

## Πτυχιακή Εργασία

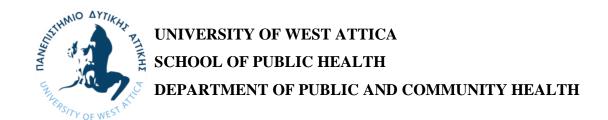
## Συμπεριφορική Επιδημιολογία: Διερευνητική Ανασκόπηση για τη Διαχρονική Εξέλιξη του Επιστημονικού Πεδίου

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Λάγιου Αρετή, Καθηγήτρια



## **Diploma Thesis**

Behavioral Epidemiology: Scoping Review of the Evolution of the Scientific Field

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## Συμπεριφορική Επιδημιολογία: Διερευνητική Ανασκόπηση για τη Διαχρονική Εξέλιξη του Επιστημονικού Πεδίου

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Η πτυχιακή εργασία εξετάστηκε επιτυχώς από την κάτωθι Εξεταστική Επιτροπή:

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2	ΕΥΑΝΘΙΑ ΣΑΚΕΛΛΑΡΗ	ΑΝΑΠΛ. ΚΑΘΗΓΗΤΡΙΑ ΤΜΗΜΑ ΔΗΜΟΣΙΑΣ ΚΑΙ ΚΟΙΝΟΤΙΚΗΣ ΥΓΕΙΑΣ, ΠΑ.Δ.Α.	
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### ΔΗΛΩΣΗ ΣΥΓΓΡΑΦΕΑ ΠΤΥΧΙΑΚΗΣ ΕΡΓΑΣΙΑΣ

Οι κάτωθι υπογεγραμμένες Ζιώτη Ιωάννα του Χρήστου, με αριθμό μητρώου 19679047 και Κιαουλιά Μαλαματένια του Ευάγγελου με αριθμό μητρώου 19679066 φοιτήτριες του Πανεπιστημίου Δυτικής Αττικής της Σχολής Δημόσιας Υγείας του Τμήματος Δημόσιας και Κοινοτικής Υγείας, δηλώνουμε υπεύθυνα ότι:

«Είμαστε συγγραφείς αυτής της πτυχιακής εργασίας και ότι κάθε βοήθεια την οποία είχαμε για την προετοιμασία της είναι πλήρως αναγνωρισμένη και αναφέρεται στην εργασία. Επίσης, οι όποιες πηγές από τις οποίες κάναμε χρήση δεδομένων, ιδεών ή λέξεων, είτε ακριβώς είτε παραφρασμένες, αναφέρονται στο σύνολό τους, με πλήρη αναφορά στους συγγραφείς, τον εκδοτικό οίκο ή το περιοδικό, συμπεριλαμβανομένων και των πηγών που ενδεχομένως χρησιμοποιήθηκαν από το διαδίκτυο. Επίσης, βεβαιώνουμε ότι αυτή η εργασία έχει συγγραφεί από εμάς αποκλειστικά και αποτελεί προϊόν πνευματικής ιδιοκτησίας τόσο δικής μας, όσο και του Εργαστηρίου Υγιεινής και Επιδημιολογίας της Σχολής Δημόσιας Υγείας του Πανεπιστημίου Δυτικής Αττικής. Παράβαση της ανωτέρω ακαδημαϊκής μας ευθύνης αποτελεί ουσιώδη λόγο για την ανάκληση του πτυχίου μας».

\*Επιθυμούμε την απαγόρευση πρόσβασης στο πλήρες κείμενο της εργασίας μας μέχρι δώδεκα μήνες και έπειτα από αίτηση μας στη Βιβλιοθήκη και έγκριση του επιβλέποντα καθηγητή

Οι Δηλούσες

\* Ονοματεπώνυμο /Ιδιότητα (Υπογραφή)

Ψηφιακή Υπογραφή Επιβλέποντα

\* Σε εξαιρετικές περιπτώσεις και μετά από αιτιολόγηση και έγκριση του επιβλέποντα, προβλέπεται χρονικός περιορισμός πρόσβασης (embargo) 6-12 μήνες. Στην περίπτωση αυτή θα πρέπει να υπογράψει ψηφιακά ο/η επιβλέπων/ουσα καθηγητής/τρια, για να γνωστοποιεί ότι είναι ενημερωμένος/η και συναινεί. Οι λόγοι χρονικού αποκλεισμού πρόσβασης περιγράφονται αναλυτικά στις πολιτικές του Ι.Α. (σελ. 6):

### ΠΕΡΙΛΗΨΗ

Η παρούσα εργασία αφορά σε διερευνητική βιβλιογραφική ανασκόπηση με θέμα "Συμπεριφορική Επιδημιολογία: η διαγρονική εξέλιξη του επιστημονικού πεδίου". Σκοπός της εργασίας αποτελεί η διερευνητική προσέγγιση των όρων "behavioural epidemiology" (βρετανικός όρος) και "behavioral epidemiology" (αμερικάνικος όρος). Ως επιμέρους στόγος ορίστηκε η κατηγοριοποίηση των αποτελεσμάτων που αναδύονται σε μηχανές αναζήτησης και η περαιτέρω συνοπτική περιγραφή τους. Έγιναν δύο ξεχωριστές αναζητήσεις στο google, μια για τον όρο "behavioural epidemiology" και άλλη μια για τον όρο "behavioral epidemiology". Στο πλαίσιο των περιορισμών της παρούσας εργασίας κρίθηκε σκόπιμο να συμπεριληφθούν οι πέντε πρώτες σελίδες από κάθε αναζήτηση. Στη συνέχεια τα αποτελέσματα κατηγοριοποιήθηκαν σε α. άρθρα, β. βιβλία, γ. διπλωματικές διατριβές δ. ακαδημαϊκοί φορείς/ερευνητικές ομάδες και ε. άλλα (π.χ. θέσεις εργασίας). Τα αποτελέσματα έδειξαν ότι το επιστημονικό πεδίο της συμπεριφορικής επιδημιολογίας επικεντρώνεται στην ελαγιστοποίηση των παραγόντων κινδύνου που προκαλούν, τις νόσους, την καλύτερη ανταπόκριση του ανθρώπου σε μεταδοτικά, μη μεταδοτικά νοσήματα και την υιοθέτηση μίας σωστής συμπεριφοράς. Συμπερασματικά εκφράζεται η ανάγκη για περαιτέρω έρευνα και μελλοντική εξέλιξη του πεδίου της συμπεριφορικής επιδημιολογίας.

**Λέξεις κλειδιά:** Συμπεριφορική επιδημιολογία, behavioral/ behavioural epidemiology, διαχρονική εξέλιξη, μεταδοτικά/ μη μεταδοτικά νοσήματα, νόσος COVID-19, μέθοδοι ανάλυσης άρθρων, ανασκόπηση

### ABSTRACT

This paper is an exploratory literature review on "Behavioural Epidemiology: the evolution of the field over time". The aim of the paper is to take an exploratory approach to the terms "behavioural epidemiology" (British term) and "behavioural epidemiology" (American term). The sub-objective was defined as the categorisation of the results emerging in search engines and further brief description of them. Two separate google searches were conducted, one for the term 'behavioural epidemiology' and another for the term 'behavioural epidemiology'. Within the constraints of this paper it was deemed appropriate to include the first five pages from each search. The results were then categorised into a. articles, b. books, c. theses, d. academic institutions/research groups and e. other (e.g. jobs). The results showed that the scientific field of behavioural epidemiology focuses on minimising risk factors that cause, diseases, better human response to communicable, non-communicable diseases and adopting a right behaviour. In conclusion, the need for further research and future development of the field of behavioural epidemiology is expressed.

**Keywords:** Behavioral epidemiology, behavioral/behavioural epidemiology, evolution over time, communicable/non-communicable diseases, COVID-19 disease, methods of article analysis, review

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### ΚΕΦΑΛΑΙΟ 1: ΕΙΣΑΓΩΓΗ

## 1.1. Συμπεριφορική Επιδημιολογία

Σύμφωνα με τον ψυγολόγο Rogers, η συμπεριφορά θεωρείται «το αποτέλεσμα της αλληλεπίδρασης του σώματος του ατόμου με τα γεγονότα της ζωής του». Ο άνθρωπος φτάνει στην αυτοπραγμάτωση μέσω της εξέλιξης με διαφορετικό τρόπο και ανάλογα με την ιδιοσυγκρασία του. Όμως για να το πετύχει αυτό πρέπει να βρίσκεται σε κατάσταση ισορροπίας μεταξύ του ιδεατού και του πραγματικού εαυτού του (Rogers, 1961). Ο συγγραφέας Gochman από την άλλη, το 1982 όρισε την συμπεριφορά ως «εκείνα τα προσωπικά χαρακτηριστικά όπως πεποιθήσεις, προσδοκίες, κίνητρα, αξίες, αντιλήψεις και άλλα γνωστικά στοιχεία, χαρακτηριστικά της προσωπικότητας, συμπεριλαμβανομένων των συναισθηματικών και συγκινησιακών καταστάσεων και χαρακτηριστικών, φανερά πρότυπα συμπεριφοράς, ενέργειες και συνήθειες που σχετίζονται με την υγεία για την αποκατάσταση της υγείας και τη βελτίωση της υγείας». Η συμπεριφορά παρουσιάζει ερευνητικό ενδιαφέρον στον τομέα της υγείας, καθώς την επηρεάζει με ποικίλους τρόπους (Wisconsin, 2014) και μπορεί να συμβάλλει καθοριστικά στην εμφάνιση ασθενειών. Η διεθνής βιβλιογραφία παρουσιάζει πληθώρα παρεμβάσεων που αφορούν την υιοθέτηση ή και την τροποποίηση συγκεκριμένων συμπεριφορών υγείας (American Psychological Association, 2002). Η επιδημιολογία, η οποία είναι: "η μελέτη της κατανομής και των καθοριστικών παραγόντων των καταστάσεων ή συμβάντων που σχετίζονται με την υγεία σε καθορισμένους πληθυσμούς και την εφαρμογή αυτής της μελέτης στον έλεγχο των προβλημάτων υγείας", παίζει καθοριστικό ρόλο στη διερεύνηση της συμπεριφοράς και της επίδρασής της στην υγεία (CDC, 2012). Από τα τέλη της δεκαετίας του 1970 άρχισε να αναπτύσσεται ένα νέο επιστημονικό πεδίο της επιδημιολογίας, η Συμπεριφορική Επιδημιολογία. Η παραπάνω αφορούσε αποκλειστικά στη μελέτη της συμπεριφοράς σε σχέση με την υγεία (Sallis, et al., 2013).

Το 1980 το Κέντρο Ελέγχου Νοσημάτων των ΗΠΑ (CDC) όρισε τη συμπεριφορική επιδημιολογία ως "Την επιστήμη που περιλαμβάνει διεπιστημονικές προσπάθειες για να συνδυαστούν οι γνώσεις των ερευνητών σχετικά με τους κινδύνους για την υγεία των ανθρώπων και των συμπεριφορικών και κοινωνικών παραγόντων που προάγουν αυτούς τους κινδύνους" (Raymond, 1989). Πιο συγκεκριμένα, η συμπεριφορική επιδημιολογία ασχολείται με την έρευνα που στοχεύει στην αντίληψη και διαμόρφωση των προτύπων υγιεινής συμπεριφοράς, παγκοσμίως, με σκοπό την πρόληψη ασθενειών

και την προαγωγή της υγείας (Sallis, et al., 2013). Το 1980 η έξαρση της επιδημίας HIV/AIDS αποτέλεσε την πρώτη μεγάλη ώθηση για την ανάπτυξη της Συμπεριφορικής Επιδημιολογίας (Bauch, et al., 2012).

Το 2022 ο κλάδος της Συμπεριφορικής Επιδημιολογίας επεκτάθηκε και στην ανάλυση της πανδημίας του COVID-19 με την έκδοση σχετικών μελετών (Shomak Chakrabarti, 2022). Συγκεκριμένα, δεν περιορίστηκε μόνο στα μεταδοτικά νοσήματα, αλλά επεκτάθηκε και στον τομέα των μη μεταδοτικών νοσημάτων (MMN) [καρδιαγγειακά νοσήματα (35%), καρκίνοι (12%), χρόνια νοσήματα του αναπνευστικού (6%)]. Τα ΜΜΝ αποτελούν το επίκεντρο της υγείας του 21ου αιώνα, καθώς συντελούν στην διεθνή θνησιμότητα. Πιο συγκεκριμένα θεωρούνται υπεύθυνα για το 71% των θανάτων παγκοσμίως. Ακόμα έχουν βρεθεί συμπεριφορικοί παράγοντες, που αυξάνουν τον κίνδυνο ανάπτυξης ΜΜΝ σε εφήβους (ελλιπής φυσική δραστηριότητα, χαμηλή κοινωνικοοικονομική κατάσταση, παχυσαρκία, το ανδρικό φύλο και αυξημένη ηλικία) (Basri, 2022).

### 1.2. Σκοπός και στόχος της εργασίας

Σκοπός της εργασίας αποτελεί η διερευνητική προσέγγιση των όρων "behavioural epidemiology" και "behavioral epidemiology  $\Omega_{\zeta}$  επιμέρους στόχος ορίστηκε η κατηγοριοποίηση των αποτελεσμάτων που βρέθηκαν και η περαιτέρω συνοπτική περιγραφή τους.

### ΚΕΦΑΛΑΙΟ 2: ΜΕΘΟΔΟΛΟΓΙΑ

Η διερευνητική βιβλιογραφική ανασκόπηση ξεκίνησε με τον ορθογραφικό διαγωρισμό του όρου "Behavioral epidemiology" (αμερικάνικη ορολογία) από τον όρο "Behavioural epidemiology" (βρετανική ορολογία), ώστε να διαπιστωθούν τα διαφορετικά αποτελέσματα πού εμφανίζονται από κάθε αναζήτηση στο google. Η αναζήτηση ξεκίνησε την πρώτη εβδομάδα του μήνα Δεκεμβρίου του έτους 2022 και τελείωσε την τελευταία εβδομάδα του μήνα Ιουνίου του 2023. Από την αναζήτηση προέκυψαν: 102.000.000 αποτελέσματα για τον όρο "behavioral epidemiology" και 26.600.000 για τον όρο "behavioural epidemiology". Στην συνέχεια συλλέχθηκαν οι 5 πρώτες σελίδες αναζήτησης στο google από κάθε όρο και ελέγχθηκε το χρονικό υπόβαθρο (1981-2023). Συνολικά ο αριθμός των αποτελεσμάτων που συλλέχθηκαν από τις πέντε πρώτες σελίδες και των δύο όρων ήταν 98 (49 από τον κάθε όρο). Τα αποτελέσματα διαχωρίστηκαν σε κατηγορίες (Πίνακας 1), οι οποίες προέκυψαν από το περιεγόμενό τους και στη συνέχεια παρουσιάζονται σε μορφή εικόνας και αναλύονται συνοπτικά. Καθώς οι εικόνες μίκρυναν πολύ για να χωρέσουν σε μια σελίδα μαζί με τον τίτλο παρατίθεται και ο αντίστοιχος σύνδεσμός. Σε κάθε κατηγορία παρουσιάζεται πρώτα ο όρος με τα λιγότερα αποτελέσματα. Στο τέλος παρουσιάζονται τα συμπεράσματα που προκύπτουν από την αναζήτηση των δύο όρων, την ανάλυση των άρθρων, των βιβλίων και της εργασίας γενικότερα. Για λόγους διαγείρισης του αργείου έχει δημιουργηθεί μια δεύτερη έκδοση της παρούσας εργασίας, η οποία έχει αναρτηθεί στην "Πολυνόη". Για την πρώτη και πλήρη έκδοση, ο ενδιαφερόμενος μπορεί να επικοινωνήσει με το εργαστήριο Υγιεινής και Επιδημιολογίας.

### ΚΕΦΑΛΑΙΟ 3: ΑΠΟΤΕΛΕΣΜΑΤΑ

## 3.1. Ταξινόμηση

Ταξινομήθηκαν σε κατηγορίες τα αποτελέσματα που βρέθηκαν:

Πίνακας 1: Ταξινόμηση των αποτελεσμάτων σε κατηγορίες

			ΕΙΔΟΣ ΚΕΙΜΙ	ENOY	
ΟΡΟΣ	АРӨРА	ВІВЛІА	ΔΙΠΛΩΜΑΤΙΚΕΣ ΔΙΑΤΡΙΒΕΣ*	ΑΚΑΔΗΜΑΪΚΟΙ ΦΟΡΕΙΣ/ ΕΡΕΥΝΗΤΙΚΕΣ ΟΜΑΔΕΣ	ΑΛΛΑ**
Behavioural	13	0	2	10	8
Behavioral	9	3	0	17	5

### Σημείωση πίνακα:

- 1. **ΔΙΠΛΩΜΑΤΙΚΈΣ ΔΙΑΤΡΙΒΕΣ\*:** Η κατηγορία αυτή συμπεριλαμβάνει μεταπτυχιακή διατριβή (1) και διδακτορικές διατριβές (1).
- 2. ΆΛΛΑ\*\*: Η κατηγορία αυτή περιέχει ορισμό του όρου "behavioral epidemiology" (1), το προφίλ ενός καθηγητή πανεπιστημίου (2), περίληψη από ένα κεφάλαιο βιβλίου (1), θέσεις εργασίας στον τομέα του behavioral epidemiology (2) και behavioural epidemiology (1), αρχική σελίδα περιοδικού (1), πληροφορίες ενός event (workshop) (1) και λογαριασμούς πανεπιστημίων σε μέσα κοινωνικής δικτύωσης (3).

### 3.2. Παρατηρήσεις

Παρακάτω αναγράφονται ορισμένες παρατηρήσεις που προκύπτουν από την κατηγοριοποίηση και σύγκριση των αποτελεσμάτων. Συμπερασματικά:

- 1. Ο όρος "behavioral epidemiology" εμφανίζει 75.400.000 περισσότερα αποτελέσματα στο google από τον όρο "behavioral epidemiology".
- 2. Μετά από σύγκριση των αποτελεσμάτων αναζήτησης προκύπτει ότι οι σελίδες ακαδημαϊκών φορέων/ ερευνητικών ομάδων και τα άρθρα αποτελούν την πλειοψηφία σε σχέση με τα υπόλοιπα αποτελέσματα που εμφανίστηκαν.
- 3. Ο όρος "behavioral epidemiology" εμφανίζεται νωρίτερα χρονικά από τον όρο "behavioural epidemiology", με παλαιότερο άρθρο να αποτελεί το "Behavioral epidemiology and social area analysis"που έχει δημοσιευτεί το 1981. Ενώ αντίστοιχα στον όρο "behavioural epidemiology" εμφανίζεται το άρθρο "Cultural components of behavioural epidemiology: implications for primary health care" του 1986.
- 4. Παρατηρείται πως το πιο παλιό άρθρο παρουσιάστηκε στην αναζήτηση του όρου "behavioral epidemiology" το 1981, ενώ το πιο σύγχρονο στην αναζήτηση του όρου "behavioural epidemiology" το 2023 (Muhlin, et al., 1981), (Sally, et al., 2023).
- 5. Στον όρο "behavioural epidemiology" βρέθηκαν στην αναζήτηση 2 διδακτορικές διατριβές, η μία εκ των οποίων εμφανίστηκε 2 φορές σε διαφορετικούς ιστότοπους ενώ στον όρο "behavioral epidemiology" δεν βρέθηκαν.
- 6. Στον όρο "behavioral epidemiology" βρέθηκαν στην αναζήτηση 3 βιβλία, ενώ στον όρο "behavioural epidemiology" δεν βρέθηκαν.
- 7. Και στις 2 αναζητήσεις εμφανίστηκαν μερικά κοινά αποτελέσματα.
- 8. Στην αναζήτηση του όρου "behavioural epidemiology" εμφανίστηκαν 13 αποτελέσματα που αφορούσαν τον όρο "behavioral epidemiology" στα οποία τα 12 εμφανίστηκαν και στον όρο "behavioral epidemiology" ενώ 1 δεν εμφανίστηκε καθόλου.
- 9. Στην αναζήτηση του όρου "behavioral epidemiology" εμφανίστηκαν 3 αποτελέσματα που αφορούσαν τον όρο "behavioural epidemiology" που ήταν επίσης κοινά.

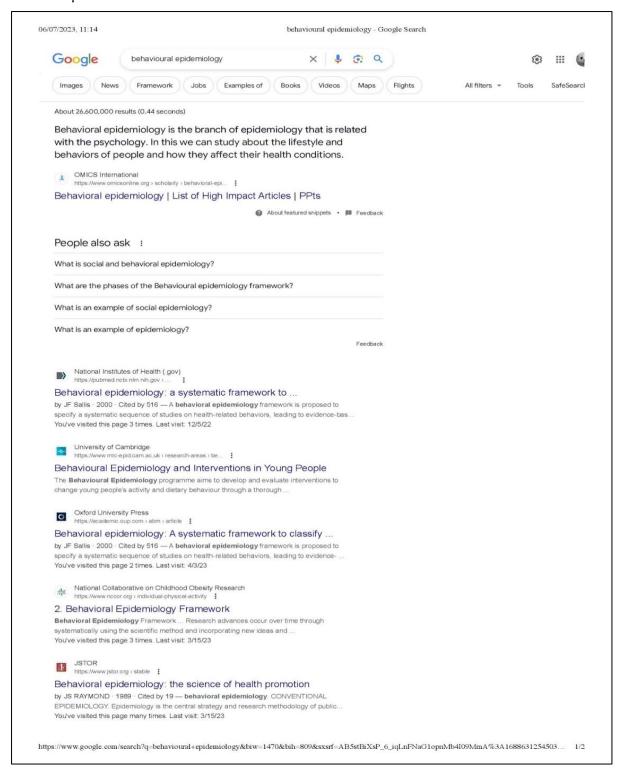
- 10. Ένα από τα άρθρα εμφανίστηκε αρχικά σε ένα ερευνητικό site, αλλά και σε μια σελίδα ακαδημαϊκού φορέα.
- 11. Στην αναζήτηση του όρου "behavioural epidemiology" εμφανίστηκαν 5 άρθρα στα οποία η πρόσβαση δεν ήταν δυνατή γιατί ήταν κλειδωμένα από τους συγγραφείς ή χρειαζόταν πληρωμή για την πρόσβασή τους. Για τα παραπάνω 5 άρθρα παρουσιάζεται μόνο η αρχική σελίδα που εμφανίζεται στο google.
- 12. Οι κατηγορίες που προέκυψαν ήταν α. άρθρα, β. βιβλία, γ. διπλωματικές διατριβές δ. ακαδημαϊκοί φορείς/ ερευνητικές ομάδες και ε. άλλα (πχ: θέσεις εργασίας). Σε κάθε μια κατηγορία παρουσιάζονται τα αποτελέσματα και των 2 όρων ξεχωριστά.
- 13. Στην κατηγορία "ΑΛΛΑ" εντάχθηκαν και 2 προφίλ καθηγητών πανεπιστημίου, καθώς παρουσίαζαν πληροφορίες για τον καθηγητή και όχι για το πανεπιστήμιο (Eastern Virginia Medical School, n.d.), (Carson, n.d.).
- 14. Στην κατηγορία "ΑΛΛΑ" εντάχθηκε και μια αρχική σελίδα περιοδικού η οποία δεν είχε κάποιο άρθρο για να συμπεριληφθεί στην κατηγορία «ΑΡΘΡΑ» (MDPI, n.d.).
- 15. Το άρθρο "Behavioural epidemiology: a systematic framework to classify phases of research on health promotion and disease prevention" εμφανίστηκε σε 3 διαφορετικές ιστοσελίδες και το άρθρο "Behavioral epidemiology: An economic model to evaluate optimal policy in the midst of a pandemic" σε 2 στα αποτελέσματα της αναζήτησης του όρου "behavioral epidemiology".
- 16. Το βιβλίο "Behavioral epidemiology and disease prevention" εμφανίστηκε σε 2 διαφορετικές ιστοσελίδες και το βιβλίο "Behavioral epidemiology: Principles and Applications" σε 6 διαφορετικές ιστοσελίδες στα αποτελέσματα της αναζήτησης του όρου "behavioral epidemiology".
- 17. Στην κατηγορία "ΒΙΒΛΙΑ", παρατηρείται πως στον όρο "behavioral epidemiology" εμφανίστηκαν 3 βιβλία, ενώ στον όρο "behavioural epidemiology" δεν εμφανίστηκε κανένα. Επιπλέον όλα τα βιβλία παρουσιάστηκαν και στην κατηγορία "google books" και σε ηλεκτρονικά καταστήματα (amazon, J&B Learning, Barnes & Noble). Τέλος στο βιβλίο "Behavioral Epidemiology and Disease Prevention" παρουσιάζεται και μια κριτική.

## 3.3. Αποτελέσματα αναζήτησης

Παρακάτω παρατίθενται τα αποτελέσματα της αναζήτησης των 2 όρων στο google. Επισημαίνεται για κάθε όρο ότι έχουν αξιοποιηθεί οι πέντε πρώτες σελίδες.

### 3.3.1. Όρος behavioural epidemiology

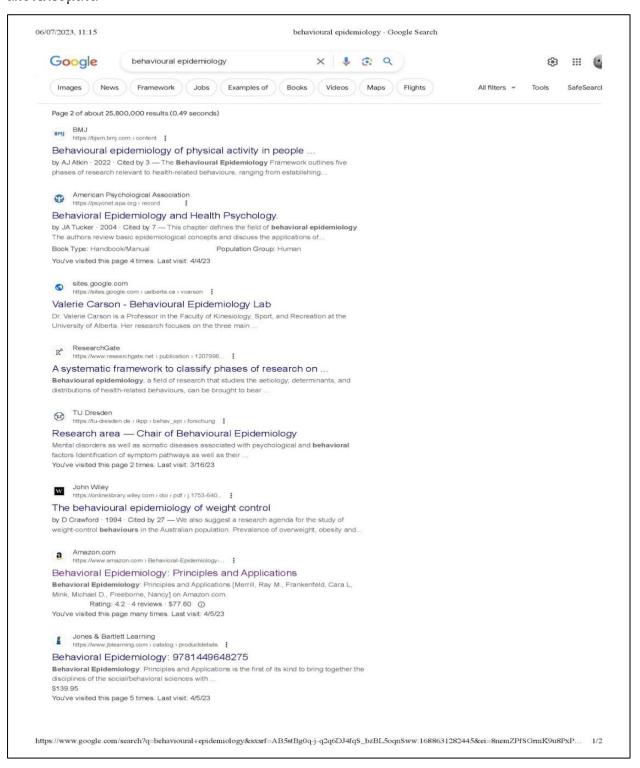
**Εικόνα-1.** Πρώτη σελίδα από την αναζήτηση Behavioural epidemiology: Όλα τα αποτελέσματα



# **Εικόνα -1.** (συνέχεια) -Πρώτη σελίδα από την αναζήτηση Behavioural epidemiology: Όλα τα αποτελέσματα



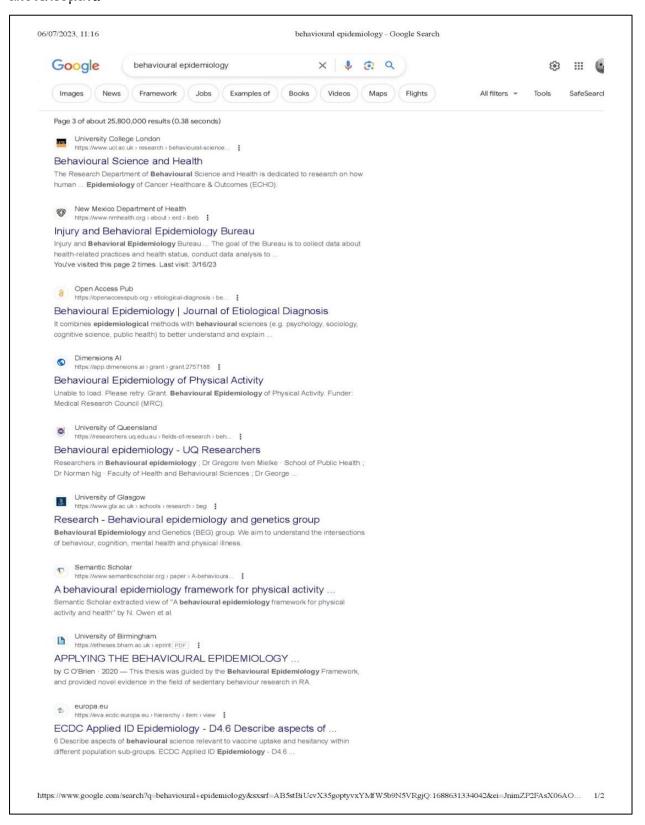
# **Εικόνα-2.** Δεύτερη σελίδα από την αναζήτηση Behavioural epidemiology: Όλα τα αποτελέσματα



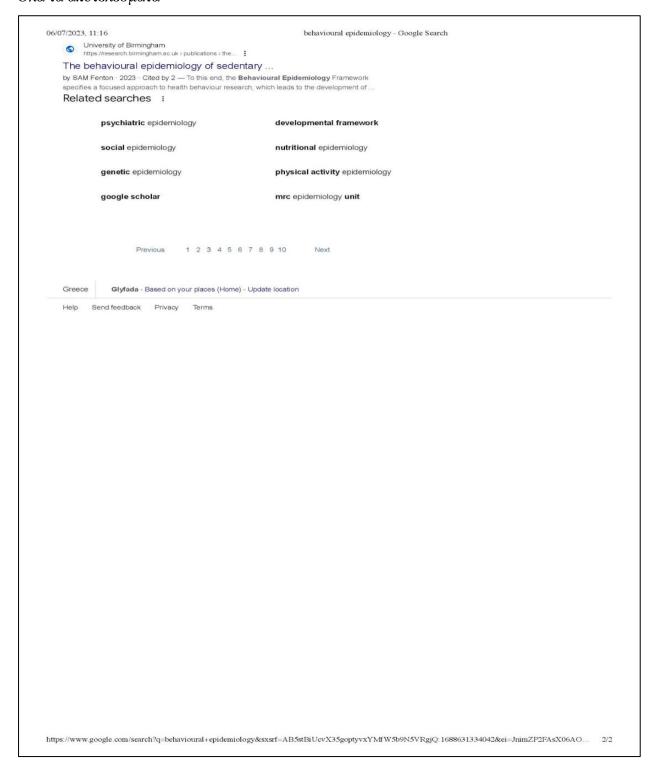
## Εικόνα-2. (συνέχεια) -Δεύτερη σελίδα από την αναζήτηση Behavioural epidemiology:



**Εικόνα-3.** Τρίτη σελίδα από την αναζήτηση Behavioural epidemiology: Όλα τα αποτελέσματα



# **Εικόνα-3.** (συνέχεια) -Τρίτη σελίδα από την αναζήτηση Behavioural epidemiology: Όλα τα αποτελέσματα

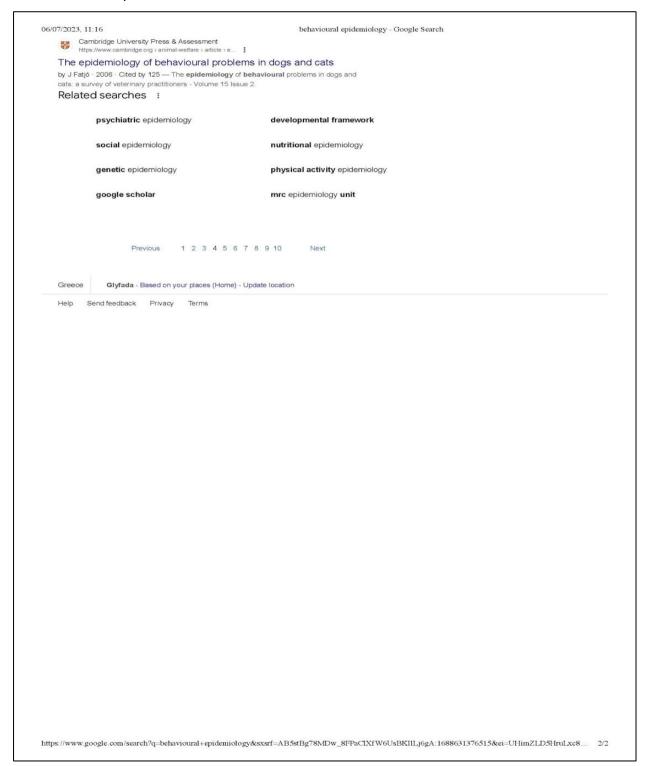


# **Εικόνα-4.** Τέταρτη σελίδα από την αναζήτηση Behavioural epidemiology: Όλα τα αποτελέσματα

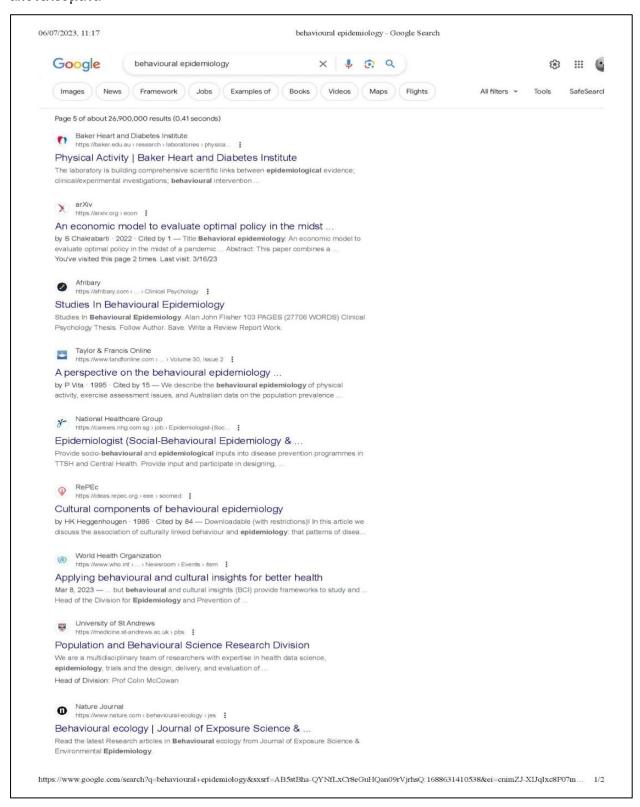


## Εικόνα-4. (συνέχεια) -Τέταρτη σελίδα από την αναζήτηση Behavioural epidemiology:

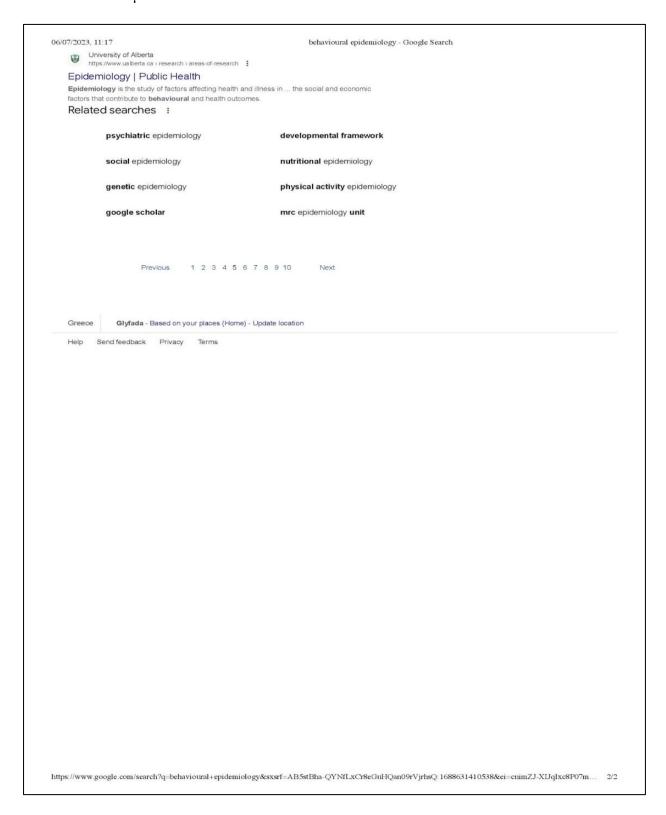
### Όλα τα αποτελέσματα



**Εικόνα-5.** Πέμπτη σελίδα από την αναζήτηση Behavioural epidemiology: Όλα τα αποτελέσματα

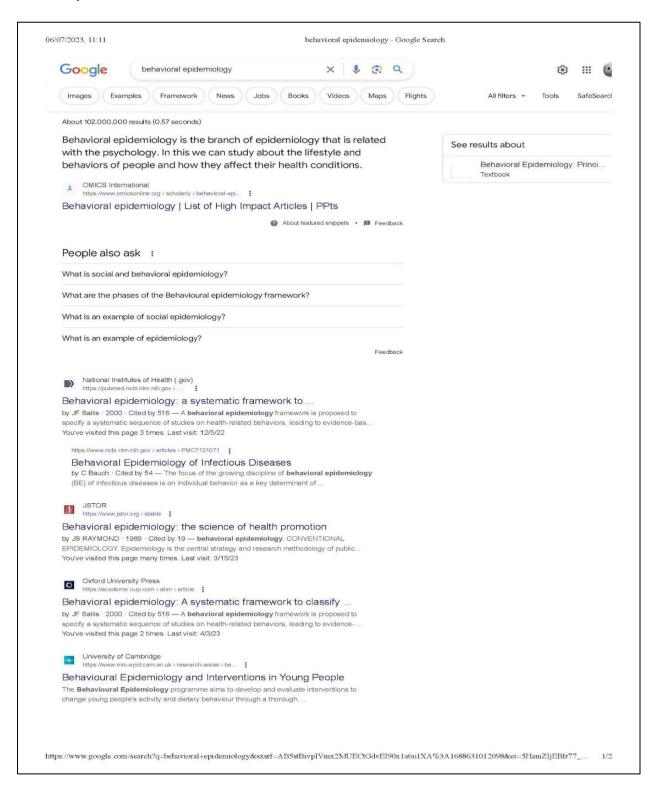


# Εικόνα-5. (συνέχεια) -Πέμπτη σελίδα από την αναζήτηση Behavioural epidemiology: Όλα τα αποτελέσματα



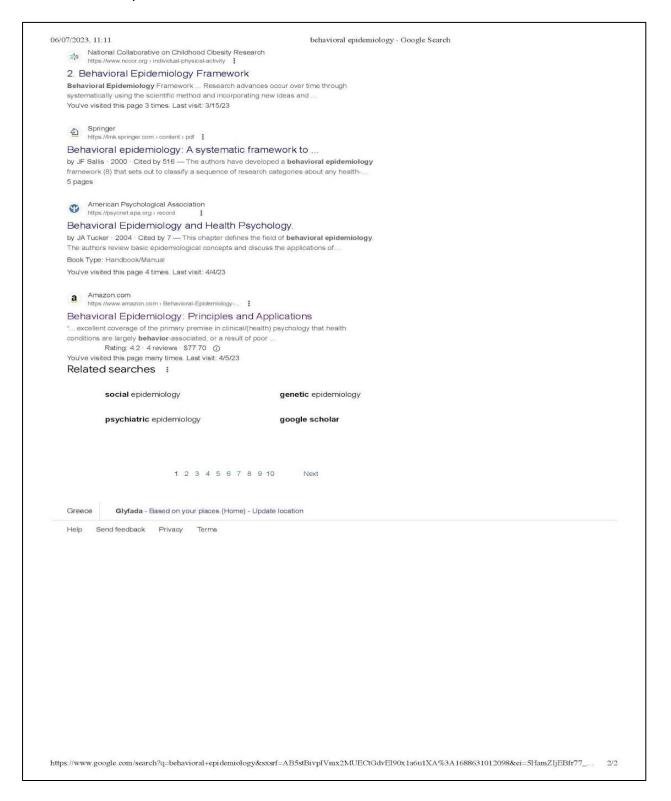
### 3.3.2. Όρος behavioral epidemiology

**Εικόνα-6.** Πρώτη σελίδα από την αναζήτηση Behavioral epidemiology: Όλα τα αποτελέσματα

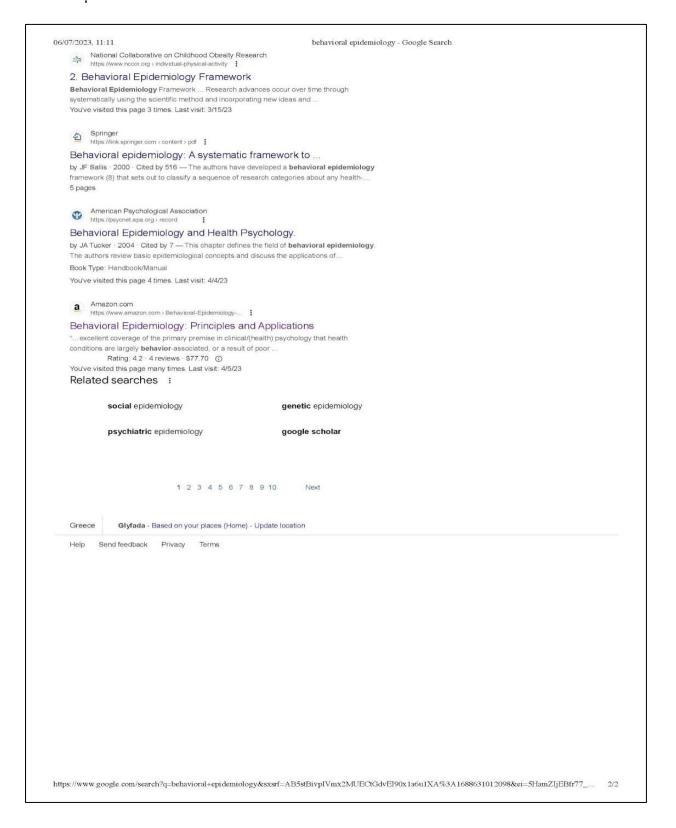


### Εικόνα-6. (συνέχεια) -Πρώτη σελίδα από την αναζήτηση Behavioral epidemiology:

### Όλα τα αποτελέσματα



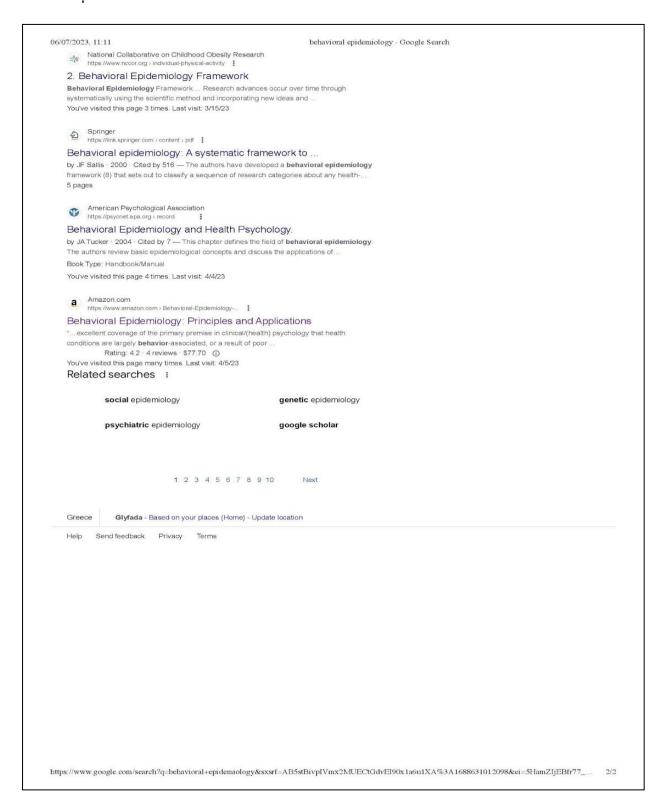
# **Εικόνα-7.** Δεύτερη σελίδα από την αναζήτηση Behavioral epidemiology: Όλα τα αποτελέσματα



# **Εικόνα-7.** (συνέχεια)-Δεύτερη σελίδα από την αναζήτηση Behavioral epidemiology: Όλα τα αποτελέσματα



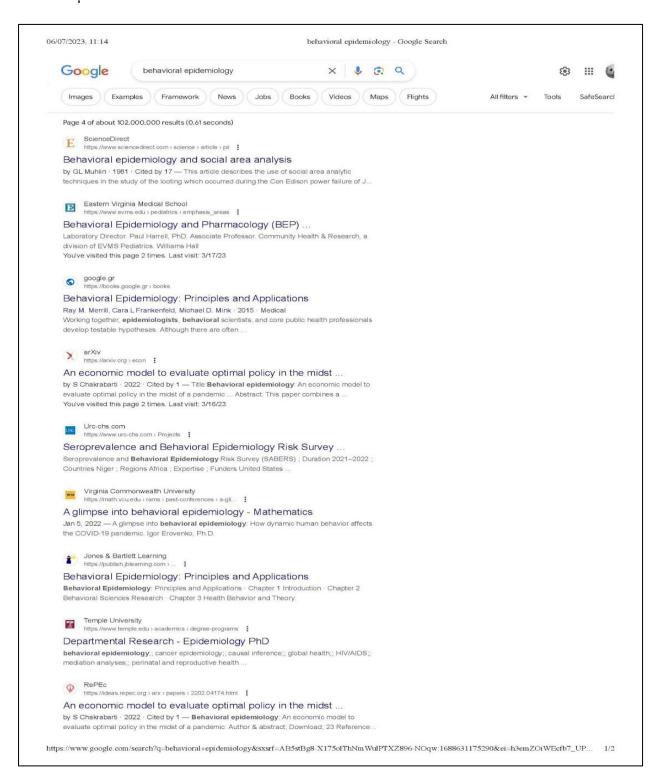
# Εικόνα-8. Τρίτη σελίδα από την αναζήτηση Behavioral epidemiology: Όλα τα αποτελέσματα



**Εικόνα-8.** (συνέχεια)-Τρίτη σελίδα από την αναζήτηση Behavioral epidemiology: Όλα τα αποτελέσματα



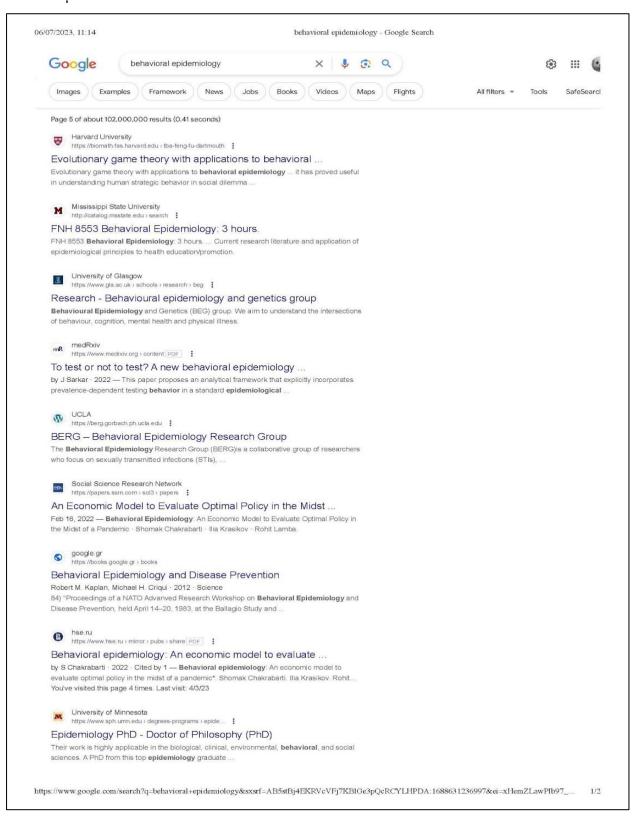
**Εικόνα-9.** Τέταρτη σελίδα από την αναζήτηση Behavioral epidemiology: Όλα τα αποτελέσματα



# **Εικόνα-9.** (συνέχεια)-Τέταρτη σελίδα από την αναζήτηση Behavioral epidemiology: Όλα τα αποτελέσματα

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Cambridge University Press & Assessment https://www.cambridge.org > core > journals > article > b
Behavioral Epidemiology and Disease Prevention. Edited
by E Watson · 1986 — Behavioral Epidemiology and Disease Prevention. Edited by Robert M.
Kaplan and Michael H. Criqui. New York: Plenum. 1985. Pp 450. US\$69.50.  Related searches:
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$https://www.google.com/search?q=behavioral+epidemiology\&sxsrf=AB5stBg8-X175olThNmWulPTXZ896-NOqw:1688631175290\&ei=h3emZ0iWEefb7\_UP 2/2 and a superscript of the contraction of the$

# **Εικόνα-10.** Πέμπτη σελίδα από την αναζήτηση Behavioral epidemiology: Όλα τα αποτελέσματα



# **Εικόνα-10.**(συνέχεια)-Πέμπτη σελίδα από την αναζήτηση Behavioral epidemiology: Όλα τα αποτελέσματα

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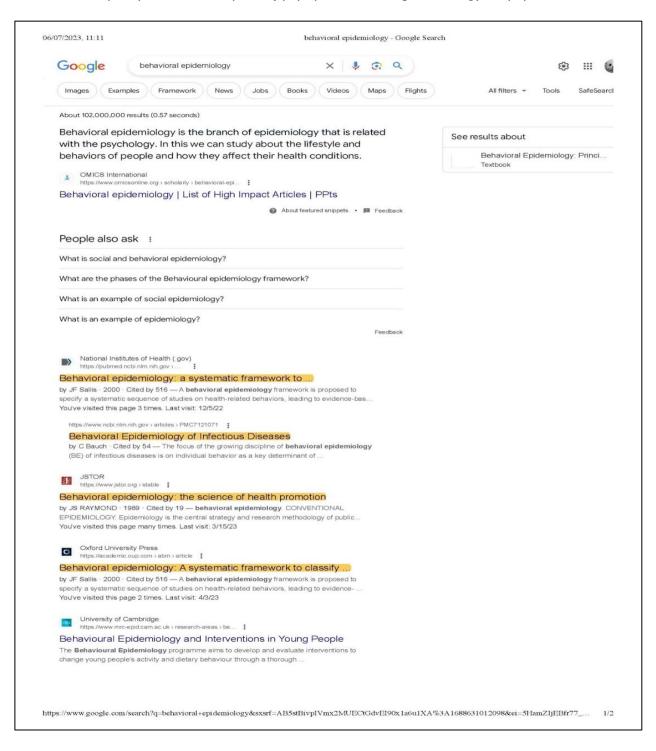
## ΚΕΦΑΛΑΙΟ 4: ΠΑΡΟΥΣΙΑΣΗ ΑΠΟΤΕΛΕΣΜΑΤΩΝ

## 4.1. APΘPA

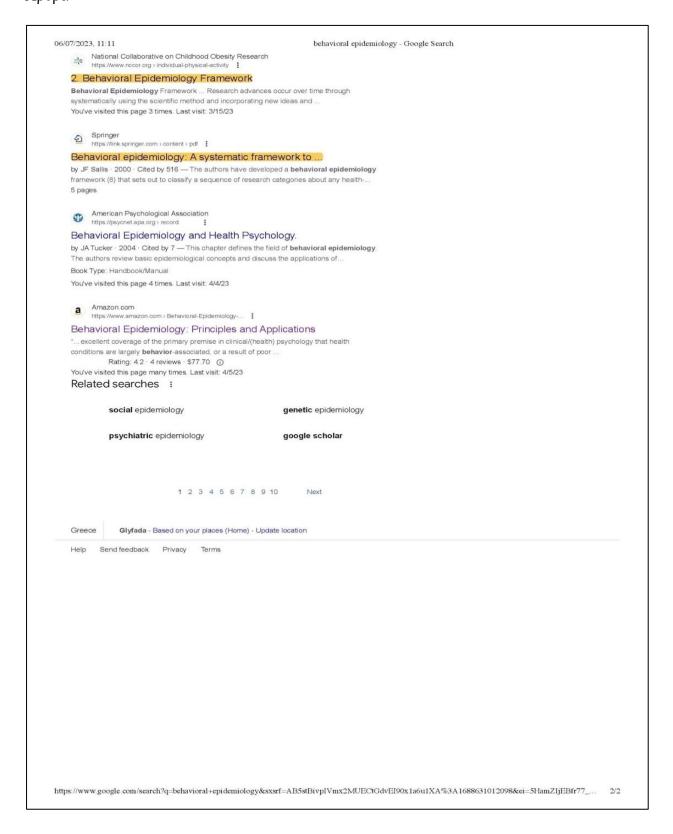
Παρακάτω παρουσιάζονται οι 5 πρώτες σελίδες από κάθε όρο. Σε κάθε σελίδα έχουν επισημανθεί οι ιστότοποι που εντάσσονται στην κατηγορία "ΑΡΘΡΑ".

### 4.1.1. Όρος behavioral epidemiology

Εικόνα-11. Πρώτη σελίδα από την αναζήτηση Behavioral epidemiology: Άρθρα



## **Εικόνα-11.** (συνέχεια) -Πρώτη σελίδα από την αναζήτηση Behavioral epidemiology: Αρθρα



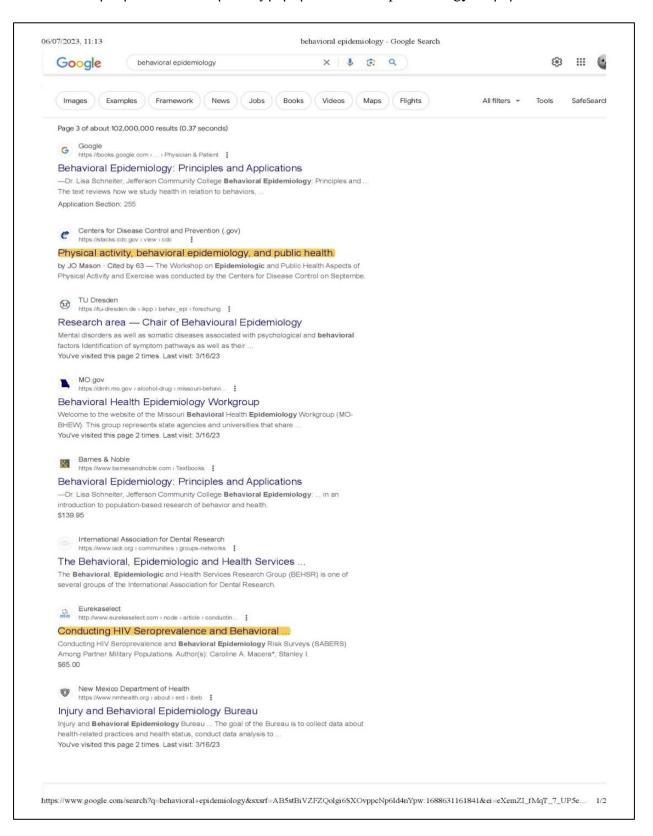
Εικόνα -12. Δεύτερη σελίδα από την αναζήτηση Behavioral epidemiology: Άρθρα



## **Εικόνα-12.** (συνέχεια) -Δεύτερη σελίδα από την αναζήτηση Behavioral epidemiology: Αρθρα



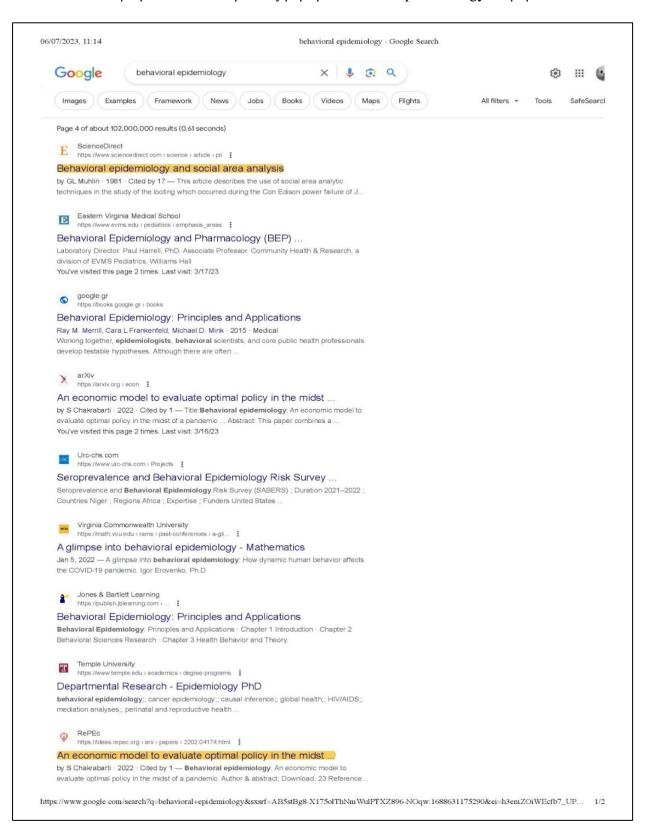
Εικόνα-13. Τρίτη σελίδα από την αναζήτηση Behavioral epidemiology: Άρθρα



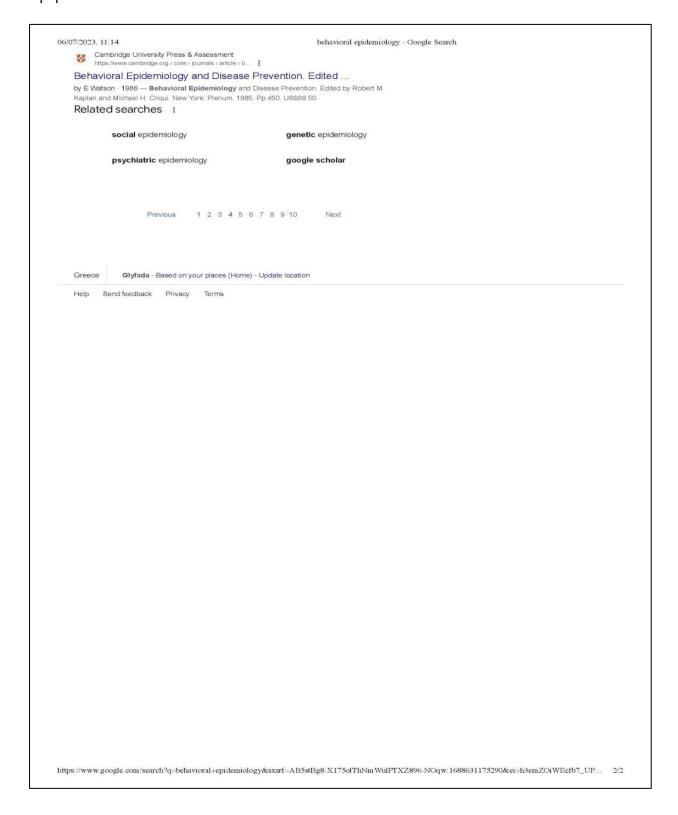
**Εικόνα-13.** (συνέχεια) -Τρίτη σελίδα από την αναζήτηση Behavioral epidemiology: Αρθρα



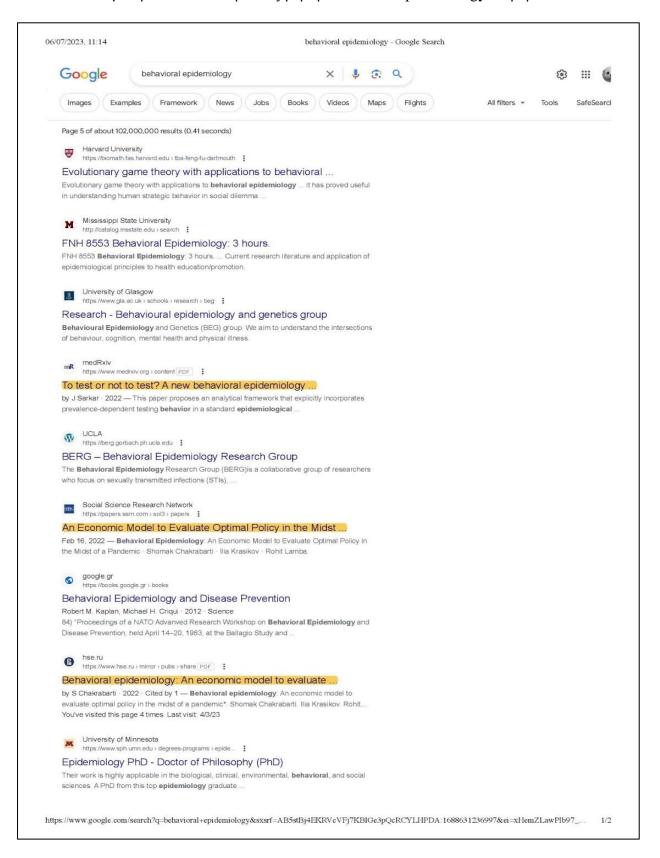
Εικόνα-14. Τέταρτη σελίδα από την αναζήτηση Behavioral epidemiology: Άρθρα



**Εικόνα-14.** (συνέχεια) -Τέταρτη σελίδα από την αναζήτηση Behavioral epidemiology: Αρθρα



Εικόνα-15. Πέμπτη σελίδα από την αναζήτηση Behavioral epidemiology: Άρθρα



**Εικόνα-15.** (συνέχεια) -Πέμπτη σελίδα από την αναζήτηση Behavioral epidemiology: Αρθρα

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Behavioral Epidemiology Models
Behavioral Epidemiology Models Models in both in Epidemiology and Economics are mathematical models Rational choice/behavior matters greatly.
Related searches:
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Greece Glyfada - Based on your places (Home) - Update location
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https://www.google.com/search?q=behavioral+epidemiology&sxsrf=AB5stBj4EKRVcVFj7KBlGe3pQcRCYLHPDA:1688631236997&ei=xHemZLawPlb97 2/2

Παρακάτω παρουσιάζονται αναλυτικά τα άρθρα του όρου "behavioral epidemiology" με την σειρά.

**Εικόνα-16.** Behavioural epidemiology: a systematic framework to classify phases of research on health promotion and disease prevention (Sallis, et al., 2000) (Sallis, et al., 2022) (Sallis & others, 2000). Link.

## BEHAVIORAL EPIDEMIOLOGY: A SYSTEMATIC FRAMEWORK TO CLASSIFY PHASES OF RESEARCH ON HEALTH PROMOTION AND DISEASE PREVENTION<sup>1</sup>

James F. Sallis, Ph.D. San Diego State University

Neville Owen, Ph.D.

M. L. J. F. H. L. L. L. D. D. D.

Michael J. Fotheringham, Ph.D. Deakin University, Melbourne Australia

#### ABSTRACT

Although the term "behavioral epidemiology" has been used in the literature since the late 1970s, it has not been clearly defined. A behavioral epidemiology framework is proposed to specify a systematic sequence of studies on health-related behav-iors, leading to evidence-based interventions directed at populations. The phases are: 1-establish links between behaviors and health: 2-develop measures of the behavior: 3-identify influences on the behavior; 4-evaluate interventions to change the behavior; 5-translate research into practice. Mature research areas are expected to have more studies in the latter phases. Recent volumes of four journals (Annals of Behavioral Medicine, Health Psychology, Journal of Nutrition Education, Tobacco Control) were audited, and empirical studies were classified into these phases. Phase 3 studies were common (identifying influences on behaviors; 27% to 50%), and Phase 2 studies were least common (measurement; 0% to 15%). Annals of Behavioral Medicine and Health Psychology were low on Phase 4 (intervention studies; 9% and 11%, respectively). The Journal of Nutrition Education was the only journal reviewed that had a substantial number (20%) of Phase 5 studies (translating research into practice). The behavioral epidemiology framework can be used to evaluate the status of research on health behaviors and to guide research policies.

(Ann Behav Med 2000, 22(4):294-298)

## INTRODUCTION

A large body of evidence has accumulated on the extent to which unhealthful behavior patterns are contributing to the chronic diseases that are the leading causes of death and disability in industrialized nations (1). The discipline of epidemiology studies the distribution and etiology of diseases, with the intention of using the results to inform population-wide prevention efforts (2). Some limits of traditional epidemiology become apparent when the diseases have a substantial behavioral etiology, because epidemiologic data do not provide specific guidance on how to change the behaviors that are implicated in cardiovascular diseases, diabetes,

cancers, human immunodeficiency virus (HIV), and pulmonary diseases, among others. Here, we describe and apply a framework through which we aim to clarify and systematize what we see as the purposes of behavioral epidemiology research. Our aim is to make more explicit how the contributions of behavioral science can be brought to bear on ameliorating the leading causes of death and disability in populations.

"Behavioral epidemiology" is a term that has been used in the literature since the late 1970s (3–7) but has not yet been sufficiently clearly defined. A more explicit conceptualization of the focus, scope, and logic of behavioral epidemiology is needed. In the context of behavioral medicine research, behavioral epidemiology can be considered a subset of research that studies the distribution and etiology of health-related behaviors in populations, as contrasted with research on clinical cases. Further, behavioral epidemiology concerns itself with research that has the explicit purpose of understanding and influencing healthful behavior patterns, as part of population-wide initiatives to prevent disease and promote health.

The authors have developed a behavioral epidemiology framework (8) that sets out to classify a sequence of research categories about any health-related behavior. The framework proposes a general sequence of studies that leads to evidence-based public health interventions, while acknowledging that there is nonsequential feedback among the phases. It builds on, but is distinct from, earlier frameworks proposed by Greenwald and Cullen (9) and of Flay (10) that describe phases—from basic research through to policy and program implementation—of chronic disease prevention and health promotion research. Oldenburg, Hardcastle, and Kok (11) described a research framework focused more specifically on the latter phases—the diffusion and institutionalization of health behavior change programs. Others have proposed related frameworks to guide thinking about how to conceptualize and influence behavior for health protection and disease prevention outcomes (12,13). These also set out to classify the different domains of relevant research and its applications.

A fundamental concern of all of these frameworks is improving the understanding of health-related behaviors and using this knowledge to favorably influence behavior and health in populations. Achieving these goals requires research across the spectrum of analytic, descriptive, and intervention studies. We argue that this can be facilitated by the use of a systematic framework to classify the sequencing of studies. To this end, the proposed behavioral epidemiology framework (8) describes five main research phases.

<sup>&</sup>lt;sup>1</sup> Adrian Bauman and Tom Baranowski contributed to the critique of terminology. Special thanks to Robert LaForge for his helpful comments on an earlier draft. Kecia Carrasco contributed to manuscript preparation. Reprint Address: J. F. Sallis, Ph.D., Department of Psychology, San Diego State University, 6363 Alvarado Court, #103, San Diego, CA 92120.

<sup>© 2000</sup> by The Society of Behavioral Medicine.

**Εικόνα-21.** Behavioral epidemiology of infectious diseases: an overview (Bauch, et al., 2012). Link.

## Behavioral Epidemiology of Infectious Diseases: An Overview

Chris Bauch, Alberto d'Onofrio, and Piero Manfredi

Abstract The focus of the growing discipline of behavioral epidemiology (BE) of infectious diseases is on individual behavior as a key determinant of infection trajectories. This overview departs from the central, but static, role of human behavior in traditional mathematical models of infection to motivate the importance of including behavior into epidemiological models. Our aim is threefold. First, we attempt to motivate the historical and cultural background underpinning the BE revolution, focusing on the issue of rational opposition to vaccines as a natural endpoint of the changed relation between man and disease in modern industrialized countries. Second, we review those contributions, from both mathematical epidemiology and economics, that forerun the current "epidemic" of studies on BE. Last, we offer a more detailed overview of the current epidemic phase of BE studies and, still motivated by the issue of immunization choices, introduce some baseline ideas and models.

## 1 Introduction

The severe acute respiratory syndrome coronavirus (SARS-CoV) outbreaks of the early 2003 yielded worldwide panic. The characteristics of the SARS virus, mainly transmitted through close contact from person to person [20], brought to everyone's

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A. d'Onofrio

Department of Experimental Oncology, European Institute of Oncology, Milan, Italy e-mail: alberto.donofrio@ieo.eu

P. Manfredi (⊠)

Department of Economics and Management, Pisa University, Pisa, Italy e-mail: manfredi@ec.unipi.it

P. Manfredi and A. d'Onofrio (eds.), *Modeling the Interplay Between Human Behavior and the Spread of Infectious Diseases*, DOI 10.1007/978-1-4614-5474-8\_1, © Springer Science+Business Media New York 2013

**Εικόνα-40.** Behavioral epidemiology: the science of health promotion (Raymond, 1989). Link.

HEALTH PROMOTION © Oxford University Press 1989

Vol. 4, No. 4 Printed in Great Britain

## Behavioral epidemiology: the science of health promotion

JONATHAN S. RAYMOND

University of Hawaii School of Public Health, The International Center for Health Promotion and Disease Prevention

#### INTRODUCTION

A careful follower of the progress of the field of health promotion over the past several years will likely agree that it complements yet extends our practical understanding of the core principles and precepts of conventional public health. It is natural for those of us concerned with prevention and promotion to focus on initiatives and efforts which benefit as many persons in as equitable a manner as possible. This is a shared concern for justice (Albee, 1986). We share a concern for the strengthening and protecting of all populations expressed in an article of faith that problems are often best prevented when physical and social environments are permitted to contribute to the strengthening and protection of populations. This is a public health precept. It is appropriate that the fields of public health and prevention continue to explore research methodologies and approaches in support of health promotion by adding to its armamentarium the public health strategy of behavioral epidemiology.

## CONVENTIONAL EPIDEMIOLOGY

Epidemiology is the central strategy and research methodology of public health. It may be defined as the study of the occurrence of disease in a population. Epidemiology as a word has Greek derivatives. Epi means on or upon; demos (as in demography) means people and logos means the study of. Epidemiology then is the study of that which falls upon the people. One who engages in the practice of epidemiology is of course an

epidemiologist. Epidemiology was initially concerned with infectious diseases (plague, small pox, measles, cholera, rabies, tetanus, etc.). Today a review of the field will reveal studies on the epidemiology of drug and alcohol use, psychiatric problems, child abuse, suicide, hypertension, cancer, injuries and osteoporosis, to name a few areas of inquiry. This expansion of the field beyond the infectious diseases is due to the fact that epidemiology is not a disease specific content area, but rather a strategy and process of identifying the incidence, prevalence and distribution in populations of a given health phenomenon.

populations of a given health phenomenon. The present epidemiologic approach is concerned with the interaction of the host, the causative agent and the environment. Conventionally agents have been biological (bacteria, viruses), chemical (pesticides, food additives, drugs) and physical (heat, light, noise). Host factors range from personal characteristics (age, sex, ethnicity, income, heredity, education) to more recent behavior-related factors (lifestyle). Environmental factors have ranged from such things as water, milk, food, plants, animals to weather, housing, traffic and more recently work demands, daily stressors and social support.

The extent to which a disease or problem is occurring is described in one of three ways: (i) endemic—the problem is usually present; it also refers to the usual prevalence (number of cases) within a geographic area; (ii) epidemic—clearly in excess of the normal expectancy (endemic level) transmitted from a common (single) source or from sources propagated from a single source;

281

## Link.

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2. Behavioral Epidemiology Framework - NCCOR Measures Registry User Guides

SECTION

2

## Behavioral Epidemiology Framework

Research advances occur over time through systematically using the scientific method and incorporating new ideas and approaches to answer progressively more complex questions. Medical and public health research is inherently driven by the need to develop and evaluate more effective methods to promote health and well-being in the population. A classic definition of epidemiology (which underlies all public health research) is "the study of the distribution and determinants of health-related states in the population, and the application of this study to the control of health problems." This definition captures all health-related states but specific "behavioral epidemiology frameworks" have been proposed to facilitate the progression<sup>a</sup> of research needed on specific health-related behaviors. This Guide adapts a behavioral epidemiology framework developed for physical activity research.

## Description of the Behavioral Epidemiology Framework

The conceptual model in Figure 2 presents different types or categories of research needed to understand physical activity behavior and how to promote it more effectively.

Five specific types of research are depicted around the perimeter of the figure, with each level building sequentially on the others to systematically advance behavioral research on physical activity. Basic Research provides the foundation for understanding physiological and biochemical mechanisms influencing disease risk and health. Health Outcomes Research then establishes specific associations with health indicators and facilitates the establishment of physical activity guidelines. Surveillance Research provides insights about secular trends with regard to physical activity as well as information about patterns, trends, and disparities in the population. Theory and Correlate Research seeks to understand the causes and correlates that influence the behavioral patterns and evaluates theoretical models designed to study and influence physical activity behavior. Intervention Research applies these insights to plan and evaluate intervention methods to influence physical activity and sedentary behavior in different settings and populations. The various types of research are linked to the center box labeled Physical Activity and Sedentary Behavior because these are the central behaviors of interest. The line between this center box and Intervention Research is a double-headed arrow because this is the only form of research designed specifically to promote change in these behaviors.

Figure 2: Behavioral Epidemiology Framework

https://www.nccor.org/tools-mruserguides/individual-physical-activity/behavioral-epidemiology-framework/linearity/second-physical-activity/behavioral-epidemiology-framework/linearity/second-physical-activity/behavioral-epidemiology-framework/linearity/second-physical-activity/behavioral-epidemiology-framework/linearity/second-physical-activity/behavioral-epidemiology-framework/linearity/second-physical-activity/behavioral-epidemiology-framework/linearity/second-physical-activity/behavioral-epidemiology-framework/linearity/second-physical-activity/behavioral-epidemiology-framework/linearity/second-physical-activity/behavioral-epidemiology-framework/linearity/second-physical-activity/sec

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**Εικόνα-49.** Physical activity, behavioral epidemiology, and public health (Mason & Powell, 1985). Link.

## **EDITORIALS**

## Physical Activity, Behavioral Epidemiology, and Public Health

This issue of Public Health Reports contains papers prepared for the Workshop on Epidemiologic and Public Health Aspects of Physical Activity and Exercise, conducted by the Centers for Disease Control on September 24–25, 1984. Each paper by itself is a worthy contribution to the scientific literature. As a whole, they provide an excellent summary of the current state of our knowledge plus useful research recommendations.

The authors present evidence demonstrating that regular physical activity is clearly beneficial for cardiovascular health, weight control, and reduction of symptoms of depression, depressed mood, and anxiety (1-3). Evidence of other benefits is suggestive but not established (1,3,4). In some important areas of public health, however, we know surprisingly little. For instance, the incidence of injuries and other hazards related to common aerobic exercise activities is unknown (5). The reasons why people do or do not exercise are largely unknown (6), as are the components of a successful program in the worksite, school, or community (7). Although everyday occurrences and conversations suggest that leisure-time physical activity is more common today than 10 to 15 years ago, we have few data to support that belief and essentially none to tell us if the behavioral changes involve all segments of our society (8.9).

The details of these issues, and more, are well presented in the papers. Therefore, we turn our attention to two tangential but important topics that deserve attention: behavioral epidemiology and public policy. First, behavioral epidemiology, the fabric from which the papers are tailored, is mentioned only briefly (8). Second, the papers generally focus on how physical activity does or may influence the public's health and not on how public health does, may, or should influence physical activity. The papers were not intended to address public policy. However, sound policy emanates from factual assessments of the present status.

Behavioral epidemiology contains two distinguishable concepts. One is the epidemiologic relationship between behavior and disease; the other is the epidemiologic study of the behavior itself. Be-

havioral epidemiology is the identification of behaviors that are causally linked to disease-the study of the relationship between smoking and lung cancer, alcohol consumption and motor vehicle accidents, or sexual practices and herpetic infection. The relationships, once identified, should be clarified and refined to bolster the claim to causality and to point the way to prevention. The number of years of smoking, the frequency of driving after drinking, the number of sexual contacts are all important and useful refinements to the epidemiologic link between the behavior and the disease. This concept of behavioral epidemiology is an etymologic parallel with our current use of "environmental epidemiology," which is the study of the relationship between disease and environmental conditions or contaminants. It is also in concert with traditional concepts of epidemiology such as the study of the distribution and determinants of disease.

The second concept in behavioral epidemiology is somewhat less traditional. It is the application of epidemiologic methods to study the distribution and determinants of behaviors that are causally linked with disease. One step removed from the relationship between behavior and disease, it is the epidemiologic study of the behavior itself. In terms of smoking, for example, the second component of behavioral epidemiology is the study of who smokes, why they smoke, and, for public health workers, how we can help people to stop smoking or not start. In terms of inactivity, it is the study of who is inactive, why they are inactive, and how we can help them be more active. This second concept of behavioral epidemiology is semantically similar to the way we use "cancer epidemiology" or "infectious disease epidemiology," meaning the study of the distribution and determinants of cancer or of infectious disease. It differs from the traditional concept of epidemiology in that the focus is on the distribution and determinants of the behavior, not the disease produced. This second concept of behavioral epidemiology is vitally important because efforts in this field will help provide the knowledge we need to make progress in the second public health revolution cited in "Healthy People" (10). The control of contemporary scourges in our free society requires a better understanding of who has certain behaviors and, more importantly, why they have them. This will not be easy. Behaviors are extraordinarily complex and their determinants are

March-April 1985, Vol. 100, No. 2 113

Εικόνα-52. An essential journal on HIV research (Macera, et al., 2017). Link.



## Εικόνα-54. Behavioral epidemiology and social area analysis (Muhlin, et al., 1981).

## Link.

Evaluation and Program Planning, Vol. 4, pp. 35-42, 1981 Printed in the U.S.A. All rights reserved. 0149-7189/81/010035-08\$02.00/0 opyright = 1981 Pergamon Press Ltd

### BEHAVIORAL EPIDEMIOLOGY AND SOCIAL AREA ANALYSIS

## The Study of Blackout Looting

GREGORY L. MUHLIN New York State Psychiatric Institute Albert Einstein College of Medicine

PATRICIA COHEN

ELMER L. STRUENING New York State Psychiatric Institute

LOUIS E. GENEVIE Albert Einstein College of Medicine City University of New York

and

SEYMOUR R. KAPLAN

HARRIS B. PECK Albert Einstein College of Medicine

### ABSTRACT

This article describes the use of social area analytic techniques in the study of the looting which occurred during the Con Edison power failure of July 13 and 14, 1977. Detailed procedures are outlined of the systematic collection and analysis of data which were developed from available data. Analyses contrasting competing explanatory theoretical models for blackout looting are presented. The central dependent variable is ratio of looted to retail stores. Both the numerator and denominator are aggregated to the census tract level.

At 8:37 on the evening of July 13, 1977, during a severe thunderstorm, lightning struck two extra-high voltage lines in Westchester County at the extreme of Consolidated Edison of New York's service area. At 8:56 two more lines were struck. Power transmission links to other utilities tried to make up the deficit but failed. The customer load became too great for Con Edison's available in-city sources of power. At 9:36 the entire system was completely shut down. Electrical service to more than 8 million people in the New York City metropolitan area and to commercial and industrial users was lost for periods from 5 to 25 hours.

During the blackout extensive looting and malicious

property damage took place in a number of New York City neighborhoods. The New York City Police Department arrested more than 3,000 people and charged them with a variety of offenses including assault, criminal trespass, and burglary in the first, second and third degree.

In the year following the blackout several studies were conducted. Most of these were designed to assess the level of damage (New York City Department of Planning, 1977) or to fix the blame for the incident (Federal Energy Regulatory Commission, 1978). Some focussed on the looters (New York City Criminal Justice Agency, 1977) and still others presented in-

This research is supported by NIMH, 1 ROLMH 31722-01, NIMH Institutional NRS Award 5T32 MH 14627 and by the New York State Psychiatric Institute. We wish to thank John Baer, Evelyn Mann and Richard Satkin of the New York City Department of City Planning and Dan McCarthy of the Office of Economic Development for making the initial Blackout data available to us for analysis. Thanks are also due to our research assistant Theresa Ann Karanik and Mattie Jones and Detra Allen for their typing and other assistance. Requests for reprints should be sent to Gregory L. Muhlin, New York State Psychiatric Institute, Box 47, Epidemiology of Mental Disorders Research Dept., 722 W, 168th St., New York, NY 10032.

**Εικόνα-62.** Behavioral epidemiology: An economic model to evaluate optimal policy in the midst of a pandemic (Chakrabarti, et al., 2022), (Chakrabarti, et al., 2022). (Chakrabarti, et al., 2022). Link.

## Behavioral epidemiology: An economic model to evaluate optimal policy in the midst of a pandemic\*

Shomak Chakrabarti

Ilia Krasikov

Rohit Lamba

February 2022

#### Abstract

This paper combines a canonical epidemiology model of disease dynamics with government policy of lockdown and testing, and agents' decision to social distance in order to avoid getting infected. The model is calibrated with data on deaths and testing outcomes in the Unites States. It is shown that an intermediate but prolonged lockdown is socially optimal when both mortality and GDP are taken into account. This is because the government wants the economy to keep producing some output and the slack in reducing infection is picked up by social distancing agents. Social distancing best responds to the optimal government policy to keep the effective reproductive number at one and avoid multiple waves through the pandemic. Calibration shows testing to have been effective, but it could have been even more instrumental if it had been aggressively pursued from the beginning of the pandemic. Not having any lockdown or shutting down social distancing would have had extreme consequences. Greater centralized control on social activities would have mitigated further the spread of the pandemic.

"Coronavirus is Germany's greatest challenge since World War II, says Angela Merkel", Deutsche Welle [2020]

"Covid-19 restrictions not affecting social distancing, says ONS: UK statistics agency says level of people still meeting likely to lead to increased hospitalisations and deaths." Financial Times [2020]

"Vietnam abandons zero-Covid strategy after record drop in GDP: Warnings that lockdowns were crippling businesses heaped pressure on Communist government." Financial Times [2021b]

#### 1 Introduction

Three instruments have been salient in the global response to the Covid-19: government policy of lockdown and testing, and people's decision to practice social distancing. The objective for the collective has largely been the minimization of direct mortality while ensuring a steady pace of the economy, and

\*Chakrabarti: shomak.chakrabarti@manchester.ac.uk, University of Manchester; Krasikov: krasikovis.main@gmail.com, Higher School of Economics Moscow; Lamba: rlamba@psu.edu, Pennsylvania State University. We are grateful to David Argente, Shoumitro Chatterjee, Krishna Dasaratha, Elisa Giannone, Callum Jones, Kei Hirano, Shouyong Shi, Shamim Sinnar, Jakub Steiner and Flavio Toxvaerd for helpful comments and suggestions.

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**Εικόνα-112.** To test or no to test? A new behavioral epidemiology framework for Covid-19 (Sarkar, 2022). Link.

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To test or not to test? A new behavioral epidemiology framework for COVID-19

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**Abstract** 

Recent clinical research finds that rapid transmission of SARS-CoV-2 is facilitated by substantial undocumented asymptomatic infections. Asymptomatic infections have implications for behavioral response to voluntary testing. The paper argues that a substantial proportion of SARS-CoV-2 infections are hidden due to rational test avoidance behavior, especially among those without perceptible disease symptoms. However, if perception of disease threat is prevalence dependent, testing compliance increases in response to reported infection prevalence rate in the population. This behavior, in turn, affects infection and mortality dynamics. This paper proposes an analytical framework that explicitly incorporates prevalence-dependent testing behavior in a standard epidemiological model, generating distinctive equilibrium epidemiological outcomes with significant policy implications. Numerical simulations show that failure to consider endogenous testing behavior among asymptomatic individuals leads to over- and underestimation of infection rates at the peaks and troughs, respectively, thereby distorting the disease containment policies. The results underscore the importance of augmenting testing capacity as an effective mitigation policy for COVID-19 and similar infectious diseases.

Keywords: COVID-19, Behavior, Economic epidemiology, Testing and Isolation

JEL Codes: I12, I18

NOTE: This preprint reports new research that has not been certified by peer review and should not be used to guide clinical practice.

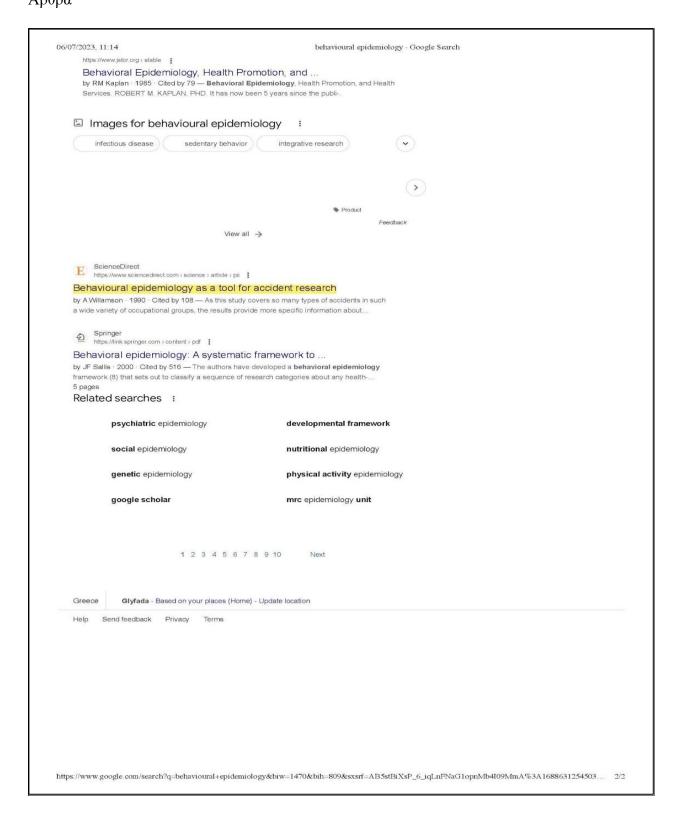
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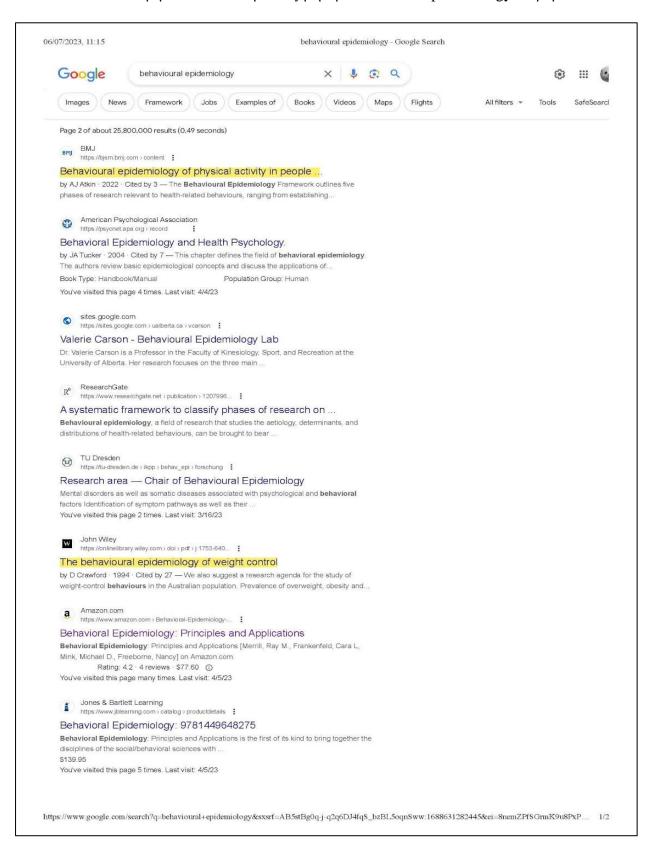
Εικόνα-143. Πρώτη σελίδα από την αναζήτηση Behavioural epidemiology: Άρθρα

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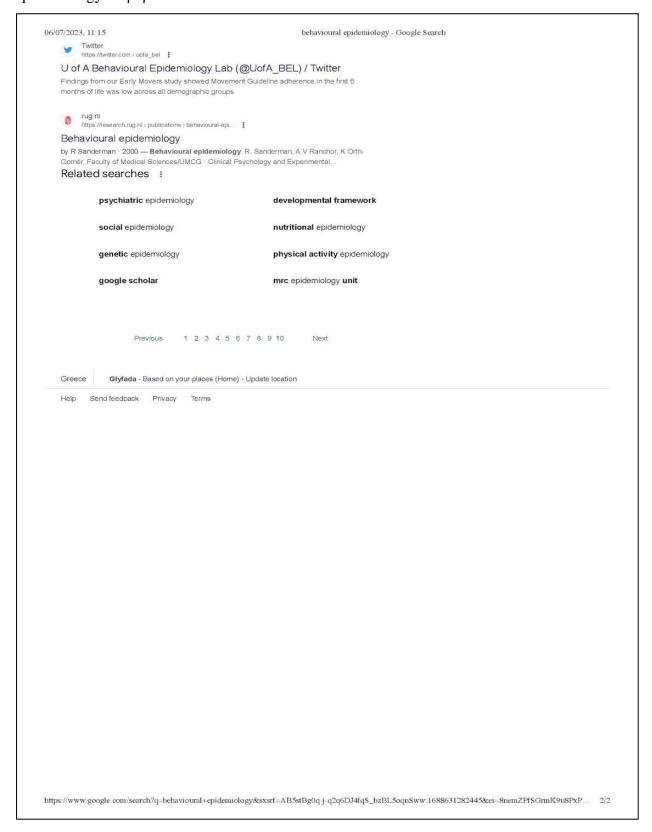
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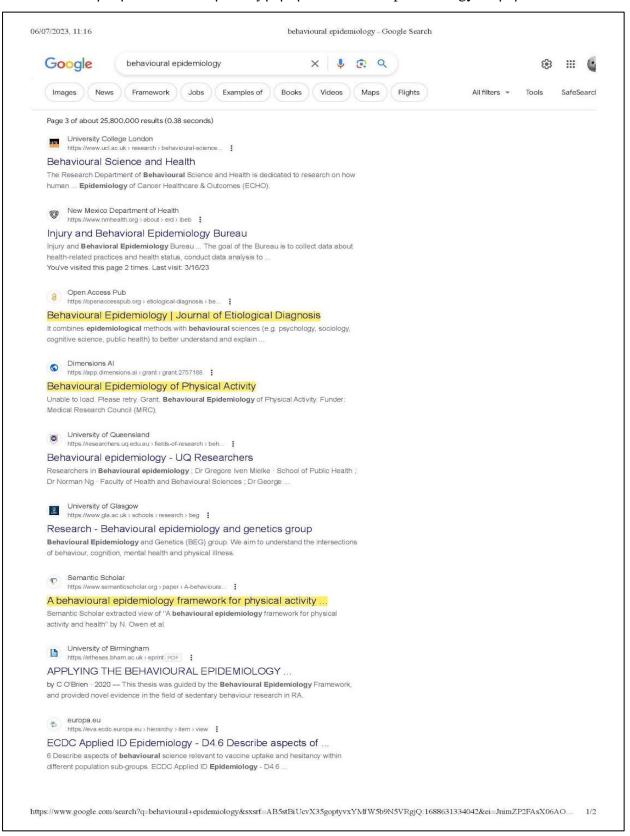
Εικόνα -144. Δεύτερη σελίδα από την αναζήτηση Behavioural epidemiology: Άρθρα



# **Εικόνα-144.** (συνέχεια)-Δεύτερη σελίδα από την αναζήτηση Behavioural epidemiology: Άρθρα



Εικόνα-145. Τρίτη σελίδα από την αναζήτηση Behavioural epidemiology: Άρθρα

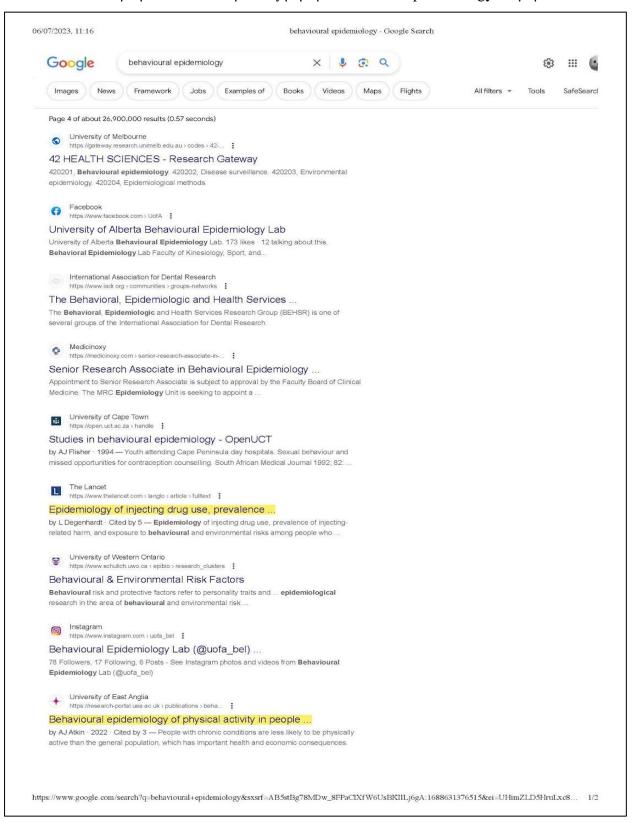


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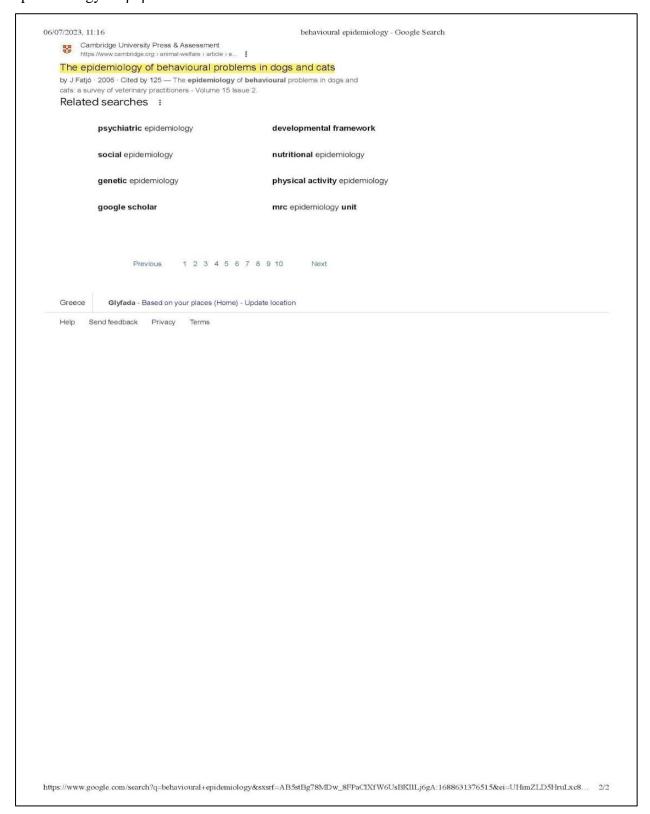
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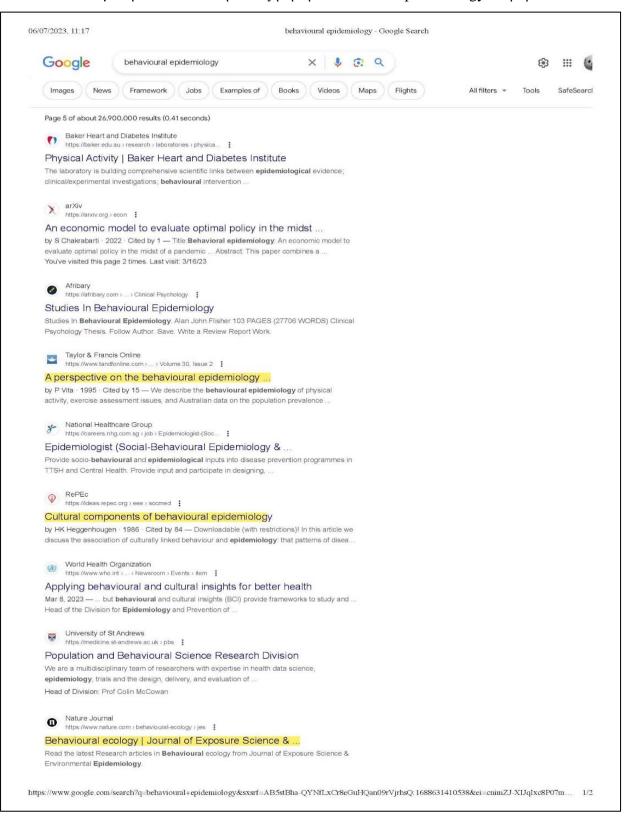
Εικόνα-146. Τέταρτη σελίδα από την αναζήτηση Behavioural epidemiology: Άρθρα



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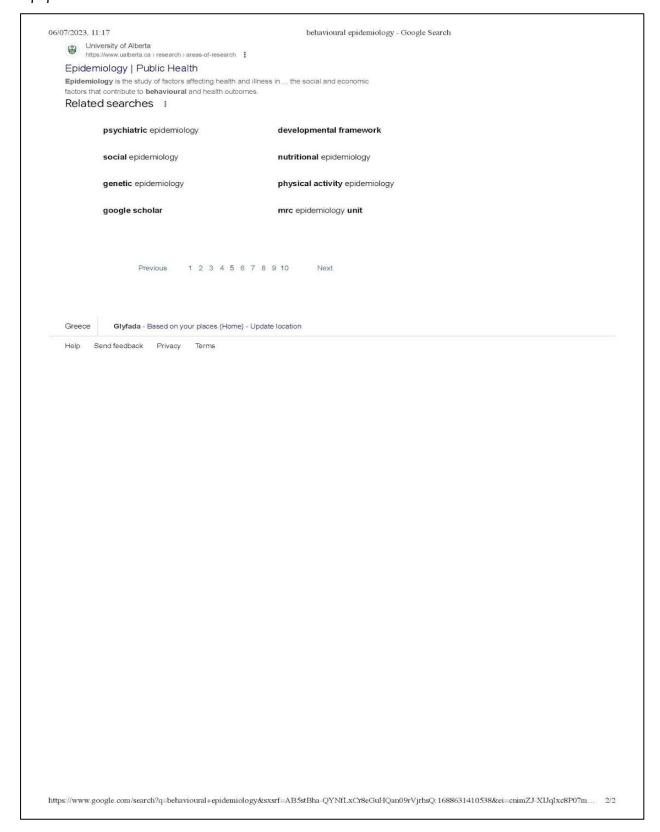


Εικόνα-147. Πέμπτη σελίδα από την αναζήτηση Behavioural epidemiology: Άρθρα



## **Εικόνα-147.** (συνέχεια)-Πέμπτη σελίδα από την αναζήτηση Behavioural epidemiology:

## Άρθρα



Παρακάτω παρουσιάζονται αναλυτικά τα άρθρα του όρου "behavioural epidemiology" με την σειρά.

**Εικόνα-148.** Behavioural epidemiology as a tool for accident research (Williamson & Feyer, 1990). Link.

Journal of Occupational Accidents, 12 (1990) 207-222 Elsevier

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## Behavioural Epidemiology as a Tool for Accident Research

ANN WILLIAMSON and ANNE-MARIE FEYER

National Institute of Occupational Health and Safety, P.O. Box 58, Sydney 2001, Australia

#### ABSTRACT

Williamson, A. and Feyer, A.-M., 1990. Behavioural epidemiology as a tool for accident research. Journal of Occupational Accidents, 12: 207–222.

In this study the incidence and nature of behavioural events preceding work-related fatalities were investigated. All occupational facilities were examined for the years 1982 to 1984. The events preceding the fatality and any pre-existing factors that contributed to the fatality were coded. The coding focussed on such aspects as the environment, equipment design and upkeep, as well as human factors like work practice, supervision, training, medical precursors and task errors. The primary events and contributory factors were ranked and weighted in order to establish the casual relationships between them. Multivariate analysis was used to determine the nature of these relationships across all fatalities.

As this study covers so many types of accidents in such a wide variety of occupational groups, the results provide more specific information about human behavioural epidemiological method to evaluate the impact of different aspects of human error on accident causation. This method will allow highlighting of the most suitable strategies for accident prevention.

## INTRODUCTION

Although one of the most well-studied areas of accident analysis, human factors are among the most difficult to isolate when looking for strategies to improve accident prevention. There is very little real-world information other than for specific occupations on what aspect of the human factor warrants modification. The aviation industry, for example, has provided an often emulated model for accident investigation and analysis. It is often stated that well over half of aviation accidents are caused by human factors. Similar proportions are quoted for other industries.

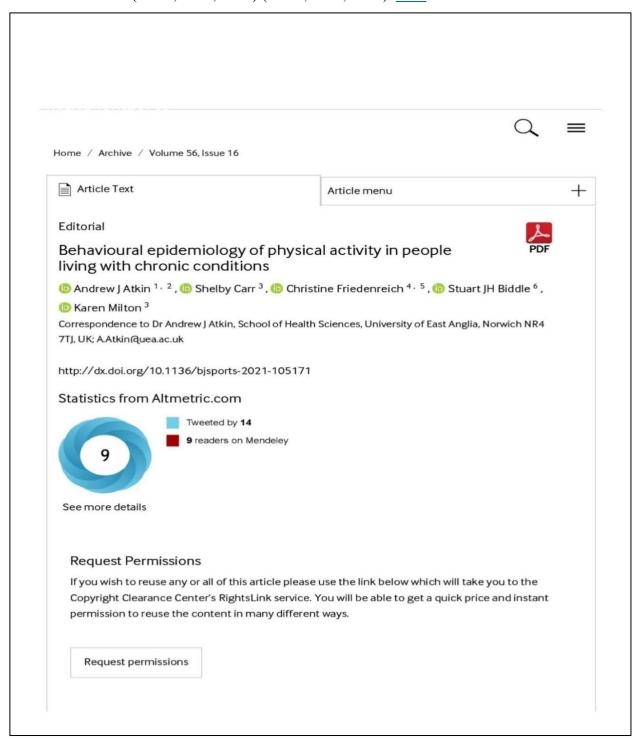
Unfortunately such analyses of human factors involvement often do not take the field much further. Aspects of human factors such as the nature and timing

0376-6349/90/\$03.50 © 1990—Elsevier Science Publishers B.V.

<sup>\*</sup>Presented at the International Conference on Strategies for Occupational Accident Prevention, Stockholm, Sweden, 21–22 September 1989.

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**Εικόνα-163.** - Behavioural epidemiology of physical activity in people living with chronic conditions (Atkin, et al., 2022) (Atkin, et al., 2022). Link.



## Εικόνα-164. The behavioural epidemiology of weight control (Crawford & Owen, 1994). Link.

WEIGHT CONTROL

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   Legionnaires' disease emergency management plan. Sydney: NSW
- Legionnaires' disease emergency management plan. Sydney: NSW Health Department, 1992.

## The behavioural epidemiology of weight control

### **David Crawford**

National Centre for Epidemiology and Population Health, Canberra

#### Neville Owen

Department of Community Medicine, University of Adelaide

Abstract: Excess body weight is associated with increased health risk, but there are also risks to health Abstract: Excess body weight is associated with increased health risk, but there are also risks to health related to weight-control practices. While representative population data are available on the anthropometry of body weight and its sociodemographic correlates in Australia, less is known about the population prevalence and correlates of weight-control behaviours. We examine the prevalence of overweight and obesity, and low body weight, in the Australian population, using data from studies in which height and weight have been objectively measured; we describe the sociodemographic correlates of overweight and obesity, we outline relevant aspects of Australian health-system and private-sector approaches to body weight control; and we describe the findings of Australian studies of weight-control practices and related beliefs and attitudes. These findings relate mainly to women, particularly younger women, and little is known about the weight-control practices of Australian men. We suggest research which may promote a better understanding of weight-control practices in the Australian population. (Aust J Public Health 1994; 18: 143–8)

ealth authorities are concerned about excess body weight because it is a risk factor for a number of prevalent conditions, including hypertension, hyperlipidaemia, non-insulindependent diabetes mellitus, gall bladder disease and cardiovascular disease. Prospective studies have shown a J-shaped relationship between body weight and risk of premature mortality, with the highest levels of body weight being associated with greatly increased risk. Long-term prospective studies have shown that degree of overweight is an independent predictor of premature mortality. There are also concerns about low body weight, with individuals in this category being at increased risk. Overweight people are encouraged to reduce their weight, and those of low body weight to increase their weight to a healthier level.

In the context of these concerns and initiatives, an ealth authorities are concerned about excess

In the context of these concerns and initiatives, an accurate and comprehensive understanding of the nature and extent of weight-control practices in the community is important. This is particularly so because there exists evidence that some of those attempting to alter their body weight may paradoxically put their health at risk. Many strategies to control body weight are available, ranging from dietary restriction and increased physical activity through to less desirable behaviours such as laxative and diuretic abuse, smoking for weight control, and extreme behaviours such as vomiting and purging. These strategies for weight control all have the potential, to a greater or lesser extent, to cause harm to health.<sup>4</sup>

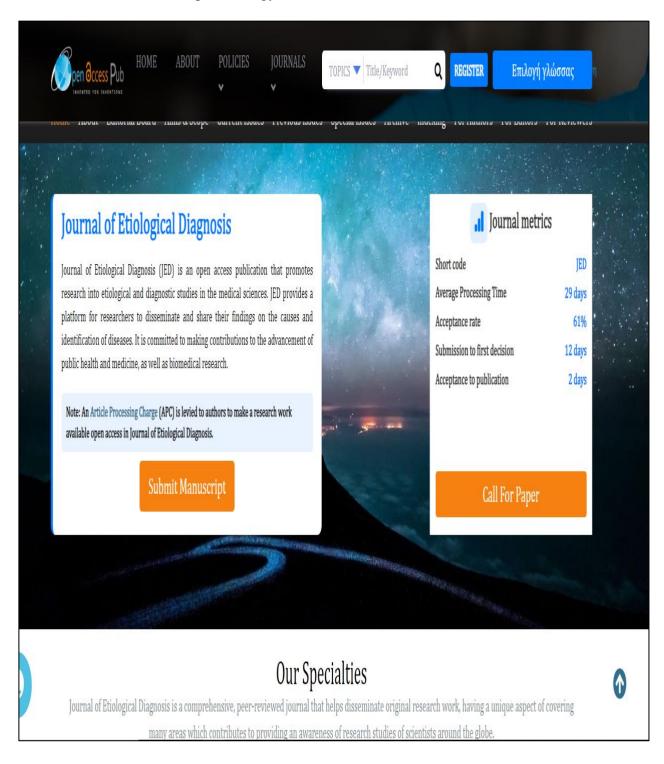
to health.<sup>4</sup>
Unsuccessful attempts to alter body weight (weight loss and subsequent regain) may also pose a significant long-term health risk. Large or frequent fluctuations in body weight may increase the risk of premature mortality, particularly from cardiovascular disease.<sup>5</sup> Perhaps the most convincing evidence on the health effects of cycles of weight change is based on the 32-year follow-up data from the Framingham study.<sup>5</sup> Multivariate analyses controlling for obesity, trends in weight over time, and indicators of cardiovascular disease revealed positive independent associations between weight positive independent associations between weight

Correspondence to Mr David Crawford, National Centre for Epi-demiology and Population Health, The Australian National Uni-versity, GPO Box 4, Canberra, ACT 2601. Fax (06) 249 0740.

AUSTRALIAN JOURNAL OF PUBLIC HEALTH 1994 VOL 18 NO. 2

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Εικόνα-169. Behavioural Epidemiology (Talaat, n.d.). Link.



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Εικόνα-170. Behavioural epidemiology of physical activity (Medical Research Council, n.d.). Link.



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## Behavioural Epidemiology of Physical Activity

Lead Research Organisation: MRC Epidemiology Unit Go back

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- Outcomes

#### Abstract

#### Funding

#### details

Physical activity is important for young people's current and future health. However, it appears that many young people are not active enough to enjoy these health benefits. We also know that children do less physical activity when they become older, particularly during teenage years. Identifying ways to maintain and promote young people's levels of physical activity is therefore important for public health.

Physical activity behaviour is complex, not just consisting of sports activities but including behaviours such as walking the dog, cycling to school, playing in the playground and physical education lessons. How active young people are is influenced by many factors, such as their preference for physical activity, the provision of footpaths in the neighbourhood, weather and how much their parents support them in being physically active. How these factors work together in promoting physical activity and how to use this knowledge to promote increases in physical activity is still largely unknown.

The Behavioural Epidemiology of Physical Activity Group therefore aims to improve the long-term health of young people

- developing and evaluating interventions to increase physical activity in young people
- increasing our understanding of where, when and how physical activity interventions in young people may be applied

#### **Technical Summary**

Physical activity during childhood is important for both contemporary and future health. Evidence suggests that young people's levels of physical activity are insufficient for health. More importantly, physical activity on average declines with age. Identifying ways to maintain and, where applicable, promote physical activity in young people is therefore a key public health issue

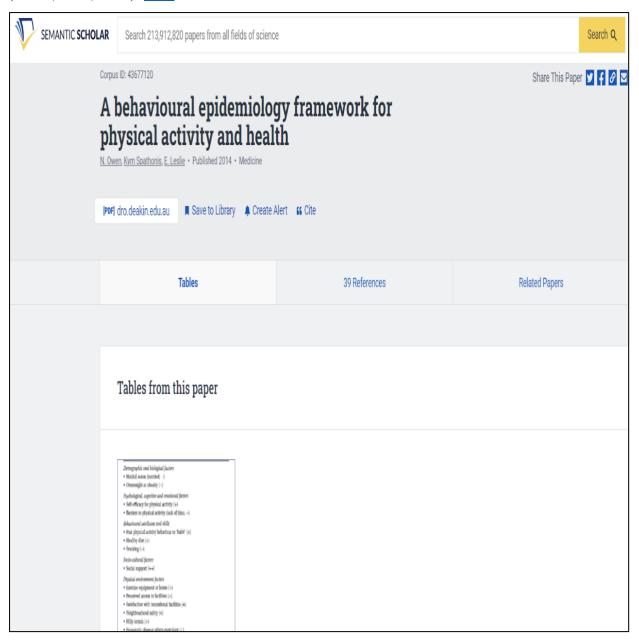
Physical activity is a complex behaviour, influenced by a combination of factors from multiple ecological levels, including individual, socio-cultural, policy and environmental-level factors. The relative importance of these factors and how they interact is still largely unknown. Moreover, our current understanding is largely based on cross-sectional evidence, limiting our ability to draw conclusions about causality and inform intervention development.

The two main aims of the Behavioural Epidemiology of Physical Activity Group are to:

- develop and evaluate interventions to promote physical activity in young people
   use observational research to further understand where, when and how physical activity interventions in young people may

Intervention development and evaluation are a core part of the programme. Using a structured and iterative approach, we undertake explanatory trials to understand the feasibility and effectiveness of specific intervention strategies based on our previous observations. This approach allows for a greater understanding of the causal mechanisms behind behaviour change, and the potential effectiveness of specific components of future, more complex, interventions to be evaluated later. Παρακάτω παρουσιάζεται η αρχική σελίδα του άρθρου που εμφανίζεται στο google scholar και δεν είναι δυνατή η πρόσβαση του.

**Εικόνα-171.** A behavioural epidemiology framework for physical activity and health (Owen, et al., 2014). <u>Link</u>.



## Εικόνα-172. The behavioural epidemiology of sedentary behaviour in inflammatory arthritis: where are we, and where do we need to go? (Sally, et al., 2023). Link.

Rheumatology Advances in Practice, 2023, 7, rkac097 https://doi.org/10.1093/rap/rkac097







## Review

## The behavioural epidemiology of sedentary behaviour in inflammatory arthritis: where are we, and where do we need to go?

Sally A. M. Fenton @ 1,2\*, Ciara M. O'Brien3, George D. Kitas1,2, Joan L. Duda1, Jet J. C. S. Veldhuijzen van Zanten<sup>1,2</sup>, George S. Metsios <sup>® 2,4</sup>

<sup>1</sup>School of Sport, Exercise and Rehabilitation Sciences, University of Birmingham, Edgbaston, Birmingham, UK <sup>2</sup>Department of Rheumatology, Russells Hall Hospital, The Dudley Group NHS Foundation Trust, Dudley, UK <sup>3</sup>School of Psychology, Faculty of Health and Medical Sciences, University of Surrey, Surrey, UK

Department of Nutrition and Dietetics, School of Physical Education, Sport Science and Dietetics, University of Thessaly, Volos, Greece

\*Correspondence to: Sally A. M. Fenton, School of Sport, Exercise and Rehabilitation Sciences, University of Birmingham, Edgbaston, Birmingham B15 2TT,

#### Abstract

In the last decade, studies into sedentary behaviour in inflammatory arthritis have raised important questions regarding its role in this condition. Specifically, evidence is needed on whether sedentary behaviour might exacerbate adverse inflammatory arthritis outcomes, and whether reducing sedentary behaviour might offer an effective avenue for self-management in this population. Research exploring these important research questions is still very much in its infancy and lacks the direction and scientific rigour required to inform effective intervention design, delivery and evaluation. Behavioural epidemiology refers to research that aims explicitly to understand and influence health behaviour patterns to prevent disease and improve health. To this end, the Behavioural Epidemiology Framework specifies a focused approach to health behaviour research, which leads to the development of evidence-based interventions directed at specific populations. In this review, we introduce the Behavioural Epidemiology Framework in the context of research into sedentary behaviour in inflammatory arthritis and ask: where are we, and where do we need to go?

#### Lay summary

#### What does this mean for patients?

What does this mean for patients?

In the last few years, an increasing amount of research has started to investigate the links between sedentary behaviour, or sitting time, and health among people living with inflammatory arthritis. Overall, this research provides an initial indication that people living with inflammatory arthritis who spend more time sitting (and expending little energy) might experience worse outcomes, such as increased pain, fatigue and poorer physical function. However, there is still very little research being carried out in this area, and the research that has been done to date is very varied with regard to the scientific approach taken and the outcomes that have been studied. A more focused and systematic approach to research in this area is needed, so that researchers approach questions regarding the role of sitting time in inflammatory arthritis in the same way. In this way, we can generate a larger body of scientific evidence that can be used to design new ways, or interventions, that are more likely to bein penple living with inflammatory arthritis to reduce their stilling time and improve their health. In this article, we introduce a systematic approach to the penple living with inflammatory arthritis to reduce their stilling time and improve their health. In this article, we introduce a systematic approach to the penple living with inflammatory arthritis to reduce their stilling time and improve their health. In this article, we introduce a systematic approach to the penple living with inflammatory. to help people living with inflammatory arthritis to reduce their sitting time and improve their health. In this article, we introduce a systematic approach to research that can be applied to understand how sitting time might be related to inflammatory arthritis-specific outcomes and overall health, in order to design these interventions. In introducing this approach, we highlight studies into sitting time in inflammatory arthritis that have already been conducted, and outline the research that we propose needs to be done to move this scientific field forward.

Keywords: sedentary behaviour, sitting, behavioural epidemiology, inflammatory arthritis, intervention

### Key messages

- · Research into sedentary behaviour in inflammatory arthritis is dominated by cross-sectional studies, using heterogeneous methodologies.
- · The Behavioural Epidemiology Framework outlines a sequential approach to research, to inform effective intervention design
- · More studies on sedentary behaviour in inflammatory arthritis should use experimental designs, validate measures and explore determinants.

## Introduction

Prospective observational evidence from the general population suggests that high levels of sedentary behaviour (waking activities in a seated or reclining posture, requiring ≤1.5 metabolic equivalents) [1] are linked to increased risk for allcause and cardiovascular mortality, some cancers, and to

increased incidence of type 2 diabetes and heart disease [2, 3]. This is especially the case for individuals who are not achieving recommended levels of moderate-to-vigorous physical activity (MVPA; activity ≥3 metabolic equivalents) [4, 5]. An accumulating body of experimental evidence also suggests that the pattern in which sedentary time is accumulated might

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**Εικόνα-182.** Epidemiology of injecting drug use, prevalence of injecting-related harm, and exposure to behavioural and environmental risks among people who inject drugs: a systematic review (Degenhardt, et al., 2023). <u>Link</u>.

**Articles** 

## Epidemiology of injecting drug use, prevalence of injectingrelated harm, and exposure to behavioural and environmental risks among people who inject drugs: a systematic review



Louisa Degenhardt, Paige Webb, Samantha Colledge-Frisby, Jeremy Ireland, Alice Wheeler, Sophie Ottaviano, Alex Willing, Abe Kairouz, Evan B Cunningham, Behzad Hajarizadeh, Janni Leung, Lucy T Tran, Olivia Price, Amy Peacock, Peter Vickerman, Michael Farrell, Gregory J Dore, Matthew Hickman\*, Jason Grebely\*

oa

### Summary

Background People who inject drugs are exposed to various and changing risk environments and are at risk of multiple harms related to injecting drug use (IDU). We aimed to undertake a global systematic review of the prevalence of IDU, key IDU-related harms (including HIV, hepatitis C virus [HCV], and hepatitis B virus [HBV] infection and overdose), and key sociodemographic characteristics and risk exposures for people who inject drugs.

Methods We systematically searched for data published between Jan 1, 2017, and March 31, 2022, in databases of peerreviewed literature (MEDLINE, Embase, and PsycINFO) and grey literature as well as various agency or organisational websites, and disseminated data requests to international experts and agencies. We searched for data on the prevalence, characteristics, and risks of people who inject drugs, including gender, age, sexuality, drug-use patterns, HIV, HCV, and HBV infections, non-fatal overdose, depression, anxiety, and injecting-related disease. Additional data were extracted from studies identified in our previous review. Meta-analyses were used to pool the data where multiple estimates were available for a country. We present country, regional, and global estimates for each variable examined.

Findings We screened 40427 reports published between 2017 and 2022, and the 871 eligible reports identified were added to the 1147 documents from the previous review. Evidence of IDU was documented in 190 of 207 countries and territories, and 14-8 million people (95% uncertainty interval [UI] 10·0-21·7) aged 15-64 years globally were estimated to inject drugs. Existing evidence suggests that there might be 2-8 million (95% UI 2-4-3-2) women and 12-1 million (95% UI 11·0-13·3) men who inject drugs globally, and that 0·4% (95% CI 0·3-1·3) of people who inject drugs identify as transgender. The amount of available data on key health and social risks among people who inject drugs varied widely across countries and regions. We estimated that 24·8% (95% CI 19·5-31·6) of people who inject drugs globally had experienced recent homelessness or unstable housing, 58·4% (95% CI 52·0-64·8) had a lifetime history of incarceration, and 14·9% (95% CI 8·1-24·3) had recently engaged in sex work, with substantial geographical variation. Injecting and sexual risk behaviour varied considerably geographically, as did risks of harms. Globally, we estimated that 15·2% (95% CI 10·3-20·9) of people who inject drugs are living with HIV, 38·8% (95% CI 31·4-46·9) have current HCV infection, 18·5% (95% CI 31·3-24·1) have recently overdosed, and 31·7% (95% CI 33·6-40·5) have had a recent skin or soft tissue infection.

Interpretation IDU is being identified in a growing number of countries and territories that comprise more than 99% of the global population. IDU-related health harms are common, and people who inject drugs continue to be exposed to multiple adverse risk environments. However, quantification of many of these exposure and harms is inadequate and must be improved to allow for better targeting of harm-reduction interventions for these risks.

Funding Australian National Health and Medical Research Council.

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## Introduction

People who inject drugs face multiple and multilevel risks and adverse outcomes. Risk environments are dynamic, and occur at both the micro and macro levels; they can be social, physical, economic, or political in nature, and can affect risk behaviour and the likelihood of harms. There is increasing recognition that to reduce

drug-related harms requires modifying social and structural risks and individual behaviours.

Transmission of blood-borne viruses—including HIV, hepatitis C virus (HCV), and hepatitis B virus (HBV)—through injection equipment as a consequence of injecting drug use (IDU) is a leading contributor to morbidity and mortality. Although blood-borne viruses

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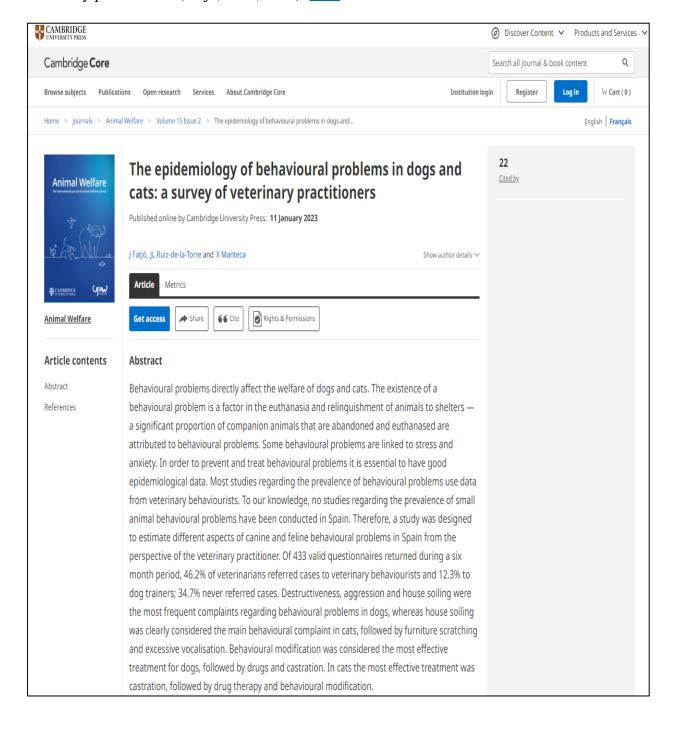
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**Εικόνα-194.** The epidemiology of behavioural problems in dogs and cats: a survey of veterinary practitioners (Fatjó, et al., 2006). Link.



**Εικόνα-195.** A perspective on the behavioural epidemiology, the determinants, and the stages of exercise involvement (Vita & Owen, 2007). <u>Link</u>.

#### A Perspective on the Behavioural Epidemiology, the Determinants, and the Stages of Exercise Involvement

PHILIP VITA AND NEVILLE OWEN
University of Adelaide

abitual physical activity is associated with a number of health benefits, particularly in relation to the prevention of cardiovascular disease. Psychological research has made useful contributions to the understanding of physical activity as a pattern of behaviour. We describe the behavioural epidemiology of physical activity, exercise assessment issues, and Australian data on the population prevalence and recent trends in exercise participation. We present a selective commentary on studies of the determinants of exercise participation, with examples of studies likely to be of particular relevance to psychologists. Studies of potential determinants (demographic and biological characteristics; past and present activity patterns; self-motivation; knowledge, attitudes, and beliefs; environmental characteristics) show inconsistent patterns of findings. Making better use of representative population data on physical activity, studying the role of environmental influences on participation, understanding more clearly the stages of involvement in exercise, and clarifying the factors related to these different stages are potentially fruitful directions for research. Such research is needed to inform public health initiatives to promote higher levels of involvement in physical activity.

The past twenty years have seen a marked increase in the contribution of psychological research which aims to understand participation in physical activity. This trend has been driven by the accumulating body of evidence that regular physical activity results in a number of health benefits (Blair, Kohl, Gordon, & Paffenbarger, 1992), particularly the reduced risk of cardiovascular disease (Bauman & Owen, 1991; Powell, Thompson, & Caspersen, 1987). There has been considerable interest in understanding and promoting higher levels of involvement in physical activity in industrialised countries, particularly in North America and Australia (Mason & Powell, 1985; Owen & Dwyer, 1988). Psychological research on physical activity may be considered as a sub-area of behavioural epidemiology, of sport and exercise psychology, or of health psychology (see earlier reviews by Lee & Owen, 1986; Owen & Lee, 1987). The study of physical activity is a large, active, and diverse field which overlaps with several other disciplines and subdisciplines, including epidemiology, exercise physiology, preventive cardiology, marketing, and exercise and sport sociology. The major rationale for psychological study of

physical activity derives from the demonstrated usefulness of exercise in preventing or ameliorating a range of health problems — a rationale which provides a strong link with epidemiology (Jeffery, 1989). Exercise psychology research is also directed towards a number of different levels of analysis within the overall discipline (Cacioppo & Berntson, 1992), ranging from psychophysiology (Blumenthal, Williams, Wallace, Williams, & Needles, 1982) through to population studies and social marketing (Donovan & Owen, in press).

#### The Behavioural Epidemiology of Physical Activity

The behavioural epidemiology of physical activity at its most basic level is concerned with the identification of behaviours that are causally linked to disease. One step removed from the relationship between behaviour and disease is the epidemiological study of the behaviour itself. With regard to physical activity, this latter aspect of behavioural epidemiology concerns itself with the study of who is active, who is inactive, and how we might help them become more active. The focus is on the distribution and determinants of the behaviour, and not the disease itself (Owen & Bauman, 1992). Dishman (1990) has argued that the public health potential of physical activity cannot be defined or fulfilled until the social, biological, and behavioural determinants of participation are identified and understood. Soundly based psychological perspectives on the determinants of physical activity can be used to guide the development of large-scale interventions and public policy (Booth, Bauman, Oldenburg, Owen, & Magnus, 1992; Owen & Lee, 1989).

The most common means for assessing physical activity as a pattern of behaviour in population studies and intervention trials is by questionnaires or diary records. Some questionnaires require a skilled interviewer and can take up to an hour, whereas others can be self-administered and completed in 10–15 minutes. Self-report measures are, however, not without methodological difficulties. As an indirect measure of behaviour, they are susceptible to many of the traditional problems of self-reported measurement, including sampling bias, recall and intrusion bias, social desirability, and over-reporting (Bauman, 1987; Blair, 1984). Some studies have validated self-report measures

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**Εικόνα-200.** Cultural components of behavioural epidemiology: implicatios for primary health care (Heggenhougen & Shore, 1986). Link.

Soc Sci Wed Vol 22, No 11, pp 1235-1245 1986 Printed in Great Britain 0277-9536 86 \$3 00 ± 0 00 Pergamon Journals Ltd

#### SECTION T

## CULTURAL COMPONENTS OF BEHAVIOURAL EPIDEMIOLOGY: IMPLICATIONS FOR PRIMARY HEALTH CARE

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Abstract—In this article we discuss the association of culturally linked behaviour and epidemiology that patterns of disease are significantly related to cultural sets of normative beliefs and behaviour. The literature on this is vast and includes much of what is written under the headings of Medical Anthropology as well as, for example, Cross-cultural Psychiatry and Medical Geography. A comprehensive review is obviously impossible, but as this is presented primarily as a background paper, basic issues are raised, and related to examples from the literature, to stimulate discussion. The article is divided into four subsections which give an indication of our focus (1) culture, disease and illness causation; (2) utilization and provision of health resources, (3) health, illness and normative socio-political and economic behaviour and (4) primary health care, community participation and culture—implications for the future

#### INTRODUCTION

We need only read Fabrega's 1974 volume Disease and Social Behavior [1] and scan its 30 pages of references to be convinced that behaviour and disease prevalence and incidence are interconnected. It is clear that people's behaviour affect agents, hosts and environment to either increase or decrease the risk of a whole range of diseases and ailments. It is this which we understand as behavioural epidemiology, the study of patterns of morbidity and mortality of various groups which may be associated with particular behaviour (e.g. it has been found that smoking behaviour is, epidemiologically, associated with higher rates of lung cancer for smokers than for non-smokers)

There are many reasons why we behave as we do, but much of what we do, and how we do it, is culturally determined. We may agree with Landy that, "almost every facet of human behavior seems to be either modifiable or impressively influenced by cultural factors" [2] Culture has many definitions, but most would agree that it is a set of beliefs and behaviour shared by a specific group. Thus by the very fact of our belonging to such a group, as we all do, we all have been socialized to accept certain values and behaviours as normative.

Even if we argue that no culture is static, with some being particularly fluid, and that acculturation and multiculturism. not to mention cultural imperialism, have relevance in most parts of the world, we are all undeniably influenced by cultural norms, be they those of dominant and/or of the sub-culture in which we live It may be that the culture of our youth is different from the one we live in as adults both because of change over time and because we may have moved from one culture to another, but this does not minimize the influence of culture, though it does signify dissonance.

Since the publication of Benjamin Paul's Health, Culture and Community [3] in 1955 and Steven Polgar's major article, "Health and Human Behavior areas of interest common to the social and medical sciences" [4] in Current Anthropology in 1962, the connection between culture and epidemiology has been clearly established. It is now widely accepted, not only by social scientists but also by a substantial number of health professionals that patterns of disease are significantly related to cultural sets of normative beliefs and behaviour. It is now no longer considered strange that anthropologists work in medical schools or with health services programmes as it was less than 10 years ago.

More recent volumes such as Landy's, 1977, Culture, Disease and Healing [2] and those published in the "Comparative Studies of Health Systems and Medical Care" series edited by Leslie [5] since 1978 and those in the "Culture, Illness and Healing" series edited by Kleinman [6] which began in 1981 are but a few of the more well known of a vast literature which convincingly makes the connection between culture, behaviour and epidemiology (e.g. [7–14]). The current prominence of this connection does not imply that it is a new discovery. It has been recognized and expressed by medical philosophers and practitioners from Hippocrates [15] to Virchow [16] and, more recently, Dubos [17, 18] and Engel [19]. The rediscovery is connected with a growing disillusionment with the disproportionate prominence and pre-occupation

The views expressed in this article are those of the authors and do not necessarily represent those of the institutions with which they are associated.

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**Εικόνα-209.** Behavioural ecology articles within Journal of Exposure Science & Environmental epidemiology (Journal of exposure science & environmental epidemi, 2023). Link.

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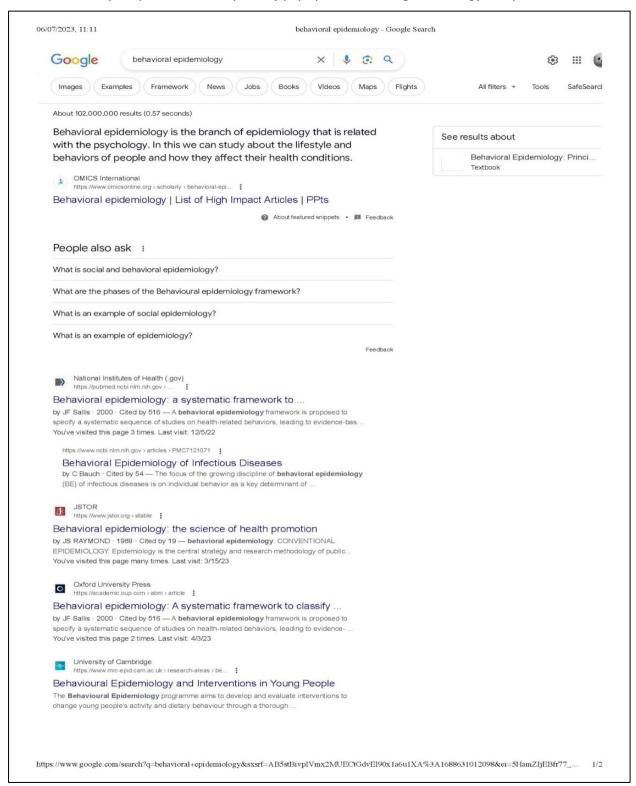
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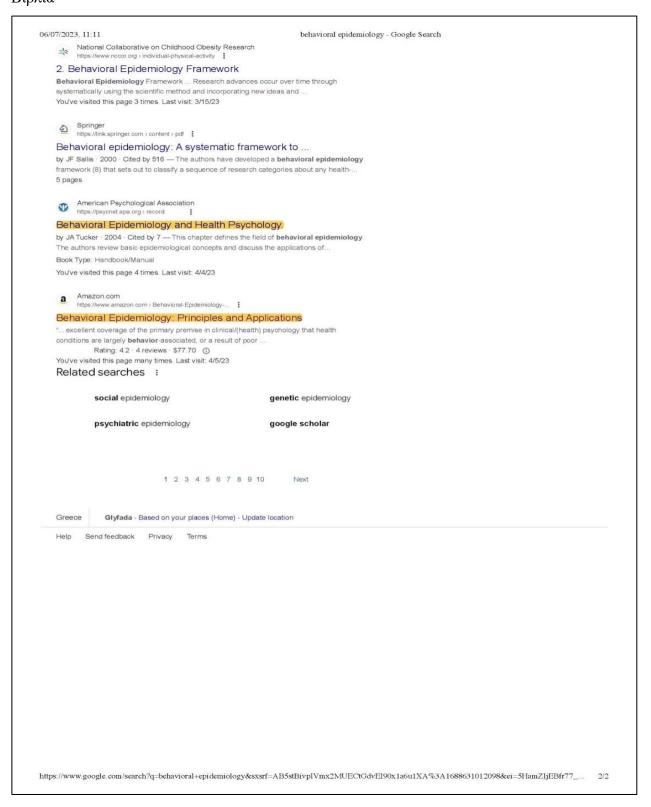
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#### 4.2.2. Όρος behavioral epidemiology

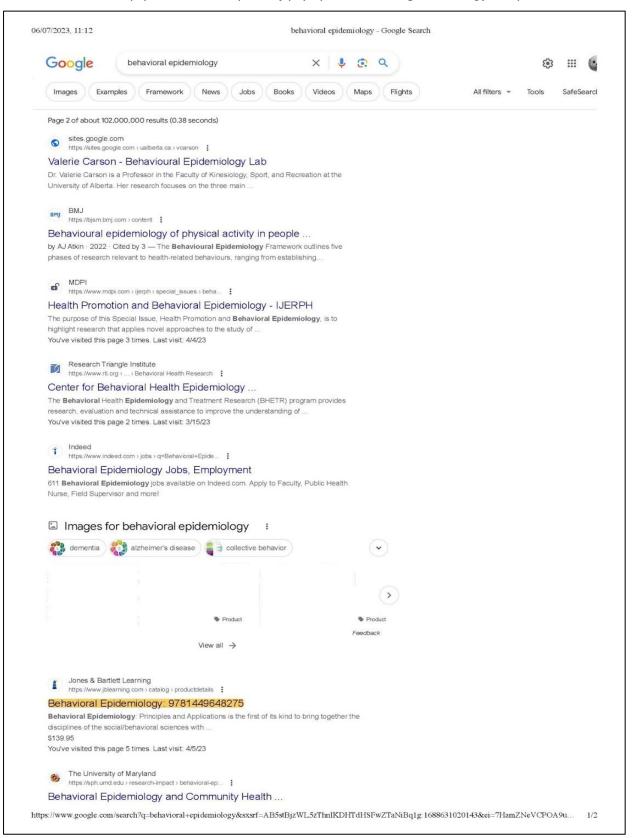
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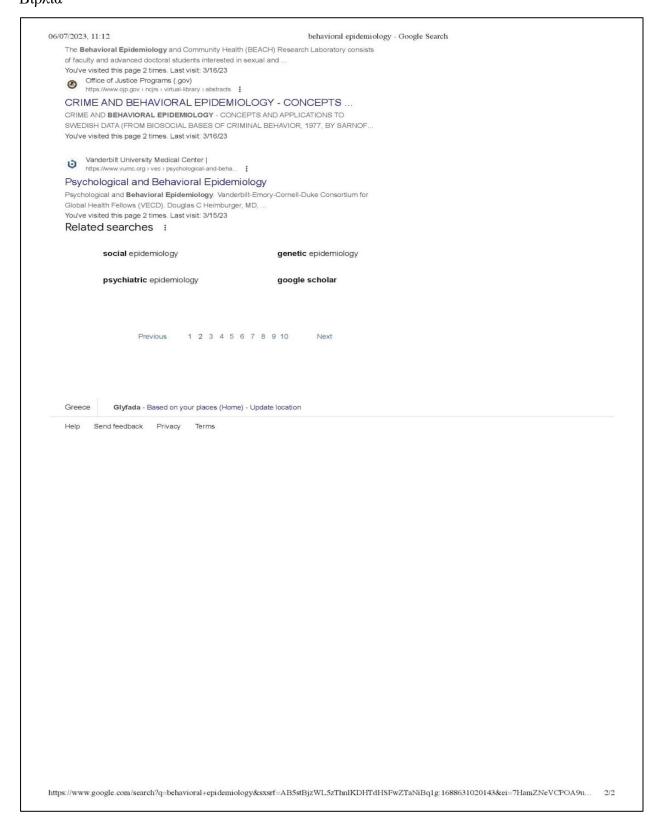
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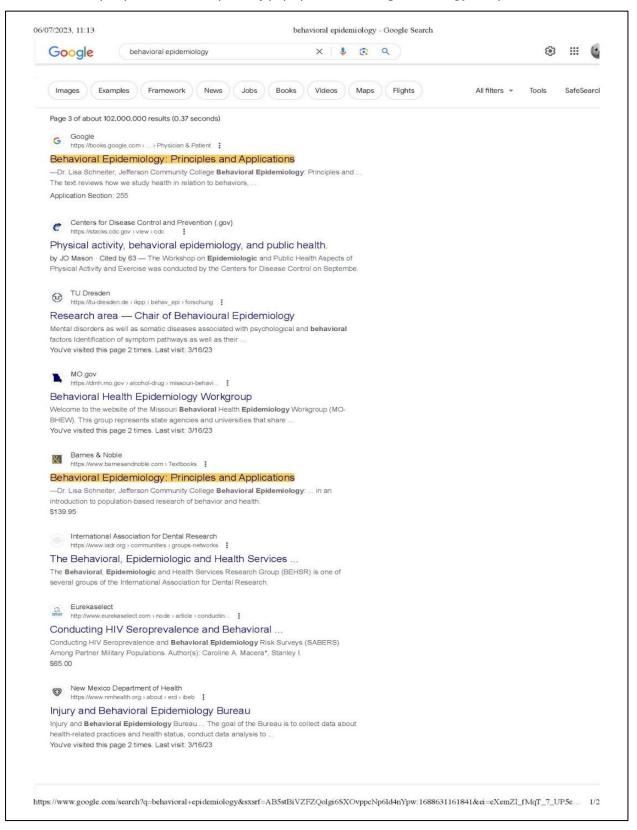
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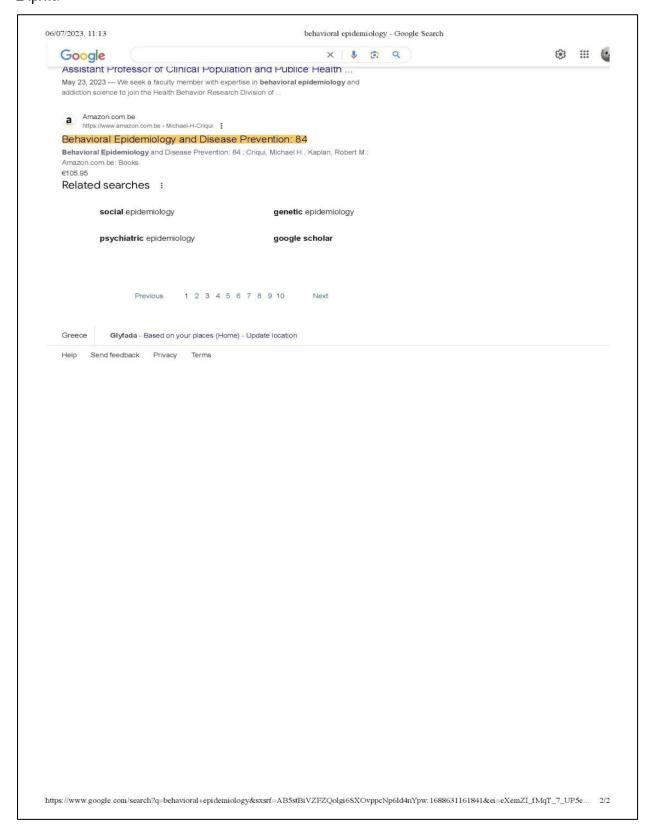
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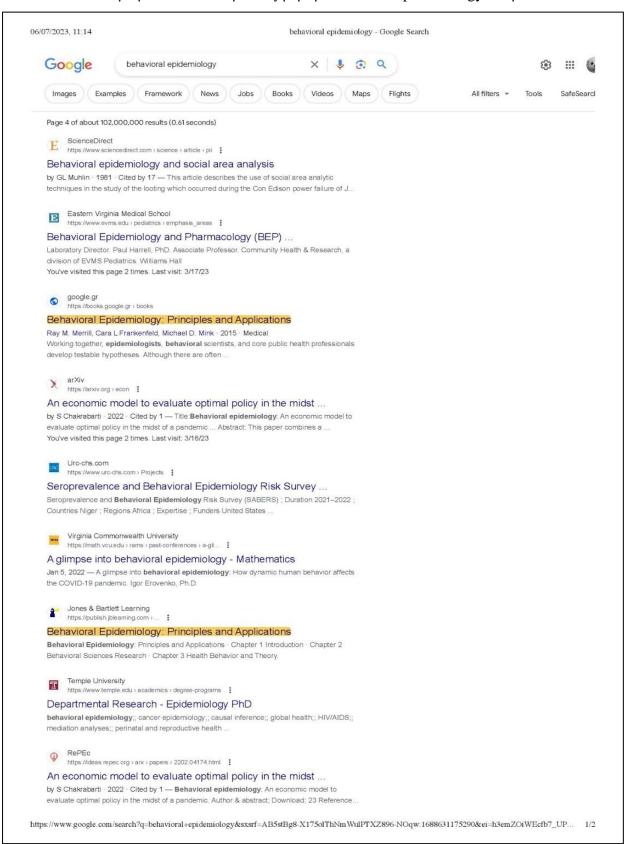
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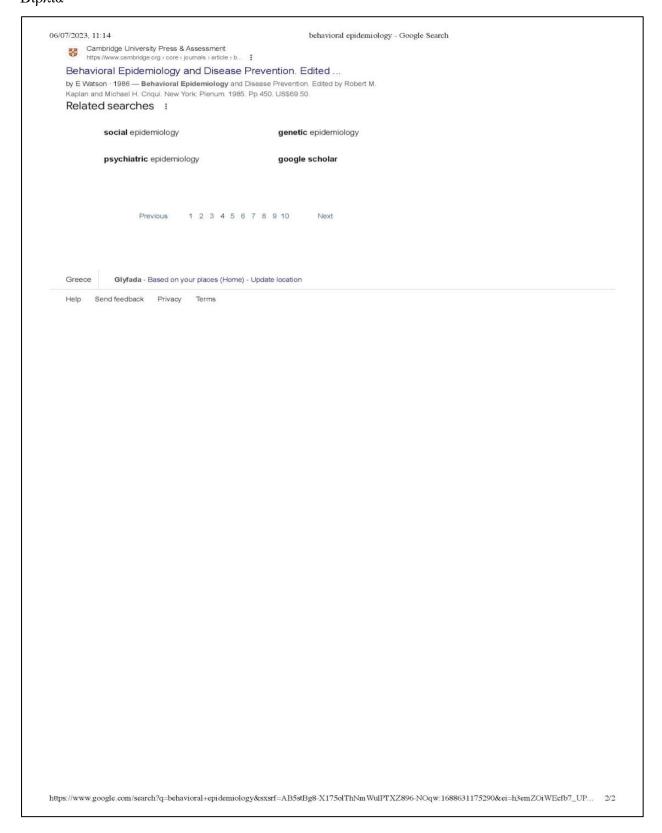
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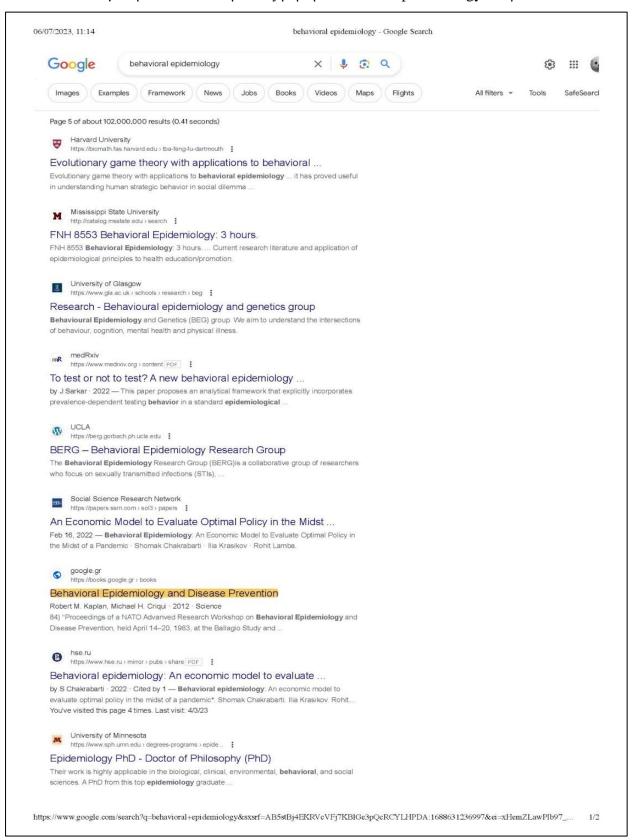
Εικόνα-213. Τέταρτη σελίδα από την αναζήτηση Behavioral epidemiology: Βιβλία



# **Εικόνα-213.** (συνέχεια)-Τέταρτη σελίδα από την αναζήτηση Behavioral epidemiology: Βιβλία



Εικόνα-214. Πέμπτη σελίδα από την αναζήτηση Behavioral epidemiology: Βιβλία

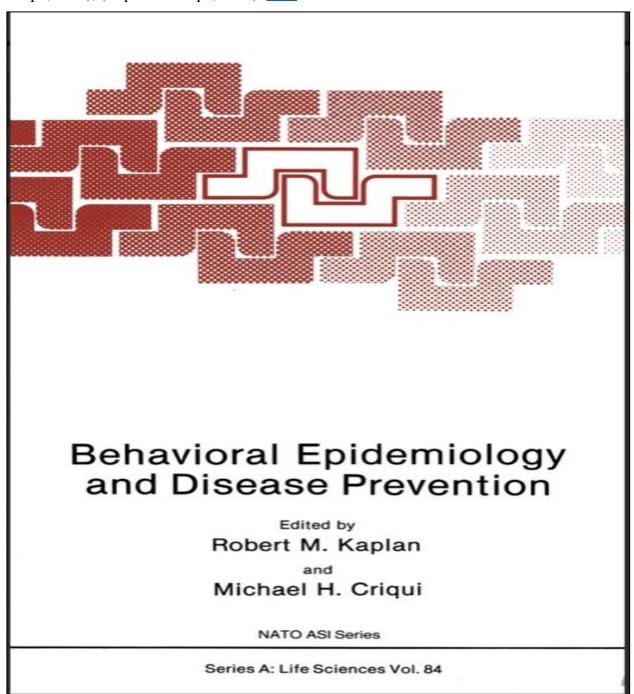


# **Εικόνα-214.** (συνέχεια) -Πέμπτη σελίδα από την αναζήτηση Behavioral epidemiology: Βιβλία



Παρακάτω παρουσιάζονται τα εξώφυλλα και περιεχόμενα των βιβλίων που εμφανίστηκαν στον όρο "behavioral epidemiology".

**Εικόνα-215.** Εξώφυλλο - Behavioral epidemiology and disease prevention (Kaplan & Criqui, 2012), (Kaplan & Criqui, 2012). <u>Link</u>.



**Εικόνα-216.** Περιεχόμενα – (Behavioral Epidemiology and Disease Prevention) (Kaplan & Criqui, 2012), (Kaplan & Criqui, 2012).

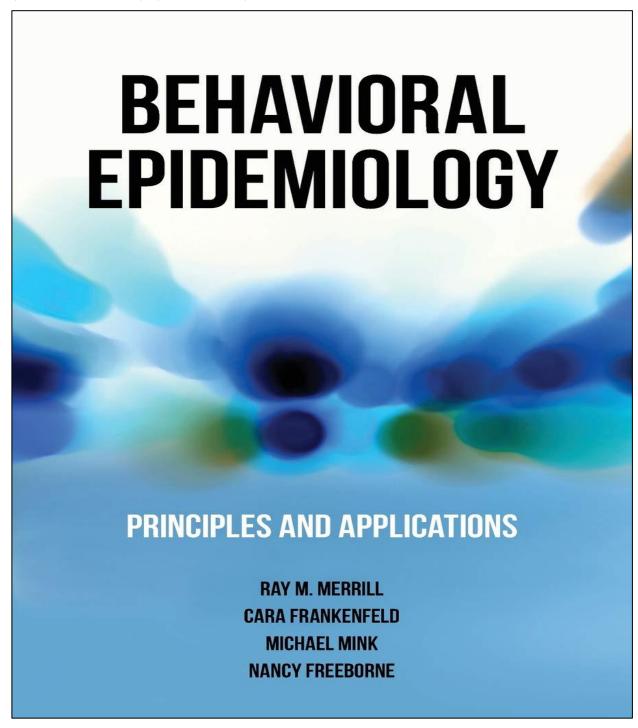
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**Εικόνα-220.** Περιεχόμενα - (Behavioral Epidemiology: Principles and Applications) (Merill, et al., 2015), (Merrill, et al., 2016), (Merrill, et al., 2015), (Merrill, et al., 2015), (Merrill, et al., 2015), (Merrill, 2016).



**Εικόνα-221.** Περιεχόμενα - (Behavioral Epidemiology: Principles and Applications) (Merill, et al., 2015), (Merrill, et al., 2016), (Merrill, et al., 2015), (Merrill, et al., 2015), (Merrill, et al., 2015), (Merrill, et al., 2016).

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MODELS AND PERSPECTIVES IN HEALTH PSYCHOLOGY

3

# HANDBOOK of CLINICAL HEALTH PSYCHOLOGY

EDITOR-IN-CHIEF THOMAS J. BOLL

VOLUME EDITORS

ROBERT G. FRANK, Andrew Baum, and Jan L. Wallander

**Εικόνα-225.** Περιεχόμενα – (Handbook of Clinical Health Psychology) (Tucker, et al., 2004).

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### 4.3. $\Delta$ ΙΠΛ $\Omega$ ΜΑΤΙΚΕΣ $\Delta$ ΙΑΤΡΙΒΕΣ

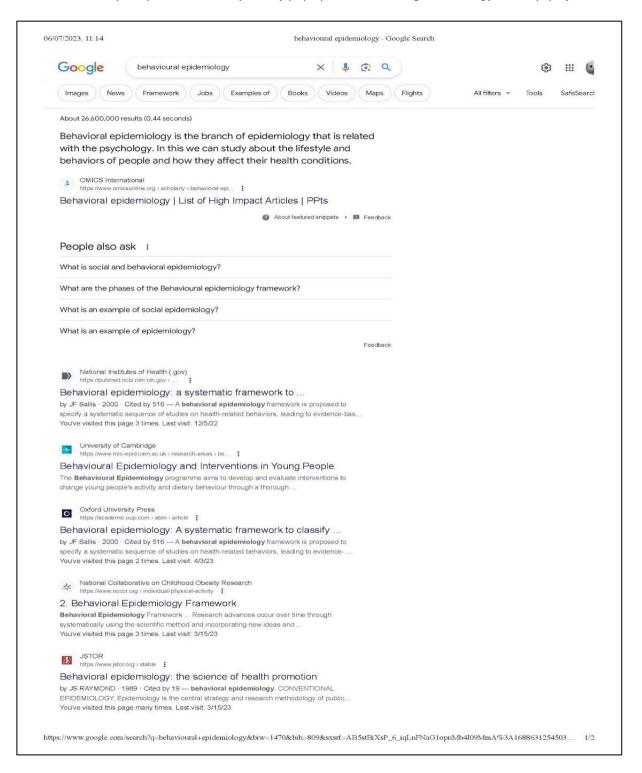
Παρακάτω παρουσιάζονται οι διατριβές που εμφανίστηκαν και στους 2 όρους.

### 4.3.1. Όρος behavioral epidemiology

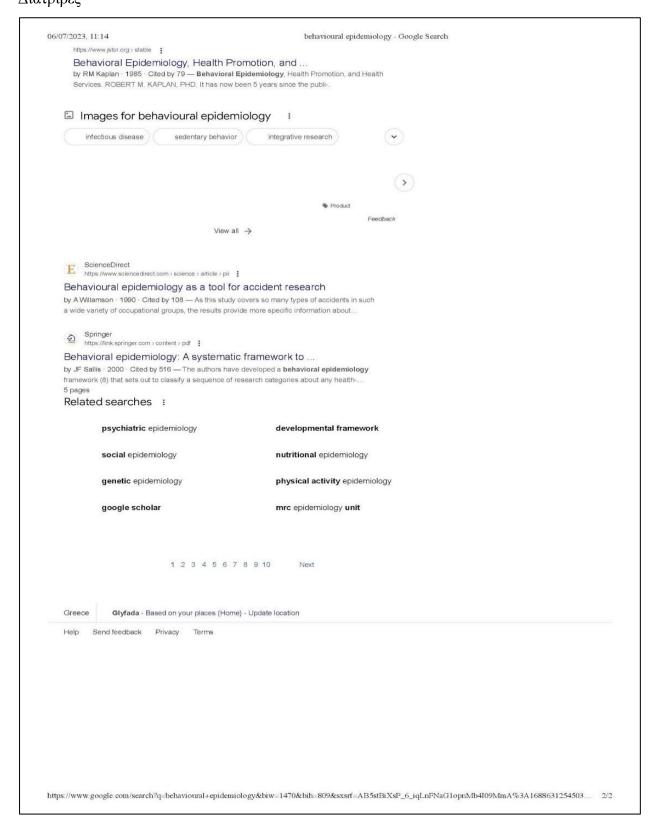
Δεν βρέθηκαν διπλωματικές διατριβές στην αναζήτηση του όρου "behavioral epidemiology".

#### 4.3.2. Όρος behavioural epidemiology

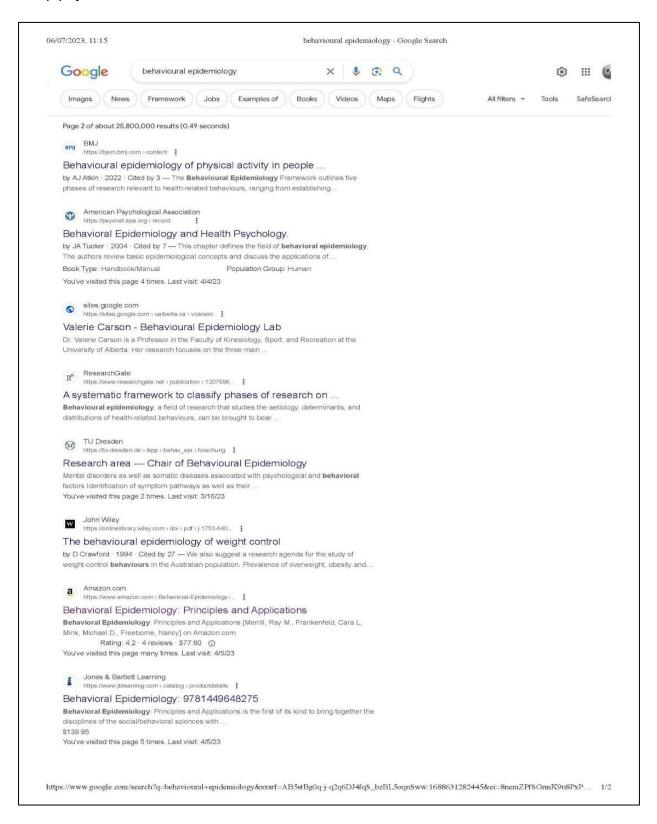
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# **Εικόνα-228.** (συνέχεια) -Πρώτη σελίδα από την αναζήτηση Behavioural epidemiology: Διατριβές



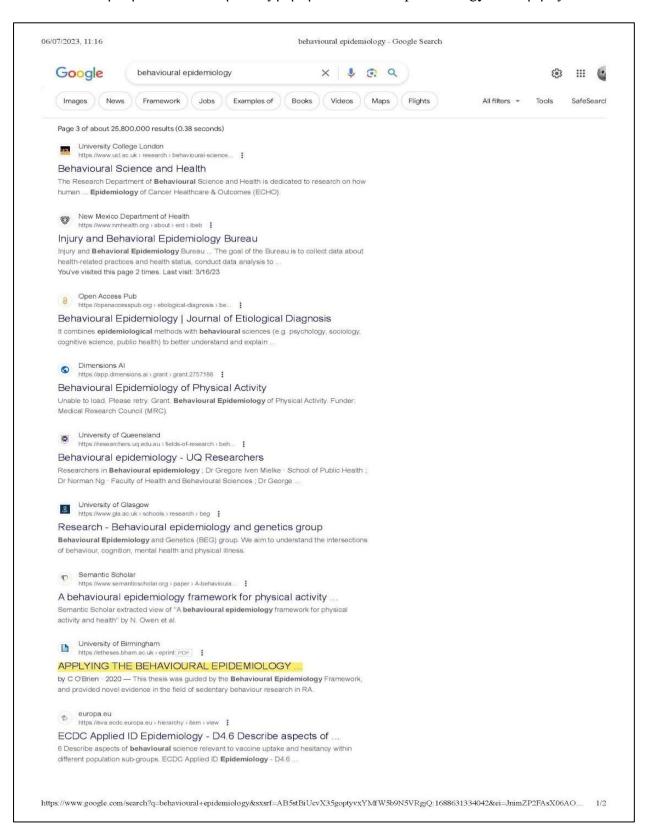
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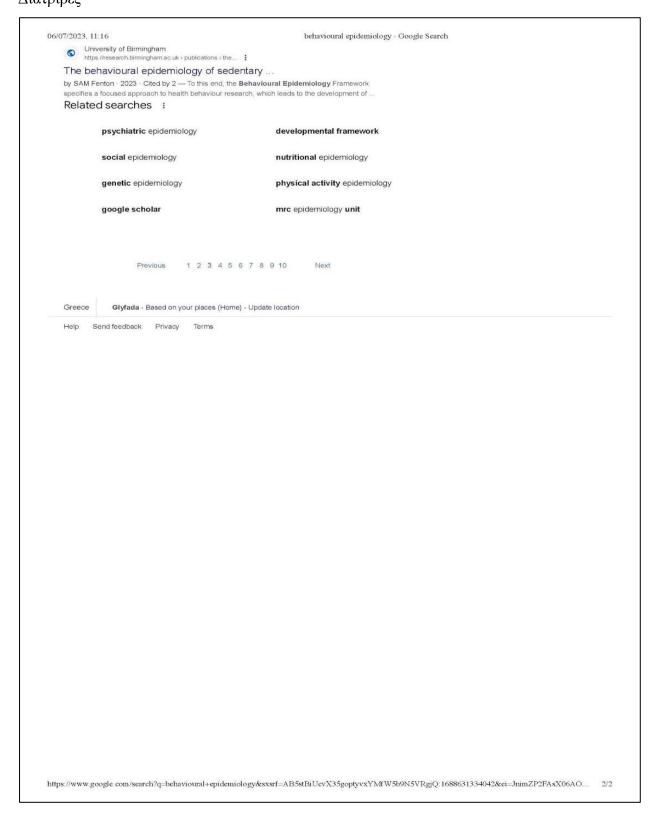
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Εικόνα-230. Τρίτη σελίδα από την αναζήτηση Behavioural epidemiology: Διατριβές



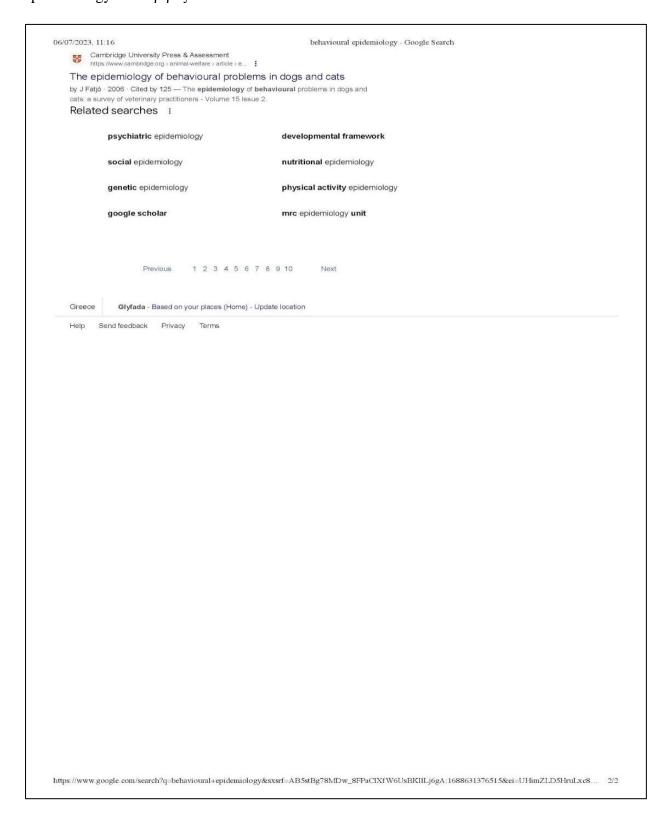
# **Εικόνα-230.** (συνέχεια) -Τρίτη σελίδα από την αναζήτηση Behavioural epidemiology: Διατριβές



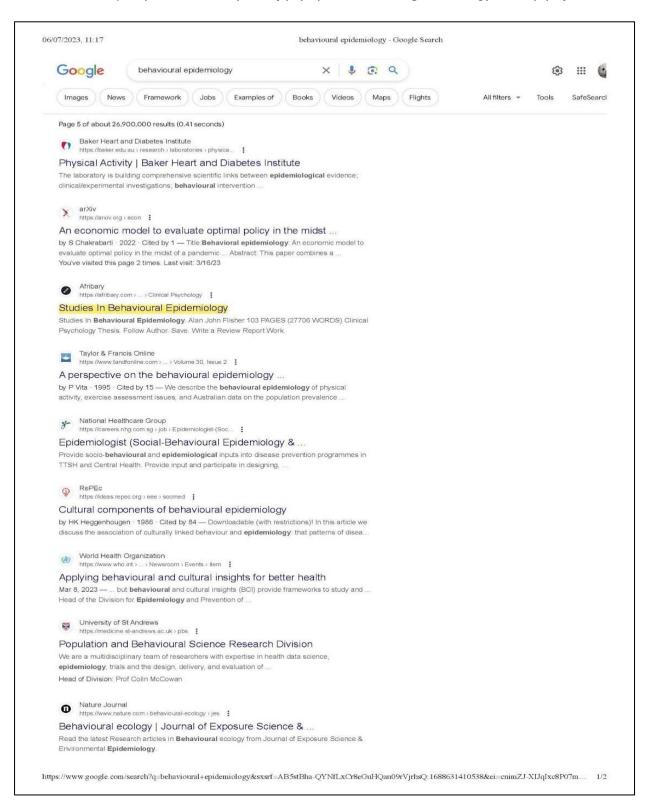
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**Εικόνα-231.** (συνέχεια)-Τέταρτη σελίδα από την αναζήτηση Behavioural epidemiology: Διατριβές



Εικόνα-232. Πέμπτη σελίδα από την αναζήτηση Behavioural epidemiology: Διατριβές



## **Εικόνα-232.** (συνέχεια)-Πέμπτη σελίδα από την αναζήτηση Behavioural epidemiology: Διατριβές



Παρακάτω παρουσιάζονται πιο αναλυτικά οι διατριβές του όρου "behavioural epidemiology".

**Εικόνα-233.** Διατριβή της Ciara O'Brien για το πανεπιστήμιο του Birmingham (O'Brien, 2019). <u>Link</u>.

## APPLYING THE BEHAVIOURAL EPIDEMIOLOGY FRAMEWORK TO INVESTIGATE SEDENTARY BEHAVIOUR AND PHYSICAL ACTIVITY IN RHEUMATOID ARTHRITIS

By CIARA O'BRIEN

A thesis submitted to
The University of Birmingham
For the degree of
DOCTOR OF PHILOSOPHY

School of Sport, Exercise and Rehabilitation Sciences

College of Life and Environmental Sciences

University of Birmingham

September 2019

**Εικόνα-234.** Διατριβή του Alan Fisher για το πανεπιστήμιο του Cape Town (Fisher, 1994). <u>Link</u>.

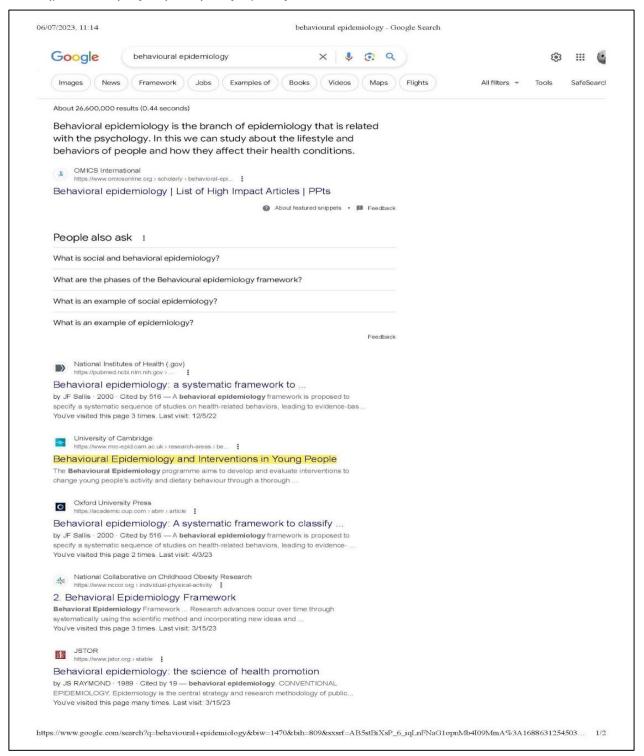
# STUDIES IN BEHAVIOURAL EPIDEMIOLOGY Alan John Flisher M.Sc. (Clinical Psychology), M.B., Ch.B. (Cape Town); F.F.Psych. (S.A.); D.C.H. (S.A.) Collection of papers submitted to the Faculty of Medicine, University of Cape Town, in fulfilment of the requirements of Part III of the Degree Master of Medicine in Psychiatry The University of Cigor fovo has been given the right to consist of this thought in whate or in part. Copyright is hold by the author.

### 4.4. ΑΚΑΔΗΜΑΪΚΟΙ ΦΟΡΕΙΣ / ΕΡΕΥΝΗΤΙΚΕΣ ΟΜΑΔΕΣ

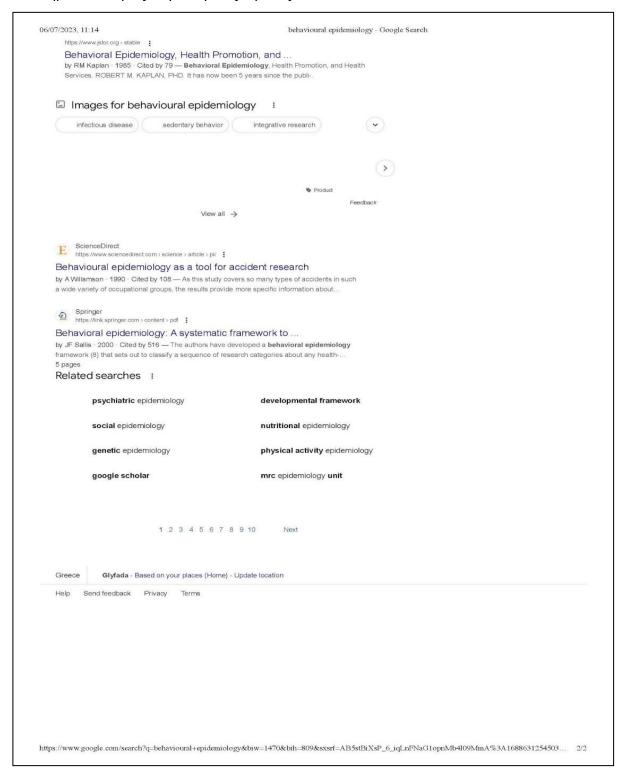
Παρακάτω παρουσιάζονται οι 5 πρώτες σελίδες απο κάθε όρο. Σε κάθε σελίδα έχουν επισημανθεί οι ιστότοποι που εντάσσονται στην κατηγορία "ΑΚΑΔΗΜΑΪΚΟΙ ΦΟΡΕΙΣ / ΕΡΕΥΝΗΤΙΚΕΣ ΟΜΑΔΕΣ".

### 4.4.1. Όρος behavioural epidemiology

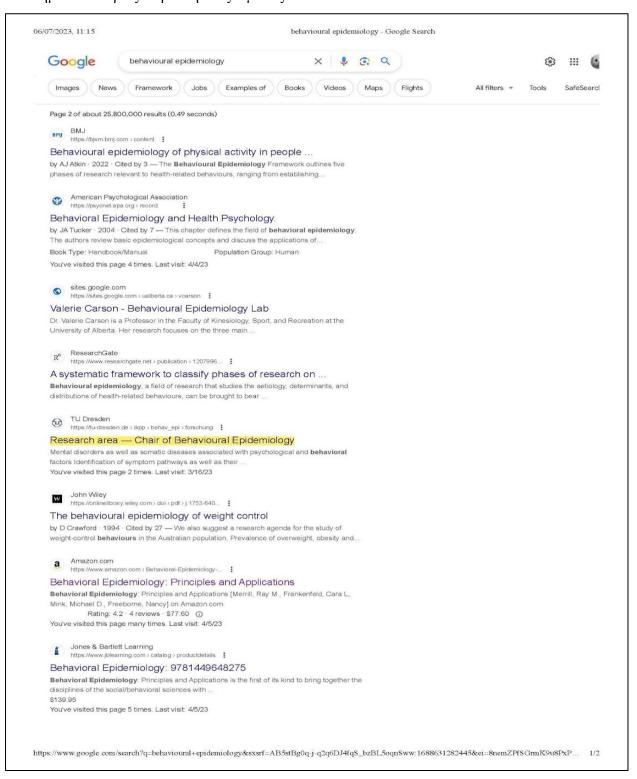
**Εικόνα-235.** Πρώτη σελίδα από την αναζήτηση Behavioural epidemiology: Ακαδημαϊκοί Φορείς / Ερευνητικές Ομάδες



### **Εικόνα-235.** (συνέχεια) -Πρώτη σελίδα από την αναζήτηση Behavioural epidemiology: Ακαδημαϊκοί Φορείς / Ερευνητικές Ομάδες



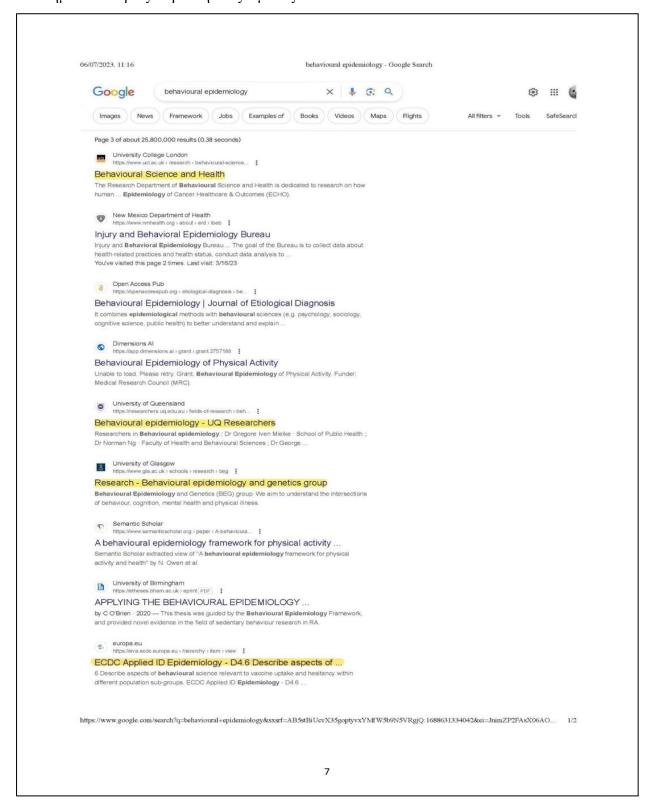
## **Εικόνα-236.** Δεύτερη σελίδα από την αναζήτηση Behavioural epidemiology: Ακαδημαϊκοί Φορείς / Ερευνητικές Ομάδες



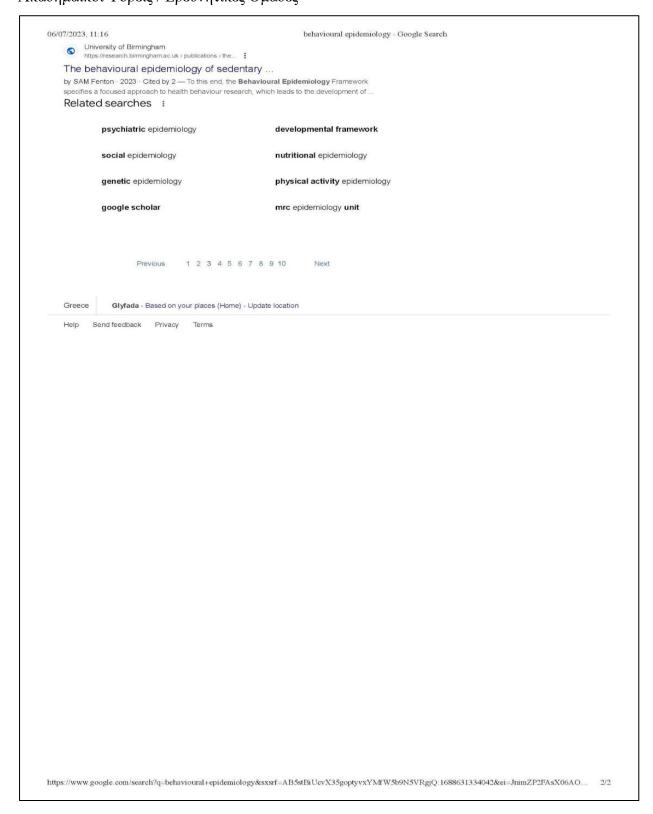
## **Εικόνα-236.** (συνέχεια)- Δεύτερη σελίδα από την αναζήτηση Behavioural epidemiology: Ακαδημαϊκοί Φορείς / Ερευνητικές Ομάδες



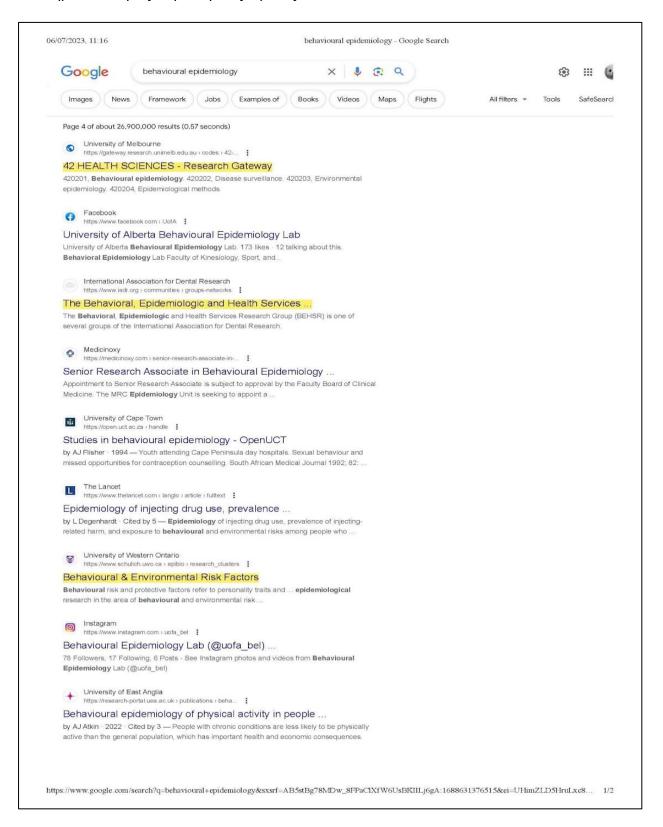
**Εικόνα-237.** Τρίτη σελίδα από την αναζήτηση Behavioural epidemiology: Ακαδημαϊκοί Φορείς / Ερευνητικές Ομάδες



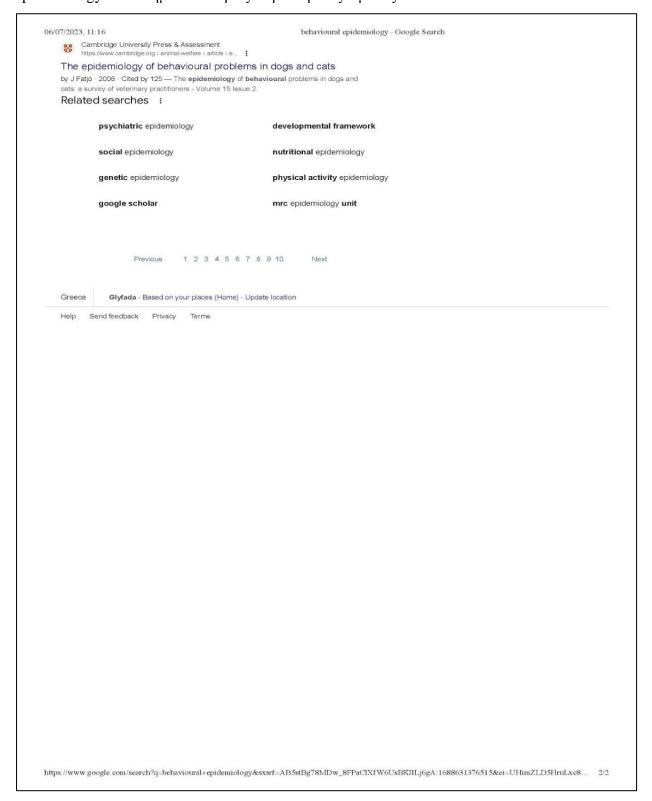
## **Εικόνα-237.** (συνέχεια) -Τρίτη σελίδα από την αναζήτηση Behavioural epidemiology: Ακαδημαϊκοί Φορείς / Ερευνητικές Ομάδες



## **Εικόνα-238.** Τέταρτη σελίδα από την αναζήτηση Behavioural epidemiology: Ακαδημαϊκοί Φορείς / Ερευνητικές Ομάδες

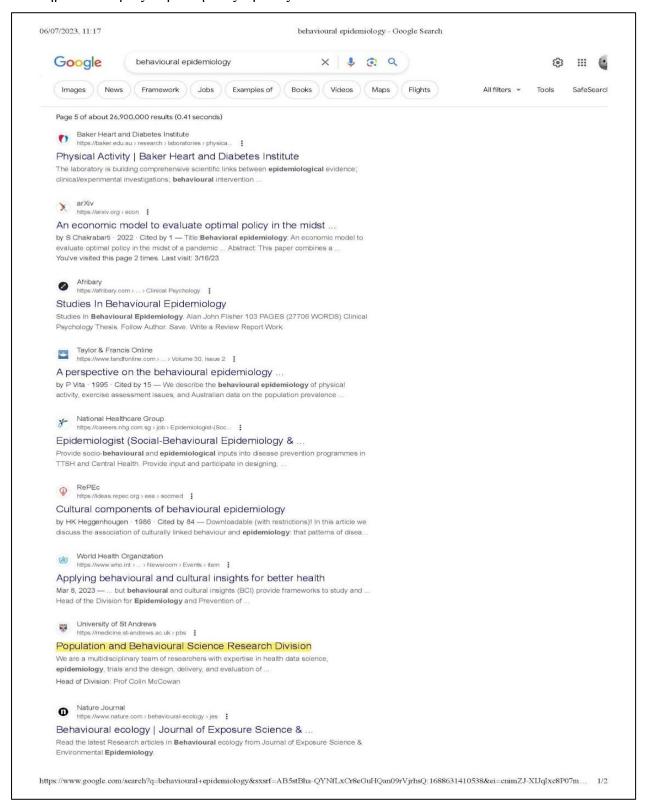


## **Εικόνα-238.** (συνέχεια)-Τέταρτη σελίδα από την αναζήτηση Behavioural epidemiology: Ακαδημαϊκοί Φορείς / Ερευνητικές Ομάδες

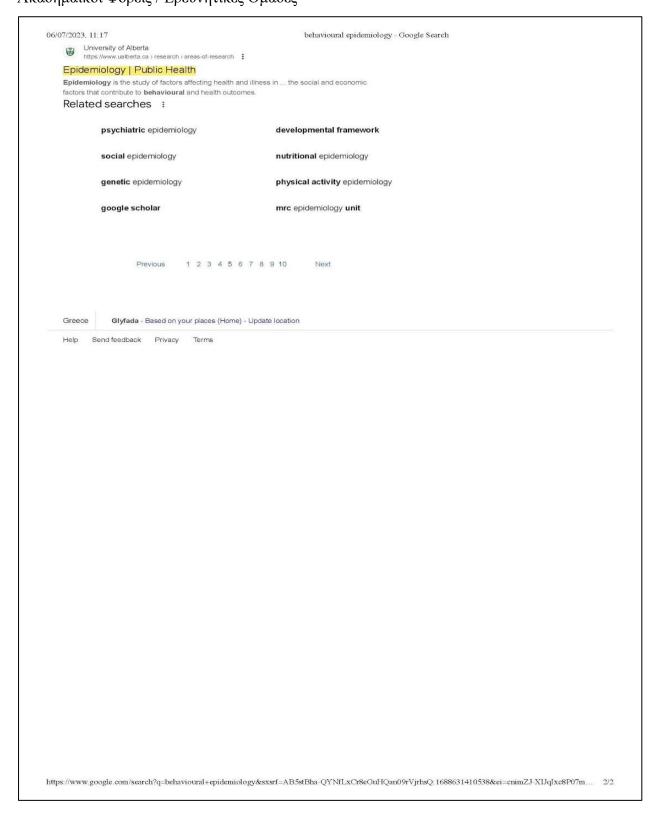


### Εικόνα-239. Πέμπτη σελίδα από την αναζήτηση Behavioural epidemiology:

### Ακαδημαϊκοί Φορείς / Ερευνητικές Ομάδες

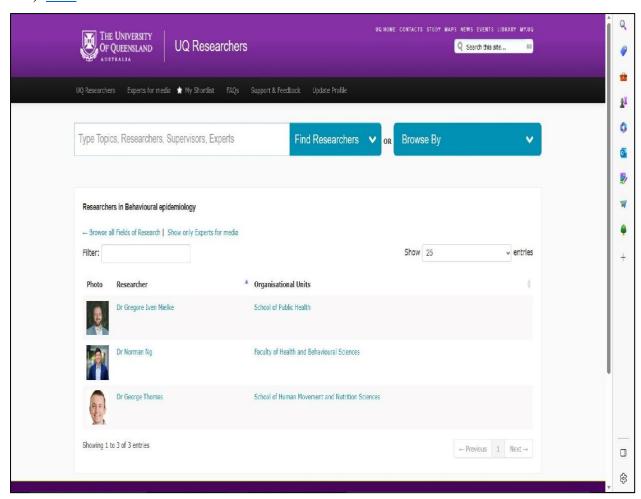


## **Εικόνα-239.** (συνέχεια)-Πέμπτη σελίδα από την αναζήτηση Behavioural epidemiology: Ακαδημαϊκοί Φορείς / Ερευνητικές Ομάδες



Παρακάτω παρουσιάζονται οι σελίδες Ακαδημαϊκών φορέων / ερευνητικών ομάδων που εμφανίστηκαν στην αναζήτηση του όρου "behavioural epidemiology".

**Εικόνα-240.** Πανεπιστήμιο του Queensland - ερευνητές (University of Queensland, n.d.). <u>Link</u>.



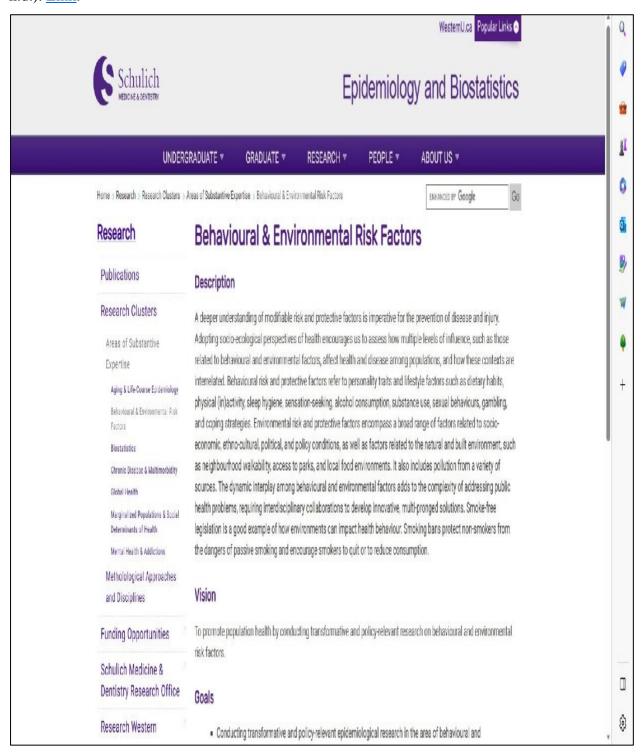
**Εικόνα-241**. Πανεπιστήμιο του St Andrews School of Medicine - τομέας έρευνας (University of St Andrews, n.d.). Link.



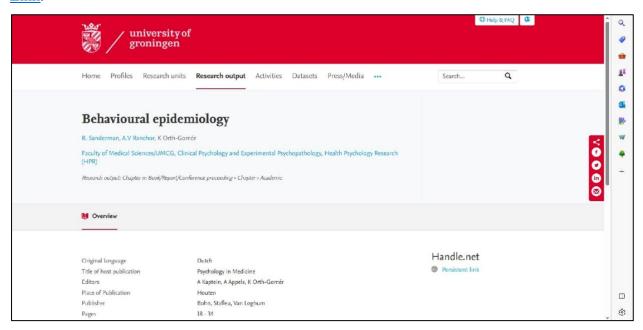
**Εικόνα-242.** Πανεπιστήμιο της Alberta - Σχολή Δημόσιας Υγείας - τομέας έρευνας (University of Alberta, n.d.). <u>Link</u>.



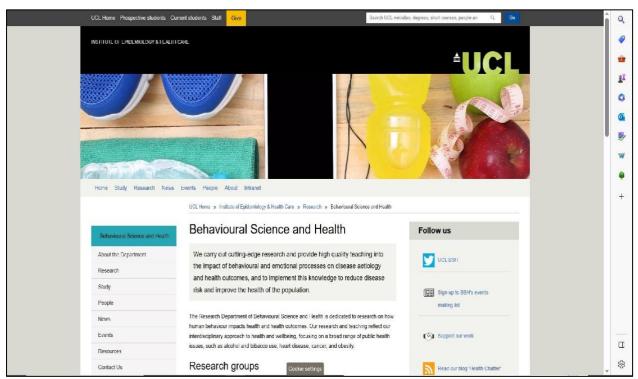
**Εικόνα-243.** Πανεπιστήμιο του Schulich - τομέας έρευνας (University of Schulich, n.d.). Link.



**Εικόνα-244.** Πανεπιστήμιο του Groningen - τομέας έρευνας (Sanderman, et al., 2000). Link.



**Εικόνα-245.** Πανεπιστήμιο του University College London - τομέας έρευνας (UCL, n.d.). <u>Link</u>.



## MRC Epidemiology Unit



Behavioural Epidemiology and Interventions in Young People

Programme Leader – Dr Esther van Sluijs

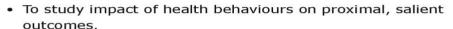
#### Programme news

Read news and blogs about this programme's research.

#### Goal and objectives

The overall goal of Behavioural Epidemiology and Interventions in Young People programme is to understand and improve activity and diet behaviour in





- To lead methodological improvement in behavioural epidemiological research.
- To understand health behaviours and their multi-level determinants.
- To develop and test interventions in key settings for young people's health behaviours.
- To further understanding of the role of implementation and context in intervention effectiveness.



**Εικόνα-247.** Πανεπιστήμιο του Technische Universität Dresden - τομέας έρευνας (Technische Universitat Dresden, n.d.). <u>Link</u>.





RESEARCH

### RESEARCH AT THE CHAIR OF BEHAVIOURAL EPIDEMIOLOGY

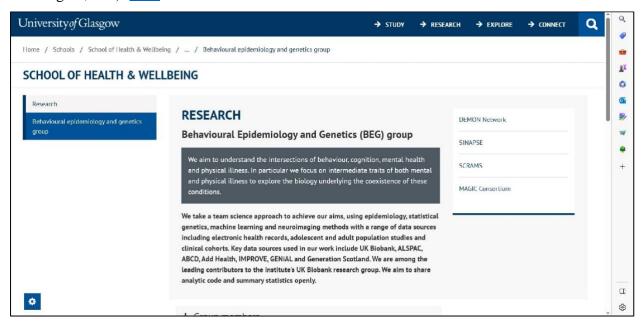
The Chair of Behavioural Epidemiology focusses on psychological and behavioural factors, including cognitive-affective factors, in health and disease, considering interactions with genetic and social-environmental determinants.



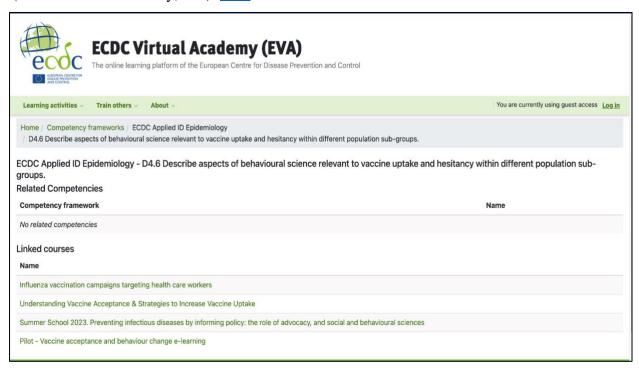




**Εικόνα-248.** Πανεπιστήμιο της Glasgow – School of Health & Wellbeing (University of Glasgow, n.d.). <u>Link</u>.

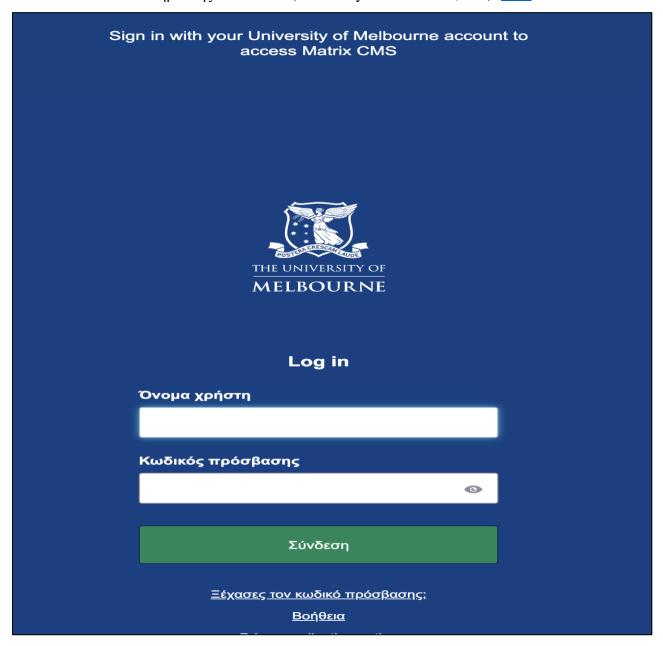


**Εικόνα-249.** European Center for Disease Prevention and Control - τομέας έρευνας (ECDC Virtual Academy, n.d.). Link.



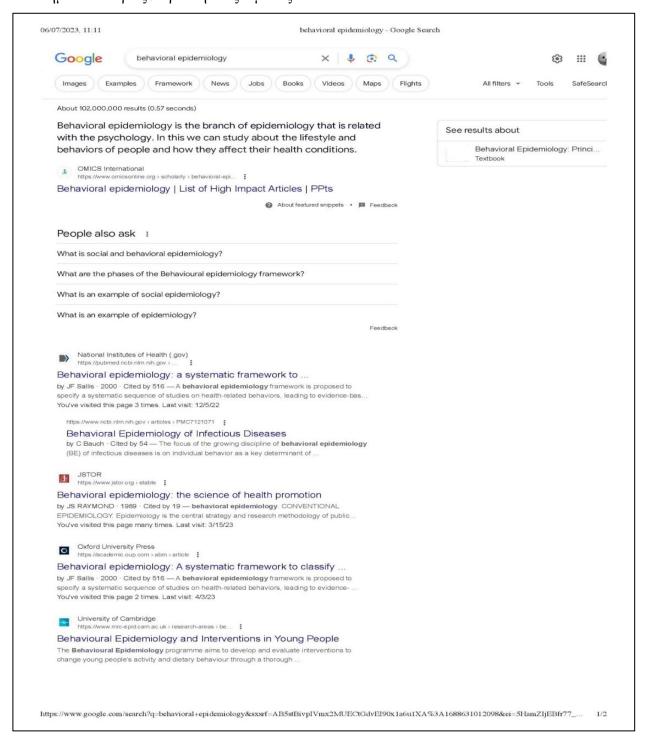
Η παρακάτω φωτογραφία αντιστοιχεί σε ένα αποτέλεσμα στο οποίο δεν μπορέσαμε να έχουμε πρόσβαση, διότι απαιτούσε λογαριασμό στο αντίστοιχο πανεπιστήμιο.

Εικόνα-250. Πανεπιστήμιο της Melbourne (University of Melbourne, n.d.). Link.

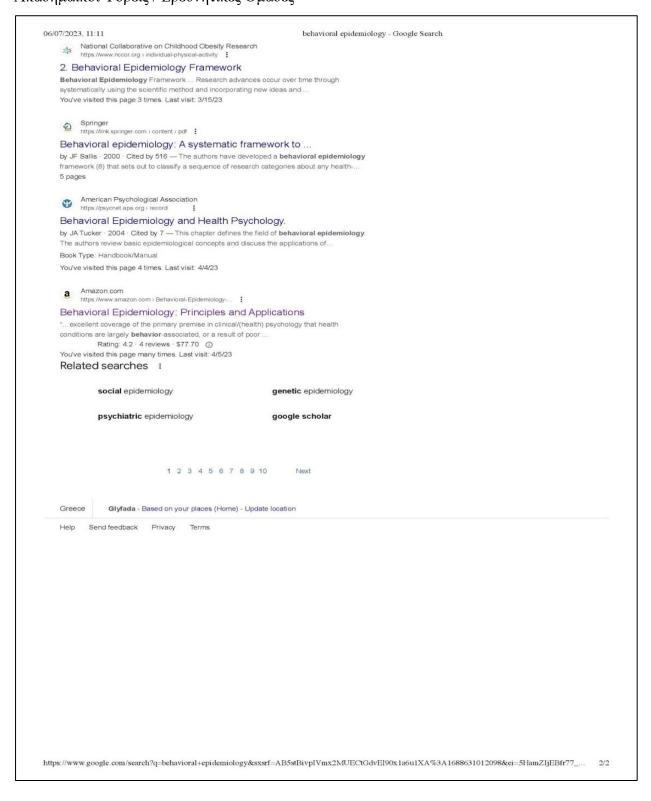


### 4.4.2. Όρος behavioral epidemiology

**Εικόνα-251.** Πρώτη σελίδα από την αναζήτηση Behavioral epidemiology: Ακαδημαϊκοί Φορείς / Ερευνητικές Ομάδες

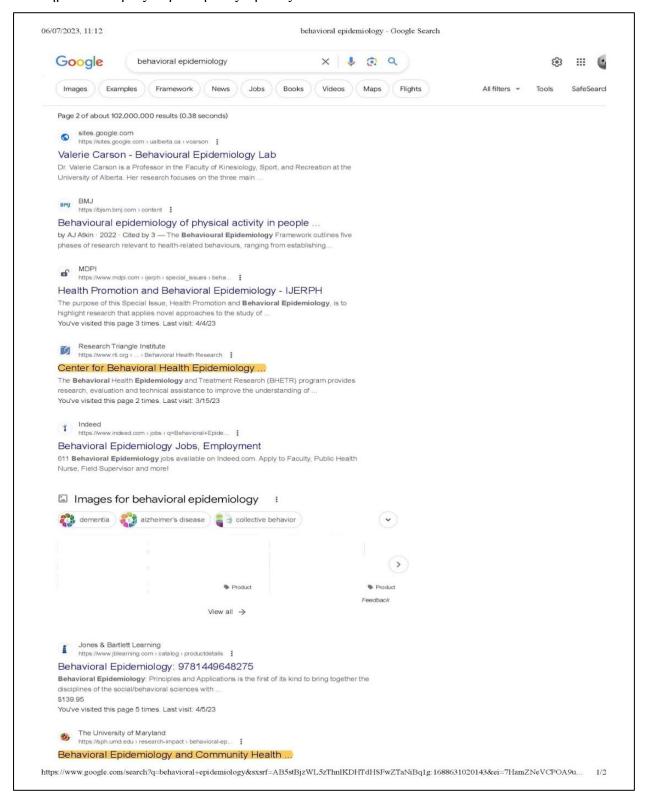


## **Εικόνα-251.** (συνέχεια) -Πρώτη σελίδα από την αναζήτηση Behavioral epidemiology: Ακαδημαϊκοί Φορείς / Ερευνητικές Ομάδες

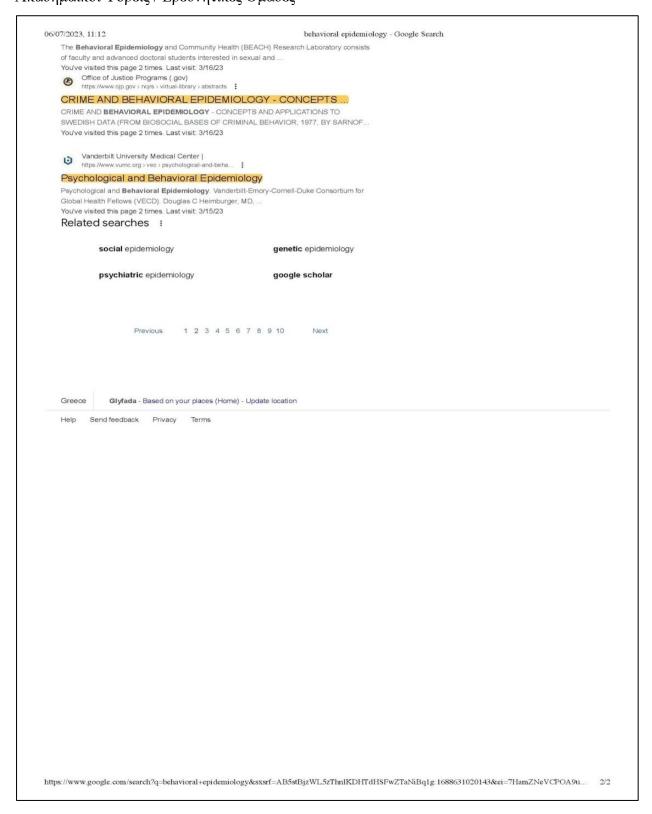


### Εικόνα-252. Δεύτερη σελίδα από την αναζήτηση Behavioral epidemiology:

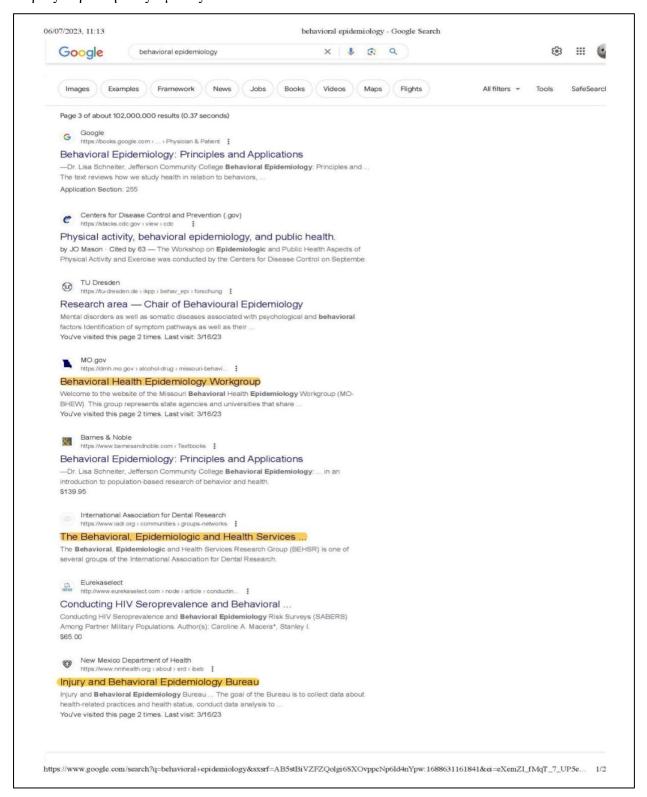
### Ακαδημαϊκοί Φορείς / Ερευνητικές Ομάδες



## **Εικόνα-252.** (συνέχεια)-Δεύτερη σελίδα από την αναζήτηση Behavioral epidemiology: Ακαδημαϊκοί Φορείς / Ερευνητικές Ομάδες



**Εικόνα-253.** Τρίτη σελίδα από την αναζήτηση Behavioral epidemiology: Ακαδημαϊκοί Φορείς / Ερευνητικές Ομάδες

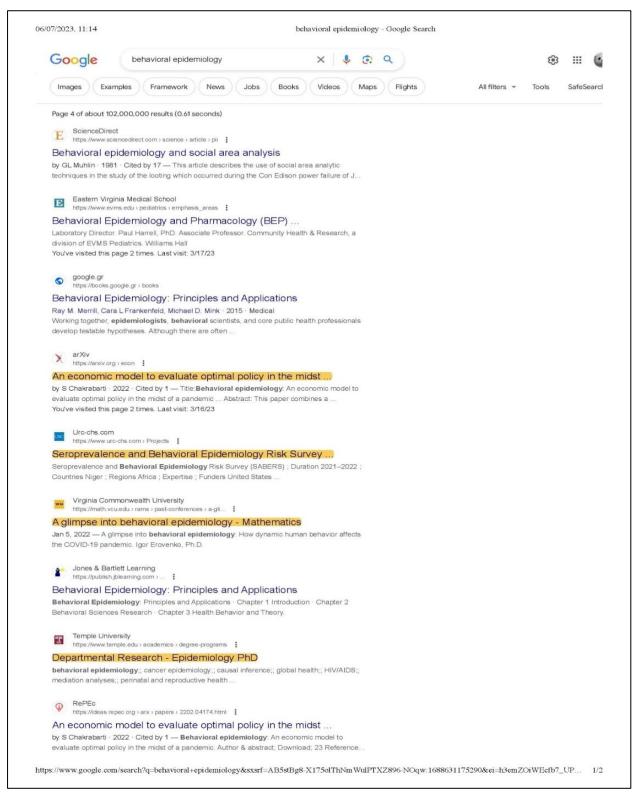


**Εικόνα-253.** (συνέχεια) -Τρίτη σελίδα από την αναζήτηση Behavioral epidemiology:

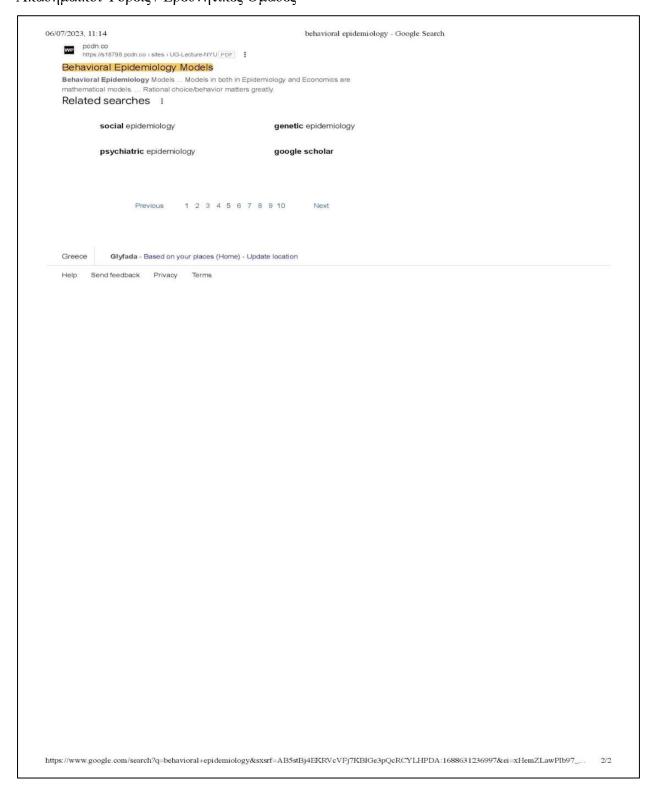


### Εικόνα-254. Τέταρτη σελίδα από την αναζήτηση Behavioral epidemiology:

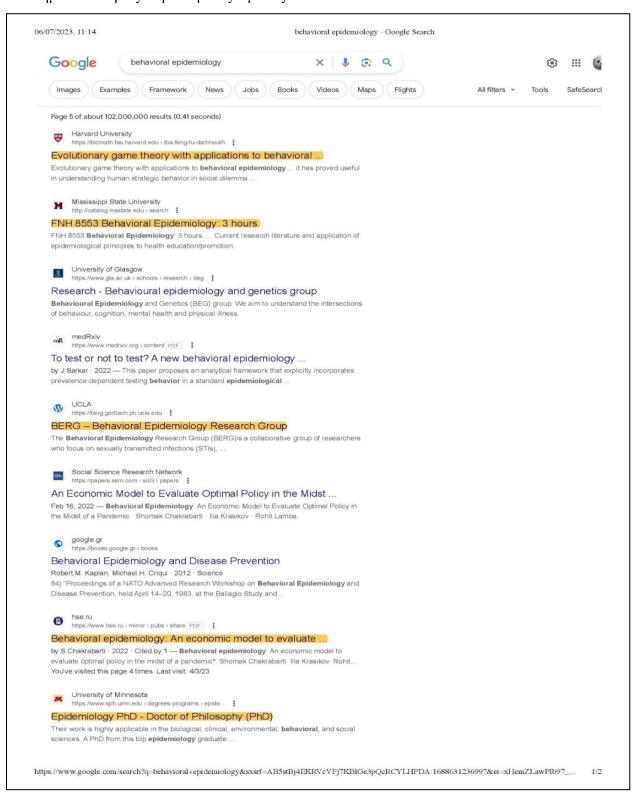
Ακαδημαϊκοί Φορείς / Ερευνητικές Ομάδες



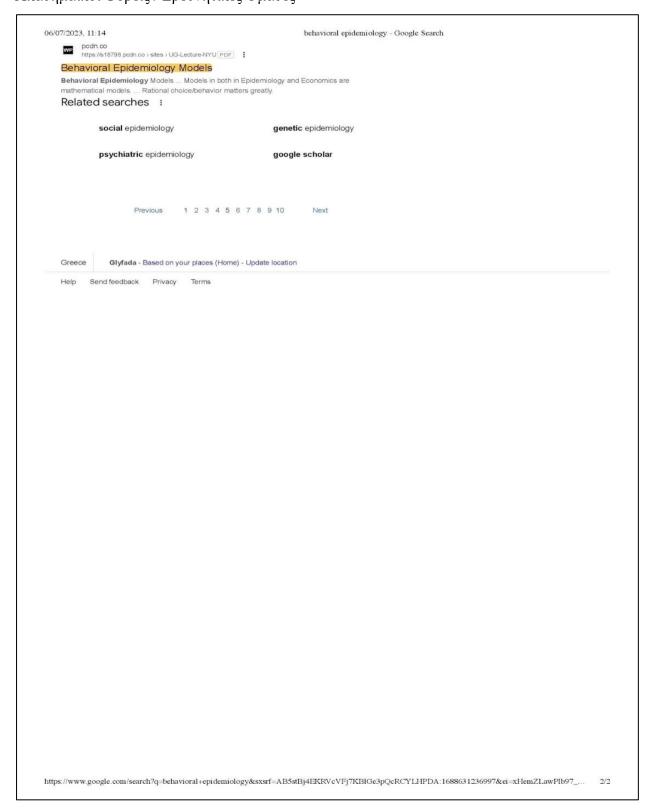
## **Εικόνα-254.** (συνέχεια)-Τέταρτη σελίδα από την αναζήτηση Behavioral epidemiology: Ακαδημαϊκοί Φορείς / Ερευνητικές Ομάδες



## **Εικόνα-255.** Πέμπτη σελίδα από την αναζήτηση Behavioral epidemiology: Ακαδημαϊκοί Φορείς / Ερευνητικές Ομάδες

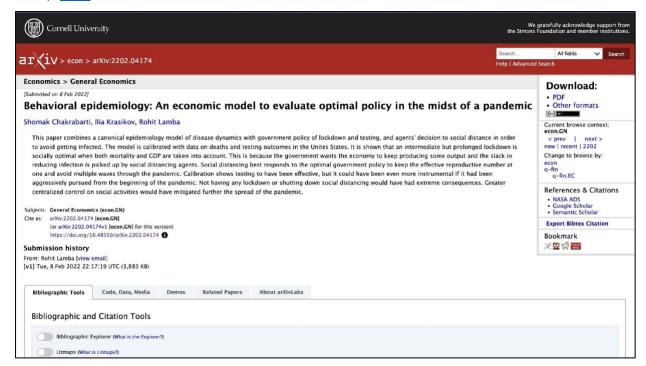


## **Εικόνα-255.** (συνέχεια) -Πέμπτη σελίδα από την αναζήτηση Behavioral epidemiology: Ακαδημαϊκοί Φορείς / Ερευνητικές Ομάδες

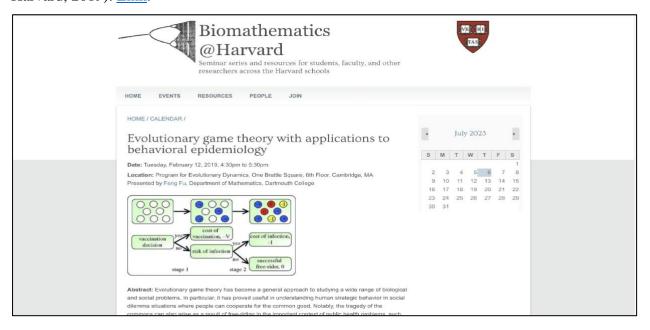


Παρακάτω παρουσιάζονται οι σελίδες πανεπιστημίων/ ερευνητικών ομάδων που εμφανίστηκαν στην αναζήτηση του όρου "behavioral epidemiology".

**Εικόνα-256.** Πανεπιστήμιο του Cornell - παρουσίαση εγγράφου (Chakrabarti, et al., 2022). Link.



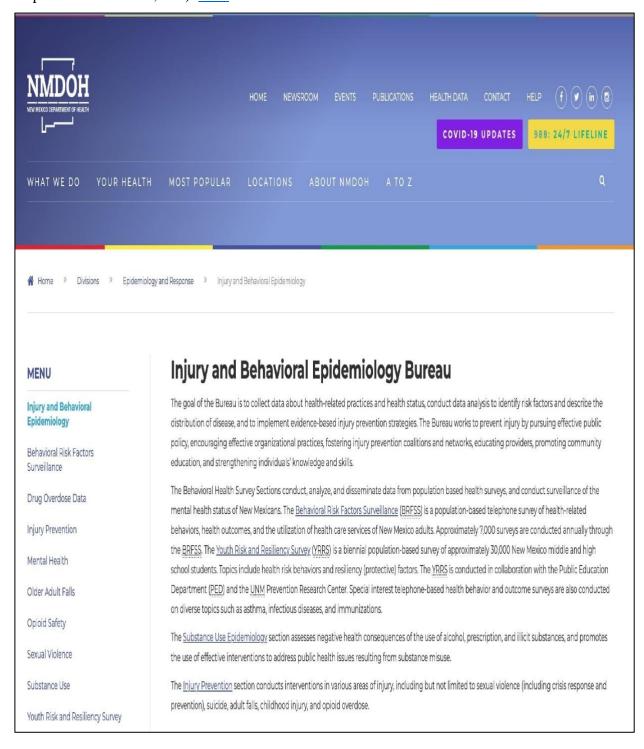
**Εικόνα-257.** Πανεπιστήμιο του Harvard - τομέας των Biomathematics (University of Harvard, 2019). Link.



**Εικόνα-258.** Πανεπιστήμιο του Maryland – εργαστήριο (University of Maryland,, n.d.). <u>Link</u>.



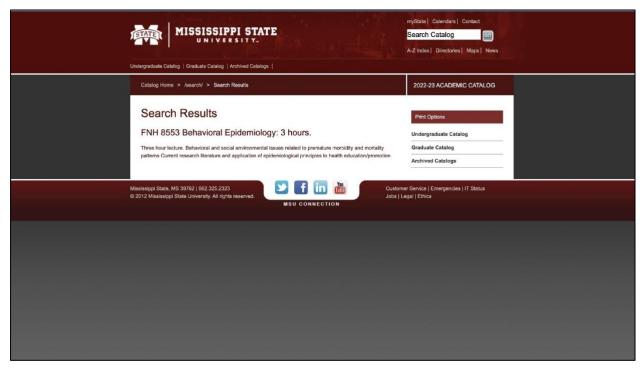
**Εικόνα-259.** New Mexico Department of Health - τομέας έρευνας (New Mexico Department of Health, n.d.). Link.



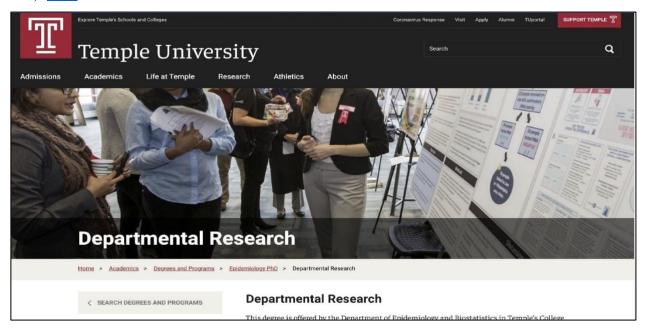
**Εικόνα-260.** Πανεπιστήμιο της Minnesota - τομέας των Biomathematics (University of Minnesota,, n.d.). <u>Link</u>.



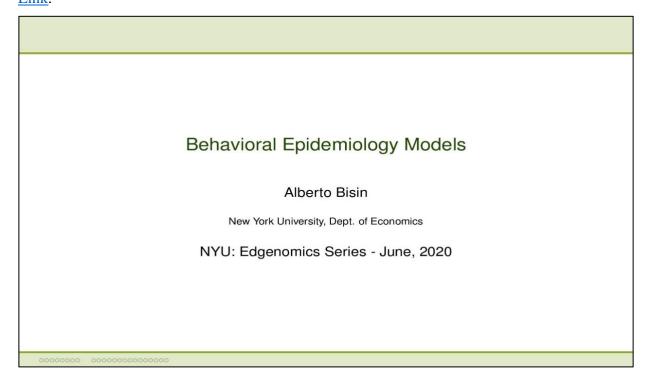
**Εικόνα-261.** Πανεπιστήμιο του Mississippi State – μάθημα (Mississippi State University, 2012). <u>Link</u>.



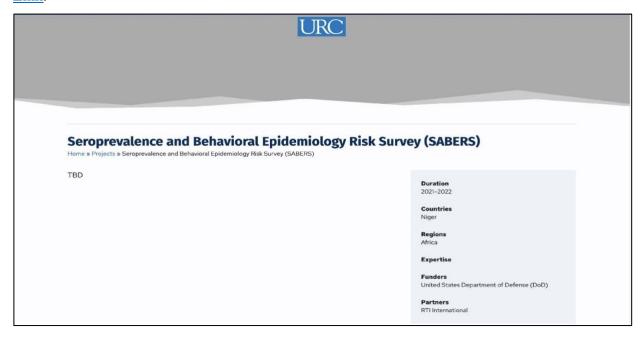
**Εικόνα-262.** Πανεπιστήμιο του Temple - τομέας της έρευνας (Temple University, n.d.). <u>Link</u>.



**Εικόνα-263.** Πανεπιστήμιο της New York - παρουσίαση μαθήματος (Bisin, 2020). Link.



**Εικόνα-264.** University Research Co - τομέας έρευνας (University Research Co, n.d.). Link.



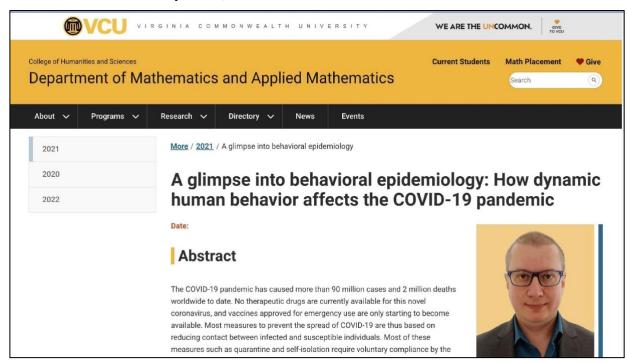
**Εικόνα-265.** Πανεπιστήμιο University of Southern California - αρχική σελίδα (University of Southern California, n.d.). <u>Link</u>.



**Εικόνα-266.** Πανεπιστήμιο του Vanderbilt - τομέας Επιδημιολογίας (Vanderbilt University,, n.d.). Link.



**Εικόνα-267.** Πανεπιστήμιο Virginia Commonwealth - τομέας της έρευνας (Virginia Commonwealth University, 2022). <u>Link</u>.



**Εικόνα-268.** U.S. Department of Justice – έγγραφο (Mednick & Cristiansen, 1977).

## Link.

29/07/2023, 19:21

CRIME AND BEHAVIORAL EPIDEMIOLOGY - CONCEPTS AND APPLICATIONS TO SWEDISH DATA (FROM BIOSOCIAL BAS...

An official website of the United States government, Department of Justice. Here's how you know



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# CRIME AND BEHAVIORAL EPIDEMIOLOGY - CONCEPTS AND APPLICATIONS TO SWEDISH DATA (FROM BIOSOCIAL BASES OF CRIMINAL BEHAVIOR, 1977, BY SARNOFF A MEDNICK AND KARLO CRISTIANSEN - SEE NCJ47285)

NCJ Number: 47287 Author(s): G CARLSSON Date Published: 1977 Length: 19 pages

### Annotation

MODELS FOR THE DEVELOPMENT OF CRIME ARE FORMULATED AND TESTED IN INTERACTION WITH DATA.

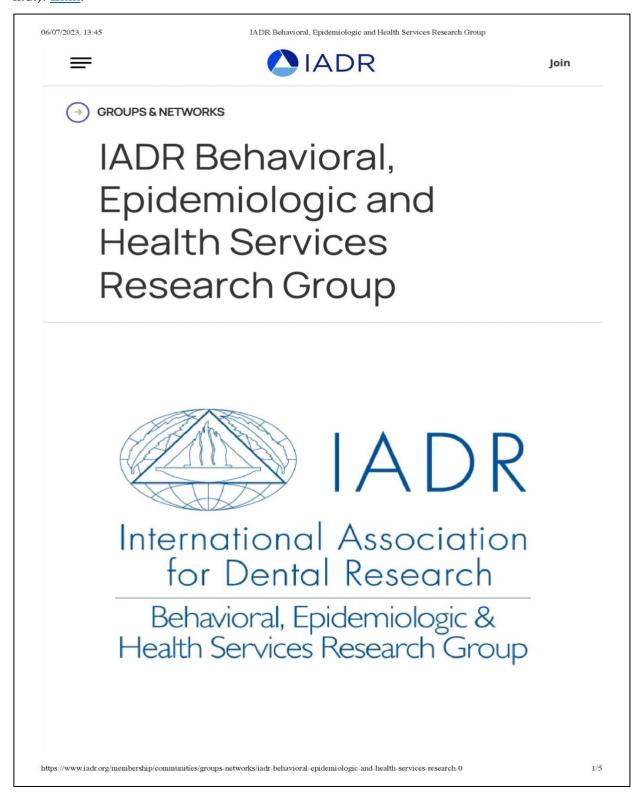
### **Abstract**

THE FIRST PART OF THE ANALYSIS INDICATES THAT CRIME AS AN ACTIVITY IS
PRODUCED BY A RELATIVELY SMALL PERCENTAGE OF THE POPULATION. STABILITY OF
BEHAVIOR THROUGH TIME IS BELIEVED EVIDENT IN THE REPETITIVE PRODUCTION OF
CRIME BY A PARTICULAR FEW. MODELS FOR PREDICTING THE DEVELOPMENT OF THIS

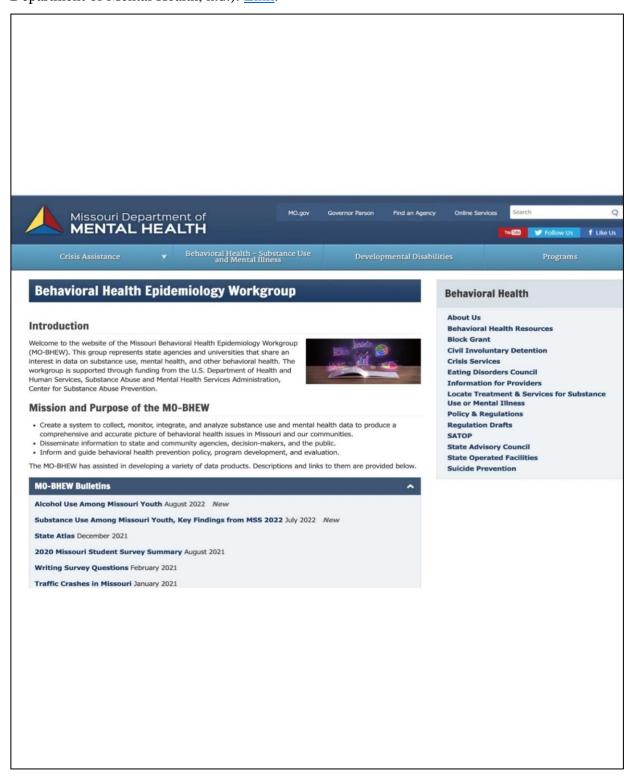
https://www.ojp.gov/ncjrs/virtual-library/abstracts/crime-and-behavioral-epidemiology-concepts-and-applications-swedish

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**Εικόνα-269.** International Association for Dental Research - ομάδα έρευνας (IADR, n.d.). Link.



**Εικόνα-270.** Missouri Department of Mental Health - ομάδα έρευνας (Missouri Department of Mental Health, n.d.). <u>Link</u>.

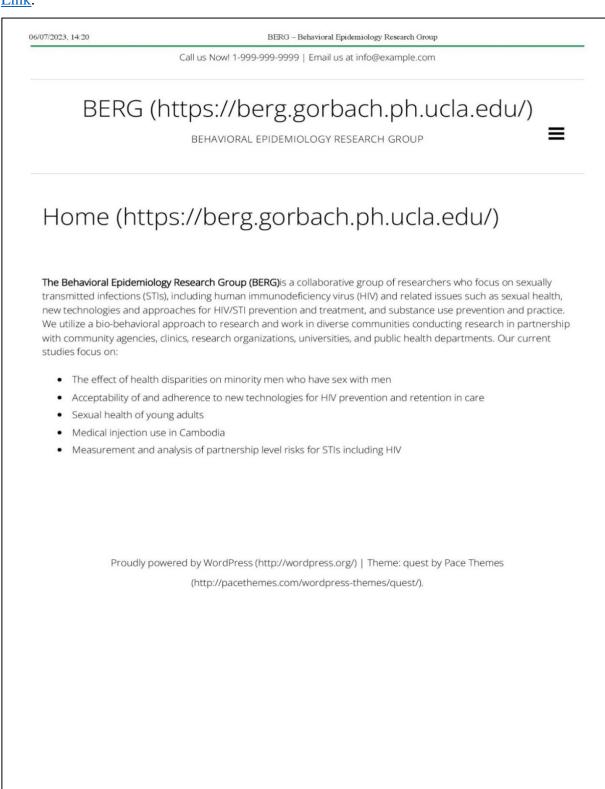


Εικόνα-271. RTI International - ομάδα έρευνας (RTI International, n.d.). Link. ORTI About Practice Areas Services + Capabilities Centers Impact Experts Emerging Issues COVID-19 **RTI Center for Behavioral Health** Epidemiology, Implementation, and **Evaluation Research** SHARE Promoting evidence-The consequences of substance use and misuse, mental disorder, and violence can be devastating. The most effective way to promote health and well-being is to based prevention, harm support communities in which everyone, regardless of background, has the reduction, and opportunity for physical and mental health. treatment strategies to Our scientists identify factors at the individual, family, community, institutional, and help communities thrive societal levels that underlie substance use and misuse, mental disorder, sexual risk behavior, interpersonal violence, and infectious disease. Our experience allows us to develop, test, and refine strategies for prevention, harm reduction, and

# Εικόνα-272. Πανεπιστήμιο του Harvard - τομέας των Biomathematics (BERG, 2023).

# Link.

https://berg.gorbach.ph.ucla.edu



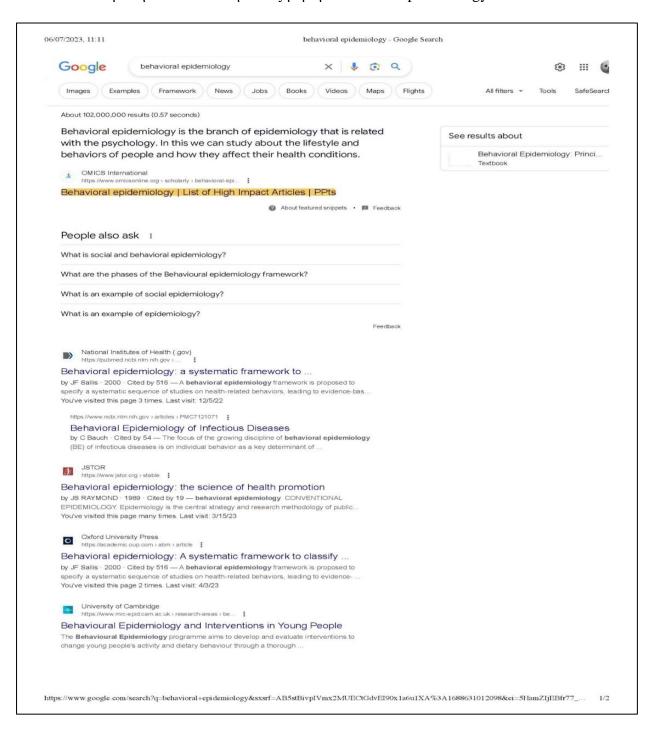
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# 4.5. ΑΛΛΑ

Παρακάτω παρουσιάζονται οι 5 πρώτες σελίδες απο κάθε όρο. Σε κάθε σελίδα έχουν επισημανθεί οι ιστότοποι που εντάσσονται στην κατηγορία "ΑΛΛΑ".

# 4.5.1. Όρος behavioral epidemiology

Εικόνα-273. Πρώτη σελίδα από την αναζήτηση Behavioral epidemiology: Άλλα



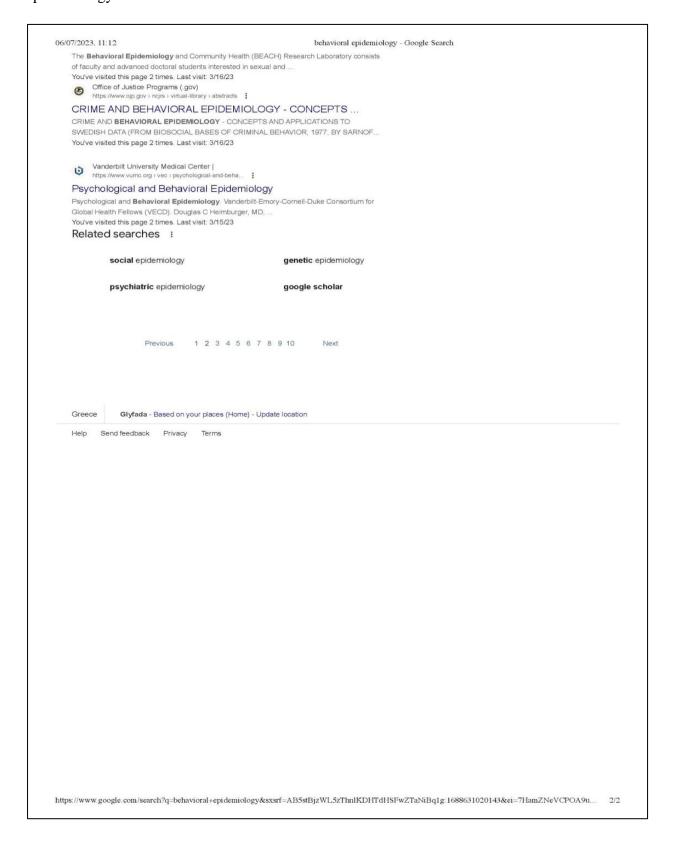
# Εικόνα-273. (συνέχεια) -Πρώτη σελίδα από την αναζήτηση Behavioral epidemiology:



Εικόνα-274. Δεύτερη σελίδα από την αναζήτηση Behavioral epidemiology: Άλλα



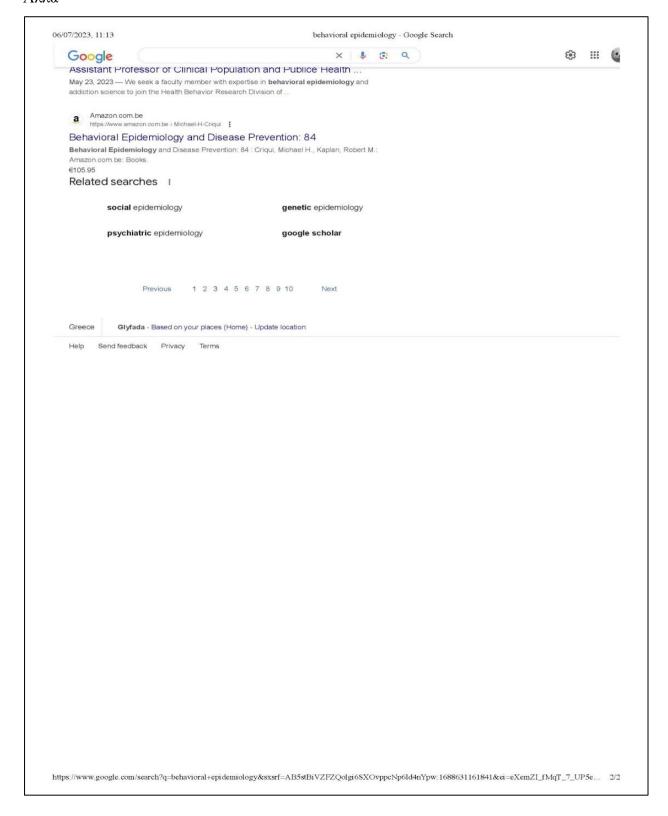
# **Εικόνα-274.** (συνέχεια) -Δεύτερη σελίδα από την αναζήτηση Behavioral epidemiology: Άλλα



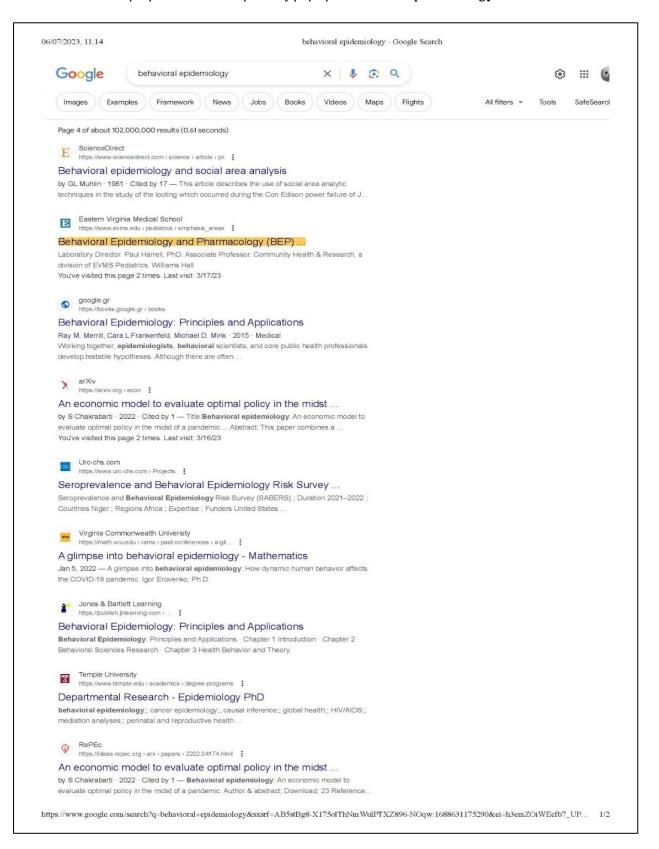
Εικόνα-275. Τρίτη σελίδα από την αναζήτηση Behavioral epidemiology: Άλλα



# Εικόνα-275. (συνέχεια) -Τρίτη σελίδα από την αναζήτηση Behavioral epidemiology:



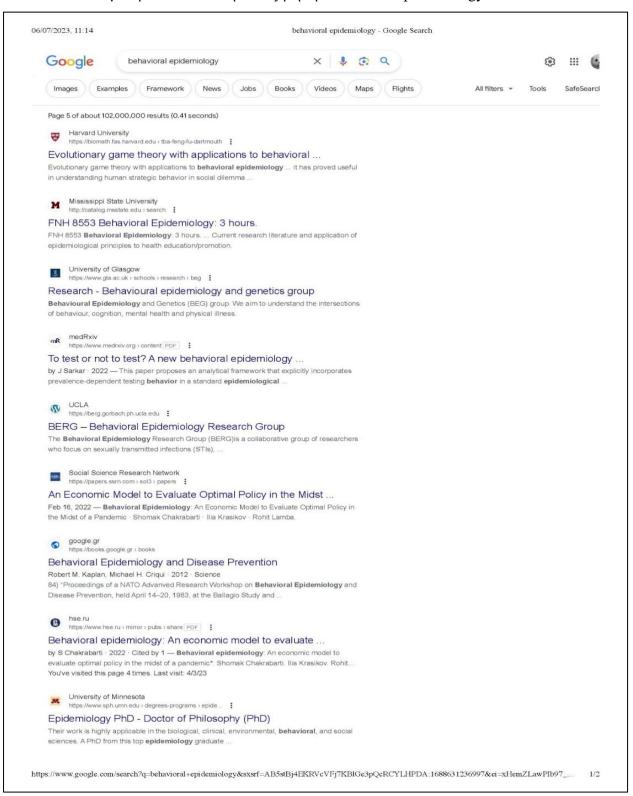
Εικόνα-276. Τέταρτη σελίδα από την αναζήτηση Behavioral epidemiology: Άλλα



# **Εικόνα-276.** (συνέχεια)-Τέταρτη σελίδα από την αναζήτηση Behavioral epidemiology: Αλλα

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Εικόνα-277. Πέμπτη σελίδα από την αναζήτηση Behavioral epidemiology: Άλλα

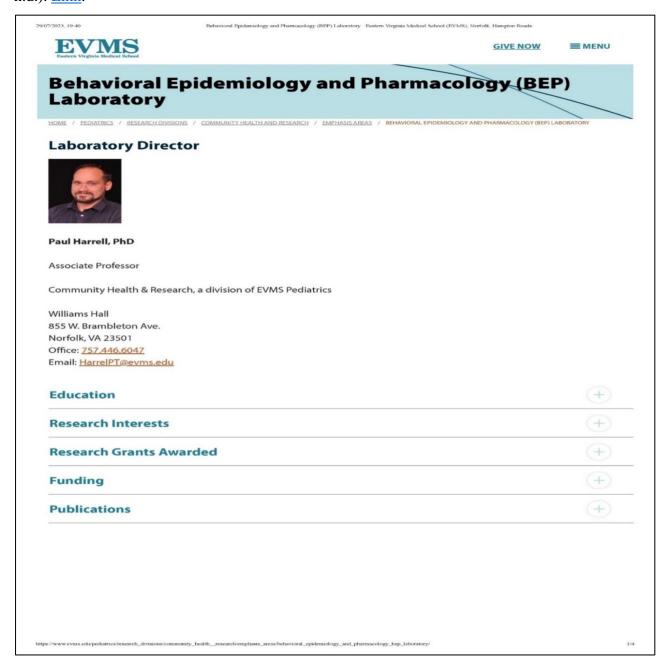


# **Εικόνα-277.** (συνέχεια) - Πέμπτη σελίδα από την αναζήτηση Behavioral epidemiology: Άλλα

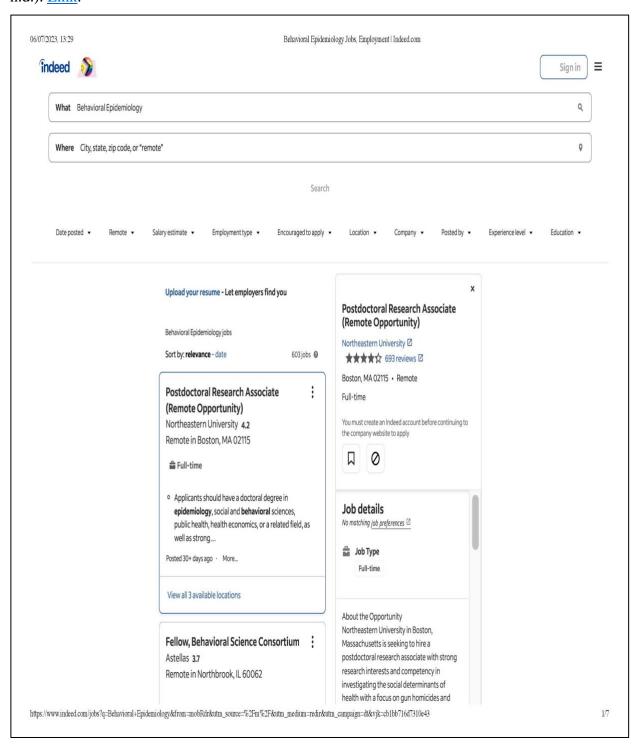
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Παρακάτω παρουσιάζονται τα υπόλοιπα αποτελέσματα που εμφανίστηκαν στην αναζήτηση του όρου "behavioral epidemiology" και ταξινομούνται στην κατηγορία "ΑΛΛΑ"

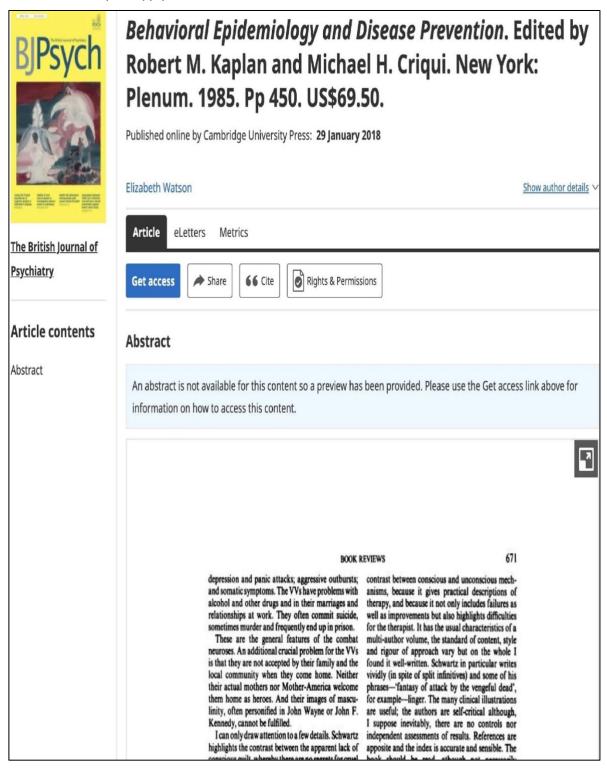
**Εικόνα-278.** Πληροφορίες διευθυντή εργαστηρίου (Eastern Virginia Medical School, n.d.). Link.



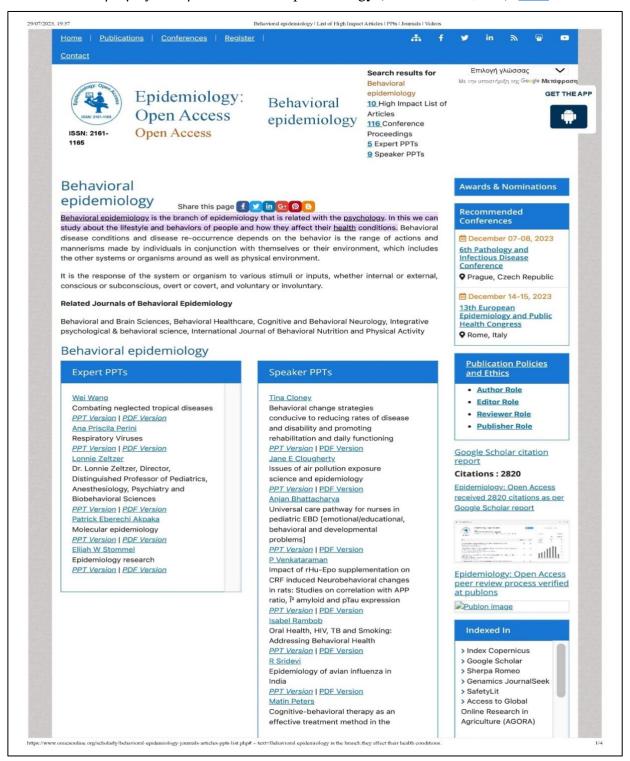
**Εικόνα-279.** Θέση εργασίας στον τομέα της συμπεριφορικής επιδημιολογίας (Indeed, n.d.). Link.



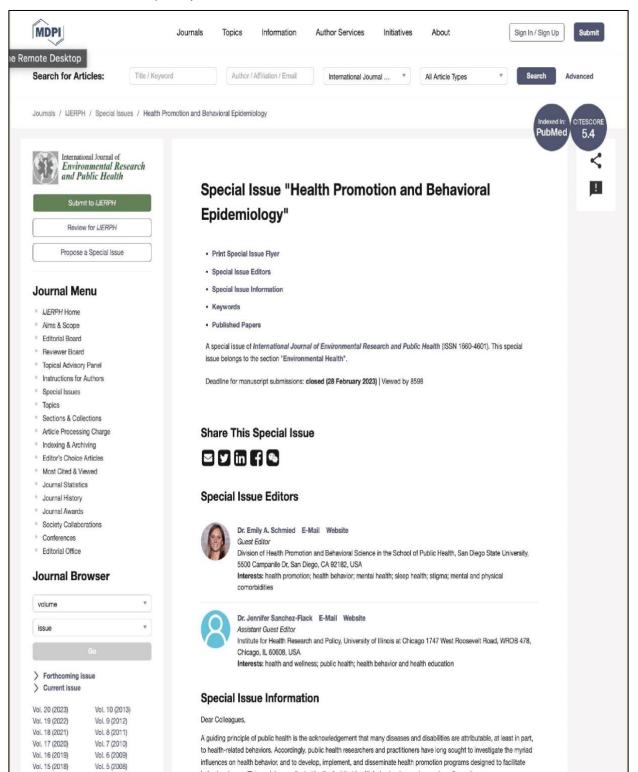
Εικόνα-280. Κριτική βιβλίου, (Watson, 2018). Link.



Εικόνα-281. Ορισμός του όρου behavioral epidemiology (Omics Online, n.d.). Link.

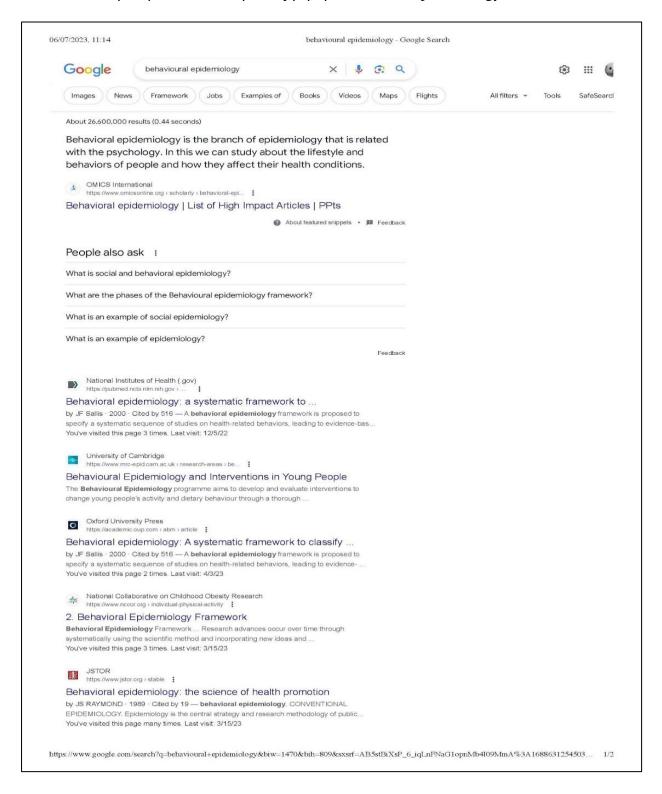


Εικόνα-282. Ειδικό θέμα περιοδικού (MDPI, n.d.). Link.



# 4.5.2. Όρος behavioural epidemiology

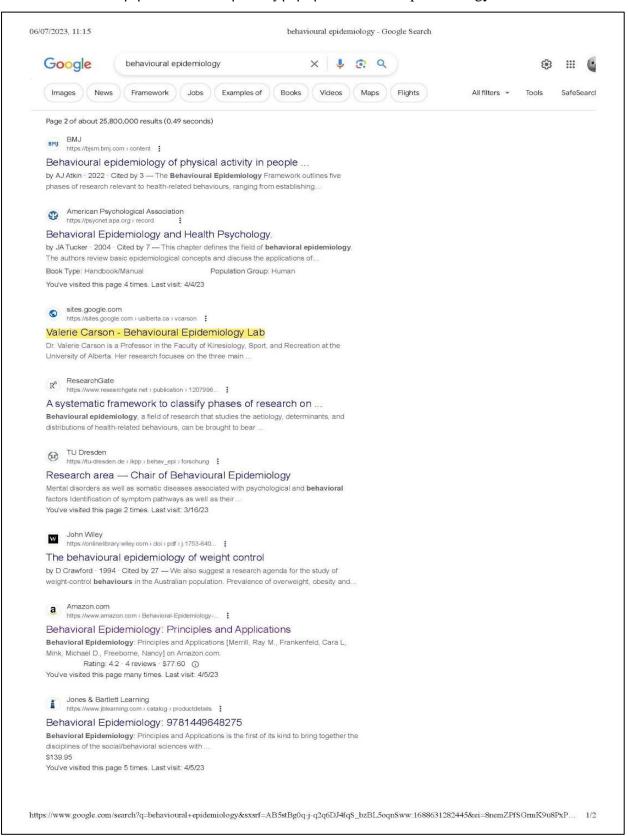
Εικόνα-283. Πρώτη σελίδα από την αναζήτηση Behavioural epidemiology: Άλλα



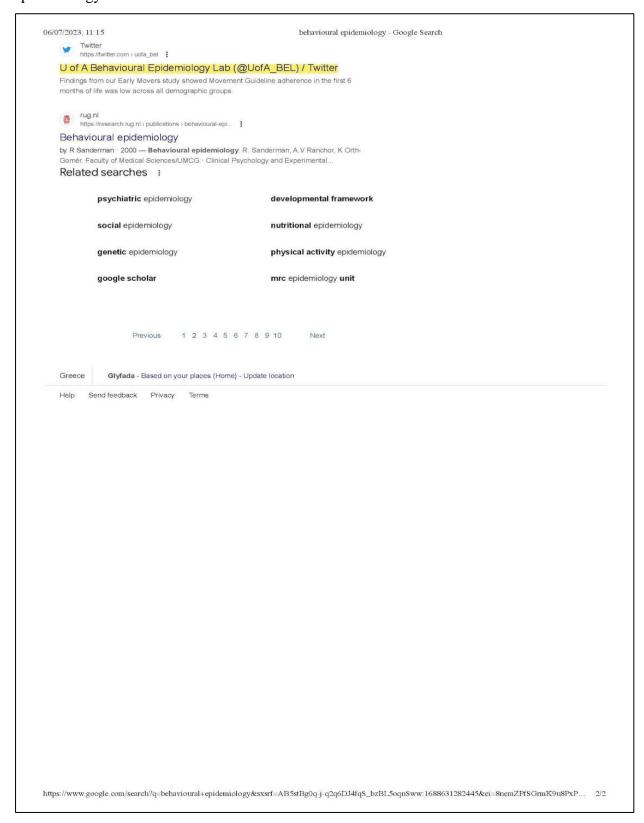
# Εικόνα-283. (συνέχεια) -Πρώτη σελίδα από την αναζήτηση Behavioural epidemiology:



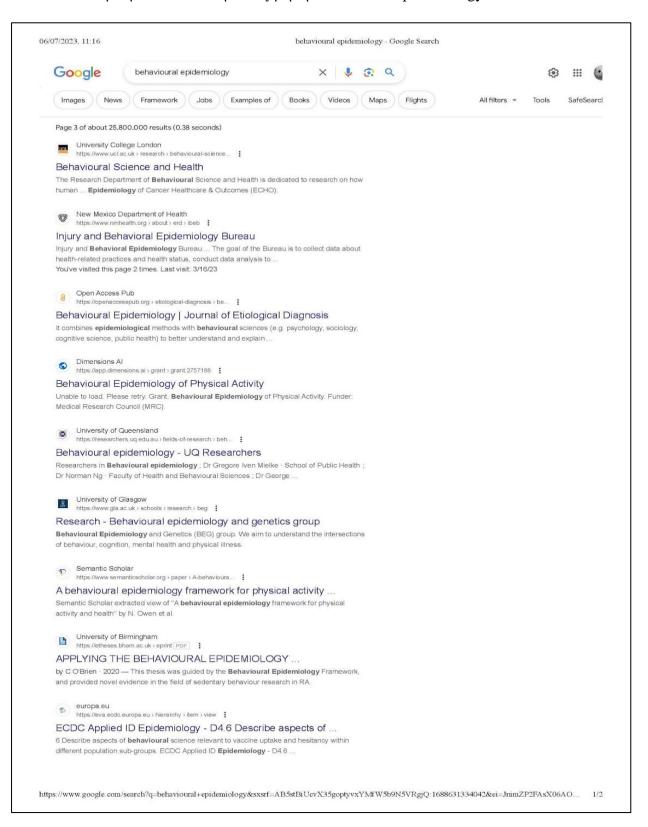
Εικόνα-284. Δεύτερη σελίδα από την αναζήτηση Behavioural epidemiology: Άλλα



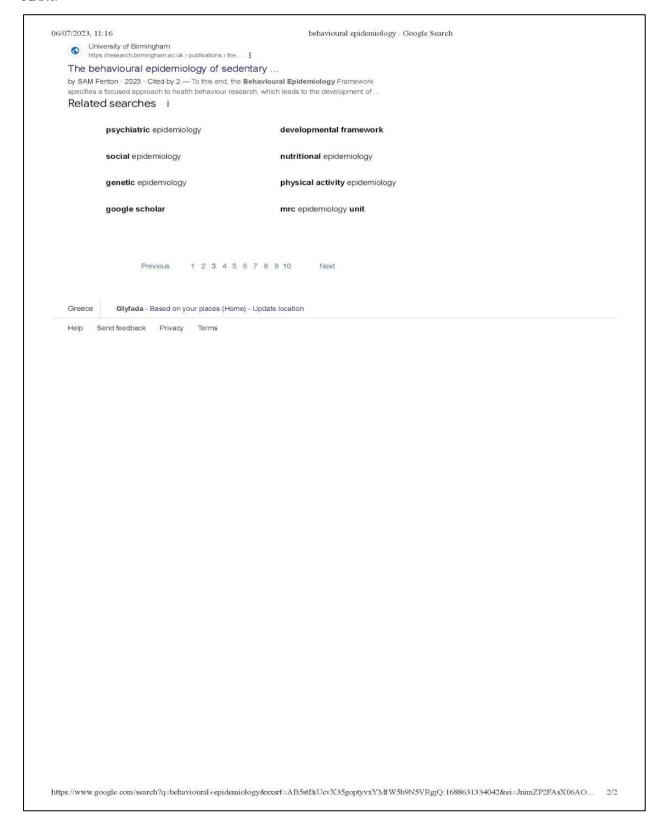
# **Εικόνα-284.** (συνέχεια)-Δεύτερη σελίδα από την αναζήτηση Behavioural epidemiology: Άλλα



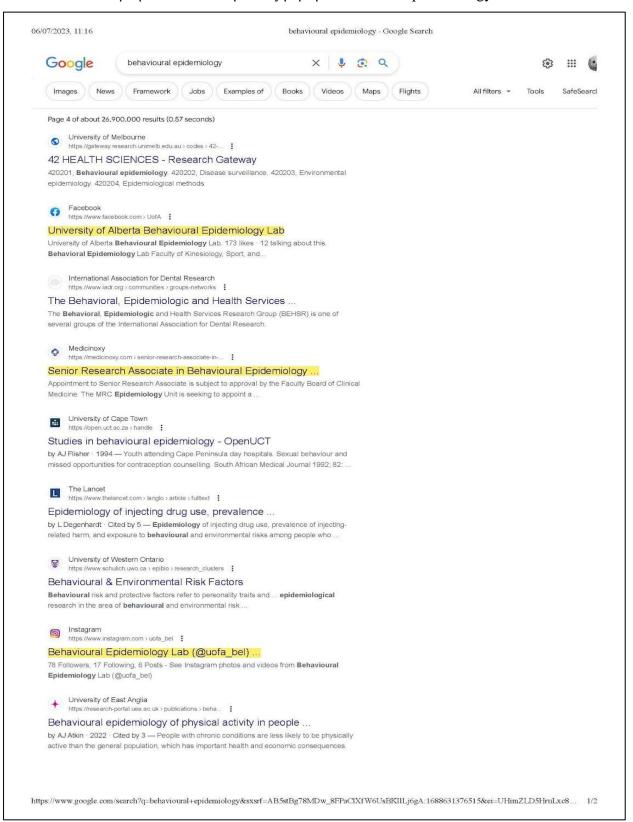
Εικόνα-285. Τρίτη σελίδα από την αναζήτηση Behavioural epidemiology: Άλλα



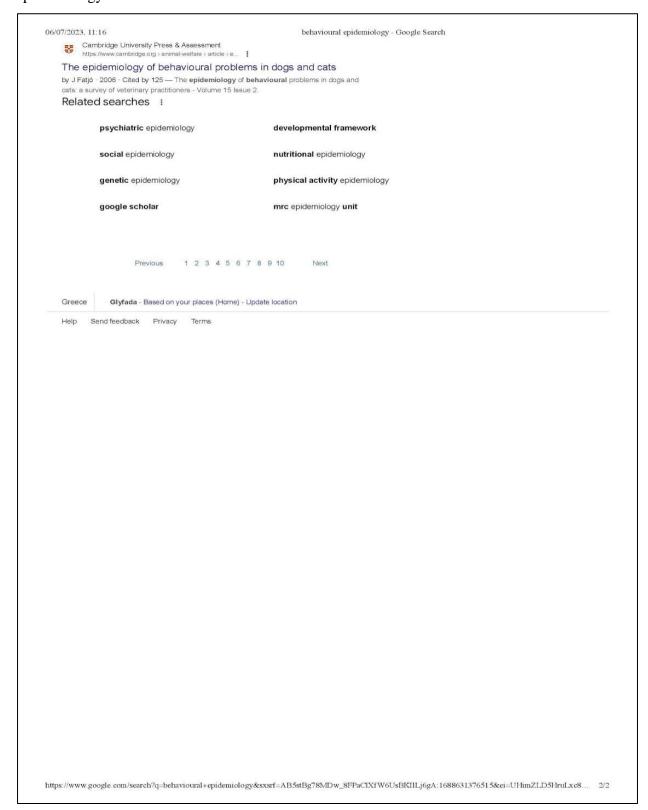
# Εικόνα-285. (συνέχεια) -Τρίτη σελίδα από την αναζήτηση Behavioural epidemiology:



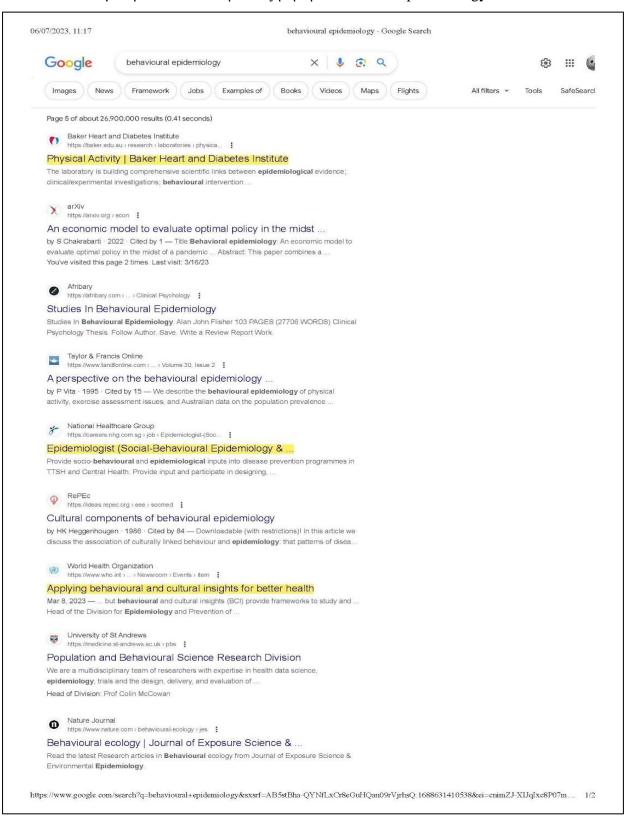
Εικόνα-286. Τέταρτη σελίδα από την αναζήτηση Behavioural epidemiology: Άλλα



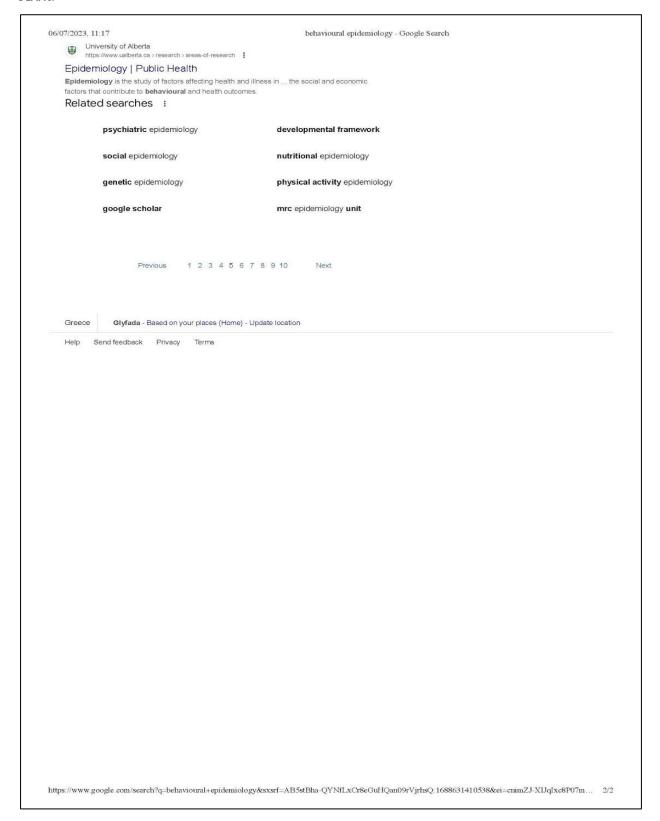
# **Εικόνα-286.** (συνέχεια)-Τέταρτη σελίδα από την αναζήτηση Behavioural epidemiology: Άλλα



Εικόνα-287. Πέμπτη σελίδα από την αναζήτηση Behavioural epidemiology: Άλλα

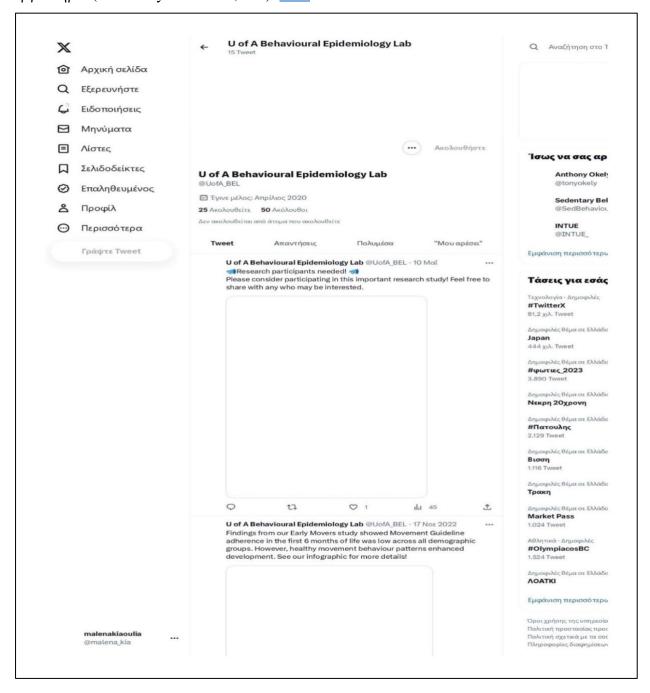


# Εικόνα-287. (συνέχεια)-Πέμπτη σελίδα από την αναζήτηση Behavioural epidemiology:



Παρακάτω παρουσιάζονται τα υπόλοιπα αποτελέσματα που εμφανίστηκαν στην αναζήτηση του όρου "behavioural epidemiology" και ταξινομούνται στην κατηγορία "ΑΛΛΑ"

**Εικόνα-288.** Λογαριασμός σε Μέσο Κοινωνικής Δικτύωσης από επιδημιολογικό εργαστήριο (University of Alberta, n.d.). <u>Link</u>.





# Applying behavioural and cultural insights for better health – workshop

8 March 2023 | Zagreb, Croatia

**Français** 

<u>Русский</u>

Deutsch

#### **Event highlights**

9 March 2023

"As doctors and policy-makers, we know that much of people's health behaviour is influenced by their environment, social relations and their psychology, but behavioural and cultural insights (BCI) provide frameworks to study and address these factors systematically," said Ivana Brkić Biloš, Head of the Division for Epidemiology and Prevention of Noncommunicable Chronic Diseases at the Croatian Institute of Public Health. "You can see the shift in thinking even in such a short workshop. I think all of us have come away with new ideas on how to use BCI to improve health outcomes."

"It is always fruitful to bring together people from different backgrounds to discuss health challenges, as well as to learn from international examples," said Iva Pejnović Franelić, Liaison Officer at the WHO Country Office in Croatia. "The discussion on how BCI can be applied in the Croatian context identified several promising opportunities, and I am excited to see what we can achieve together."

Although capacity building was the primary focus of the workshop, the discussions between attendees identified several health behaviours in Croatia that would benefit from a BCI approach. The workshop coincided with Croatia's Cancer Screening Awareness Month, and colorectal cancer screening was one of the areas identified to potentially benefit from a BCI approach. Despite the necessary systems and regular reminders being in place, only 25% of eligible citizens complete their at-home cancer screening, which suggests that behavioural and cultural factors are likely preventing people from engaging in this behaviour.

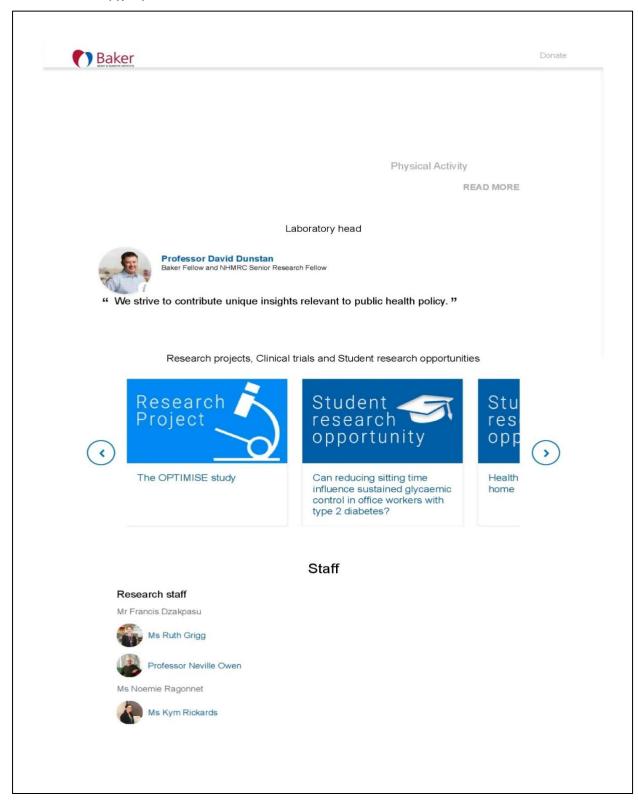
**Εικόνα-290.** Λογαριασμός από Μέσο Κοινωνικής Δικτύωσης απο Επιδημιολογικό εργαστήριο (University of Alberta, n.d.). <u>Link</u>.



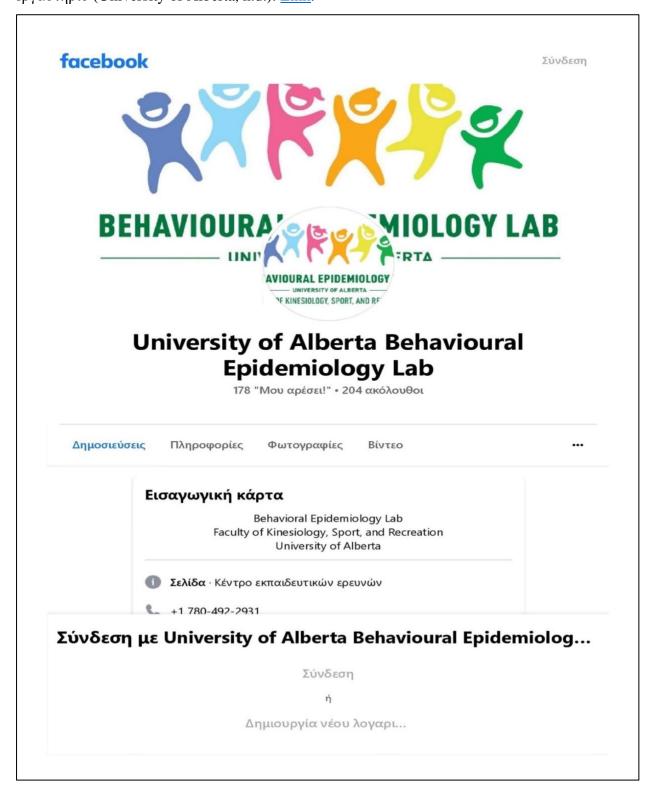
## **Εικόνα-291.** Θέση εργασίας στον τομέα της Επιδημιολογίας (National Healthcare Group, n.d.). Link.

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Provide socio-behaviours     and Central Health.      Provide input and parties		outs into disease prevent ing, and implementation	

Εικόνα-292. Αρχική σελίδα ινστιτούτου (Baker, n.d.). Link.



**Εικόνα-293.** Λογαριασμός από Μέσο Κοινωνικής Δικτύωσης απο Επιδημιολογικό εργαστήριο (University of Alberta, n.d.). <u>Link</u>.



### Home

Dr. Valerie Carson is a Professor in the Faculty of Kinesiology, Sport, and Recreation at the University of Alberta. Her research focuses on the three main areas related to physical activity and sedentary behaviour among young people (birth to 17 years). These areas include understanding the links with health, establishing measurement methods, and identifying factors that influence the behaviours in home, school/childcare, and neighbourhood settings. She is particularly interested in children of the early years (<5 years old), including social-emotional and cognitive development, parental influences, and child care influences. Dr. Carson co-led projects that developed Canada's first 24-hour movement guidelines for the early years (0-4 years) and school-aged children and youth (5-17 years). She is currently the Primary Investigator of several studies in the area of physical activity and sedentary behaviour in young people (see current research projects).

Read more:

#### **New Funding**

#### **New Canadian 24-Hour Movement Guidelines**

#### Killam Accelerator Research Award

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ΜΑΘΕΤΕ ΠΕΡΙΣΣΟΤΕΡΑ ΕΓΙΝΕ

**Εικόνα-295.** Θέση εργασίας στον τομέα της Συμπεριφορικής Επιδημιολογίας (University of Cambridge, n.d.). <u>Link</u>.



#### ΚΕΦΑΛΑΙΟ 5: ΣΥΖΗΤΗΣΗ

Παρά την πληθώρα αποτελεσμάτων, η κατηγοριοποίηση και κατανόηση του περιεχομένου αποτελεί πρόκληση. Περισσότερους περιορισμούς εμφάνισαν οι ιστοσελίδες των άρθρων, καθώς σε μερικά δεν μας δόθηκε πρόσβαση, αφού απαιτούσαν πληρωμή συνδρομής. Ακόμα, εμφανίζονταν πολλαπλές πηγές για κάθε άρθρο, γεγονός που επέκτεινε τον χρόνο ολοκλήρωσης της εργασίας. Πρόβλημα επίσης αποτέλεσε και ο μη διαχωρισμός των δυο όρων στην μηχανή αναζήτησης google. Δηλαδή στην αναζήτηση του όρου "behavioural epidemiology" εμφανίστηκαν αποτελέσματα του όρου "behavioral epidemiology" και το αντίθετο. Κάτι ακόμα που δυσκόλεψε την καταγραφή των αποτελεσμάτων στην εργασία ήταν τα στιγμιότυπα οθόνης από τα αποτελέσματα της αναζήτησης των 2 όρων στο google. Η κάθε σελίδα αναζήτησης που αποθηκεύαμε ήταν αρκετά μεγάλη σε μέγεθος και είχε διαφορετικές διαστάσεις με αποτέλεσμα να μην χωράει στην αντίστοιχη σελίδα του word. Προκειμένου να συμβαδίζουν οι διαστάσεις της κάθε εικόνας με τις σελίδες του word και να είναι ευανάγνωστα τα γράμματα η κάθε σελίδα χωρίστηκε σε 2 εικόνες. Για να είναι διακριτό αυτό στον τίτλο 2 εικόνων που αντιστοιγούν σε μια σελίδα κρατήσαμε τον ίδιο αριθμό και γράψαμε δίπλα την λέξη -(συνέχεια). Ένα ακόμα ανάχωμα που παρουσιάστηκε είναι πως ορισμένοι σύνδεσμοι που αφορούν θέσεις εργασίας ή μαθήματα πανεπιστημίων δεν εμφανίζουν το περιεχόμενο της εικόνας καθώς αλλάζουν οι θέσεις εργασίας και διαγράφονται τα μαθήματα.

Στο πλαίσιο της διερευνητικής αυτής ανασκόπησης πραγματοποιήθηκε μελέτη των ευρημάτων από τα οποία προκύπτει ότι οι μελετητές επικεντρώθηκαν στην συμπεριφορά και πως αυτή αλληλοεπιδρά με τα μεταδοτικά/μη μεταδοτικά νοσήματα, την σωματική δραστηριότητα, την προαγωγή υγείας και την εξέλιξή της συμπεριφορικής επιδημιολογίας στην πορεία του χρόνου. Διαπιστώθηκε ότι τα άρθρα που έχουν δημοσιευθεί τη δεκαετία του 1980 αφορούσαν γενικά στον τομέα της συμπεριφορικής επιδημιολογίας και την προαγωγή υγείας, ενώ αυτά που έχουν δημοσιευθεί τη δεκαετία του 2010 και μετά αφορούσαν συγκεκριμένους τομείς με ιδιαίτερη προσοχή στα νοσήματα HIV/AIDS, COVID-19, τα εμβόλια, στην σωματική δραστηριότητα και πώς τα παραπάνω αλληλοεπιδρούν με την συμπεριφορά του ατόμου (Raymond, 1989), (Muhlin, et al., 1981), (Welk, et al., 2017), (Macera, et al., 2017), (Chakrabarti, et al., 2022), (Sarkar, 2022), (Sally, et al., 2023), (Bauch, et al., 2012), (

Medical Research Council, n.d.), (Vita & Owen, 2007). Αξιοσημείωτο και ενδιαφέρον είναι πως εμφανίστηκαν 2 άρθρα που αφορούσαν στην ενιαία υγεία. Το πρώτο άρθρο αναφέρεται στην συμπεριφορά του ατόμου που επηρεάζει έμμεσα την ευημερία των σκύλων και των γάτων και το δεύτερο αποτελεί μια έρευνα που συσχετίζει τη συμπεριφορά των ατόμων με ένα γεγονός διακοπής ρεύματος (Fatjó, et al., 2006), (Muhlin, et al., 1981). Με βάση τα παραπάνω συμπεραίνεται οτι την τελευταία δεκαετία αντικείμενο μελέτης έχει αποτελέσει η αυξανόμενη ανάγκη των ανθρώπων για σωματική δραστηριότητα από τη νεαρή τους ηλικία και πως αυτή επιδρά στον τρόπο ζωής τους (Vita & Owen, 2007), (Welk, et al., 2017), (Medical Research Council, n.d.).

Στα αποτελέσματα της αναζήτησης βρέθηκαν αρκετές ομάδες εργασίας, μαθήματα πανεπιστημίων όπως και καθηγητές που ασχολούνται με τον τομέα της συμπεριφορικής επιδημιολογίας, από πανεπιστήμια της Αμερικής και της Αγγλίας. Τα παραπάνω υποδηλώνουν την τάση συμμετοχής νέων επιστημόνων, στον τομέα της τριτοβάθμιας εκπαίδευσης και τη περεταίρω ενασχόληση στο επιστημονικό πεδίο της συμπεριφορικής επιδημιολογίας.

Από το 2019 με την εμφάνιση της πανδημίας Covid-19 ο τομέας της συμπεριφορικής επιδημιολογίας άρχισε να εστιάζει στη αλληλεπίδραση της συμπεριφοράς του ανθρώπου με τον ιό. Πιο συγκεκριμένα, οι ερευνητές προσπάθησαν να βρουν τρόπους για την καλύτερη διαχείριση μελλοντικών πανδημιών. Αυτό αποδεικνύεται στα άρθρα του όρου "behavioral epidemiology" (Chakrabarti, et al., 2022) (Sarkar, 2022). Θα ήταν σημαντικό να αναφερθεί πώς κυρίαρχο ρόλο στην συμπεριφορά έχουν οι κοινωνικοπεριβαλλοντικοί παράγοντες και τα χαρακτηριστικά όπως το φύλο, ηλικία, την κουλτούρα κλπ. σύμφωνα με τους συγγραφείς (Heggenhougen & Shore, 1986), (Crawford & Owen, 1994), (Degenhardt, et al., 2023).

Μέσα στην κατηγορία "ΑΛΛΑ" του όρου "behavioural epidemiology" εμφανίστηκαν μέσα κοινωνικής δικτύωσης (Facebook, Instagram, twitter) από ένα επιδημιολογικό εργαστήριο (University of Alberta, χ.χ.). Η τάση αυτή εκφράζει την ανάγκη προσαρμογής του κλάδου στην σύγχρονη κοινωνία και την προώθηση του περιεχόμενου και της δραστηριότητας του στο ευρύ κοινό.

Μέσα από την εργασία μας, ο αναγνώστης έρχεται σε επαφή με τον κλάδο της συμπεριφορικής επιδημιολογίας και τους δυο όρους που προκύπτουν από τον ορθογραφικό διαχωρισμό της λέξης «επιδημιολογία» στην αγγλική γλώσσα ("behavioral epidemiology", "behavioural epidemiology"). Στη συνέχεια μέσω της κατηγοριοποίησης των αποτελεσμάτων, ο αναγνώστης κατανοεί την εφαρμογή και την εξέλιξη της συμπεριφορικής επιδημιολογίας σε επιστημονικό επίπεδο και πως η συμπεριφορά παρουσιάζει ερευνητικό ενδιαφέρον στον τομέα της υγείας.

Καταληκτικά, συμπεραίνεται ότι η έρευνα στον κλάδο της συμπεριφορικής επιδημιολογίας διεξάγεται με σκοπό την ελαχιστοποίηση των παραγόντων κινδύνου που συνοδεύουν τις νόσους, την καλύτερη ανταπόκριση του ανθρώπου σε μεταδοτικά/μη μεταδοτικά νοσήματα και την υιοθέτηση της σωστής συμπεριφοράς. Μέσω των παραπάνω ευρημάτων της διερευνητικής αυτής ανασκόπησης, εκφράζεται η ανάγκη για περεταίρω έρευνα και μελλοντική εξέλιξη στον τομέα της συμπεριφορικής επιδημιολογίας.

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