Background of Writefull

Academic writing can be a challenge to researchers and students. Researchers might get their manuscripts and research proposals rejected due to poor language, and students may struggle to write their assignments and dissertations.

Writefull uses the latest Artificial Intelligence techniques to identify language patterns in academic texts. It has been developed especially for students and researchers, and its feedback is tailored to academic writing. Using Writefull enables students and researchers to have more confidence in their writing, thereby increasing their productivity and fostering academic success.

For more information, please visit our website at https://writefull.com/

1) The team behind Writefull

As non-native speakers of English and students new to academic writing, Writefull co-founders' Juan Castro and Alberto Villar were looking for an easy way to check their texts. With a PhD in AI and MSc in Machine Learning under their belts, they set out to create a tool using the latest AI techniques on big data to enable this. Joined by two PhD graduates in Applied Linguistics, they have built AI models with solid academic language performance.

Writefull is science, AI, and linguistics. Created by researchers, for researchers.

2) How Writefull works

Writefull trains its language models on authentic academic texts, from a very large global database of millions of published Open Access articles from Dimensions.

Writefull offers expert language feedback in the following categories:

- **Grammar** covers several aspects. For example, does the student/researcher use the right preposition? (it is the effect in/on/at something?), are articles like 'the' used where needed, and are the correct verb forms used (is it the majority of people is/are)?
- **Spelling** is a contextual spell check, using Writefull's scientific dictionaries to correct highly technical, discipline-scientific terms (e.g. chemical compounds and plant/animal species).
- Word use checks that the student/researcher uses words that are appropriate in their sentence (e.g. capability vs ability, quantity vs amount, notable vs noticeable, alternate vs alternative). Writefull's models process the written sentence and determine which of two confusing words is better to use.
- **Punctuation** covers, for example, the use of commas.

• **Style** looks at whether the author uses language appropriate for science (e.g. no informal words like 'stuff', no contractions like 'it's', the use of connectors like 'however' instead of 'but', etc). It also checks for language conciseness (e.g. instead of 'The aim of this paper is to...', write 'This paper aims to...', etc).

Writefull's la	nguage feedback 😣 w	ritefull
Grammar	This emphasised the role of agglomeration economies on in accelerating economic growth.	
Spelling	The infrared spectrum of tetrafluorohydrasine tetrafluorohydrazin	ne <mark></mark>
Word use	Most African RLGs have weak fiscal capacity, limiting their capability ability to access capital markets.	
Punctuation	However However, with the complexity of contemporary buildings	5,
Style	This led to a huge large / great / considerable / substantial increas	ie

3) Privacy and security

Writefull takes privacy and security issues very seriously.

All Writefull products encrypt all communications between computers and servers. The servers do not store any texts, and text written in Word or uploaded to Writefull Revise/Cite never reaches our hard drive.

For privacy reasons, accepted suggestions by students and researchers are not used to improve algorithms.



Writefull products and solution scope

Writefull's product suite comprises **four** distinct **products** that cater for the needs of different users, from students/researchers to publishers, at various stages of the writing/publishing process

1) Writefull for Word

Writefull for Word provides language feedback on text written in a Word document. It checks for correctness of grammar, word use, style, and more. It also offers a database of authentic scientific texts, in which students and researchers can search for language patterns that they can incorporate into their own texts.



Office Add-ins - word.writerull.al				
Highlighting Results	These results need to be interpreted with $\ensuremath{\mbox{caution}}$ / $\ensuremath{\mbox{care}}$, because …			
Studies with Similar Results	Extreme caution must be excercised in interpreting these data, as			
Studies with Different Results	As this was a small-scale study, results may not be conclusive.			
Study Limitations	Considering the limited number of participants, further research is needed …			
	A downside / limitation / of the methodology used is			
	This methodological decision $\ensuremath{\mbox{may have led to}}$ / $\ensuremath{\mbox{might have affected}}$ / $\ensuremath{}$			
	This study failed to account for			
Connectors The reported inaccuracies / discrepancies / were likely due to				
	Studies with Similar Results Studies with Different Results			

Office Add-ins - word.writefull.ai	• • •	Office Add-ins - word.writefull.al		
a *big* difference	a greater/bigger			
a significant difference (50%)	a bigger focus on	17 (58)		
a large difference (14%)	Board unveiled a ne	ew curriculum with <mark>a greater focus on</mark> "scientific practices". This cours		
a big difference (7%)		Similarly, some protected areas have a greater focus on ecological integrity than others.		
a crucial difference (7%)	film preservation efforts to include greater focus of the safety. The early motion-pict various projects while also assuming 6 greater focus of conservation. Its remaining funct tay, with Valoyie no benestum having 6 greater focus of solida without Valoyie no benestum was t t form periods Sincity titles, with 6 greater focus of social development. SimCity Socie			
a major difference (6%)				
a substantial difference (5%)				
a key difference (4%)		Festival, which has a greater focus on Canadian and other North American		
a huge difference (3%)	nd may be distinguished from that by a greater focus on the management of wooledge as a the folly sound from the group, with a bigger focus on traditional instruments and baraly a a late-night that those format with a bigger focus on much lowest and interviews with			
a notable difference (2%)				
a considerable difference (2%)	ller without any gr	raphic scenes, with a bigger focus on plot and character development and		
	nsional The Legend	of Zelda game with a bigger focus on puzzles and less pronounced action		

studies have _	that	×
studies have	shown that (54%)	
studies have	demonstrated that (13%)	
studies have	suggested that (8%)	
studies have	found that (7%)	
studies have	indicated that (5%)	
studies have	reported that (5%)	
studies have	revealed that (4%)	
studies have	confirmed that (2%)	
studies have	concluded that (1%)	
studies have	established that (1%)	

1) Writefull for Overleaf

Get Writefull's language feedback within Overleaf, and directly apply the corrections to your LaTeX source.



2) Writefull Revise

Writefull Revise screens text for correctness of grammar, word use, style, and more. It can be used by students and researchers to upload and check the language quality of a text they have already written, and to ensure that any language mistakes are corrected. A revised version of their text incorporating all accepted suggestions can then be downloaded.



3) Writefull Cite

Writefull Cite screens texts for citation completeness, highlighting sentences that should be supported by a reference. It can be used by students and researchers to check for citation completeness within their text, to ensure that claims are supported by references as appropriate.

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🙌 writefull		Compact View	GUIDE
	6 MISSING CITATIONS		
	are diagnosed as gambling disorder, significant impairment and distress [1 disorder and a subdiagnostic level of 5.8% across continents.	omenon with a long history in human societies. Severe forms o a persistent and recurrent maladaptive gambling behaviour, w I4]. The concept of problem gambling, including both a diagr problematic gambling, has been estimated to have prevalenc tattokr@pset]. Allogether, problematic gambling is known to be .7] and with an increased risk of suicidal behaviour [8] and su	which leads to clinically nosed gambling be between 0.1 and b associated with
	drug-related conditions. Messing or phenomenon causing addiction [10], diagnoses, including the concept of p gaming disorder as a "condition for fu as a disorder by the World Health Org associated with consequences relater and even health-related harms [12]. A addiction diagnosis, was under evalu	vioural addiction recognized as a disorder in the same categor INTOKY (0.846) In contrast to the relatively well-established conc other nonsubstance-related conditions are discussed as poter problematic video gaming or internet use. Here, the DSM-5 ma urther studies", and recently, this condition (named gaming dis ganization. Massivo CIANOKY (0.889) Addiction to gaming has d to preoccupation, extensive time investment, lack of priority Aside from the gaming disorder diagnosis, another tentative dif iation for inclusion into the DSM-5, but hitherto it has not been to ognized as a clinical and public health issue [13–16].	ept of gambling as a ntial separate anual included internet sorder) was recognized been described to be given to other activities, agnosis, an internet

4) Solution scope

Our suite of products helps students and researchers at various stages of the academic writing process, which require different solutions.

Writefull for Word and Writefull for Overleaf provide language feedback online, offering suggestions as students and researchers are writing their texts.

Writefull Revise and Writefull Cite provide language and referencing feedback on texts after they have been written, for a quick revision. Students and researchers can upload their texts to Revise and Cite, and review language and citation suggestions offered by the tools.

Using Writefull Revise and Writefull Cite is recommended before proceeding with submitting a paper to a journal for publication, a proposal to a conference or funding body, or university coursework.



Writefull products



Using Writefull

1) Technical requirements

Writefull for Word can be used with:

- Microsoft 365, Office 365 (Windows and Mac)
- Word Online (Windows and Mac)
- Office 2016 (Windows and Mac)
- Office 2019 (Windows and Mac)

Writefull Revise and Writefull Cite run in evergreen browsers (Chrome, Firefox, Safari, Edge). If using Edge, it must be a Chromium based build (post January 15, 2020).

Writefull for Overleaf is not part of Overleaf itself, but is offered as a Chrome extension by Writefull. It is currently available from the Chrome web store and from the Writefull website.

2) How-to guides for users (with screenshots)

We have created dedicated guides for users, including detailed explanations of how to use the products, and screenshots to illustrate the various features.

These guides can be accessed from the top right-hand side corner of

Writefull Revise and Writefull Cite homepages, as shown below.



3) Technical support

Students and researchers can email support@writefull.com with any questions.

In addition, tutorial videos on how to use our suite of products will shortly be made available on the Writefull website (<u>https://writefull.com/</u>