Rewrite the headlines! Helping young people evaluate how academic research is reported in the media

ALAN GOW and SINEAD RHODES

Dr Alan Gow, is Associate Professor in Psychology at Heriot-Watt University. He received a British Academy Rising Star Engagement Award that helped launch a competition designed to engage young people in evaluating the coverage of research in the media. His project colleague, Dr Sinead Rhodes, is a Senior Lecturer in Psychology at the University of Strathclyde.

Ever wondered how findings go from a research lab to headline news?

When we pick up a newspaper or read news stories online, we hope that the reporting is fair and accurate. Many times it is, but sometimes the reporter, the press officer or even the researcher can get it wrong! With stories based on research findings there are a few potential weak points in the process where inaccuracies can sneak in.

Whith that, 'Rewrite the Headlines', a new competition for schoolchildren and undergraduates to explore how research is discussed in the media, was launched in August 2015. A key aim of the initiative was to help young people get a better understanding of the journey from 'lab to headline', so they can more confidently judge any research stories they might come across. Rewrite the Headlines was funded by a British Academy Rising Star Engagement Award, and here we describe some of the ideas behind the competition and how it engaged young people across Scotland.

The ethos behind the competition

The critical consumption of research reported in the media is an important skill, and one which needs to be encouraged early. Rewrite the Headlines was therefore proposed as a competition to engage young people in evaluating research reported in the media, helping them to understand the potential weak points in the pipeline between research and headline, and in particular, to identify the responsibilities of both researchers and



Dr Alan Gow gave a presentation about his British Academy-supported project at the British Academy Early Career Research Showcase event held on 9 October 2015.

journalists in the process of knowledge dissemination. A key aim of the competition was to raise awareness of – and engage young people in – research that may have an impact on their lives.

The target audiences for the initiative were primary schoolchildren (in primaries 5 to 7) and university undergraduate students. While the overall aim was the same, the approaches taken for the two audiences obviously differed. But before I describe those approaches, let me give some of the background to the group who are behind the competition.

First there was a blog

The competition was co-ordinated within the context of 'Research the Headlines', a multidisciplinary blog addressing how research is reported in the media.¹ It was developed and launched in August 2013 by members of the Royal Society of Edinburgh's Young Academy of Scotland.² The blog arose from discussions among members about how best to address issues of communication between researchers and the media and, more importantly, how to engage members of the public in

^{1.} http://researchtheheadlines.org/

^{2.} www.youngacademyofscotland.org.uk/



Dr Alan Gow leads a primary school workshop about the 'Rewrite the Headlines' competition, in November 2015.

exploring research in the media.

On developing the ideas behind Research the Headlines, Dr Sinead Rhodes (founder and current Co-Chair) has said: 'New findings from detailed research studies often form the basis of media reports. But how confident are people in assessing the science and methods that sit behind the latest headline, such as the absolute risk of eating red meat? Accessing the original research papers might be difficult or in some cases costly, and where people are able to get hold of the source material, they may find it inaccessible given the specialist language and methods used.'

The blog was very clearly inspired by the excellent work of the NHS Choices 'Behind the Headlines' team, but develops this in two distinct ways. Research the Headlines moves beyond a focus on health-related stories. This is possible because the blog benefits from contributions by researchers and professionals spanning the diverse range of backgrounds within the Young Academy of Scotland – from psychology and history to astronomy and social policy. For example, among the most popular posts from 2015 were a piece discussing popular media myths around the refugee crisis across Europe, another giving some insight into the Hunga Tonga-Hunga Ha'apai volcano eruption, and another exploring whether gender reassignment might be seen to have an impact on cognitive abilities.

In the standard posts, our Research the Headlines contributors take recent media coverage of research as a starting point, allowing readers to reach a better understanding of what was really done, and what it might mean for them, from an expert but independent position.

The second way in which Research the Headlines complements existing blogs such as Behind the Headlines is its broader educational focus. For example, special series have included 'How to "Research the Headlines"', giving 10 top tips to readers about what to look for in the media reporting of new research, and 'Talking Headlines', where we ask high-profile researchers, journalists or bloggers to give an insight into what goes on behind the headlines. Since its launch, the blog activity has grown steadily, and has attracted interest from the NHS Choices team, Sense about Science, and the Science Media Centre. For example, the NHS now name and link to Research the Headlines as 'Editor's pick of the blogs' on some of their own health posts. The blog has also just been shortlisted in the 2016 UK Blog Awards, with the winners to be announced in April. However, it was always the group's intention to build on the successful foundation of the blog to engage relevant audiences more directly. And so the Rewrite the Headlines competition was conceived.

'Don't stop at the headline'

For the primary school audience, the competition had a simple underlying message: 'Don't stop at the headline'. This was our first tip in the How to 'Research the Headlines' series, and while it may seem obvious, the tip essentially highlights a very important issue. Media coverage of research can often be fair and accurate, but the number of times the headline doesn't match the content or tone of the piece remains problematic. This is particularly the case where the headlines are intentionally misleading to generate traffic, or to provoke an immediate comment or response before the article has been read fully. The competition was therefore targeted at children in the upper years of primary school (primaries 5-7), as it was felt they represented a key age to begin exploring the critical consumption of media, and how stories are (mostly) based on original sources.

For the schools that registered to participate, Research the Headlines contributors (or our colleagues from the Young Academy of Scotland or from universities across Scotland), ran a short workshop with the classes (Figure 1). The schools workshops explored what research is, where it comes from and why understanding new findings might be important, before showing how those often very specialist descriptions get translated into news stories. Through examples, the workshops took the children from the headline, and what that might



Figure 2

Dr Alan Gow (far left) and Dr Sinead Rhodes (far right) with the winners of the Rewrite the Headlines school competition – St Roch's Primary and Hearing Impaired School, Glasgow.

initially suggest, to seeing how reading more of the story might change that initial impression. For each example, the children were then asked to 'rewrite the headlines' to represent more accurately the research being reported.

What was particularly important to the group was that the workshop was not to be designed to criticise journalists or the media unfairly. The sessions included news stories where the headlines were indeed exaggerated, but other examples highlighted fair reporting based on flawed research.

After the workshop, teachers were given some direction on how to identify their own news story of interest related to recent research output and have the class devise their more accurate headline. These new headlines were then accompanied by a short description of why the class felt their headline was a clearer account of the story, with both headline and text going to our judging panel of members of the Young Academy of Scotland.

When the competition opened, 96 schools registered their interest, and in many cases they signed up multiple classes. This represented a potential audience of over 5,000 schoolchildren. While it wasn't possible to reach every school, our contributors crossed the country, from the Scottish Borders to the Highlands and Islands. Overall, workshops were hosted in over 80 schools. To ensure no one need miss out, a short video was also prepared to allow teachers to run their own workshops (accompanied by a fuller script). The materials remain available on the competition website for anyone interested in exploring the ideas further.³

Engaging with students

While the principal focus for the first year of the competition was on children of primary school age, Rewrite the Headlines was also targeted at university undergraduate students. Students represent a key demographic that should be able to apply their critical skills to explore how their subject is presented in the media.

The student competition was self-guided, using materials available on the website (again, these are feely available for others to use, e.g. for teaching). The submissions for the student competition were blogs in the style of the standard Research the Headlines posts, where a news story and its associated research paper are discussed, and the good, bad (and ugly) are highlighted. As with the schools competition, it was important to highlight that good reporting could and should be covered. Research the Headlines regularly champions good reporting, and so students were advised that their pieces could be positive or negative in appraising the research and/or media reporting, but their approach needed to be justified by the source material.

And the winner is...

On 28 January 2016, the Research the Headlines team held a special event to reveal the winners of the Rewrite the Headlines competition. The winning school was St Roch's Primary and Hearing Impaired School in Glasgow (Figure 2). The school's entry had turned the recent headline 'Processed meats do cause cancer – WHO', into 'Eating processed meat slightly increases risk of cancer'. The research story was one that had generated a lot of interest and confusion when originally released, and the judges were impressed with how the class cleverly explained the concept of risk, and had worked out that eating processed meat is associated with an enhanced risk of one extra person per 100.

In the student competition, prizes were awarded across a number of categories, including Social Science (Figure 3), History, and Social Policy. This last prize was awarded to David McElroy from Abertay University for

^{3.} http://researchtheheadlines.org/rewritetheheadlines/

his blog entitled 'How did *The Sun* work out that "1 in 5 Brit Muslims have sympathy for jihadis"?' His piece was praised by the judges as 'an engaging piece, clearly considering the audience and the Research the Headlines blogging style, with a good balance of evidence from the actual survey and analysis of the misrepresentation of findings in the newspaper article.' Another entry in the Social Policy category – from Fraser Barker, a student at the University of Strathclyde – asked 'Will a square jaw help Trump win in 2016?', and was highly commended as 'a timely piece, well written and presented'.

The overall student prize was from Abbey Wrathall, a student at the University of Edinburgh. In her blog entry entitled 'So, should you wait until Monday to take your child to hospital?', Abbey explored recent media coverage about whether weekend versus weekday hospital admissions might be associated with poorer outcomes. This topic is still very much in the news, and the judges recognised the importance of careful reporting on this, given that it might directly affect the choices people make.

Full details of all the winning and highly commended entries appear on the Research the Headlines blog.⁴

The next stage

The Research the Headlines team is grateful to the British Academy for funding the development of its new initiative, and has been overwhelmed by the enthusiasm of the school children and students who took part. As the competition wrapped, Sinead also added 'Given the interest in Rewrite the Headlines, we're exploring further opportunities to ensure it can become an annual event.' In this first year of Rewrite the Headlines, the competition was naturally limited to Scotland given the resources available. However, the Research the Headlines team is seeking funding to allow the competition to grow in future years, not only geographically, but also potentially to other age groups - and with the inclusion of small homework exercises addressing some other How to 'Research the Headlines' tips, this could engage parents too. In achieving this, it is likely that a number of partner organisations will be involved, and we would welcome hearing from anyone interested in becoming more involved in those next stages.

The bottom line

A number of online and offline outlets provide information on – and foster debate around – topical issues. They range from broadcast and traditional print media to alternative information sources, including blogs and discussions on social media platforms. The extent to

4. http://researchtheheadlines.org/2016/01/29/rewrite-the-headlinesand-the-winner-is/



Figure 3

Dr Alan Gow and Dr Sinead Rhodes with (centre) Sarah Keith of University of Aberdeen, who won the undergraduate subject prize in Social Science for her blog entitled 'Can films really boost your memory?'

which these outlets engage with evidence on such issues varies greatly, as does the quality and interpretation of such evidence. While freedom of speech allows for this plurality of information sources to exist, it is ever more important that consumers are able to engage with it in a critical manner.

Both Research the Headlines and our new Rewrite the Headlines initiative are specifically designed to facilitate that engagement, in a positive and constructive manner. Critical engagement with the media, research and the evidence generated from it is a centrally important skill. Training in this should come as early as possible, and be reinforced throughout the education process, beginning in the formative school years and continuing throughout further and higher education. Educating and training the public to be more critical consumers of information is something that academics and researchers should be involved in. And we hope that you'll be hearing more from our attempts to 'rewrite the headlines' in the future.

'Rewrite the Headlines' is an initiative of 'Research the Headlines', jointly led by Dr Sinead Rhodes and Dr Alan Gow. The competition is supported by a British Academy Rising Star Engagement Award to Dr Gow, with additional funding from the University of Strathclyde to Dr Rhodes. Research the Headlines is a working group of the Royal Society of Edinburgh Young Academy of Scotland.

All enquiries relating to Rewrite the Headlines should be directed to rewritetheheadlines@ youngacademyofscotland.org.uk