



Evaluación del rastro social de las investigaciones de las universidades latinoamericanas: relación entre universidad y políticas públicas en el área de economía

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24 de noviembre de 2022



Antecedentes: Area-based connectedness (ABC)

<https://www.cwts.nl/blog?article=n-r2u264>

Monitoring how science finds its way into society: measuring societal impact through area-based connectedness (ABC)

Ed Noyons

September 10th, 2018

No comments

societal impact of research; Area-based connectedness; bibliometric analysis

The impact of scientific research on society has many dimensions. These cannot be captured by a single measure. In addition, research is a collective effort and depends on the collaboration of many actors. The impact research has on society should therefore be measured at the level of this collective effort.

In this post I propose a new approach to frame and to quantitatively monitor societal impact. I refer to this approach as ABC (Area-Based Connectedness) to society. The core idea of this approach is that actors should be assessed on societal impact through their contribution to societally connected research areas.

<https://sciendo.com/es/article/10.2478/jdis-2019-0012>

Research Paper

Measuring Societal Impact Is as Complex as ABC

Ed Noyons[†]

Centre for Science and Technology Studies, Leiden University, Leiden, The Netherlands

Citation: Ed Noyons (2019). Measuring societal impact is as complex as ABC. *Journal of Data and Information Science*, 4(3), 6–21

DOI: 10.2478/jdis-2019-0012

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Abstract

Purpose: This paper describes an alternative way of assessing journals considering a broader perspective of its impact. The Area-based connectedness (ABC) to society of journals applied here contributes to the assessment of the dissemination task of journals but with more data it may also contribute to the assessment of other missions.

Design/methodology/approach: The ABC approach assesses the performance of research actors, in this case journals, considering the characteristics of the research areas in which they are active. Each paper in a journal inherits the characteristics of its area. These areas are defined by a publication-based classification. The characteristics of areas relate to 5 dimensions of connectedness to society (news, policy, industrial R&D, technology and local interest) and are calculated by bibliometric indicators and social media metrics.

Findings: In the paper, I illustrate the approach by showing the results for a few journals. They illustrate the diverse profiles that journals may have. We are able to provide a profile for each journal in the Web of Science database. The profiles we present show an appropriate view on the journals' societal connectedness.

Research limitations: The classification I apply to perform the analyses is a CWTS in house classification based on Web of Science data. As such the application depends on the (updates of) that system. The classification is available at www.leidenranking.com.

ABC: premisas y dimensiones (Noyons, 2020)

ABC: premisas

El impacto social es muy diverso y complejo para medirse de forma “clásica”.
La conectividad social nos da un enfoque más productivo (y replicable).
La conectividad (así como el impacto) no depende de un solo actor.
La conectividad es el esfuerzo de una comunidad de investigadores.
Cuanto más fuerte es la conectividad, mayor la relevancia social.

ABC: dimensiones / rastro (señal)

Relevancia I+D para desarrollo tecnológico: estudios citados por patentes.
Relevancia I+D para el público en general: estudios mencionados en redes.
Relevancia I+D para políticas públicas: menciones en documentos de política.

ABC: ejemplos e interpretación (Noyons, 2019)

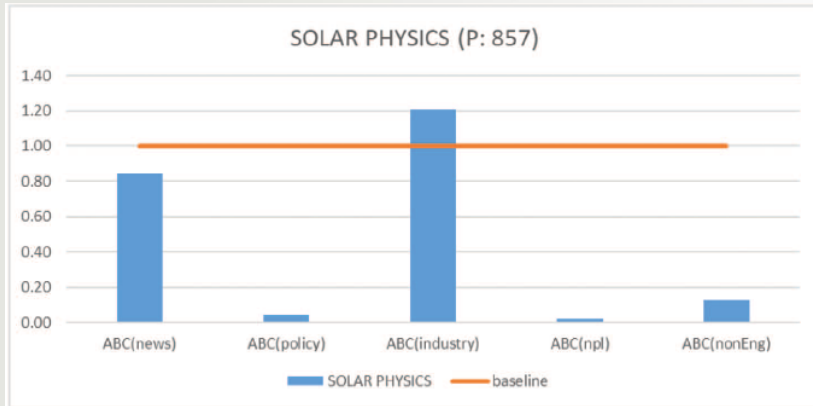


Figure 10. Area-based connectedness to society profile of journal Solar Physics (2014–2017).

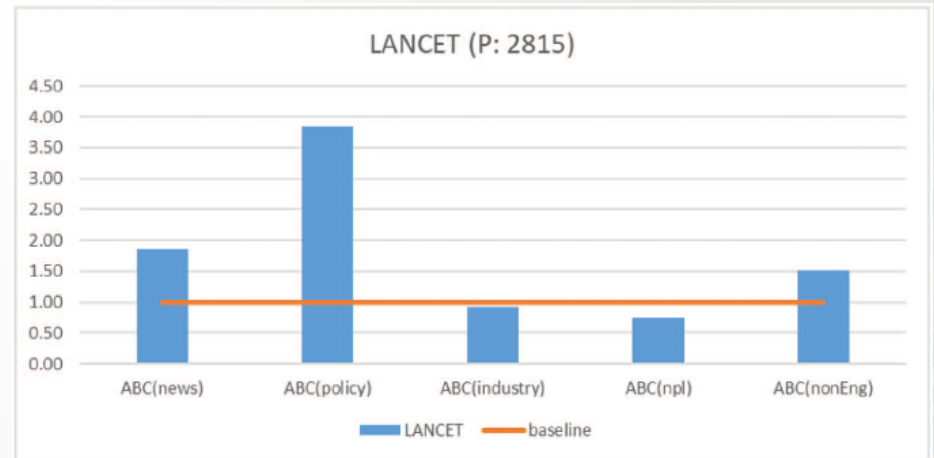


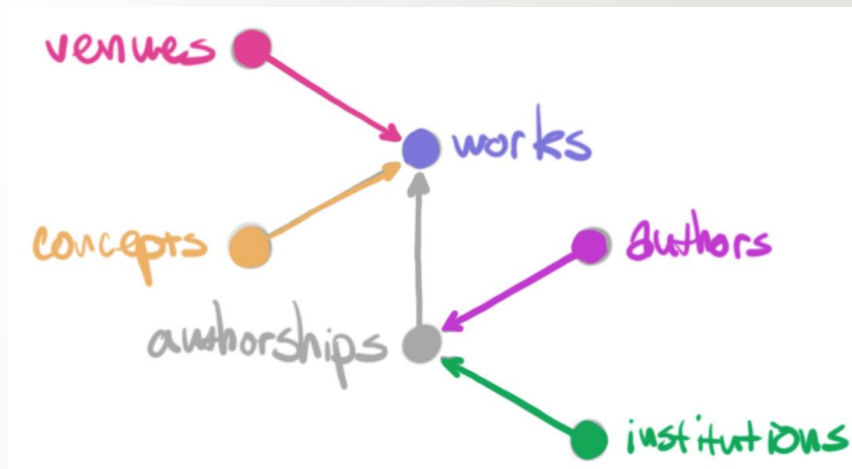
Figure 12. Area-based connectedness to society profile of The Lancet (2014–2017).

Métodos de recolección y análisis



Fuente de datos: OpenAlex – tamaño y estructura

	Works	Citations	Authors	Venues	Institutions
Web of Science (core)	82M	1.8B	17M	24k	11k
Scopus	82M	1.7B	17M	40k	80k
Google Scholar	390M	?	4M?	?	-
MAG	204M	1.7B	206B	49k	27k
Dimensions	148M	1.6B	28k	74k	100k
Crossref/COCI	135M	1.3B	4.5M	104k	1k
OpenAlex	236M	1.8B	243M	124k	108k



Fuente de datos: OpenAlex – tamaño y estructura

OpenAlex concepts in use (17 August 2022) ☆ 🗑️ ☁️

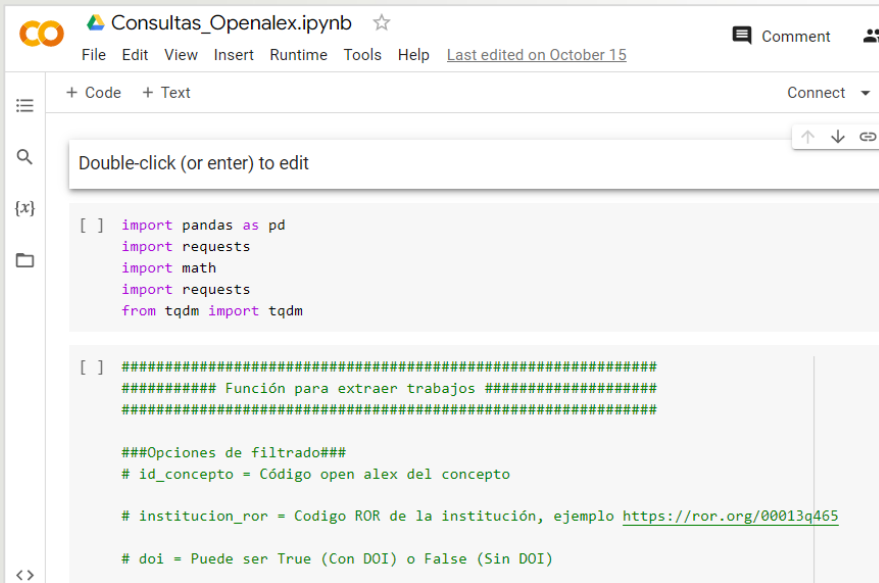
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A1 fx | openalex_id

	A	B	C	D	
1	openalex_id	display_name	normalized_name	level	wikidata_id
2	https://openalex.org/c17744445	Political science	political science	0	https://www
3	https://openalex.org/c138885662	Philosophy	philosophy	0	https://www
4	https://openalex.org/c162324750	Economics	economics	0	https://www
5	https://openalex.org/c144133560	Business	business	0	https://www
6	https://openalex.org/c15744967	Psychology	psychology	0	https://www
7	https://openalex.org/c33923547	Mathematics	mathematics	0	https://www
8	https://openalex.org/c71924100	Medicine	medicine	0	https://www
9	https://openalex.org/c86803240	Biology	biology	0	https://www
10	https://openalex.org/c41008148	Computer science	computer science	0	https://www
11	https://openalex.org/c127313418	Geology	geology	0	https://www
12	https://openalex.org/c185592680	Chemistry	chemistry	0	https://www
13	https://openalex.org/c142362112	Art	art	0	https://www
14	https://openalex.org/c144024400	Sociology	sociology	0	https://www
15	https://openalex.org/c127413603	Engineering	engineering	0	https://www
16	https://openalex.org/c205649164	Geography	geography	0	https://www

Proceso de recolección de datos: API y PostgreSQL



Consultas_Openalex.ipynb ☆

File Edit View Insert Runtime Tools Help Last edited on October 15

+ Code + Text Connect

```
[ ] Double-click (or enter) to edit
```

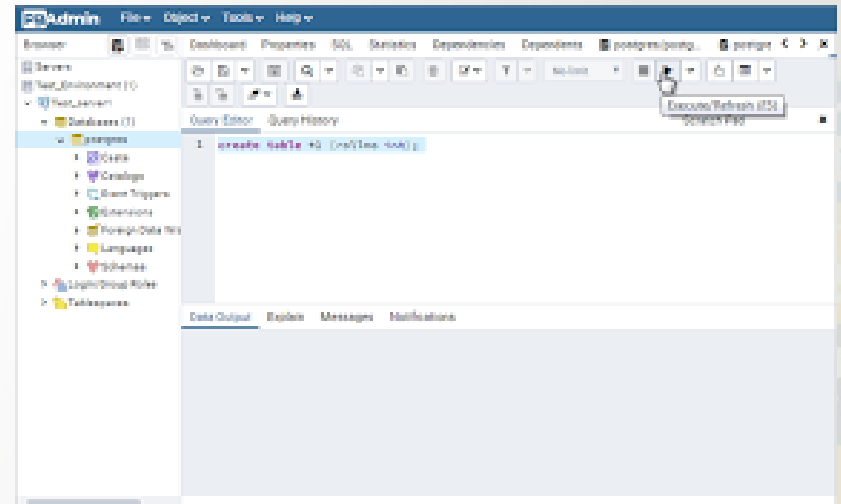
```
[ ] import pandas as pd
import requests
import math
import requests
from tqdm import tqdm

[ ] #####
##### Función para extraer trabajos #####
#####

###Opciones de filtrado###
# id_concepto = Código open alex del concepto

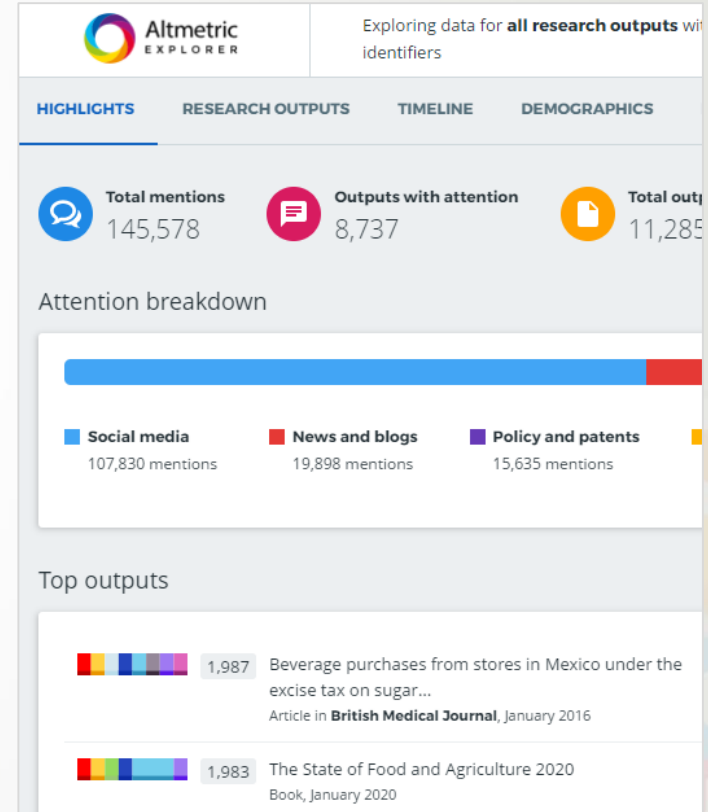
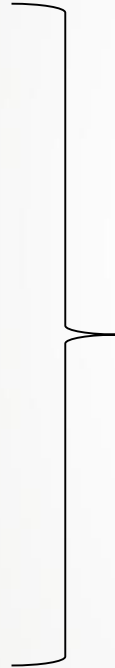
# institucion_ror = Código ROR de la institución, ejemplo https://ror.org/00013q465

# doi = Puede ser True (Con DOI) o False (Sin DOI)
```

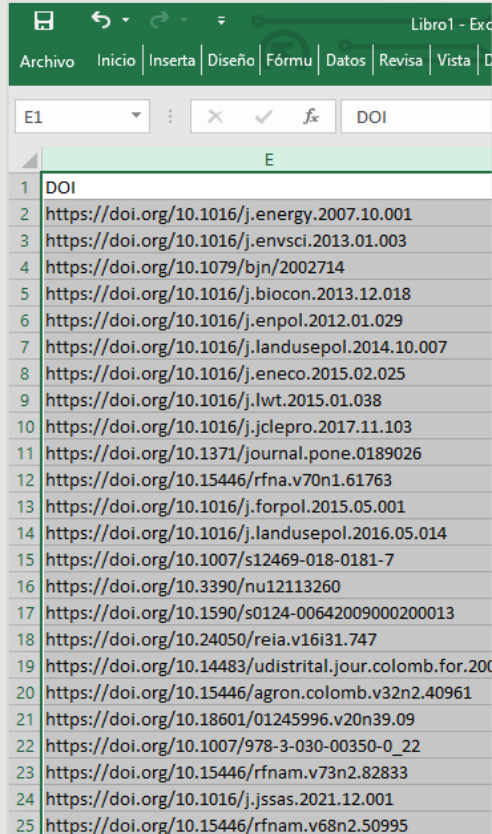


Proceso de recolección de datos: DOIs importados en Altmetric

A1	doi
1	doi
2	https://doi.org/10.1177/0170840603024003910
3	https://doi.org/10.1016/s0304-405x(00)00065-9
4	https://doi.org/10.1016/s0304-405x(00)00067-2
5	https://doi.org/10.1016/j.jacceco.2005.01.002
6	https://doi.org/10.1016/s0304-405x(01)00044-7
7	https://doi.org/10.1016/j.jacceco.2004.11.002
8	https://doi.org/10.1016/s0304-405x(03)00121-1
9	https://doi.org/10.2308/accr.2002.77.s-1.35
10	https://doi.org/10.1016/s0165-4101(02)00059-9
11	https://doi.org/10.5465/amr.2008.31193458
12	https://doi.org/10.1057/9780230271326_102
13	https://doi.org/10.1002/1097-0266(200101)22:2<125::
14	https://doi.org/10.1002/(sici)1097-0266(200005)21:5<
15	https://doi.org/10.1016/s0304-405x(02)00146-0
16	https://doi.org/10.1016/j.jfineco.2008.10.007
17	https://doi.org/10.1016/j.jacceco.2006.01.002
18	https://doi.org/10.1108/09513570210435852
19	https://doi.org/10.1111/j.1468-2370.2009.00275.x
20	https://doi.org/10.1787/533411815016
21	https://doi.org/10.1111/0022-1082.00199
22	https://doi.org/10.5465/amr.2003.10196729
23	https://doi.org/10.2139/ssrn.171975
24	https://doi.org/10.1162/003355303322552775
25	https://doi.org/10.1002/smj.274
26	https://doi.org/10.1111/j.1540-6261.2004.00642.x
27	https://doi.org/10.1016/s0929-1199(02)00006-8
28	https://doi.org/10.1111/1540-6288.00034
29	https://doi.org/10.1016/j.jfineco.2006.08.008
30	https://doi.org/10.1016/i.ifineco.2003.07.002

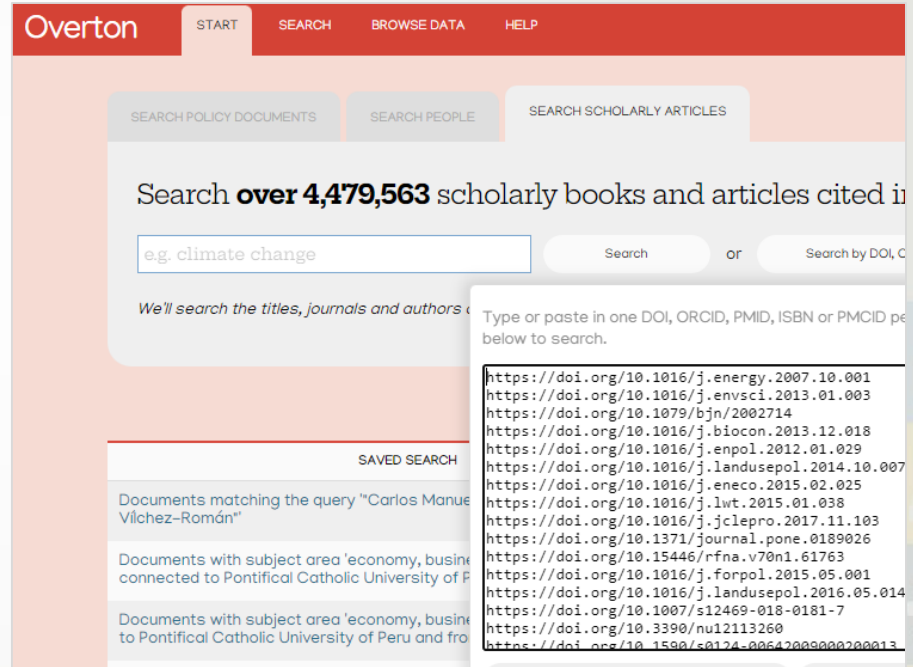


Proceso de recolección de datos: DOIs importados en Overton



Excel spreadsheet showing a list of DOIs in column E:

	E
1	DOI
2	https://doi.org/10.1016/j.energy.2007.10.001
3	https://doi.org/10.1016/j.envsci.2013.01.003
4	https://doi.org/10.1079/bjn/2002714
5	https://doi.org/10.1016/j.biocon.2013.12.018
6	https://doi.org/10.1016/j.enpol.2012.01.029
7	https://doi.org/10.1016/j.landusepol.2014.10.007
8	https://doi.org/10.1016/j.eneco.2015.02.025
9	https://doi.org/10.1016/j.lwt.2015.01.038
10	https://doi.org/10.1016/j.jclepro.2017.11.103
11	https://doi.org/10.1371/journal.pone.0189026
12	https://doi.org/10.15446/rfna.v70n1.61763
13	https://doi.org/10.1016/j.forpol.2015.05.001
14	https://doi.org/10.1016/j.landusepol.2016.05.014
15	https://doi.org/10.1007/s12469-018-0181-7
16	https://doi.org/10.3390/nu12113260
17	https://doi.org/10.1590/s0124-00642009000200013
18	https://doi.org/10.24050/reia.v16i31.747
19	https://doi.org/10.14483/udistrital.jour.colomb.for.2007.10.001
20	https://doi.org/10.15446/agron.colomb.v32n2.40961
21	https://doi.org/10.18601/01245996.v20n39.09
22	https://doi.org/10.1007/978-3-030-00350-0_22
23	https://doi.org/10.15446/rfnam.v73n2.82833
24	https://doi.org/10.1016/j.jssas.2021.12.001
25	https://doi.org/10.15446/rfnam.v68n2.50995



Overton search interface showing search results for a query. The search bar contains "e.g. climate change". The results section displays a list of DOIs matching the query "Carlos Manuel Vílchez-Román".

Overton START SEARCH BROWSE DATA HELP

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Search **over 4,479,563** scholarly books and articles cited in

e.g. climate change Search or Search by DOI, ORCID, PMID, ISBN or PMCID

We'll search the titles, journals and authors of the following sources:

Type or paste in one DOI, ORCID, PMID, ISBN or PMCID per line below to search.

SAVED SEARCH

Documents matching the query "Carlos Manuel Vílchez-Román"

Documents with subject area 'economy, business and management' connected to Pontifical Catholic University of Peru

Documents with subject area 'economy, business and management' to Pontifical Catholic University of Peru and from

<https://doi.org/10.1016/j.energy.2007.10.001>
<https://doi.org/10.1016/j.envsci.2013.01.003>
<https://doi.org/10.1079/bjn/2002714>
<https://doi.org/10.1016/j.biocon.2013.12.018>
<https://doi.org/10.1016/j.enpol.2012.01.029>
<https://doi.org/10.1016/j.landusepol.2014.10.007>
<https://doi.org/10.1016/j.eneco.2015.02.025>
<https://doi.org/10.1016/j.lwt.2015.01.038>
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<https://doi.org/10.1371/journal.pone.0189026>
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<https://doi.org/10.1016/j.landusepol.2016.05.014>
<https://doi.org/10.1007/s12469-018-0181-7>
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<https://doi.org/10.1590/s0124-00642009000200013>

Resultados parciales

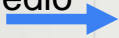


Resultados: UNC – Rastro en políticas públicas

UNC - Rastro social en documentos de política pública					
Area	Papers_OpenAlex	Trabajos_UNC	POA_Menciones	%_Menciones	
Economía agraria	20,000	34	15,356	0.77	
Economía ambiental	20,000	150	10,894	0.54	
Economía demográfica	20,000	28	34,661	1.73	
Economía monetaria	20,000	27	24,969	1.25	
Economía política	20,000	58	8,153	0.41	
Rastro social en políticas públicas para investigaciones UNC en economía agraria					
Peso		$34 * 0.77$	26.1052		
Promedio		$26.1052 / 15,356$	0.0017		
Linea base (valor esperado) del rastro social para menciones en documentos de política pública					
Promedio		$15,356 / 20,000$	0.7678		
Rastro social en documentos de política para las investigaciones UNC sobre economía agraria					
		$0.0017 / 0.7678$	=	0.0022	
Rastro social en políticas públicas para investigaciones UNC en economía ambiental					
Peso		$150 * 0.54$	81.7050		
Promedio		$81.7050 / 10,894$	0.0075		
Linea base (valor esperado) del rastro social para menciones en documentos de política pública					
Promedio		$10,894 / 20,000$	0.5447		
Rastro social en documentos de política para las investigaciones UNC sobre economía ambiental					
		$0.0075 / 0.5447$	=	0.0138	

Resultados: UNC – Rastro en políticas públicas

Impacto promedio



Resultados: UNC – Rastro en políticas públicas

We searched for the 34 identifiers you supplied and found 8 (24%) matching items in the database.

☆ Save search

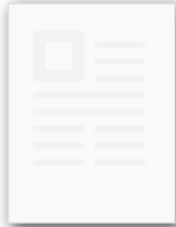
📄 See report

📄 Export ▾

@ Explore ▾

Showing 8 results

Scholarly article



Reformulation of Packaged Foods and Beverages in the Colombian Food Supply

From Nutrients on October 24th 2020 (cited by 1)

Public discussion, advocacy, and legislative consideration of policies aimed at reducing consumption of processed foods, such as sugar-sweetened beverage (SSB) taxes and mandatory front-of-package (FOP) warning labels, may stimulate product reformulation as a strategy to prevent regulation.

“ Lim et al. (2020) Lowery et al. (2020) Intervention/Comparator Data from Mintel Global New Products Database for 21 096 food and beverage products across 44 product categories in the US for over 16 years (1996–2011) was used in order to examine the effect of FOP nutrition labels adoption on the nutritional quality of the food products.

Front-of-pack nutrition labelling schemes : an update of the evidence : addendum to the JRC Science for Policy report “Front-of-pack nutrition labelling schemes: a comprehensive review”, published in 2020. (pg 187)
Publications Office of the European Union (2022)

“ Study (most recent first) Lowery et al. (2020) (cont.

Front-of-pack nutrition labelling schemes : an update of the evidence : addendum to the JRC Science for Policy report “Front-of-pack nutrition labelling schemes: a comprehensive review”, published in 2020. (pg 188)
Publications Office of the European Union (2022)


Publicación de la Universidad Nacional de Colombia (UNC)

Menciones a la publicación de la Universidad Nacional de Colombia (UNC) en un policy brief de UNICEF, documento de política pública que está registrado en la plataforma Overton.

Resultados: Policy brief de UNICEF que cita estudio UNC

☆ Save search 📄 See report 📄 Export 🔍 Explore Showing 1 result

Policy document



Front-of-pack nutrition labelling schemes : an update of the evidence : addendum to the JRC Science for Policy report Front-of-pack nutrition labelling schemes: a comprehensive review, published in 2020. 📄

🌐 Bavel, R van, Marandola, G, Dessart, F & others from Publications Office of the European Union on September 9th 2022 Publication

This addendum of the JRC Science for Policy report “Front-of-pack nutrition labelling schemes: a comprehensive review” provides an update of the former publication regarding the effects of front-of-pack nutrition labelling (FOPNL) schemes on consumers’s understanding, food purchases, diet and health, as well as food reformulation. This addendum was produced to further inform the Commission’s proposal for harmonised mandatory FOPNL announced in the Farm to Fork Strategy. The previous report provided a rev

NUTRITION NUTRI-SCORE BEHAVIOR

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Reformulation of Packaged Foods and Beverages in the Colombian Food Supply
Caitlin M. Lowery et al. (2020) *Nutrients*

“ Lim et al. (2020) Lowery et al. (2020) Intervention/Comparator Data from Mintel Global New Products Database for 21 096 food and beverage products across 44 product categories in the US for over 16 years (1996-2011) was used in order to examine the effect of FOP nutrition labels adoption on the nutritional quality of the food products.
On page 187

“ Study (most recent first) Lowery et al. (2020) (cont).
On page 188

Referencias bibliográficas

Noyons, E. (2018). Monitoring how science finds its way into society: measuring societal impact through area-based connectedness (ABC).
<https://www.cwts.nl/blog?article=n-r2u264&title=monitoring-how-science-finds-its-way-into-society-measuring-societal-impact-through-area-based-connectedness-abc>.

Noyons, E.(2019).Measuring societal impact is as complex as ABC. Journal of Data and Information Science,4(3) 6-21. <https://doi.org/10.2478/jdis-2019-0012>.

Noyons, E. (2020). The CWTS publication dataset. Area-based connectedness (ABC): communities relating to society. RISIS policy briefs.
https://zenodo.org/record/3939220/files/4%20RISIS2_NOYONS_Part%2003.pdf?download=1.

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