significant differences were found between items written by early career scientists and 'Mako's' organic reporters in any of the measured parameters: Views, Likes, Comments & Time on page (Table 1).

No significant differences were found between items written by early career scientists and 'Ynet's' organic reporters regarding Views, Likes & Comments (Table 1). Statistical difference was found regarding Time on page: more time was dedicated to items written by scientists, but data was inconsistent and removed from the analysis.

Table 1 – averages and standard deviation of engagement data

		Time on page	Comments	Likes	Views
Mako	Writers	Ave. 118.6 SD 89.9	Ave. 11.8 SD 12.8	Ave. 129.9 SD 186.3	Ave. 20198 SD 18331.4
	Scientists	Ave. 112.5 SD 99.2	Ave. 9.1 SD 10.5	Ave. 141.3 SD 157.2	Ave. 11054 SD 37144.9
Ynet	Writers	Ave. 1427.5 SD 152.1	Ave. 49.6 SD 56.8	Ave. 74.8 SD 72.8	Ave. 26432 SD 22434.2
	Scientists	Ave. 1511.4 SD 128.2	Ave. 48.1 SD 59.7	Ave. 78.8 SD 90.8	Ave. 30625 SD 25856



Discussion

Based on 67 pairs of news items, it seems that the chance for a science item written by a scientist to be read is the same as a general item written by an organic reporter of the news site published at the same channel. This pose an optimistic starting point in assessing the viability of filing the void of science reporters with scientist-as-science reporters; Promoting frequent, updated, accurate, quality science content in Israeli online news sites, which in turn could promote public's science literacy.

Based on our data it seems that public's interactions with science-related news are not significantly different from their interactions with other news items, even when written by scientists.

So, is science inherently boring? It seems NOT