

Research Insight Report: Wild Swimming in the News. Dawn Knight, Emma McClaughlin, Svenja Adolphs

Introduction to the report

Wild swimming or swimming in natural 'blue spaces', including rivers, lakes, or the sea is also referred to as open water swimming or cold water swimming. The Wild Swimming and Blue Spaces project aims to address the current lack of integrated information about the mental and physical health benefits of wild swimming alongside the risks related to water quality and safety aspects of specific blue spaces that people use for swimming.

Researchers in the School of English at the University of Nottingham and the School of English, Communication and Philosophy at Cardiff University are working on mobilising interdisciplinary knowledge and partnerships to combat health inequalities at scale. Our aim is to gain a broad understanding of the attitudes to, and knowledge of, the benefits and risks of wild swimming from multiple perspectives. This report outlines the methods and results from a corpus linguistic analysis of UK news articles about wild swimming.

Methods of research

We used a linguistic approach called 'corpus linguistics' which uses specialist software to identify common patterns that occur in language, including the frequency and usage of specific words in a corpus (plural 'corpora'). Three corpus linguistic analyses were used in this study.

Frequency lists

These lists organise words in a corpus by frequency of occurrence and provide a starting point to understanding the data. Frequencies can be filtered by 'part of speech' (e.g., nouns, verbs, adjectives).

Collocation analysis

This analysis examines words that frequently co-occur together (e.g., 'hunky' and 'dory'). It can reveal a word's positive or negative associations (e.g., 'provide' + 'care' (positive) or 'substance' + 'abuse' (negative)). This is known as <u>semantic prosody</u>.

Concordance lines

These are extracts of text from the corpus which show the context in which a keyword search term appears (also referred to as keyword in context, or KWIC). They are useful for close, qualitative analysis.















Natural Environment **Research Council**

Data gathered for the study

We examined news texts about wild swimming using corpus linguistics to highlight patterns in the language used by the media to represent wild swimming to its readers.

The news texts about wild swimming were gathered using the search string "wild swim^{*}" to identify relevant texts from the British English language newspapers in the LexisNexis news database (<u>https://advance.lexis.com</u>). The dates of the search were set for 1st January 2018 until present and the most recent text gathered was published on 30th June 2022. The news corpus contains 3862 articles and 3.3m words.

For this analysis, our focus was on the language surrounding the words 'benefit*' and 'risk*' between 2019-2022 (a span of 54 months). We looked at word **frequencies**, **collocations** and 'keyword in context' (KWIC) **concordance lines** for this part of the study.

Benefits and risks in wild swimming news

To uncover how benefit and risk are framed in the corpus of news texts about wild swimming, we examined collocates of 'benefit'', which captures the words 'benefit', 'benefits', 'benefited', and 'benefitting', but does not capture the adjective 'beneficial' or the adverb 'beneficially', and collocates of 'risk'', which captures the words 'risk', 'risks', 'risked', 'risking', 'riskier'. The word 'riskiest' was not present in the corpus. Similar frequencies of the nouns 'benefit' and 'risk' were present in the news data: 'benefit' is ranked the 183rd most frequent noun with a frequency of 791 and 'risk' is ranked the 225th noun with a frequency of 713.

The diagrams below are Word Sketches produced by Sketch Engine.¹ They show collocational behaviour organised by grammatical relation. The words of interest feature in the centre – in our case, 'benefit' and 'risk' – and co-occurring words surround them. The distance from centre represents the typicality (score) of co-occurring words. For example, 'mental benefit' is more typical than 'health benefit' in the wild swim news corpus. The circle size represents the frequency of the collocation. For example, 'reduce risk' is more frequent than 'understand risk' in our corpus.



The modifiers of 'benefit' (shown in pink) indicate that the concepts of physical, mental, and psychological health and wellbeing are a central part of the way the benefits of wild swimming are framed in the news. 'Risk' appears most frequently as the object (shown in blue) of diminishing verbs such as 'reduce' and 'minimise' but it does also appear with 'increase'.

Health benefits and risks in wild swimming news

To observe differences in use, we carried out a Sketch Difference² analysis comparing the collocational behaviour of the words 'risk' and 'benefit' in the corpus.

We examined modifiers which are words or phrases that alter meaning by providing extra information, differentiating, or clarifying.

The Sketch Difference on the right shows that 'health' is a common modifier of both terms.



A random sample of 20 concordance lines for 'health benefits' (from a total of 176 instances) shows that the benefits of wild swimming relate to the individual (i.e., to a person's individual benefits of wild swimming: physical, mental, therapeutic, wellbeing and health-related benefits).

...the health benefits of wild swimming include better sleep, improved circulation and increased happiness...

There are heaps of *health benefits* associated with swimming; it can lower stress, reduce anxiety and depression...

There are 17 instances of 'health risk' in the corpus. In contrast to health benefits, risk relates to actions of third parties and their impact on the population in general. The most common associations are to pollution, poor water quality, and temperature.

...suddenly subjecting your body to <u>extreme cold</u> comes with a **health risk** of its own for some people.

Wild swimmers face health risks from a toxic pesticide discharged into lochs and the sea...

When 'physical and mental [health] benefits' are discussed in the news, the specific benefits are not usually specified but occasionally these benefits are named, such as 'laughter', creating a 'fun' and 'exciting' 'adrenaline rush', [reducing] anxiety, connecting with others, and rejuvenating the body.

... it's <u>fun and exciting</u>. "It's really <u>exhilarating</u> and a definite <u>adrenaline rush</u>. It also benefits **physical and mental health**. I think there will be a lot of <u>laughter</u>... and probably some screams.

and <u>anxiety</u>, which researchers suggest is down to the combination of **physical** exercise and the sport's **mental benefits**. Some research suggests many of us find it <u>easier to get on with people</u> in natural "aquatic environments"

And it might be just what you need to <u>refresh and rejuvenate your body</u>. Wild swimming has so many **physical and mental benefits**, and the best part is that it's free, of course.

The physical risks highlighted are more specific than the benefits and include 'disease' hypothermia', drowning', 'injury' and 'infection'.

There are concerns over cold water shock, risk of drowning and water quality

Then there is the <u>cold shock</u>, the **risk** of <u>cramps</u>, <u>incapacitation</u> and <u>swim failure</u> where you lose power in your limbs

Summary highlights of the analysis

- News about wild swimming presents risks in more specific terms than benefits, which in turn, are framed more generically.
- The risks discussed relate more to physical health and benefits relate to both physical and mental health.
- In relation to health, the benefits outweigh the risks in news media representations of wild swimming. We found 176 instances of the phrase 'health benefits' and just 17 instances of 'health risks'.
- Though cold temperature is commonly associated with 'health risks' in the news, the temperature of the water is usually presented as exhilarating and good for health in the wider corpus.



• The benefits of wild swimming are framed in relation to the individual, whereas risks relate to third parties, the population in general, and environmental concerns. This contrast in language places the benefits in closer proximity to individual readers and distances potential risks.

Next steps

These findings will be contrasted with survey findings on the public perceptions of wild swimming to investigate whether there is an alignment between the benefits and risks of wild swimming articulated by survey respondents and those reported in the news.

References

- [1] Adam Kilgarriff, Vít Baisa, Jan Bušta, Miloš Jakubíček, Vojtěch Kovář, Jan Michelfeit, Pavel Rychlý, Vít Suchomel. The Sketch Engine: ten years on. Lexicography, 1: 7-36, 2014.
- [2] https://www.sketchengine.eu/quick-start-guide/word-sketch-difference-lesson/

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