

Πανεπιστήμιο Δυτικής Αττικής ΠΜΣ Περιβαλλοντική Επικοινωνία και Προαγωγή Υγείας



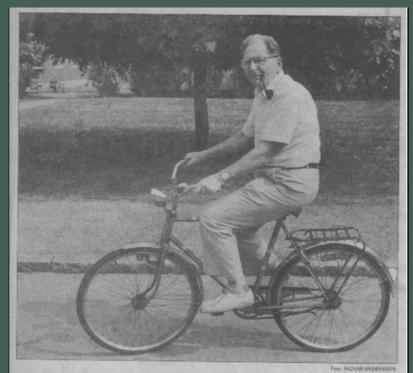
Καθηγήτρια Κωνσταντίνα Σκαναβή

OSUCITIKI SAOT

<u>Διδάσκων</u>:

Ιωάννης Σκιαδάς, MD, PhD

Προαγωγή υγείας, ανανέωση από τη Φύση: Η Οικοθεραπεία ως πλαίσιο για να βοηθήσει τους ανθρώπους να αντιμετωπίσουν κρίσεις, επιδημίες, χρόνια νοσήματα (Καρδιαγγειακά, μεταβολικά, λοιμώδη).

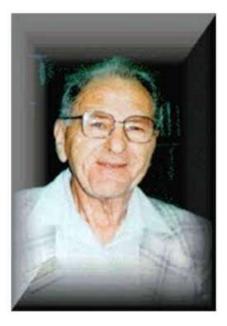


### Sense of Coherence and Salutogenesis

Aaron Antonovsky (1923-1994)

Health, Stress and Coping (1979);

Unravelling the Mystery of Health: How People Manage Stress and Stay Well (1987)



Det är siktigare att se på varför tv lyckas hålla oss friska än på vad som gör oss sjuka, säger Aaron Antonovsky, tillfällig gössprofessor i medicinsk sociologi i Lund – här på universitetets "gåsteykel", som han flirjat nythat

## Generalized Resistance Resources

• GRRs

• Biological, material & psycho-social factors that make it easier for people to perceive their lives as consistent, structured and understandable

## Sense of Coherence

### • SOC

 Global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (1) the stimuli deriving from one's internal and external environments in the course of living are structured, predictable and explicable; (2) the resources are available to one to meet the demands posed by the stimuli; & (3) these demands are challenges, worthy of investment and engagement.

## SENSE OF COHERENCE

- Comprehensibility
- Comprehensibility—the cognitive component
- > The extent to which events are perceived as making logical sense
- > Belief that things happen in an orderly and predictable fashion and a sense that you can understand events in your life and reasonably predict what will happen in the future

## SENSE OF COHERENCE

- Manageability
- Manageability—the instrumental or behavioral component
- > The extent to which a person feels that they can cope
- > Belief that you have the skills or ability, the support, the help, or the resources necessary to take care of things, and that things are manageable and within your control

## SENSE OF COHERENCE

- Meaningfulness
- Meaningfulness—the motivational component.
- > How much one feels that life makes sense
- > Belief that things in life are interesting and a source of satisfaction, that things are really worthwhile and that there is good reason or purpose to care about what happens.

## Complementary Perspectives on Health

PATHOGENESIS	SALUTOGENESIS
Start Point = Disease or Problem	Start Point = Health Potential
About avoiding problems and its causes	About approaching potential and its causes
Works to eliminate risk factors	Works to create health (salutary) factors
Reactive - react to signs, symptoms, and indications of disease	Proactive - create conditions of physical, mental, and social well-being
Disease or infirmity is an anomaly	Humans flawed and subject to entropy
Idealistic perspective - treat disease	Realistic perspective - go get health
Focus is to prevent pain or loss	Focus is to promote gains or growth
Prepares or help prepare one to live	Enhance capacities and potential so can live fully
Wants to help avoid or prevent a person from being pushed backward	Wants to help or enhance a persons ability to move forward

## Complementary Perspectives on Health

PATHOGENESIS	SALUTOGENESIS
Against Disease and infirmity	For Health
For those who need healing cures	For those who want better health
Primary focus - Prevention of negative health	Primary focus - Promotion of positive health
Secondary benefit - Health Promotion	Secondary benefit - Prevention of disease and infirmity
Outcome - absence of problem	Outcome - presence of a gain
Keep from making situation worse	Continuous Improvement
Minimization of problems	Optimization of potential

## A SAFE PLACE

	(+972)052-3294
News-Flash May 2016 to view go to conferences	TRAINING SUPERVISION CONFERENCES PROGRAMS CONTACT US The Nature-Therapy center works with numerous clients in the academy, ministries and leading organizations in Israel. The center is currently developing working connections abroad. Some of these clients are: The Israeli Ministry of Education: - running therapeutic-educational programs for children of all ages and for those with special needs. It initiates and promotes conferences and runs trainings dealing with nature oriented therapy, therapy in nature and nature therapy in particular.
<ul> <li>HOME</li> <li>PROFESSIONAL STAFF</li> <li>ADVISORY COMMITTEE</li> <li>PhD THESIS</li> <li>PUBLICATIONS</li> <li>GALLERY</li> <li>VIDEOS</li> <li>RESEARCH</li> <li>OUR CLIENTS</li> <li>CONTACT US</li> </ul>	The Israel Ministry of social affairs and social services: - Running therapeutic programs for children and families at risk and for those who live in violent environment. Tel Aviv University, Social work Faculty: establishing and running a two year's Nature-Therapy training for therapist and goup councellors Haifa University at Shiluv Center: establishing and running a two year's Nature-Therapy training for therapist and group councellor. Tel-Hai College: establishing and running the Nature-Therapy training course Dundee-Abertay University, Social-di establishing and running Nature-Therapy courses Telem (an Israeli leading therapeutic institution), establishing and running the Nature-Therapy training The Israeli Community Stress Prevention Center, an international leading center based in Israel: establishing and running Nature- Therapy programs with children, adults and families who have experienced trauma. The Violence Prevention Center (Israel): establishing and running Nature-Therapy programs for children and families who have experienced violence

#### Who we are? What we do Workshops & Trainings Support us! Contact us

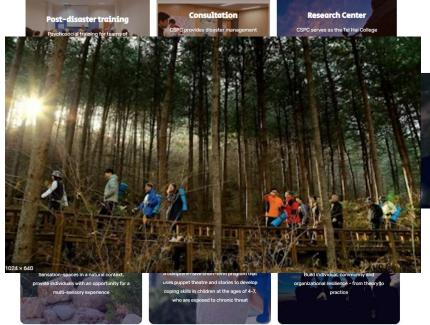
#### **The Community Stress Prevention Center**



Who we are?

The Community Stress Prevention Centre (CSPC) is the oldest organization in Israel that deals with the treatment and prevention of psychotauma. CSPC promotes stress and crisis management on national, organizational, community and individual levels world wide. CSPC has been providing both multidisciplinary treatment and support to victims of psycho-trauma due to terror and war within Israel for over 37 years.

#### What we do?



### PLOS ONE

#### RESEARCH ARTICLE

## Mental health problems and social media exposure during COVID-19 outbreak

Junling Gaoo, Pinpin Zheng, Yingnan Jia, Hao Chen, Yimeng Mao, Suhong Chen, Yi Wang, Hua Fu, Junming Dai\*

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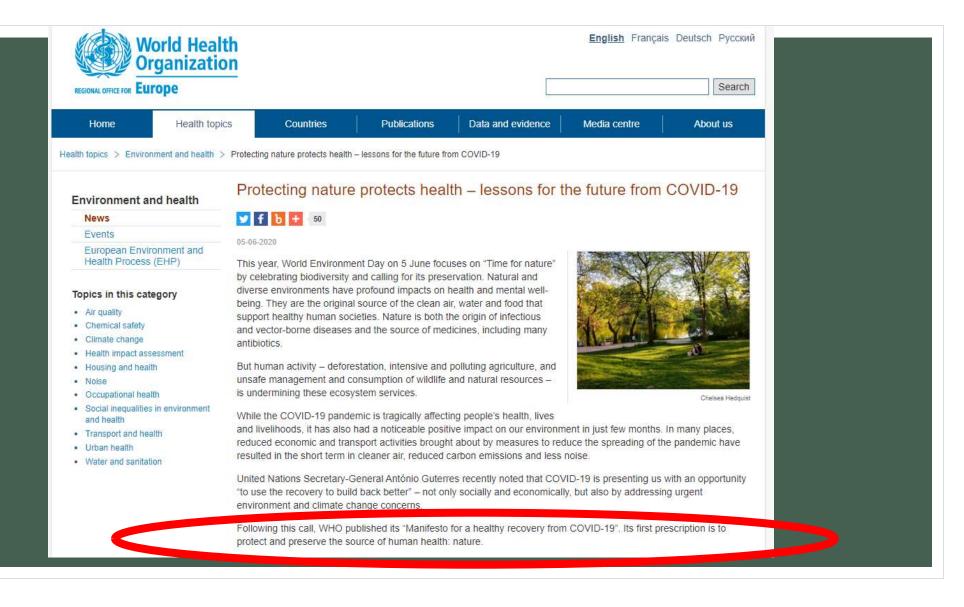


#### Abstract

Huge citizens expose to social media during a novel coronavirus disease (COVID-19) outbroke in Wuhan, China. We assess the prevalence of mental health problems and examine their association with social media exposure. A cross-sectional study among Chinese citizens aged≥18 years old was conducted during Jan 31 to Feb 2, 2020. Online survey was used to do rapid assessment. Total of 4872 participants from 31 provinces and autonomous regions were involved in the current study. Besides demographics and social media exposure (SME), depression was assessed by The Chinese version of WHO-Five Well-Being Index (WHO-5) and anxiety was assessed by Chinese version of generalized anxiety disorder scale (GAD-7). multivariable logistic regressions were used to identify associations between social media exposure with mental health problems after controlling for covariates.

#### OPEN ACCESS

Citation: Gao J, Zheng P, Jia Y, Chen H, Mao Y, Chen S, et al. (2020) Mental health problems and social media exposure during COVID-19 outbreak. PLoS ONE 15(4): e0231924. <u>https://doi.org/</u> 10.1371/journal.pone.0231924



## Rollo May:

## •'Beauty is eternity born into human existence'.





<u>Πανεπιστήμιο Δυτικής Αττικής</u> ΠΜΣ Περιβαλλοντική Επικοινωνία και Προαγωγή Υγείας



Καθηγήτρια Κωνσταντίνα Σκαναβή

**OEVOTISTES** 

<u>Διδάσκων</u>:

Ιωάννης Σκιαδάς, MD, PhD

Βιωματικές και υπαρξιακές διαστάσεις στην αποκατάσταση του περιβάλλοντος και του ανθρώπου στην οικοθεραπεια, [προάγοντας την ενσυνειδησία, (την αποδοχή ρόλου, νόσου, ζωής, κοινωνικής περιβαλλοντικής συνείδησης)].



Satellite imagery shows Tropical Storm Harvey intensifying into a hurricane.

## "a chronic fear of environmental doom

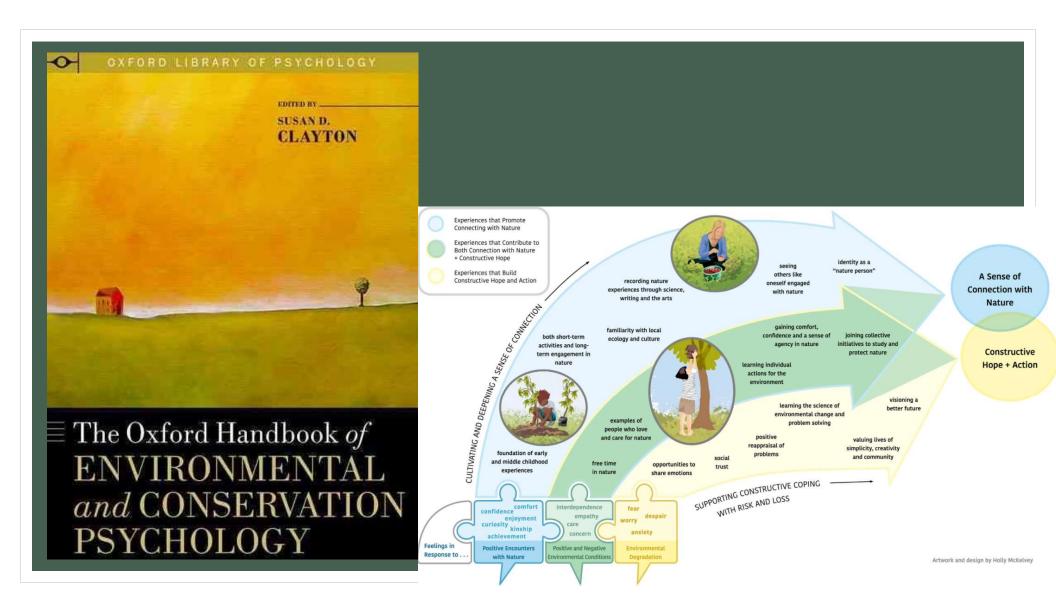


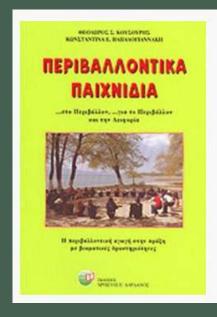
Alice McAlpine at the organic farm where she works. She's found this kind of hands-on activity helps her cope with eco-anxiety.

## Breakthrough Communities

Sustainability and Justice in the Next American Metropolis

edited by M. Palorna Pavel formed by Carl Authors

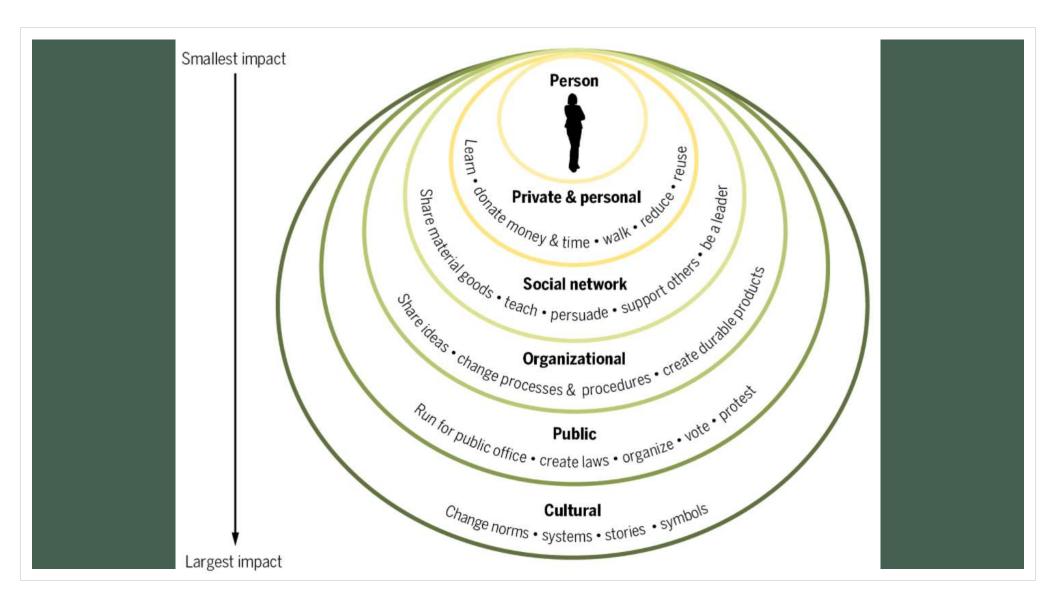




ΠΕΡΙΒΑΛΛΟΝΤΙΚΑ ΠΑΙΧΝΙΔΙΑ - . . .ΣΤΟ ΠΕΡΙΒΑΛΛΟΝ, . . . ΓΙΑ ΤΟ ΠΕΡΙΒΑΛΛΟΝ ΚΑΙ ΤΗΝ ΑΕΙΦΟΡΑ

Η ΠΕΡΙΒΑΛΛΟΝΤΙΚΗ ΑΓΩΓΗ ΣΤΗΝ ΠΡΑΞΗ ΜΕ ΒΙΩΜΑΤΙΚΕΣ ΔΡΑΣΤΗΡΙΟΤΗΤΕΣ





## ΟΔΗΓΙΑ ΓΙΑ ΤΗΝ ΠΕΡΙΒΑΛΛΟΝΤΙΚΗ ΕΥΘΥΝΗ

### Τι είναι η οδηγία για την περιβαλλοντική ευθύνη,

Το φυσικό περιβάλλον συντηρεί την ανθρώπινη υγεία, την ευτυχία και την οικονομική δραστηριότητα. Για να διαφυλάξουν το περιβάλλον προς χρήση και απόλαυση σήμερα αλλά και για τις μελλοντικές γενιές, και για να σταματήσουν τον περιορισμό της βιοποικιλότητας, να προλάβουν την υποβάθμιση της ποιότητας και της ποσότητας του νερού και να προστατεύσουν το έδαφος, τα κράτη μέλη της Ευρωπαϊκής Ένωσης δεσμεύτηκαν να προλαμβάνουν τις σημίες και, όπου σημειώνονται, να τις αποκαθιστούν.

Κατά συνέπεια, το 2004, εγκρίθηκε η οδηγία για την περιβαλλοντική ευθύνη (ΟΠΕ) με στόχο τη θέσπιση κοινού πλαισίου για την πρόληψη και την αποκατάσταση των περιβαλλοντικών εημιών (π.χ. ομοιόμορφος ορισμός της περιβαλλοντικής εημίας, συνεπέστερη προσέγγιση του τρόπου αποκατάστασης, κλπ.). Η ΟΠΕ βασίζεται στην αρχή «ο ρυπαίνων πληρώνει», με την οποία όσοι προκάλεσαν περιβαλλοντική εημία καθίστανται υπεύθυνοι για την εφαρμογή των απαραίτητων μέτρων πρόληψης και αποκατάστασης και για την κάλυψη των σχετικών δαπαινών. Εφαρμόζεται η γενική αρχή ότι, με την αποκατάσταση, το κατεστραμμένο περιβάλλον επανέρχεται στην κατάσταση στην οποία θα βρισκόταν εάν δεν είχε επέλθει η επμία. Η ΟΠΕ παρέχει το πλαίσιο για τη σχετική αξιολόγηση της επμίας και την αποκατάσταση.

Με τον τρόπο αυτό, λαμβάνοντας υπόψη το κόστος αποκατάστασης, η ΟΠΕ στοχεύει στην ευαισθητοποίηση και στην παροχή κινήτρων για περαιτέρω επενδύσεις σε μέτρα πρόληψης και καλύτερες περιβαλλοντικές πρακτικές. Όλες οι επικειρήσεις οι οποίες αναπτύσσουν δραστηριότητες που δημιουργούν κινδύνους για το περιβάλλον, οι οποίοι καλύπτονται από την ΟΠΕ, προτρέπονται να εκτιμήσουν και να λάβουν τα αναγκαία μέτρα για τη μείωση των κινδύνων αυτών.

#### Πώς λειτουργεί η ΟΠΕ;

Η εφαρμογή της ΟΠΕ ενεργοποιείται από τις επαγγελματικές Η ΟΠΕ προβλέπει τους ακόλουθους τύπους φυσικών πόρων που ενδέχεται δραστηριότητες που ενδέχεται να ζημιώσουν ή να θέσουν σε άμεσο κίνδυνο ζημίας<sup>1</sup> τους φυσικούς πόρους που καλύπτονται από την οδηγία.

Αν είστε υπεύθυνος επαγγελματικής δραστηριότητας (κερδοσκοπικής ή όχι) και εάν η δραστηριότητά σας:

- απαιτεί άδεια ολοκληρωμένης πρόληψης και ελέγχου της ρύπανσης (ΟΠΕΡ)
- αποιτεί άδεια αποβλήτων
- απορρίπτει λύματα σε ύδατα
- xρησιμοποιεί ή μεταφέρει επικίνδυνες χημικές ουσίες
- εχετίζεται με αντλήσεις υδάτων
- χρησιμοποιεί, μεταποιεί, απορρίπτει επικίνδυνες ουσίες ή σκευάσματα, προϊόντα φυτοπροστασίας ή βιοκτόνα
- απελευθερώνει σκοπίμως γενετικά τροποποιημένους οργανισμούς στο περιβάλλον
- μεταφέρει απόβλητα
- σιαχειρίζεται εξορυκτικά απόβλητα
- περιλαμβάνει δέσμευση και αποθήκευση διοξειδίου του άνθρακα.

τότε φέρετε αντικειμενική ευθύνη για τη ζημία ή τον άμεσο κίνδυνο ζημίας που προκαλεί η δραστηριότητά σας στα ύδατα, στο έδαφος και στα προστατευόμενα είδη ζώων και συτών και στα συσικά τους ενδιαιτήματα. Αυτό σημαίνει ότι, ακόμη και χωρίς να διαπιστωθεί υπαιτιότητα ή αμέλεια εκ μέρους σας, φέρετε ευθύνη για τη λήψη μέτρων πρόληψης και αποκατάστασης και για την ανάληψη του σχετικού κόστους.

Εάν η επαγγελματική σας δραστηριότητα δεν περιλαμβάνεται στον ανωτέρω κατάλογο, εξακολουθείτε να φέρετε υποκειμενική ευθύνη αλλά μόνο για τις ζημίες σε προστατευόμενα είδη και ενδιαιτήματα. Αυτό σημαίνει ότι προκειμένου να φέρετε ευθύνη θα πρέπει να αποδειχτεί υπαιτιότητα ή αμέλεια.

<sup>1</sup> Επικείμενη απειλή σημαίνει ότα υπάρχει επαρχώς ηθαικλαγούμενος κίνδυνος επέλευσης περιβαλλοντικής ζημίος στο εγγύς μέλλαν. Η «επαρχής πιθανάτητα» και τα «εγγύς μέλλαν» εξαρτώνται από την περίπτωση.



να υπόκεινται σε καθεστώς ζημίας ή άμεσου κινδύνου ζημίας:

#### Προστατευόμενα είδη και φυσικά ενδιαιτήματα

Ζημία ή άμεσος κίνδυνος ζημίας που επηρεάζει ιδιαίτερα δυσμενώς την ευνοϊκή κατάσταση διατήρησης προστατευόμενων ειδών ή ενδιαιτημάτων.

Προστατευόμενα είδη ή ενδιαιτήματα όπως ορίζονται στις οδηγίες για τους οικότοπους και τα πτηνά, και σε ορισμένα κράτη μέλη επίσης τα εθνικώς προστατευόμενα είδη και ενδιαιτήματα

#### Έδαφος

Ζημία ή άμεσος κίνδυνος ζημίας που επηρεάζει ιδιαίτερα δυσμενώς την οικολογικά χομικά και/ά την ποσοτικά κατάσταση και/ά το οικολογικά δυναμικό των υπό εξέταση υδάτων.

Υδατα κατά τα οριζόμενα στην οδηγία-πλαίσιο για τα ύδατα, ήτοι, επιφανειακά (εσωτερικά, μεταβατικά, παράκτια, χωρικά) και υπόγεια ύδατα

#### γδατα

Μόλυνση ή άμεση απειλή που δημιουργεί σημαντικό κίνδυνο για την ανθρώπινη υγεία ως αποτέλεσμα της άμεσης ή έμμεσης εισαγωγής επικίνδυνων ουσιών, παρασκευασμάτων και/ή (μικρο)οργανισμών εντός ή επί του εδάφους ή στο υπέδαφος.

### Πότε εφαρμόζεται η ΟΠΕ:

Η ΟΠΕ καλύπτει ένα συμβάν όταν αυτό προκαλεί σημαντική ζημία σε ύδατα, έδαφος ή προστατευόμενα είδη και ενδιαιτήματα όπως περιγράφεται ανωτέρω.

Για τον καθορισμό της σημασίας της ζημίας υπεύθυνες είναι οι αρμόδιες αρχές σε κάθε κράτος μέλος. Ωστόσο, η ΟΠΕ παρέχει κάποιες βασικές κατευθύνσεις. Για παράδειγμα, σε περιπτώσεις που η ζημία στο περιβάλλον επηρεάζει την ανθρώπινη υγεία, θεωρούνται σημαντικές. Αντίθετα, όταν η ζημία που προκαλείται στο περιβάλλον υπολείπεται των τυπικών φυσικών διακυμάνσεων (π.χ. όσον αφορά τους πληθυσμούς των ειδών), ή όταν είναι δυνατή η πλήρης αποκατάσταση του φυσικού πόρου σε βραχύ χρονικό πλαίσιο, η ζημία δεν θεωρείται σημαντική.

Ενδιαιτήματα και είδη	Ύδατα	Έδαφος
Άμεση απομάκρυνση ή καταστροφή προστατευόμενων ενδιαιτημάτων και ειδών Φυσική ζημία, χημική ρύπανση ή σημαντική διαταραχή (συμπεριλαμβάνεται θόρυβος και κραδασμοί) Μικροβιακή ρύπανση προστατευόμενων ενδιαιτημάτων και ειδών από, π.χ. κακές γεωργικές πρακτικές Ενσυνείδητη θανάτωση προστατευόμενων ειδών (π.χ. με παράνομη θήρα πτηνών)	<ul> <li>Υδροληψία που προκαλεί αλλαγή της ποσοτικής κατάστασης υδάτινης μάζας</li> <li>Απόρριψη από βιομηχανική εγκατάσταση αποθήκευσης —ή από φορτηγό ή σιδηροδρομικό βυτίο μεταφοράς— χημικών (π.χ. λόγω ατυχήματος)</li> <li>Κατασκευή φραγμάτων για επιφανειακά ύδατα που προκαλεί σημαντικές αλλαγές στο οικολογικό υδρολογικό δυναμικό</li> <li>Χημικές κηλίδες, πετρελαιοκηλίδες ή ρύπανση με απόβλητα από υπόγειες και υπέργειες εγκαταστάσεις αποθήκευσης, χειρισμού και μεταφοράς που προκαλούν ζημιές στα υπόγεια και τα επιφανειακά ύδατα (χημική κατάσταση)</li> </ul>	<ul> <li>Βλάβη στο σύστημα καθαρισμού καηνού εγκατάστασης αποτέφρωσης αποβλήτων που προκαλεί ρύπανση με βαρέα μέταλλα του εδάφους σε γειτονική περιοχή κατοικιών</li> <li>Ελευθέρωση χημικών λόγω ατυχήματος από περιοχές αποθήκευσης, χειρισμού και παραγωγής και μετανάστευση των χημικών ουσιών στο έδαφος και τα υπόγεια ύδατα</li> <li>Σκόπιμη, παράνομη διάθεση αποβλήτων επί ή εντός του εδάφους από την οποία παράγονται αέρια (επικίνδυνες χημικές ουσίες) και μετανάστευση σε γειτονικές περιοχές κατοικιών</li> <li>Παροπλισμός εργοστασίου που προκαλεί τυχαία διαρροή επικίνδυνων ουσιών στο έδαφος και τα υπόγεια ύδατα</li> </ul>

### Πότε δεν εφαρμόζεται η ΟΠΕ;

Ανεξάρτητα από την επαγγελματική σας δραστηριότητα ως επιχείρηση δεν φέρετε ευθύνη εάν η ζημία προκαλείται από:

- ένοπλη διένεξη, συγκρούσεις, εμφύλιο πόλεμο ή εξέγερση
- εξαιρετικό φυσικό φαινόμενο (έκτακτου, ακαταμάχητου και αναπόφευκτου χαρακτήρα)
- δραστηριότητες που διεξάγονται κυρίως στο πλαίσιο αποστολών εθνικής αμύνης, ή διεθνούς ασφάλειας, ή για την προστασία έναντι φυσικών καταστροφών, ή
- δραστηριότητες απροσδιόριστης φύσης, για παράδειγμα σε περίπτωση διάχυτης ρύπανσης, εάν δεν μπορεί να προσδιοριστεί σχέση αιτίου-αποτελέσματος μεταξύ της δραστηριότητας και της ζημίας.

Επιπλέον, η ΟΠΕ δεν εφαρμόζεται στις εξής περιπτώσεις:

- εκπομπές, γεγονότα ή συμβάντα (και οι αντίστοιχες δραστηριότητες) που συνέβησαν πριν από τις 30 Απριλίου 2007
- προκληθείσες ζημιές, εάν έχουν παρέλθει άνω των 30 ετών από την εκπομπή, το γεγονός ή το συμβάν που προκάλεσε τη ζημία,
- θαλάσσια ρύπανση από πετρέλαιο, μεταφορά επικίνδυνων εμπορευμάτων, πυρπνικές δραστηριότητες κ.λπ. κατά τα προβλεπόμενα από διεθνείς συνθήκες, και
- εάν η επιχείρηση μπορεί να αποδείξει ότι η ζημία προκλήθηκε από τρίτο μέρος και σημειώθηκε παρά τη λήψη των κατάλληλων μέτρων ασφαλείας ή κατόπιν διαταγής/οδηγίας που έδωσε δημόσια αρχή (ένσταση όσον αφορά τα έξοδα).

Ανάλογα με το εθνικό δίκαιο, ως επιχείρηση μπορείτε επίσης να αντικρούσετε τις κατηγορίες εάν:

- συμμορφωθήκατε πλήρως με την άδεια και όλους τους όρους της όσον αφορά τις εκπομπές ή το γεγονός που προκάλεσε τη ζημία, ή
- η εκπομπή ή το γεγονός εθεωρείτο απίθανο να προκαλέσουν ζημία βάσει των επιστημονικών και τεχνικών γνώσεων κατά την στιγμή της ελευθέρωσης της εκπομπής στο περιβάλλον ή κατά τη στιγμή που υλοποιήθηκε η δραστηριότητα.

### Τι πρέπει να γίνει όταν σημειωθεί ή επίκειται ζημία;

Στο ακόλουθο σχήμα περιλαμβάνονται οι ενέργειες που πρέπει να γίνουν από τους διάφορους φορείς όταν σημειώνεται ζημία ή υφίσταται άμεση απειλή και αποδεικνύεται ότι ισχύει η ΟΠΕ. Στο σχήμα φαίνεται και η δυνατή αλληλουχία των ενεργειών.



Σε περίπτωση περιβαλλοντικής ζημίας ή επικείμενου κινδύνου, οι φορείς εκμετάλλευσης πρέπει

- Να λάβουν άμεσα μέτρα για να προλάβουν τη ζημία ή να αποτρέψουν την επιδείνωσή της
- Να ενημερώσουν την αρμόδια αρχή το ταχύτερο δυνατόν περί του συμβάντος και τα προληπτικά μέτρα που ελήφθησαν, και
- Να αποκαταστήσουν τη ζημία σύμφωνα με το οικείο σχέδιο αποκατάστασης και τα βήματα που καθορίζει η αρμόδια αρχή.

Μόλις ενημερωθούν, οι αρμόδιες για την εφαρμογή της ΟΠΕ αρχές σε κάθε κράτος μέλος πρέπει

- Να καθορίσουν εάν η ζημία εμπίπτει στο πεδίο εφαρμογής της ΟΠΕ
- Να εντοπίσουν τον υπεύθυνο φορέα (ή φορείς) εκμετάλλευσης, και
- Να απαιτήσουν από τον υπεύθυνο φορέα (ή φορείς εκμετάλλευσης) να λάβουν τα αναγκαία άμεσα και μακροπρόθεσμα μέτρα αποκατάστασης.

Οι αρμόδιες αρχές είναι επίσης δυνατόν να λάβουν μέτρα αποκατάστασης με δική τους πρωτοβουλία. Στην περίπτωση αυτή οφείλουν να ζητήσουν την κάλυψη των δαπανών αποκατάστασης, αξιολόγησης, του διοικητικού κόστους και άλλων αναγκαίων δαπανών από τον φορέα εκμετάλλευσης που προκάλεσε τη ζημία.

### Πώς αποκαθίσταται η ζημία;

Τρεις είναι οι δυνατές μορφές που μπορεί να λάβει η αποκατάσταση της περιβαλλοντικής ζημίας ή του επικείμενου κινδύνου για τα ύδατα ή τα προστατευόμενα είδη και τα φυσικά ενδιαιτήματα: πρωτογενής αποκατάσταση επί τόπου • συμπληρωματική αποκατάσταση • ή αντισταθμιστική αποκατάσταση.

#### Πρωτογενής αποκατάσταση:

- Άμεσα μέτρα με στόχο την αναστολή του συμβάντος, ελαχιστοποίηση, έλεγχα και πρόληψη της περαιτέρω ζημίας και καθαρισμό της ζημίας. Αυτά αναφέρονται και ως μέτρα αποκατάστασης έκτακτης ανάγκης (ή άμεσα) (και τις περισσότερες φορές προηγούνται της πραγματικής πρωτογενούς αποκατάστασης), και
- Περισσότερο μεσο- έως μακροπρόθεσμα μέτρα αποκατάστασης του ζημιωθέντος τόπου που αποβλέπουν στην επιστροφή του ζημιωθέντος περιβάλλοντος στην αρχική κατάσταση στην οποία θα έπρεπε να βρίσκεται εάν δεν είχε σημειωθεί η ζημία ή δεν είχε υλοποιηθεί ο κίνδυνος («αποκατάσταση σε είδος»).

Ευμηληρωματική αποκατάσταση: Εάν η πρωτογενής αποκατάσταση δεν επαρκεί για την επιστροφή του περιβάλλοντος στην κατάσταση στην οποία θα έπρεπε να βρίσκεται εάν δεν είχε σημειωθεί η ζημία (την αποκαλούμενη «αρχική κατάσταση»), είναι δυνατόν να γίνουν περαιτέρω βελτιώσεις στον ζημιωθέντα τόπο. Εάν αυτό είναι ανέφικτο ή πολύ δαπανηρό, η εν λόγω αποκατάσταση μπορεί να υλοποιηθεί σε άλλον τόπο. Γία παράδειγμα, εάν με την πρωτογενή αποκατάσταση ζημιωθέντος τύπου αλιείας μπορεί να επιτευχθεί αποκατάσταση μόνο κατά 50 % του ιχθυαποθέματος στον ζημιωθέντα τόπο, μπορεί να εφαρμοστεί συμπληρωματική αποκατάσταση σε άλλη τοποθεσία προκειμένου να εξασφαλιστεί η εναπομένουσα κατά 50 % βελτίωση, ώστε τελικά οι αλιευτικό πόροι, αθροιζόμενοι στις δύο τοποθεσίες, να ισοδυναμούν με 100 % αποκατάσταση.

Αντισταθμιστική αποκατάσταση: Εάν η πρωτογενής αποκατάσταση (και η συμπληρωματική αποκατάσταση εάν χρειαστεί) απαιτεί κάποιο χρόνο για την αποκατάσταση της ζημίας στη φύση, εφαρμόζεται η αντισταθμιστική αποκατάσταση για να καλυφθούν οι απώλειες που προκύπτουν λάγω της παρόδου του χρόνου (ενδιάμεσες απώλειες).

Για τη ζημία στο έδαφος, η ελάχιστη απαίτηση βάσει της ΟΠΕ είναι η πρωτογενής αποκατάσταση, στο μέτρο που οι σχετικοί επιμολυντές που απομακρύνθηκαν, ελέγχθηκαν ή ελαχιστοποιήθηκαν δεν αποτελούν πλέον σημαντικό κίνδυνο για την ανθρώπινη υγεία (δεν απαιτείται συμπληρωματική ή αντισταθμιστική αποκατάσταση).

#### Παρασειγματα μετρων αποκαταστασης:

#### Πρωτογενής αποκατάσταση:

- Καθαρισμός (αποκατάσταση έκτακτης ανάγκης ή άμεση)
- Δημιουργία φραγμάτων για την αναστολή της περαιτέρω διάχυσης της ρύπανσης (αποκατάσταση έκτακτης ανάγκης ή άμεση)
- Αναβάθμιση, επανακαθορισμός των ορίων και αποκατάσταση της βλάστησης στον ζημιωθέντα τόπο με την εισαγωγή ιθαγενών ειδών ώστε να επιταχυνθεί η φυσική αποκατάσταση μετά τις διαταραχές που σχετίζονται με τα μέτρα πρωτογενούς αποκατάστασης
- Εισαγωγή ειδών ως συστατικών του τροφικού ιστού nou unoστηρίζουν τους ικθύς και την άγρια πανίδα, όπως κοινότητες ασπόνδυλων που είναι απαραίτητα για ικθύς και άγρια ζώα και κοινότητες μικρών θηλαστικώ που είναι απαραίτητα για αρπακτικά και σαρκοφάγα θηλαστικά
- Αποκατάσταση της πρόσβασης στις ψυχαγωγικές υπηρεσίες και εμπορικές δραστηριότητες που παρείχε προηγουμένως η ζημιωθείσα τοποθεσία
- Θα μπορούσε επίσης να θεωρηθεί ως μέρος της πρωτογενούς αποκατάστασης η φυσική αποκατάσταση των ζημιωθέντων πόρων

#### Συμπληρωματική και αντισταθμιστική αποκατάσταση:

- Αποκατάσταση λειτουργικών ενδιαιτημάτων στις ιστορικές περιοχές κατανομής όπως η αποκατάσταση υγροτόπων σε γεωργικές εκτάσεις που έχουν αποστραγγιστεί
- Αύξηση της αναπαραγωγικής επιτυχίας ειδών, όπως η προστασία τόπων ωοτοκίας από θηρευτές ή από ανθρώπινες οχλήσεις
- Δημιουργία νέων ενδιαιτημάτων για ιχθύς απομακρύνοντας τους μεταναστευτικούς φραγμούς
- Βελτίωση της φυσικής κατάστασης των ενδιαιτημάτων με την απομάκρυνση χωροκατακτητικών ειδών
- Προστασία υπόγειων υδάτων από μελλοντική επιμόλυνση
- Προστασία από την απώλεια ενδιαιτημάτων λόγω ενδεχόμενων αναπτυξιακών έργων
- Βελτίωση της ποσότητας και της ποιότητας των δυνατοτήτων ψυχαγωγίας που διατίθενται στην τοποθεσία
- Καθαρισμός «ορφανής» τοποθεσίας που έχει επιμολυνθεί από φορέα εκμετάλλευσης που έχει χρεωκοπήσει





TEPIBAddor cirai n Jun fias xia αυτό το λόγο δε πρέπει τα πετάμε σπουδιποτε τα εκουπίδια μας. Τα εκουπίδια τα κρατούμε στο χεράκι μας μέχρι που να βρούμε έναν κάδο. The auto to Logo has exer baler · Saluos has repiner 200 radous orner περιοχή μας. Alla πρέπει και γα arakukhéroulie zia autor tor lozo. Alia BLETTETE TOUS yoreis cas va finy Crakuklarour Resite Kati ra Tous Tribete ra kinour kal autoi arakuktuan. Σας τα λέω όλα αυτά επειδή To trepibabbor fias Sire, ofugoro Jia ra Joche aphoriká, cipnriká áddá kai Le useia.

Πανεπιστήμιο Δυτικής Αττικής ΠΜΣ Περιβαλλοντική Επικοινωνία και Προαγωγή Υγείας

«Περιβαλλοντική Επικοινωνία και Προαγωγή Υγείας »

**Social prescribing – addressing people's needs in a holistic way** GPs and other health care professionals can refer people to a range of local, non-clinical services, supported by a link worker or connector





<u>Διδάσκων</u>:

#### <u>Θεματική ενότητα</u>:

### Ιωάννης Σκιαδάς, MD, PhD

Το περιβάλλον ως εκπαιδευτικό μοντέλο. Συνταγογραφόντας την φύση, τεχνικές, προκλήσεις και ηθικά διλήμματα. Προγράμματα ατομικά αλλά και κοινοτικά διαχείρισης και προαγωγής υγείας. Μοντέλα οικοθεραπείας. Άσκηση και φυσική κατάσταση: Η εργοφυσιολογία της υγείας (Περίπατος, ηλιακή έκθεση, περιηγητική, πόδια στη γη, γευματίζοντας στην φύση) Σχέση με τα συστήματα υγείας.

### The Growing Field of Ecotherapy

By various estimates, the average American spends between 80 and 99% of the time INDOORS. By any estimate, that number is growing.



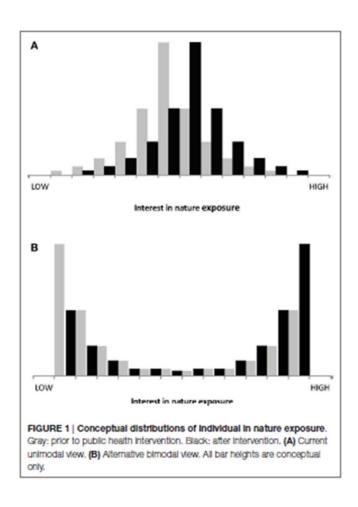
ORIGINAL RESEARCH published: 15 November 2016 doi: 10.3389/tpubh.2016.00257

Chest for

#### Social Mechanisms to Get People Outdoors: Bimodal Distribution of Interest in Nature?

#### Ralf Christopher Buckley1\*, Diane Westaway2 and Paula Brough3

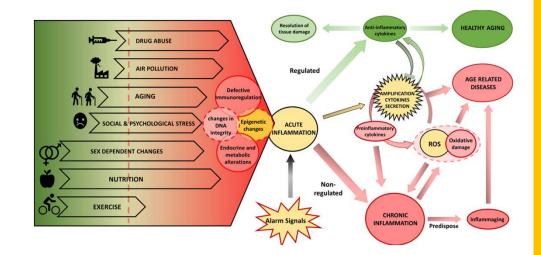
<sup>1</sup> Grittith University, Gold Coast, QLD, Australia, <sup>2</sup> Coastree, Sydney, NSW, Australia, <sup>3</sup>Merufes Health Institute of Queensiand, Grittith University, Gold Coast, QLD, Australia



by mediating the immune response, decreasing inflammation, and decreasing the chronic stress response, which in turn mediates metabolic and inflammatory pathways

(Bhasin et al., 2013; Kenney & Ganta, 2014; Kuo, 2015).

Biological and environmental factors determining the inflammatory response and the aging phenotype



### Prescribe "Nature" for your Patients - My Green Doctor



### Mental health: why bother....?



Tend to the social and the individual will flourish Jonathon Rutherford

- Mental wellbeing influences wide range of outcomes
- Improving mental wellbeing saves (a lot of) money
- Improving mwb delivers social (as well as economic) returns
- Improving mental health reduces health inequalities

### Beyond diagnosis: mental distress

"It gets so lonely around here that I phone myself seven or eight times a day, just to see how I am" (Phantom Tolbooth)

- pain
- alienation: excluded and misunderstood
- guilt: inadequacy or self blame
- anxiety: fear of loss, panic, chronic worry
- anger: blaming self and others
- loss: of identity, purpose, faith
- despair: loss of hope
- loneliness and isolation

individuals

families, schools and communities

# Contribution of mental health to inequalities



Key domains: education/employment/behaviour /health/ consequences of illness /services

(Whitehead & Dahlgren 2006)

Mental health is a significant determinant in each case, influencing:

- readiness for school/learning
- employability
- capacity, motivation and rationale for healthy behaviours
- risk for physical health (e.g. coronary heart disease),
- chronic disease outcomes (e.g. diabetes)
- relationship to health services, including uptake/treatment

# Social prescribing or Community referral:

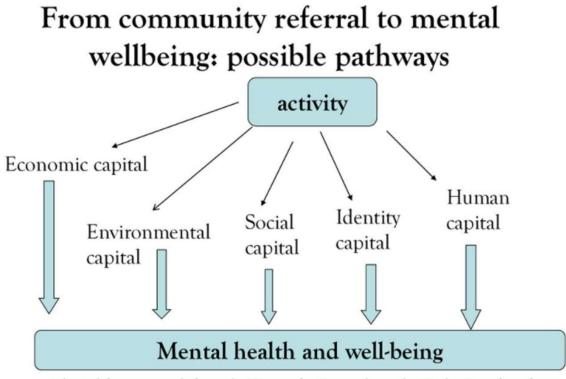
a way of linking people with non medical sources of support within the community usually via primary care

# Who is it for?

- Vulnerable and at risk groups
- People with mild to moderate depression and anxiety
- Frequent attenders (attend GP more than 12 times per year)
- People with long term mental health problem
- General population

### **EXAMPLES OF PRESCRIBING**

- Computerised therapies/CCBT
- Self-help/support groups
- Bibliotherapy/books on prescription
- Exercise on prescription
- Arts on prescription
- Green activity/ecotherapy
- Learning/education on prescription
- Volunteering
- Supported employment
- Timebanks

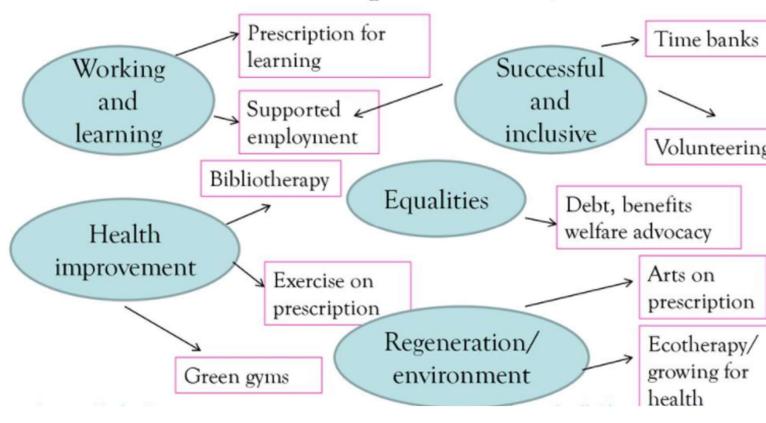


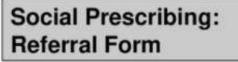
Adapted from research from the Centre for Research on the Wider Benefits of Learning (http://www.learningbenefits.net/)

# arts and creativity; physical activity; learning; time banks

• human and skill	<b>capital</b> (knowledge s)	• reduced symptoms	•wider social networks
	<b>pital</b> (trust and endency)	<ul><li>confidence</li><li>self-esteem</li></ul>	• connectedness • control
17.	<b>capital</b> (self image, & confidence)	<ul><li>lifted mood</li><li>improved</li></ul>	• hope • optimism
	<b>ic capital</b> (jobs, nvestment, se)	sleeping • increased activity	<ul> <li>healthier</li> <li>behaviours</li> <li>transferable</li> </ul>
	<b>mental</b> capital blue, wild space)	<ul> <li>life satisfaction</li> </ul>	skills

# Linking social prescribing to wider goals in Community Plans, Health Improvement & Council Corporate Plans,

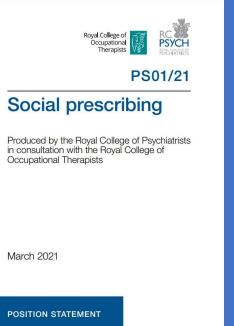






## Window

Servic	e Required		
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#### The impact of COVID-19 on social prescribing

The COVID-19 pandemic has reinforced, and even enhanced, awareness of the importance of social prescribing as part of a comprehensive set of treatment options. We know that many people have experienced loneliness and isolation during the pandemic, and social prescribing is particularly relevant in helping to address these issues alongside mental health disorders that an individual may have.

Social prescribing should always take individuals' safety into account by adhering to current guidance on social distancing and other safety measures.



CHILDREN'S HEALTH

# 6 reasons children need to play outside



### Scientific Proof That Will Motivate You to #OptOutside With Your Family

#### **#OPTOUTSIDE FOR YOUR KIDS SAKE**

According to an article from Harvard University Medical, there are six, proven reasons children need outdoor play.

#### SUNSHINE.

We need sun exposure to make vitamin D. Vitamin D plays a crucial role in many body processes, from bone development to our immune system.

#### EXERCISE.

Getting outside to play is one way to ensure children get the recommended one hour of daily activity. Additionally, active play, which takes place when kids are outdoors, is the ideal exercise for children.

#### **EXECUTIVE FUNCTION.**

Skills such as planning, prioritizing, troubleshooting, negotiation, multi-tasking, and even creativity are all developed through unstructured time, time with other children, and time where they must entertain themselves. Outdoor play gives children opportunities to practice these important life skills.

#### TAKING RISKS.

Children learn just as much from failure as they do from success. Natural areas present a number of opportunities for risk-taking. (More about risky play here.) Yes, as parents it may give us anxiety watching our child climb a tree or navigate rocks to cross a creek. But practicing risk-taking gives children the confidence to keep trying even when they fail.

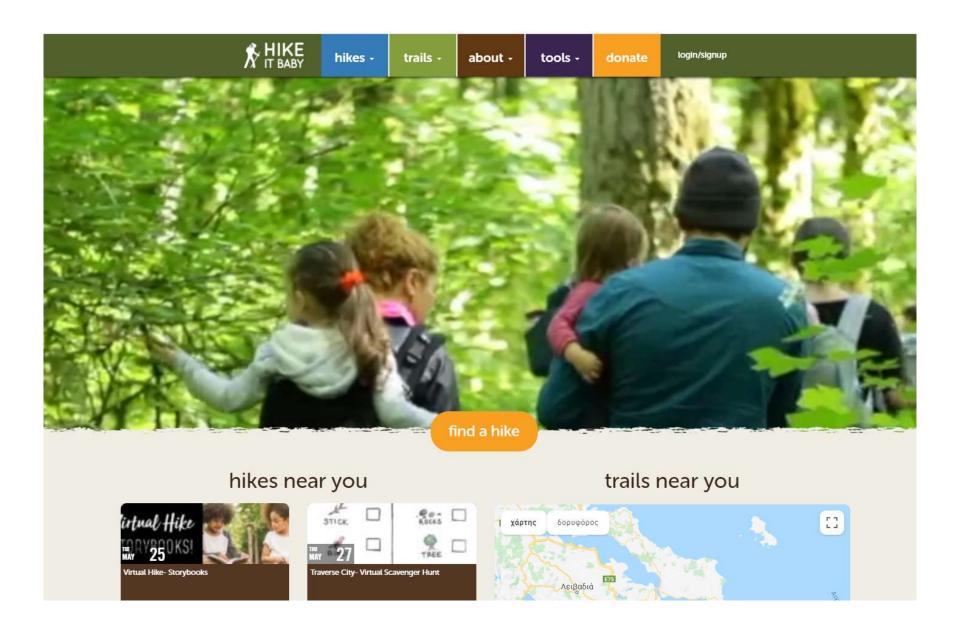
#### SOCIALIZATION.

If children only interact with other children through very structured settings, they won't develop everything they need to know about working together. Outdoor time with other children, where they are making up games, choosing which way to turn on a trail, or helping each other with gear, will develop their abilities to make friends, share, cooperate, and learn how to treat others.

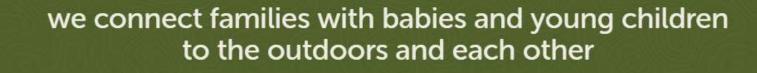
#### **APPRECIATION OF NATURE.**



"If we want children to flourish, to become truly empowered, then let us allow them to love the earth before we ask them to save it."



### Hike it Baby





### Scientific Proof That Will Motivate You to #OptOutside With Your Family



🛗 MAY 13, 2021 🎍 JESSICA NAVE 📎 COMMUNITY

# KIDS TO PARKS DAY: IDEAS FOR Enjoying the park

Originally posted May 2019. May 15 is national Kids to Parks<sup>™</sup> Day. Kids to Parks Day encourages children and families [...]



🛗 MAY 8, 2021 🛔 JESSICA CARRILLO ALATORRE 📎 COMMUNITY

# TURN THE BLUES GREEN: A NEW RESOURCE FOR POSTPARTUM MOMS

Turn the Blues Green I was exhausted after the long labor that gave birth to my first child. My body [...]

#### Growing People

"It has been a great source of pleasure to me to watch this organisation become a real force for good in recent years, not least in the development of national policy. I hope and pray that this will continue for the next thirty years because there is no doubt in my mind that its work is only going to grow in importance."

HRH The Prince Of Wales

# Ecotherapy: 5 ways to improve children's mental health

#### Ways to achieve ecotherapy

1. **The Sun:** Regular exposure to the sun is thought to strengthen the brain's nervous system and releases a hormone called serotonin. Serotonin is associated with boosting one's mood and helping a child feel calm and focused. Serotonin is responsible for accelerating another hormone called melatonin which triggers the brain for a peaceful sleep at night. Exposure to the sun is the most natural way to get enough Vitamin D. Aim for at least 4 to 5 minutes in the balcony to perform the ritual. The exposure time should depend on how sensitive your child's skin is to the sunlight.

2. Natural setting with houseplants: Embellish your window with natural settings using houseplants to purify the environment in your home. You can get the seeds of golden pothos, English Ivy, etc. Take moveable containers, which are large enough to accommodate one gallon of soil. Ask your child to place the soil and sow the seeds in it. Disperse it well and ask your child to water it regularly. Studies have found that mental health benefits of gardening are extensive. Having a living thing to care for gives us a sense of responsibility; if we don't prune, water or otherwise care for the plant, it may die. This responsibility is beneficial for children suffering with mental health issues, as it gives them purpose and a sense of worth.

3. **Make a Mud Brick House:** Mix soil and water into a thick paste. Add some sand, then mix in the straw, grass or pine needles. Pour the mixture into your molds. Bake bricks in sunshine for five days. Such fascinating activities will help children build self-confidence and nurture self-esteem. With such activities they will learn to build a concrete foundation towards a 'self' phenomenon.

4. Unconditional petting: Petting a cat or a dog with unconditional love can trigger the release of the bonding hormone oxytocin. Developing the fondness and feeling fluffy that far can lower the risk of hypertension among kids.

5. Blue Mind: Water acquires medicinal and therapeutic qualities. It enhances brain function and connectivity. Since the brain mostly consists of water, drinking water will help your child in a number of ways, including improving concentration and cognition. It will help in balancing moods and emotions.

# Child's Emotional Thermostat

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- 1. Improve your child's mood swings.
- 2. Help your child feel energised.
- 3. Reduce feelings of stress or anger and induce a sense of awareness and joy.
- 4. Increase a sense of optimism.
- 5. Improve your physical health and reduce a sense of fatigue.
- 6. Improve your child's confidence and self-esteem.
- 7. Help your child become more vigilant and improve the sense of purpose in life.

8. Help your child feel more connected towards 'self' and help them build resilience.

### **⊙T♥**NEWS

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HEALTH | News

#### Children raised in greener areas may have higher intelligence, study finds



Brooklyn Neustaeter CTVNews.ca Writer 🖉 🖉 @bneustaeter | Contact

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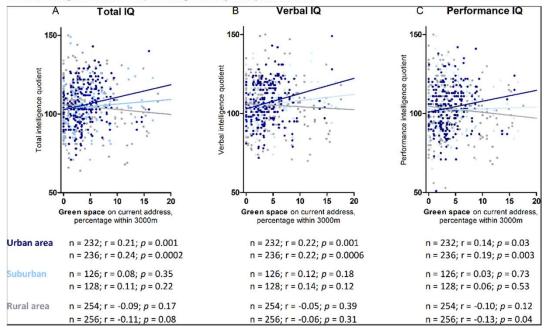


# Residential green space and child intelligence and behavior across urban, suburban, and rural areas in Belgium: A longitudinal birth cohort study of twins

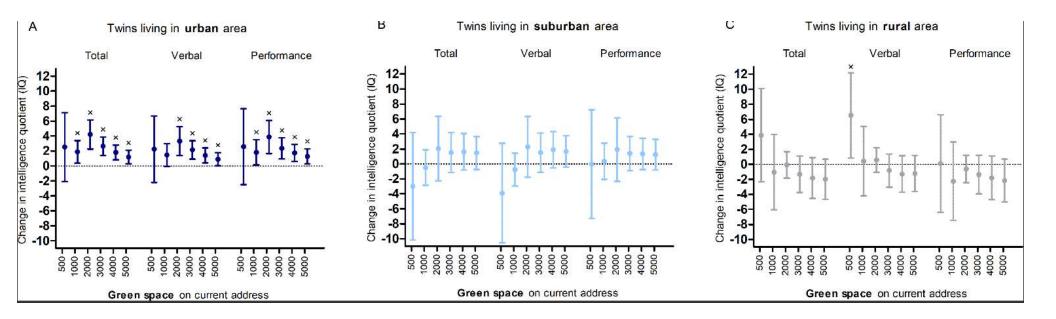
Residential green space and child intelligence and behavior across urban, suburban, and rural areas in Belgium: A longitudinal birth cohort study of twins

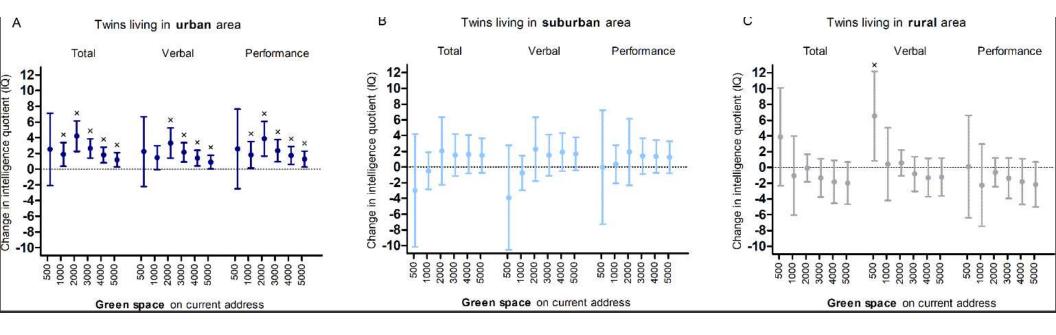
Esmée M. Bijnens 🖾, Catherine Derom, Evert Thiery, Steven Weyers, Tim S. Nawrot

Published: August 18, 2020 • https://doi.org/10.1371/journal.pmed.1003213



# Residential green space and child intelligence and behavior across urban, suburban, and rural areas in Belgium: A longitudinal birth cohort study of twins





Educating learners to become fully passionate, informed, ethical change agents and earth caretakers in three generations



# Nature-based instruction (NBI)

VS

The following model was created utilizing the research results from Our Children Our Future Project conducted in 2012-13 and published in *The Heart of Holistic Education: Expressed Through the Experience of its Most Innovative Holistic Models* by Connie Giffin in November, 2015.

Embracing the 6 core essence groups revealed in the study points the way to the underlying heart of the holistic framework. As a model this creates a highly evolved holistic design capable of educating learners to become fully passionate, informed, ethical change agents and earth caretakers in three generations.

The Our Children Our Future research produced a holistic educational model holding the power and potential to change lives, a community, a society, a nation-state, and the world. It is offered here as a gift to all children of Mother Earth.

Our Children Our Future: the Heart of Holistic Education Model



Photo Credit: Connie Giffin

# traditional instruction (TI)

### Some advances can be traced to the adoption of more rigorous research methods in individual studies

We now know that	How this advance came about and why it matters				
Nature-based instruction (NBI) is, on average, more effective than traditional instruction (TI).	Early research often compared outcomes before and after NBI, showing that students benefited from nature-based instruction but not whether there was anything particularly helpful about NBI as compared to any other instruction. More recently, studies have begun comparing outcomes for NBI vs. TI, showing that incorporating nature adds value to instruction (e.g., Ernst and Stanek, 2006; Camassao and Jagannathan, 2018).				
The advantage of NBI over TI does not simply reflect a tendency for better teachers, better schools, or better students to choose NBI.	Early research often compared learning in classrooms offering NBI vs. matched classrooms offering TI. But matching does not address the likelihood that teachers (or schools) who choose to offer NBI may be more innovative, energetic, or well-funded than teachers (or schools) who do not, even if they serve similar students. Similarly, comparisons of students who choose extracurricular NBI vs. students who do not will reflect pre-existing differences in the kinds of students who sign up for extra instruction. Recently, researchers have begun using "waitlist controls" – identifying teachers, schools, or students interested in NBI and then randomly assigning some of them to NBI and the rest to TI (e.g., Wells et al., 2015). Guarding against pre-existing differences between the teachers, schools, and students being compared lends greater confidence that any gains are due to the instruction itself.				
The effects of NBI on academic learning are real; they do not simply reflect the rosy assessments of biased observers.	Early research often relied on subjective assessments of outcomes by persons who believe in NBI. Advocates, practitioners, and parents or children who choose NBI may perceive benefits in the absence of any real effects, whether consciously or unconsciously. More recent research guards against such bias by employing objective measures or assessments made "blind to condition" – without knowing which students were in which condition (NBI or TI) (e.g., Ernst and Stanek, 2006). In these studies, an advantage of NBI over TI cannot be attributed to wishful thinking.				
NBI shows a "dose-response relationship" – as the magnitude of the treatment (the dose) increases, so does the outcome.	Early research relied on binary comparisons between learning settings with and without nature, or "low" and "high nature," leaving more room for alternative explanations. For instance, if students learn more outdoors than indoors, the difference might be due to either differences in vegetation or other differences between the settings. More recent research has compared multiple levels of nature (e.g., schoolyards with 0–40% tree cover, Sivarajah et al., 2018) or multiple levels of NBI (Wells et al., 2015). When the response is proportional to the dose, that lends confidence that the effect is attributable to the level of vegetation. Although a "dose-response relationship" does not prove causality, it strengthens the case.				

## Advances that can be traced to the maturation of the field

We now know that	How this advance came about and why it matters			
The nature-learning connection holds up across topics, learners, instructors, pedagogies, places, and measures of learning.	As researchers have continued to conduct studies, the body of studies testing the nature-learning hypothesis has grown larger and more diverse (e.g., Faber Taylor et al., 2002; Maynard et al., 2013; O'Haire et al., 2013; Ruiz-Gallardo et al., 2013; Fremery and Bogner, 2014; Lekies et al., 2015; Swank et al., 2017; Kuo et al., 2018a; McCree et al., 2018; Sivarajah et al., 2018). A robust association persisting across different contexts lends greater confidence in a cause-and-effect relationship (Hill, 1965, p. 8).			
The relationship between nature and learning holds up across different research designs.	Over time, a greater variety of study designs have been employed, including true experiments (e.g., Wells et al., 2015), quasi-experiments (e.g., Faber Taylor and Kuo, 2009; Benfield et al., 2015), large-scale correlational studies with statistical controls (e.g., Kuo and Faber Taylor, 2004), and longitudinal studies (e.g., McCree et al., 2018). Findings persisting across diverse study designs strengthen the case for causality.			

### Advances that stem from broadening the kinds of evidence considered in reviews

We now know that	How this advance came about and why it matters
The advantages of NBI over TI may stem from both setting and pedagogy.	Previous reviews drew only upon studies examining the effects of NBI on learning. In this review, we expanded our reach to include research on both the setting and the pedagogy of NBI, respectively. Educational psychologists working in the classroom have found that active, hands-on, student-centered, and collaborative forms of instruction outperform more traditional instructional approaches (Granger et al., 2012; Freeman et al., 2014; Kontra et al., 2015). Environmental psychologists have found better learning in "greener" settings – even when the instruction does not incorporate the nature (Benfield et al., 2015; Kuo et al., 2018b). These additional bodies of evidence converge to support and perhaps explain the advantages of NBI over TI.
Nature experiences may promote learning via at least eight distinct pathways.	Again, previous reviews drew only upon direct tests of the nature-learning hypothesis – studies in which nature was the independent variable and learning was the dependent variable. In this review, we also examined studies in which nature was the independent variable but the dependent variable was a precursor to learning (for example, Li and Sullivan, 2016, examines impacts of classroom views of nature on attention, which has long been established as an important precursor to learning, e.g., Rowe and Rowe, 1992). Evidence of mechanism lends greater plausibility to a cause-and-effect relationship between nature and learning. The multiple mechanisms identified here may also help explain the consistency of the nature-learning relationship, as robust phenomena are often multiply determined.

#### NATURE EXPOSURE

Free play in nature Nature walks Camp experiences Wilderness adventures Nature center programs Nature-based preschools Nature-based curricula Outdoor classes and schools Forest schools Classroom views Vegetation around early childhood institutions, schools and homes School gardens Animal-assisted learning

#### THE LEARNER

- More able to concentrate\*
- Less stressed\*
- More self-disciplined\*
- More engaged
- More physically active, fit

#### THE LEARNING CONTEXT

- Calmer, quieter, safer social context
- Warmer, more cooperative social context
- Autonomy and "loose parts"

#### LEARNING OUTCOMES

Academic Achievement
 Increased retention of subject
 matter content\*
 Higher standardized test scores
 Better grades
 Better reading, math, writing skills
 Higher graduation rates

- Personal Development Better leadership skills Better communication skills More resilience Better critical thinking and problem solving Better spatial skills
- Stewardship

Stronger connection to nature Stronger environmental values More pro-environmental behaviors

### School Farms Conference 2021 | Social Farms & Gardens





## School

# School Farms Network

# The Living Classroom

School Farms in the UK: a mapping survey

Murray Saunders

Mason Minnitt

Ian Egginton-Metters

Angela Gelston

Contact m.saunders@lancaster.ac.uk





## School

(Revised version: add GL and W12)

The map shows the geographical spread of the those schools who have responded to the survey, however it does not show the total number of farm schools in Britain, a more comprehensive map would highlight area specific gaps in provision. Table 2 shows the

### Ecotherapy | What is it and how we can all get involved | Cornwall



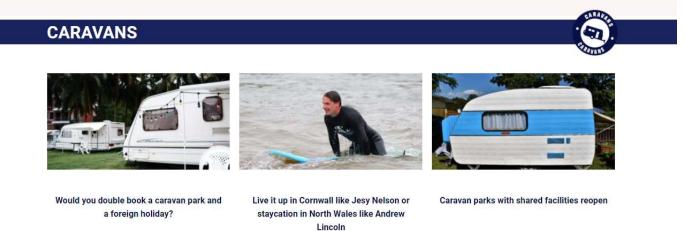
Barely a day goes by without a new article, a research report or the eminent opinions of those in the know, about the pressures of modern-day living and its impact on mental health and wellbeing. In this blog, we take a look at Ecotherapy, what is it and how we can all get involved.

Increasing numbers of people rely on antidepressants or self-medicate with drugs or alcohol. Indeed, the BMJ has reported that the number of prescriptions for antidepressants in England has almost doubled in the past decade. Moreover, the number has been steadily increasing year-on-year with:

#### 67.5 million prescribed in 2017

Is it really that surprising when there's seemingly no let-up in the pressure and stress of daily life? So much time is spent away from green space. Time is spent behind closed doors or staring blankly at the brake lights of the car in front. We live in a world where the easiest way to connect with nature is by 'viewing' rather than experiencing it through panes of glass or LCD screens.

## Touring To Become The Best Medicine Says Touring Boss





Indie Campers launches graduate programme as it eyes growth Celebrating 60 years of caravans and motorhomes at CARAVAN SALON Düsseldorf



Caravan and motorhome getaways 'set to take off' after lockdown

	STRATES								
				NEWS	MOTORHOMES	CARAVANS	LIFESTYLE		
,	/ideo	Features	Reviews				Q		

NEWS

#### Touring To Become The Best Medicine Says Touring Boss

Caravan Times | 14th August 2018





Nick's News – Staycation bookings, leisure vehicle demand and roof tents: Nick's News – Nick Harding is an expert in...

Nick's News – Cookie cutter campsites, the campervan revolution and the Bailey Adamo 69-4: Nick's News – Nick Harding is an expert in...







Nick's News – The Ford Nugget, a caravan site hero and what3words: Nick's News – Nick Harding is an expert in...

# Prescribing Nature | 2019 Global Wellness Trends

This "greening" of spaces has taken over even the smallest of apartments and allows people to feel like they are more connected to nature even if they are not. CNBC reports, these and other budding green thumbs are at the root of the DIY yard and gardening industry hitting S36.9 billion, according to the 2017 National Garden Survey, which found that of the six million Americans who got into gardening in 2016, five million were between the ages of 18–34. In addition to outdoor gardens, house plants are known to cleanse the air, remove pollutants, and some even promote sleep.



Biophilic design has become enormously popular within WELL Certified spaces over the past few years, as the demand for high performing buildings continues to grow. Photo courtesy: Frasers Property, Australia

#### The Future

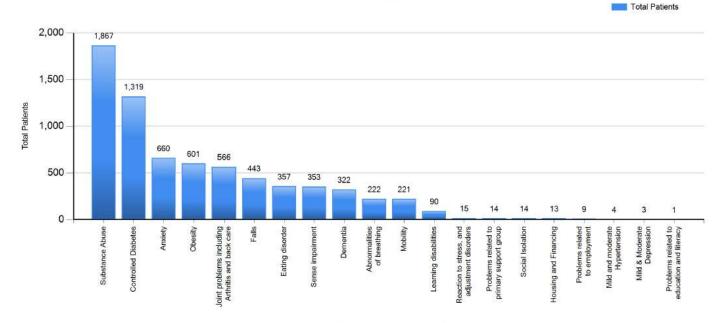
The remarkable power of nature and its healing benefits may not only impact an individual's health but also that of the planet. The more we need something, the more we tend to protect it. Imagine that your walk in the park might help preserve that very park for generations to come.

Healthy London Partnership (HLP) For: NHS HAVERING CCG Social Prescribing and Expert Patient Programme

Health

#### **Social Prescribing**

Chart shows number of patients admitted to hospital in 2016/17 by targeted condition for SP. The conditions have been identified using ICD 10 coding (See Appendix 2). There were over 3.5k patients that suffered from one or more of the top 3 conditions: Substance Abuse, Controlled Diabetes and Anxiety. (Data Source: HES 2016/17)



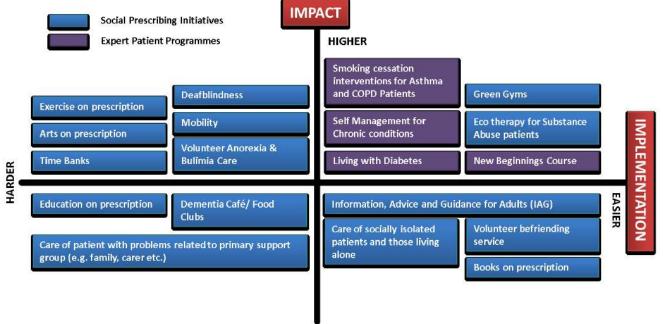
#### Social Prescribing: Patients by Conditions 2016/17

Conditions (Based on ICD 10 Coding)

Healthy London Partnership (HLP) For: NHS HAVERING CCG Social Prescribing and Expert Patient Programme

#### Impact and Implementation

Matrix indicates levels of impact and ease of implementation of the SP and EPP initiatives in the study.



LOWER

#### TimeBanking



▲ Time banking works a bit like a babysitting circle. When you help someone out, you earn time, and when you need help yourself, you spend time . Photograph: Martin Gerten/EPA

15 years ago, my colleagues and I held a party in Catford to celebrate the launch of the first time bank in a UK health centre.

The idea was to make mutual support possible among patients, their families and their neighbours, and I wanted to see if it would work in the UK. I was working for the <u>New Economics Foundation</u> at the time, and we teamed up with one of the Rushey Green doctors, Richard Byng.



#### International Timebanking Day

Timebanking is a truly international phenomenon, with roots in Japan and the UK. The first 'time banks' appeared in the USA in the 1980s, thanks to Edgar Cahn, the 'father of timebanking'.

To mark Edgar's birthday on **Tuesday 23 March**, our friends and partners at **Timebanks.Org** are hosting the third International Timebanking Day, with events spread across Sunday and Tuesday that stretch from New Jersey to New Zealand and tap into the experience of time bank members of a range of ages and backgrounds.

To find out about the events that are going on and maybe take part, click here.



One time bank reported the following statistics for people who had been members for six months:

- 85% said they were meeting more people
- 80% felt more part of the community
- 74% has made new friends
- 74% experienced a lift in mood or reduced depression
- 69% felt they could ask for or receive more help
- 66% experienced reduced loneliness
- 60% said their quality of life, health and wellbeing had improved

Timebanking enables people to realise that they are useful and valued members of society. It makes us feel better, more connected – and just happier!



THE TIMES Today's sections V Past six days Explore V Times Radio

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#### Nature's way to beat dementia

Rebecca Myers

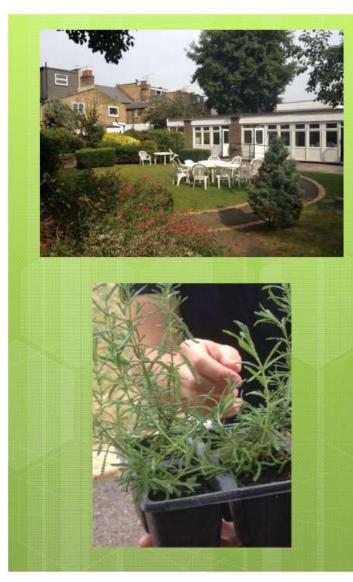
Sunday June 19 2016, 12.01am BST, The Sunday Times



'Eco-therapy' for dementia

Spending time in forests could be key to treating people with dementia, according to a study by a Dundee academic.

Dubbed "eco-therapy", participants with early-stage dementia took part in walks, nature trails and activities such as bird box building, tree planting, and woodland cooking.



W

## Ecotherapy with Dementia Clients

Andrew Waterhouse Occupational Therapist

Hammersmith and Fulham Cognitive Impairment and Dementia service

West London Mental Health NHS Trust

### Wi

# Aims and objectives

- To stimulate memory and increase concentration
- To improve overall mental and physical wellbeing
- To reduce stress and improve coping strategies
- To reconnect our clients relationship with nature in an otherwise urban environment.
- To encourage Mindfulness as a vehicle to selfmanagement of mental health.
- The facilitate collective learning, peer support and reduce the sense of social exclusion



W

# Strengths

- Variety and originality of activities to participants
- Whole body/ multi sensory (smells, touch, taste etc)
- Focussed on being, non-striving (not goal orientated)
- Inclusive/levelling, allowed choice/freedom
- High consistent attendance (8) and active participation
- Experiential

V

- Reversal of expert/learner dynamic
- Encouraged physical activity in fresh outdoor air
- Allowed space to reflect/ no 'right or wrong'
- Facilitator's knowledge of Mindfulness
- Community venue was beneficial (social inclusion)
- Appealed to all genders



# Weaknesses



- Lack of follow on groups in community
- Time consuming to develop/ plan (especially due to being new)
- Mobility excluded some clients
- English language exclusions
- Some sessions lacked enough reflective space
- Training needs for the facilitators (Ecotherapy/ Mindfulness/ Horticulture)= complicated group to facilitate
- Weather dependant!
- Memory clients limited ability to rotain information post sossion

# Participants view

- Wi
- "I never get to go outside, I look forward to being outside in the garden"
- "Before I felt grey, heavy and tense... now I feel relaxed and light"
- "I get it, its like not worrying about the future, not thinking about the past, but being here now"
- o "I felt a sense of quietness"
- "I like meeting other people with similar problems, so I don't feel alone"
- o "I'd like to carry this on when I get home"
- "It makes my worries seem small, when the world seems so big"
- "Its been years since I've done anything like this"
- "My favourite thing was the mindful walking"
- "I appreciated hearing the sounds of birds"



### Inside Out

and

### Outside In

#### Memory Care Residents and Indoor Ecotherapy

Robert Rados Ph.D., MHA Health Care Management, School of Allied Health, SIU Jun Kim Ph.D., Recreation Professions, College of Education and Human Services, SIU

### Abstract

 To investigate the effect of "Indoor Ecotherapy", ten memory care residents viewed a video of nature photographs, w/classical music . Residents' tranquility levels were measured before and after viewing the video. Resident's reported tranquility levels and staff observers' perceived tranquility levels for each resident were both higher after the intervention. Resident's written comments and staff observers' written comments about each resident before and after the intervention, were used as part of the analysis.





FEET ON THE GROUND AND BRANCHING OUT



12.3 Catching Clouds.

### Window

Most impressive is that training was a total discipline, combining elements of biology, physiology, ergometry and sports medicine, and was fully integrated with philosophy and politics.



#### **EXERCISE & HEALTH**

 much in line with current advice from the American Heart Association.
 However, there were also some extra elements which have not made it into present-day exercise routines.
 The warm-up started with a mas-

sage, followed by gentle movements to boost blood flow and prepare the muscles for more intense exercise. What followed will be unfamiliar to modern exercisers: a rubdown with olive oil by a professional aleiptes. Oiling was an art because it played a critical role in sports such as wrestling, where a deft application could make it almost impossible for an opponent to perform a hold. To counteract the oiling, the athletes applied dust or sand. A wrestler would throw sand on their opponent tactically, with a view to covering those critical parts of the body that would receive their grip.

In the main workout, a range of options were available: total-body workout, zone workouts, or training geared toward competitive sport. Training could follow the same routine daily or rotate from day to day. There were specialized exercises for boxing, wrestling and the pankration - an ancient mix of martial arts that combined boxing and wrestling. Punching bags were used, as well as shadow-boxing techniques. Bends were used to strengthen the upper body. Various running exercises, including high-resistance running in sand, were employed to improve lower body fitness and aerobic performance. A variety of jumps are also described, while upper body strength was cultivated using rope climbing and other instruments. In ad-

#### FITNESS

minte

\*

aller and all

thful jumper in training; Attic red-figure a, by the Bowdoin Painter, 475-470 BC

cal Mana

dition to repetitive exercises, training also encompassed daily physical activtites believed to enhance conditioning, such as digging, horse riding, walking, hunting and fishing. Galen rated most highly those activities that work a variety of muscle groups, including riding and swimming. He distinguished between high-impact and low-impact exercise, also mentioning the principle of circuits or interval training – where bursts of exercise alternate with short rest periods. He differentiated between general exercise and specialized training for professional athletes. The duration of training sessions

was at the discretion of the trainer and determined by the athlete's physical condition. It continued for as long as the athlete retained a lively color, was able to move steadily and rhythmically, and kept "growing in bulk." It was time to call it a day when the athlete became more sluggish and started falling to his knees to rest. Different forms of exercise were expected to yield different results on the athlete's body. Running slimmed the body and inflated the muscles, due to its emphasis on breathing. Wrestling increased body heat, as well as the density and mass of muscles. The pankration was thought to dry out the flesh because it was more intense and shorter in duration. Lifting exercises and running were believed to cleanse the body from toxins through sweating. The cool-down, or apotherapeia,

was considered necessary for the body to return to its natural condition. It started with breathing exercises, which were said to relieve the heart. Next



# January

- Step outside be still for three minutes and listen
- Really look at a lichen (a pair of upside-down binoculars make an excellent microscope!)
- Make a list of broch sites you'd like to visit and tick one off the list
- Count the birds in your garden. Maybe you could keep a "window list" of what you've seen?
- Take part in the Big Garden Birdwatch visit rspb.org/birdwatch for more information
- Get out "whatever the weather" and feel the exhilaration of wind and rain on your face
- Visit the Braer site
- Walk the core path at Lunga water look out for mountain hares
- Go looking for seabeans after westerly gales.



# February

- Draw a snowdrop
- Buy a notebook and "write to yourself", sketch or jot down your thoughts and feelings, adding insights about nature as you go
- Follow the course of a burn
- Look for tracks and signs of animals
- Beachcomb for shells, do a mini-Redd-Up or both. Record your beach clean on the 2minutebeachclean app. or see nurdlehunt.org.uk
- Make a bird bath (an upside-down bin lid will do)
- Watch a corbie (raven) at this time of year you can see courtship displays, which often include dramatic tumbling and flipping in the air.
- Make your own windsock from a hoop and material appreciate the speed of the wind
- Start bagging Shetland's 19 Marilyns (they are slightly smaller than Munroes). See shetland.org for details
- Plant some bulbs.

This calendar of ideas is a part of RSPB Scotland's Nature Prescriptions which is run in partnership with NHS Shetland. Share your suggestions for other activities at facebook.com/healthyshetland or facebook.com/RSPBShetland. As with any trip outdoors, please dress for the weather and tell someone where you are going especially for longer trips. Take your doctor's advice and work to your ability. And follow the Scottish Outdoor Access Code. Lichen photo by Helen Moncrefil. Beach photo by Ivan Hawkich. The RSPB is a registered charary in England and Wales 201706, in Sociatinal SCOTSF4.730-1309-17-18.



### Window

# March

- Welcome the oystercatchers and other waders home with an outdoor celebration of some kind
- Provide a nestbox and nesting materials for birds (avoid wool or plastic stuffing – dog hair is good, horsehair found on fences is even better!)
- Be inspired to experience some sights and sounds from Rhoda Bulter's poem "Fladdabister"
- Play like an eight year-old! Why not build a den or get together with friends and play the games you used to play outside?
- Join a club that goes outside. Search for Shetland clubs online
- Borrow a dog and take it for a walk
- Make pictures on a beach using natural materials like waar (seaweed), sand and rock – leave it for the elements to take away
- Stand looking over the Loch of Belmont in Unst and listen to the pre-migratory courtship of calloos (long-tailed ducks) before they move north to their tundra breeding grounds.



April

- Touch the sea
- Find a bud on a tree... feel the texture
- Turn over some soil and plant some flowering plants.
- Take a wader minute step outside and hear the call of a whaap (curlew), lapwing or redshank
- Spot the first sten-shakkers (wheatears) returning to Shetland after wintering south of the Sahara
- Make a bug hotel (see rspb.org.uk for ideas)
- Un-litter... a little and save a life. Take part in Da Voar Redd Up
- Take the coastal route to the Broch of Burraland watch for the "wheel" of a neesik (harbour porpoise) in Mousa Sound
- □ Visit the old haaf station at Fethaland, keeping an eye open for purple saxifrage on the way
- Clouds are often described as wispy (cirrus), heaped (cumulus) and layered (stratus). What clouds are in the sky today?

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# May

- Bury your face in the grass
- Make a daisy chain
- Tend to some plants
- Plant a tree
- Go to the Shetland Biological Records Centre website and choose a survey to take part in
- Listen for a horsegok (snipe) then try spot it in flight as it drops it makes a "drumming" sound using its outer tail feathers
- Find a place outdoors where you feel safe to just "be" try to be still in nature for three minutes and notice how you feel
- Make a sound map take an A4 sheet and something to lean on outside, place an "x" in the centre to represent you, then illustrate or represent the sounds you hear around you using marks on the page
- Go and see the UK's most northerly point Out Stack (off Hermaness) and check out all the breeding birds on your way
- Hunt for treasure. Go to geocaching.com and thingsites.com/geotour
- Turn o'er a rock and see what's there



# June

- Don't mow the lawn and watch the minibeasts move in
- Solitude in nature clarifies thought carve out some time to yourself and go explore somewhere you've never been before
- Visit the Keen of Hamar National Nature Reserve in Unst and discover its rare and endemic plant species
- Eat the leaf of a wood sorrel in Kergord
- Sit cross-legged on the ground, close your eyes and listen to the birds
- What's your favourite sound in nature? go listen to it!
- Take your hood down
- Go for a "hock" in a rockpool. Leebitton in Sandwick or Sound beach in Lerwick are two brilliant spots. Plan for a low tide
- Visit RSPB Scotland Sumburgh Head nature reserve and breathe in the smells and sounds of a bustling seabird colony
- Visit RSPB Scotland Mousa nature reserve on a day or night trip. The thrill of a night trip is seeing storm petrels flying back to the broch at dusk
- Tirricks (Arctic terns) are said to see polar bears and penguins in the same year. Listen at a distance to these iconic breeding birds.

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# July

- Pick two different types of grass and really look at them
- Notice every bird you see
- ☐ Visit RSPB Scotland Sumburgh Head nature reserve in the evening to witness "the jump" (guillemot chicks taking the flightless plunge into the sea)
- Help with a peatland restoration project (contact the Shetland Amenity Trust for details)
- Make a meal using the flower of a dandelion
- Watch pollinators at work hoverflies are major pollinators in Shetland
- Gather hentilegets (tufts of wool) and save a shalder (oystercatchers often get hampered by wool twisted round their legs)
- Go wild camping or stay in a Böd
- Walk to the top of the Noup of Noss NNR and enjoy the clamour of a solan (gannet) colony
- Follow a bumblebee.



# August

- Follow the course of a burn
- Turn o'er a rock and see what you see
- Download "Fuelling the Future" from nafc.uhi.ac.uk and get to know your seaweeds. Why not create your own seaweed work of art?
- Make a seggie boat (fold the leaves of a yellow iris) if you don't know how, ask an amenable older Shetlander
- Watch a maalie (fulmar) for 10 full minutes
- Make a moth trap and identify your catch
- Take the pith out of floss (soft rush) without breaking the line soaked in tallow they used to make nice (smokeless) wicks in oil lamps
- Explore some geology do the ophiolite trail or the volcano trail. Did you know Shetland is recognised as a "GeoPark"?
- Listen and copy a bird sound try "talking" to a bird
- Try "charming" a worm from the ground without digging or adding liquids... rhythm is the answer.

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# September

- Provide a full three-course meal for your family outdoors
- Watch the waves during the equinox gales
- Look for autumn migrants like warblers and waders
- Take part in the Marine Conservation Society's Great British Beach Clean
- Find the place or activity that makes you feel most at home in nature
- Climb a high peatland area (eg the East Kames) and name all the islands you can see
- Notice the Sphagnum moss under your feet this powerful little plant has made most of the peat in Shetland and helps tackle climate change.



# October

- Appreciate a cloud
- Help a neighbour with their tatties
- Write a worry onto a stone and throw it into the sea
- Keep a "window list" or list of birds seen. You can submit records to Nature in Shetland or BirdTrack (see birdtrack.net)
- Re-wild one of your senses smell everything in nature
- Find 10 different species of fungus in Kergord why not photograph them all?
- Find a grottie-buckie (cowrie shell, which used to be used as currency). The Laaward at Grutness can reward a keen eye
- Find a "Wullie Whyte's candle" (a curl of birch bark) on a beach and light a driftwood fire (challenge yourself to light it only with a flint steel)
- Look out for humpback whales on their autumn migration.

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# November

- Create a rock sculpture on a beach
- Find an immer gus (great northern diver) shallow bays are good places to look, like Quendale Bay
- Count whooper swans vs mute swans on Spiggie Loch
- Talk to a pony
- Go to the top of Lindsey-Lea woods in Kergord. Listen and look for goldcrests (sometimes they'll approach you if you make a "pssshh" sound)
- Experience Da Grind O' Da Navir during a westerly gale keep yourself safe!
- Go otter watching low coastline a few hours either side of low tide is best and walk into the wind. Keep an eye open for spraint (poo) and avoid holts
- Explore Shetland's mighty sand dunes like at West Sandwick and Breckon in Yell

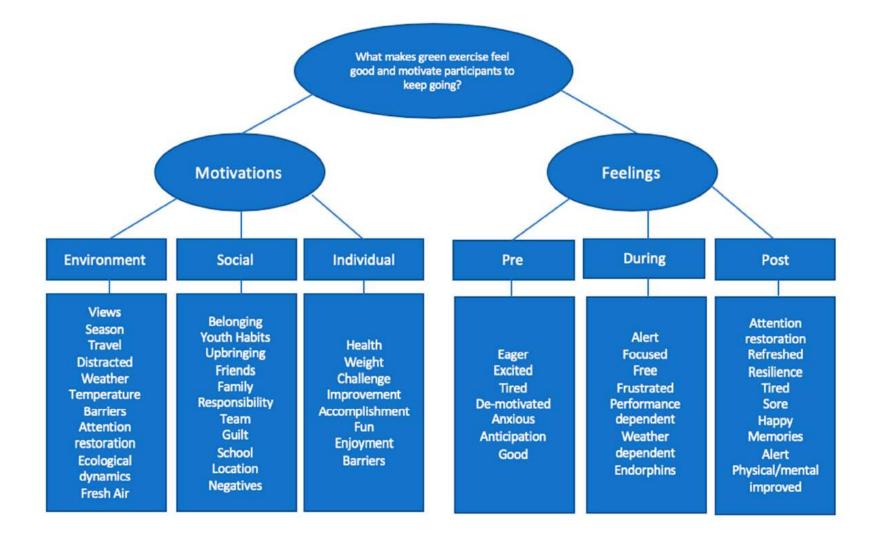




# December

- Feed the birds in your garden
- Spot a "white-winged" gull. Glaucous and Iceland gulls are sometimes found around Shetland Catch
- Use a tarp or sheet to harness the wind (hold the corners with a friend?)
- Visit Sumburgh Head lighthouse to look for linties (twite) outside the RSPB Scotland office (they're fed on canary seed)
- Watch for winter waders the Virkie Pool mid-tide is a great place to see a variety of species
- Find the hairiest lichen within a mile radius
- Go and find a chambered cairn as near to the shortest day as possible
- Did you know that the "hegri" or grey heron is a winter visitor to Shetland?
- Look back on your year and recognise how far you have come.

This calendar of ideas is a part of RSPB Scotland's Nature Prescriptions which is run in partnership with NHS Shetland. Share your suggestions for other activities at facebook.com/healthyshetland or facebook.com/RSPBShetland. As with any trip outdoors, please dress for the weather and tail someone where you are going especially for longer trips. Take your doctor's advice and your ability. And follow the Scottish Outdoor Access Code. November image by Ben Andrew, December image by Health Monchelf. The RSPB is a registered charity in England and Wales 2010/76, in Scotland SC037654, 730-1309-1-18.



### **CHALLENGES of ECOTHERAPY**

- Ecopsychology recognizes that one of the central challenges of our time is to embrace our kinship with the more-than-human world our "totemic self"—and integrate that kinship with our scientific culture and our technological selves
- Because we are meeting in a space that is neither the therapist's nor the client's, the shared situation provides an opportunity for a cocreated therapeutic experience.

#### **ETHICAL ISSUES**

Berger in 2008) first to call for a new code of ethics to address the unique concerns of nature-based therapy.

Buzzell, 2012: is concerned that applying a code of ethics would further "professionalize" the practice of ecotherapy, and squeeze the vitality and creativity out of the practice for fear of potential malpractice suits .

 preparing to take therapy outdoors, clinicians must address three overarching ethical issues that involve confidentiality, avoiding harm, and competency.

American Psychological Association (APA) (2010), the American

Counseling Association (ACA) (2005), and the National Association of Social Workers (NASW) (2008).



Linda Buzzel

## CONFIDENTIALITY

- how they would like to handle the situation if we encounter a familiar person while outdoors.
- I also raise the question of how we will manage discussing sensitive material if someone approaches or passes us on the trail
- support the client in making an informed decision





Watch what you say Where you say it To whom you say it



### **Sports Injury Management** The first 72 hours - what NOT to do

eat. Don't apply heat or deep heat creams as it increases bleeding.

Icohol. Don't consume alchohol as it increases swelling.

R un. Don't run or exercise as exercising too soon can make the injury worse.

assage. Don't massage the injured area as it will increases swelling and bleeding.

image Flickt Johnnescone

## **AVOIDING HARM**

- before leaving the office setting, we should ask if they have any physical conditions that could affect their safety while outdoors:
- if they are allergic to bee stings or poison
- history of muscular-skeletal problems, cardiac conditions, asthma, or other health concerns we should be aware of.
- Similarly, carry a light backpack containing bottled water, a basic first-aid kit, and a lightweight emergency blanket. Take a cell phone in case of an emergency.
- Safety concerns may not be a huge issue in a nearby park or garden, but if we move into wilder areas, the therapist must be prepared

www.Back2Sports.com,sg.

# COMPETENCE

- provide services...only within the boundaries of their competence, based on their education, training, supervised experience, consultation, study or professional experience" (2.01.a. Boundaries of Competence). In addition, it directs:
- In those emerging areas in which generally recognized standards for preparatory training do not yet exist
- Clinicians need to recognize not only their limits of competence related to the therapeutic issues of this emerging field, but they need to be clear about their level of competence related to the environment in which they are conducting their work











Πανεπιστήμιο Δυτικής Αττικής ΠΜΣ Περιβαλλοντική Επικοινωνία και Προαγωγή Υγείας

«Περιβαλλοντική Επικοινωνία και Προαγωγή Υγείας »

Sidu

and a french



Καθηγήτρια Κωνσταντίνα Σκαναβή

#### <u>Διδάσκων</u>: Ιωάννης Σκιαδάς, MD, PhD

Ψηφιακό περιβάλλον και εικονικό περιβάλλον: διπλοί πράκτορες. Παραγωγικότητα αλλά και συνοσηρότητα. Όσο πιο υψηλή η τεχνολογική πρόοδος τόσο πιο οικοθεραπευτικές ανάγκες γεννιόνται. (Το εγωιστικό γονίδιο, αλληλεπίδραση γονιδιών και περιβάλλοντος)



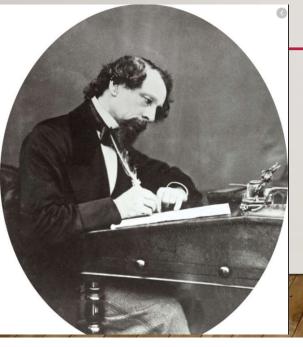
### THE INCREASING SEPARATION OF HUMANS FROM NON-HUMAN NATURE THAT RESULTS IN A LACK OF CARE THAT PUTS THE ENVIRONMENT UNDER THREAT.

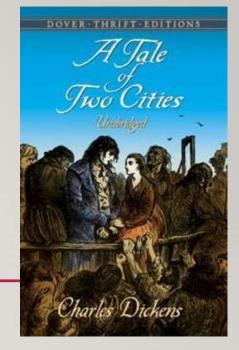
Steps to Recover from Technology Addiction

## A Tale of Two Cities

"It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of Light, it was the season of Darkness, it was the spring of hope, it was the winter of despair, we had everything before us, we had nothing before us, we were all going direct to Heaven, we were all going direct the other way..."

**Charles Dickens** 







1995-2015





#### Figure 8

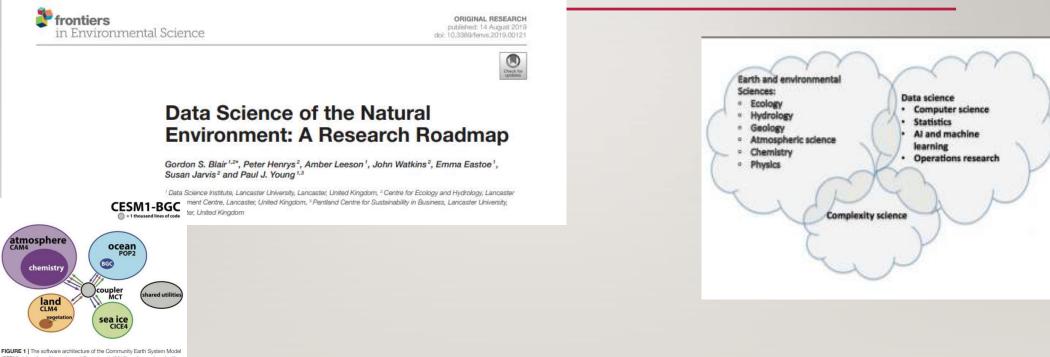
Top ten countries by total population affected by weather-related disasters (1995-2015) compared with the top ten countries most affected per 100,000 inhabitants.

- Top 10 countries with highest proportion of affected people over the total population (per 100,000 inhabitants)
- Top 10 countries with the highest absolute number of affected people (in million)



On a global scale, as reported by the United Nations (UN) in 2015, flooding impacted 2.3 billion people over a 20-year period, and 157,000 people have died

### WE ARE MOVING TOWARD HAVING UNPRECEDENTED AMOUNTS OF DATA, BUT THESE DATA ARE HIGHLY HETEROGENEOUS AND AT DIFFERENT SCALES AND ACCURACIES.



(CESM), taken from Alexander and Easterbrook (2015) and reproduced with the permission of the authors.

### DNIGITAL TECHNOLOGY CAN HAVE A TRANSFORMATIVE IMPACT ON ENVIRONMENTAL SCIENCES

- 1 Digital technology can provide unprecedented levels of data for environmental scientists to work with, including real-time streaming data and a spatial and temporal resolution unimaginable a few years ago.
- 2 Cloud computing has the (elastic) capacity to store and process the resultant massive datasets. As a team, we are also particularly excited by the concept of virtual labs that offer collaborative access to environmental data and analytics capability in the cloud and that offer a paradigm shift toward a more open and integrative style of environmental science.
- 3 Data science is providing a range of innovative techniques to make sense of large datasets, with increasing focus on tailored techniques to address the particular challenges of environmental data, e.g., reasoning across scale, managing extremes, and integration with process understanding.<sup>2</sup>
- 4 Digital technology is also opening the way to new ways of communication, whether supporting decision-makers or reaching out to children to inspire them to become digital naturalists.<sup>3</sup>



#### NEW YORKER

**BITCOIN ALONE (ONE OF THE CRYPTOCURRENCIES** SUPPORTED BY **BLOCKCHAIN) HAS A** CARBON FOOTPRINT EQUIVALENT TO THE WHOLE OF SWITZERLAND.

#### DAILY COMMENT

#### WHY BITCOIN IS BAD FOR THE ENVIRONMENT

Cryptocurrency mining uses huge amounts of power-and can be as destructive as the real thing.

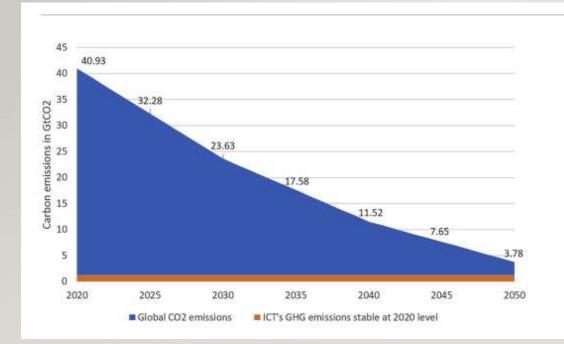


April 22, 2021



According to one source, a single bitcoin transaction uses the same amount of power that the average American household consumes in a month. Photograph by Akos Stiller / Bloomberg / Getty

### ICT (INFORMATION AND COMMUNICATIONS TECHNOLOGY)



he true carbon footprint of ICT runs at somewhere between 2.1% and 3.9% of global emissions. To put these numbers in context, the equivalent figure for the airline industry is around 2.5%



Digital Detox and Training: Applying Ecotherapy to Gamification imposes narratives that connect the learner to nature.

we can build gameworlds, altered reality states for training in the form of immersive imagination-driven design.

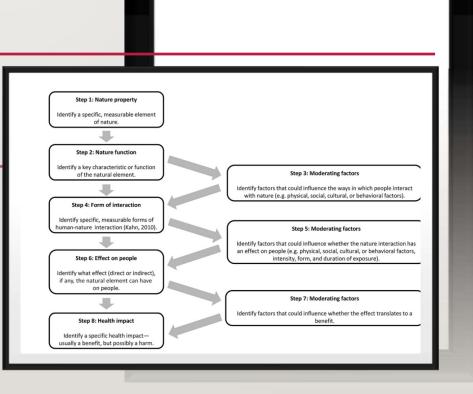
Serious Games and Ecotherapy-Based Training

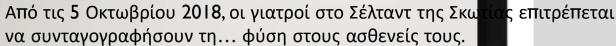
There are many game designs we can use to show inter-relationships in all training. In my upcoming paper for the International Journal of Innovation in Online Learning I will discuss these models at length. For now, the idea is that we can build gameworlds, altered

....



• A proposed framework for studying the health benefits of nature contact (adapted from Shanahan et al. 2015b).





Πιο συγκεκριμένα, βόλτες στη φύση. Είναι το πρώτο πρόγραμμα αυτού του είδους στη Βρετανία. Στόχος της συγκεκριμένης «συνταγής γιατρού» είναι η μείωση της αρτηριακής πίεσης και του άγχους και η αύξηση της ευτυχίας σε ανθρώπους με διαβήτη, διανοητικά νοσήματα, άγχος και καρδιοπάθεια.



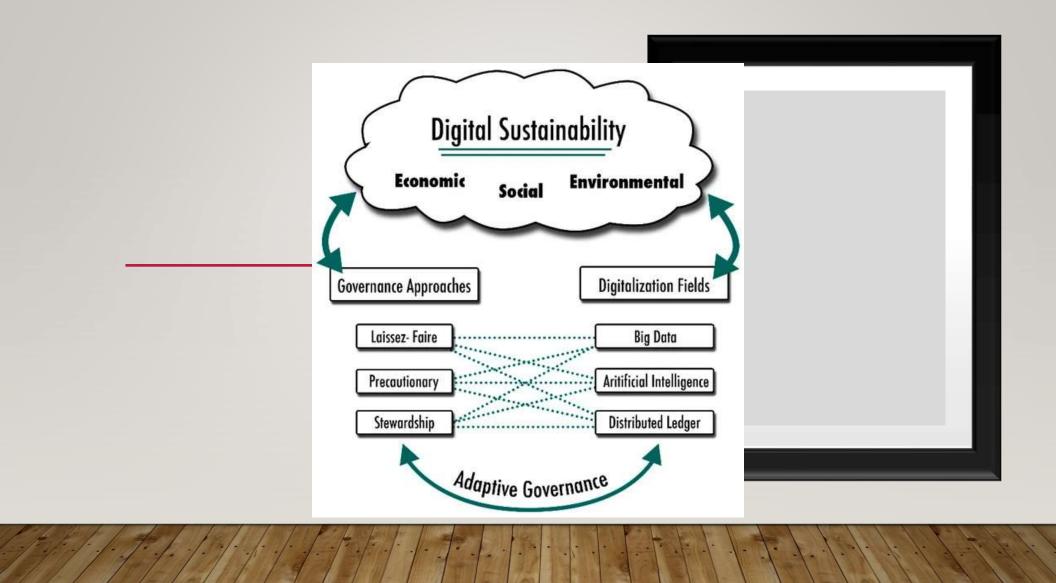
### Doctors' new prescription: 'Don't just exercise, do it outside'

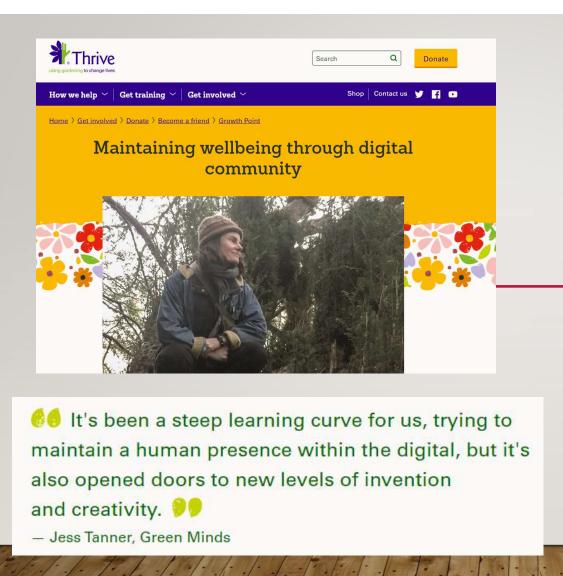
### WINDOW



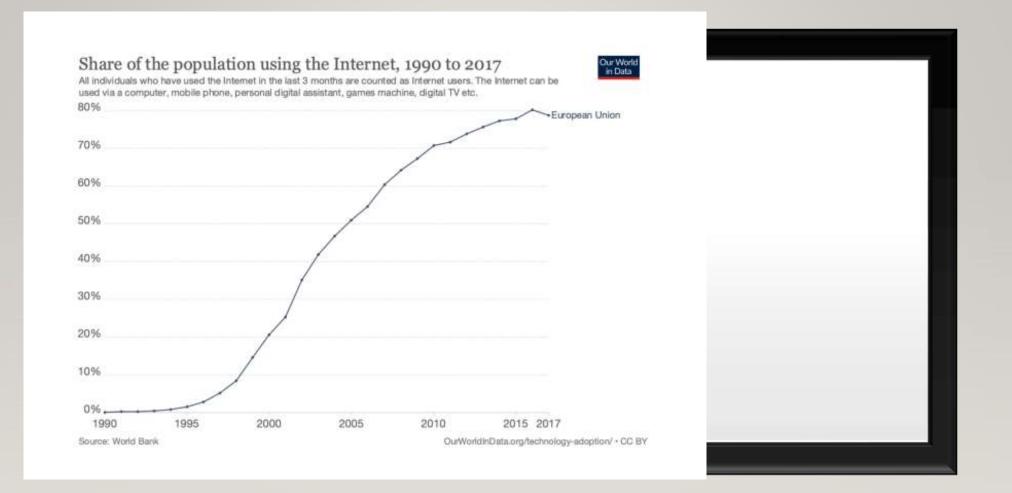
e commonplace for San Francisco physician Daphne Mil ons that look like this:

Exercise in Glen Canyon Park 15 minutes of walking or running ons: Monday, Wednesday, Friday and Saturday at 7am Unlimited













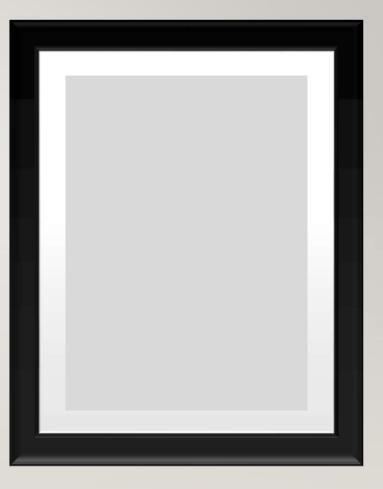
### Eco-Innovation and Digitalisation

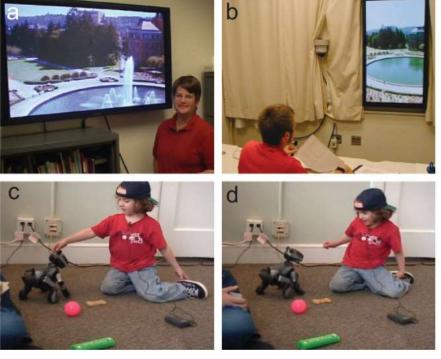
Case studies, environmental and policy lessons from EU Member States for the EU Green Deal and the Circular Economy Galeron, F. (2016) Naio Technologies: Qui sont les créateurs du robot des champs? La Tribune, 2 March 2016, <u>http://mouves.org/Mouves2015/wp-content/uploads/2016/03/02032015-La-tribune-Naio-</u> Technologie-citation-Naoile.pdf



EIO Biennial report 2020

### "ENVIRONMENTAL GENERATIONAL AMNESIA"



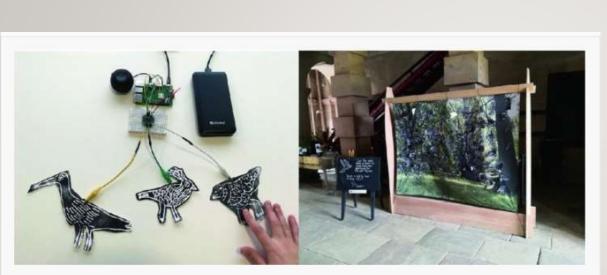


WINDOV

Fig. 1. Examples of technological nature. HDTV plasma "windows" displaying real-time images of the local nature scene outside the building are shown (a) installed in a participant's office in a long-term field study (Friedman, Freier, Kahn, Lin, & Sodeman, 2008); and (b) covering up a real window in the plasma-window condition of an experimental study in the lab (Kahn et al., 2008). The camera that recorded looking behavior can be seen poking out from the drapes to the left of the plasma window. The plasma screen was not present in the glass-window condition of the experimental study; and the drapes were pulled across the entire wall for the blank-wall condition. The bottom pictures show technological nature in the form of a robot dog (AIBO; from Kahn, Friedman, Perez-Granados, & Freier, 2006). In (c), the participant has just been introduced to AIBO and approaches the robot a little apprehensively. Within a couple of seconds, AIBO begins to move toward the participant; in (d), the participant is startled and appears slightly apprehensive (not unlike how a person might respond when encountering a biological dog that he or she has never met before).

Technological	Nature St	udies
Robotic pets in the lives of preschool children (Kahn, Friedman, Perez-Granados, & Freier, 2006)	Robotic dog (AIBO)	<ul> <li>Children engaged more often in apprehensive behavior and attempts at reciprocity with AIBO, and more often mistreated the stuffed dog and endowed it with animation.</li> <li>Similarities in children's reasoning across artifacts.</li> </ul>
Children's behavior toward and understanding of robotic and living dogs (Melson, Kahn, Beck, Friedman, Roberts, & Garrett, in press)	Robotic dog (AIBO)	<ul> <li>Children conceptualized the live dog, as compared to AIBO, as having biological attributes, mental states, social companionship, and moral standing.</li> <li>Children also spent more time touching and within arms distance of the live dog, as compared to AIBO.</li> <li>A majority of children conceptualized and interacted with AIBO in ways that were like a live dog. For example, over 60% of the children affirmed that AIBO had mental states, social companionship, and moral standing.</li> </ul>

1-1-1



**Digital Naturalists** 

### Fig. 16.5

The Lost Sounds interactive birdcall prints. (Left) Image copyright © L. Edwards 2019. The Lost Sounds mini exhibition. (Right) Image copyright National Trust Images 2019 and reproduced by permission



Why Is Nature Therapy Needed in Addiction Treatment?

• During the addiction recovery process, it's common for many people in recovery to experience symptoms of stress, anxiety, or depression.



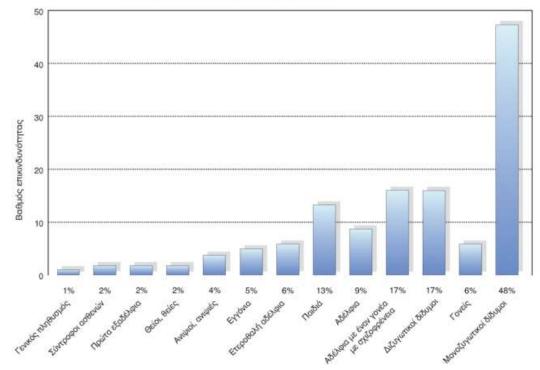
## Μπορούν τα γονίδια να επηρεάσουν το περιβάλλον;

- Κατά την S. Scarr, υπάρχουν τρεις τρόποι:
  - Άμεση επίδραση: Το παιδί ενδιαφέρεται για -και προσέχει περισσότερο- στοιχεία του περιβάλλοντος που συνδέονται στενότερα με τις γενετικά καθορισμένες ικανότητές του.
  - Έμμεση επίδραση: Γονέας με ενδιαφέρον στην άθληση (αντίστοιχα γονίδια), προσφέρει στο παιδί ευκαιρίες για ενασχόληση με αθλήματα
  - Γενετικά καθορισμένη ιδιοσυγκρασία προκαλεί την εμφάνιση συγκεκριμένων περιβαλλοντικών επιδράσεων



### Σχήμα 2.9 Γενετικοί παράγοντες και σχιζοφρένεια





Η ψυχολογική διαταραχή της σχιζοφρένειας έχει σαφή γενετικά στοιχεία. Όσο στενότερη η συγγένεια ανάμεσα στο άτομο με σχιζοφρένεια και σε άλλο μέρος της οικογένειας τόσο πιο πιθανό είναι το άλλο άτομο να παρουσιάσει τη διαταραχή

### Σχήμα 2.8 Η κληρονομική μεταβίβαση γνωρισμάτων της προσωπικότητας

Συντηρητισμός	60%	
Ακολουθεί τους κανόνες και την εξουσία, υιοθετεί	υψηλά ηθικά κριτήρια και αυστηρή πειθαρχία	
Αντίδραση στο στρες	55%	
Αισθάνεται ευπαθής και ευαίσθητος, ανησυχεί συχ	νά και αναστατώνεται εύκολα	
Απορρόφηση	55%	
Έχει ζωηρή φαντασία που διεγείρεται εύκολα από	τλούσιες εμπειρίες, αποποιείται την αίσθηση της πραγματικότητας	
Αποξένωση	55 %	
Αισθάνεται ότι δεν του έχουν συμπεριφερθεί σωστ εναντίον του»	ά και τον έχουν κακομεταχειριστεί, ότι «το σύμπαν συνωμοτεί	
Ευεξία	54%	
Έχει ευχάριστη ψυχική διάθεση, αισθάνεται αυτοπ	εποίθηση και αισιοδοξία	
Αποφυγή βλάβης	50 %	
Αποφεύγει την έξαψη του κινδύνου, προτιμά την α	σφαλή οδό, ακόμη κι αν αυτή είναι ανιαρή	
Επιθετικότητα	48%	
Είναι σωματικά επιθετικός και μνησίκακος, αρέσκε	ται στη βία και είναι έτοιμος να «σωφρονίσει» τους πάντες	
Τάση για επιτυχία	46%	
Εργάζεται σκληρά, μοχθεί για να αποκτήσει τη βαθ επιτεύγματα σε πρώτη θέση	ιά γνώση και κατατάσσει την εργασία και τα προσωπικά	
Έλεγχος	43%	
Είναι προσεκτικός και συστηματικός, λογικός και σ	υνετός, αρέσκεται σε πράγματα προσεκτικά σχεδιασμένα	
Κοινωνική εγγύτητα 33		
Προτιμά τη συναισθηματική οικειότητα και τις στεν και αναζήτηση βοήθειας	ές σχέσεις, στρέφεται στους άλλους για συμπαράσταση	
γκεκριμένα γνωρίσματα αποτελούν κούς παράγοντες. Όσο υψηλότερο ασης της κληρονομικότητας στο συ	ο διαστάσεις της προσωπικότητας που συνδέονται στενά με είναι το ποσοστό τόσο μεγαλύτερος είναι ο βαθμός	



### SIMULATION THEORY ASKS ARE WE LIVING IN A COMPUTER SIMULATION?

Are we living in a computer simulation? What is reality? Simulation theory tackles some heavy questions.





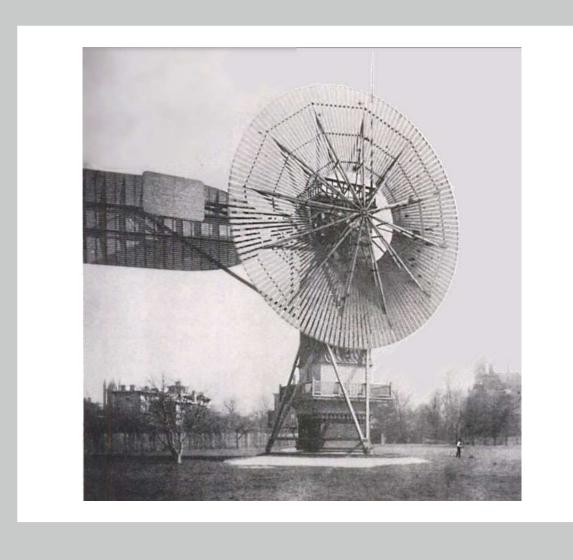
Πανεπιστήμιο Δυτικής Αττικής ΠΜΣ Περιβαλλοντική Επικοινωνία και Προαγωγή Υγείας

 Μέλλον και Οικονομικά των οικοθεραπειών. Inside Out and Outside In ! Αλληλοπροώθηση: (Μεγαλώνοντας μαζί, αναπτυσσόμενοι δεσμοί με το περιβάλλον: στην Πολιτική υγείας, στη Μελέτη δεδομένων, στην Αξιολόγηση, στην Αποδοτικότητα, και στην Πρόληψη) Οικοθεραπεία καθηγήτρια Κωνσταντίνα Σκαναβή

«Περιβαλλοντική Επικοινωνία και Προαγωγή Υγείας »

<u>Διδάσκων</u>: Ιωάννης Σκιαδάς, MD, PhD

# History



# **Ecotherapy and Telehealth?!?!**



### What?! Ecotherapy through a screen? That's ridiculous.

Yep. I can't disagree. When the need for social distancing first became clear, I was ready to throw in the towel (my work towel, not all the towels) until I could see folks in person again. Part of why I set up my work the way I do, (primarily outdoors) is to push against the omnipresence of screens in our lives. To

You can take us indoors, but you can't take nature out of us.

### Maybe not so ridiculous???

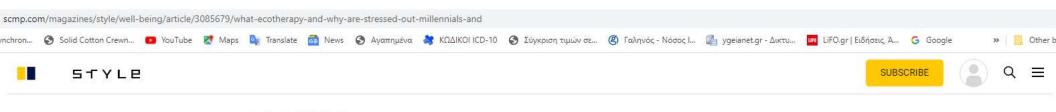
The answer I've finally come to in regards to both those questions, after lots of internal kicking and screaming (maybe even a little external kicking and screaming sometimes), surprises me. The answer is yes. 100%, yes. Not just 'well, good enough considering our options' or 'better than nothing', which honestly was the best I was hoping for when this all started. But really, truly,

yes. Ecotherapy is device between us. healing ecotherapy sentence! Is it idea when we can safely cup of tea.) But I ar therapy online, and



### Growth is Not a Straight Line

by Corie Washow | May 12, 2021 | Elemental Counseling, How Does Ecotherapy Work?



Sty	le /	Wel	l-Being	9

+ FOLLOW

### What is ecotherapy and why are stressed-out millennials and Gen Z-ers booking into nature-focused spas, resorts and therapy centres

Kate Middleton popularised forest bathing – based on the Japanese practice known as shinrin-yoku – and holistic luxury resorts and hotels have been quick to embrace ecotherapy programmes like rainforest awakening walks and ocean appreciation

A 2018 report by the UK's University of East Anglia, which gathered data from more than 140 studies involving more than 290 million people in 20 countries, revealed that exposure to green spaces reduces the risk of Type 2 diabetes, cardiovascular disease, premature death, preterm birth, stress and high blood pressure.

# Ecotherapists' perceptions about the efficacy of their work

#### Consent to Participate in a Research Study Smith College School for Social Work • Northampton, MA

Title of Study: Nature-Based Therapists' Perceptions about the Efficacy of their Work Investigator(s): Fiona Lundy, Smith College School for Social Work

#### Introduction

- · You are being asked to be in a research study of practitioners of nature-based therapies.
- You were selected as a possible participant because you are a mental health practitioner who
  uses nature-based therapies with your clients in your professional work in the United States
  and/or Canada.
- I ask that you read this form and ask any questions that you may have before agreeing to be in the study.

#### **Purpose of Study**

- The purpose of the study is to learn about nature-based therapists' perceptions about what makes their work effective and for whom.
- · This study is being conducted as a research requirement for my master's in social work degree.
- Ultimately, this research may be published or presented at professional conferences.

#### **Description of the Study Procedures**

If you agree to be in this study, you will be asked to do the following things: complete a
demographic form and be interviewed individually by the researcher for approximately one
hour. The interview will take place via webcam, phone, or face to face at a time convenient
for you. If you agree, the interview will also be audio recorded.

#### **Risks/Discomforts of Being in this Study**

There are no reasonable foreseeable risks.

Benefits of Being in the Study

### Are you a mental health practitioner who facilitates

animal-assisted therapy, horticultural therapy,

wilderness therapy,

or other nature reconnection practices at work?



zmb2t1zmat.aspx#aszz3teVviHel; photo from https://www.openskywlideness.com/vhy-open-sky/whi training-therapy-dog: photo from http://www.openskywlideness.com/why-open-sky/whi is-wideness.therapy )

#### Would you like to support research about

#### nature-based therapies by participating in an

#### hour-long interview with a graduate student?

If so, please email or call Fiona, MSW candidate at Smith College School for Social Work-, -for more information

- The benefits of participation include having an opportunity to share your thoughts about your nature-based therapy work and helping to build a research base for this important work. Describing your nature-based therapy work may provide you with an opportunity to reflect on components of your current practice and the state of this developing field.
- The benefits to social work and society include: helping develop best practices for naturebased therapy work, identifying which populations this field effectively serves and which populations, if any, are not benefitting from these interventions. An additional benefit is determining areas for further research.

#### Confidentiality

- Your participation and any data collected will be kept confidential. I will be the only individual who will have access to the data collected. Should any volunteer or professional interview transcribers be hired, they will have signed an agreement binding them to maintain the highest standards of confidentiality. Face to face interviews will take place in coffee shops, in private clinical offices, or in another public setting of your choosing. Webcam and phone interviews will take place while I am in the privacy of my home or office. In addition, the records of this study will be kept strictly confidential. You will be assigned a number that will be on the recording and transcription; your name will not be included in the recording or the transcription. Transcriptions will be destroyed after the mandated three years. Audio transcription and will be locked in a fling eabinet for the mandated three years.
- All research materials including recordings, transcriptions, analyses and consent/assent documents will be stored in a secure location for three years according to federal regulations. In the event that materials are needed beyond this period, they will be kept secured until no longer needed, and then destroyed. All electronically stored data will be password protected during the storage period. I will not include any information in any report I may publish that would make it possible to identify you.

#### Payments/gift

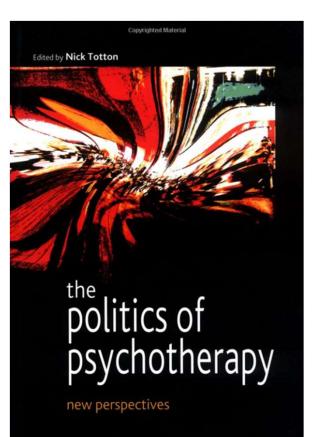
· You will not receive any financial payment for your participation.

#### **Right to Refuse or Withdraw**

• The decision to participate in this study is entirely up to you. You may refuse to take part in the study at any time (up to the date noted below) without affecting your relationship with the researcher of this study or Smith College. Your decision to refuse will not result in any loss of benefits (including access to services) to which you are otherwise entitled. You have the right not to answer any single question, as well as to withdraw completely up to the point noted below. If you choose to withdraw, I will not use any of your information collected for this study. You must notify me of your decision to withdraw by email or phone by April 1, 2015. After that date, your information will be part of the thesis.

#### **Right to Ask Questions and Report Concerns**

 You have the right to ask questions about this research study and to have those questions answered by me before, during or after the research. If you have any further questions about the study, at any time feel free to contact me, Fiona Lundy, at ... If you would like a summary



political dimensions of psychotherapy practice, such as discrimination, power, sexuality, and postcolonial issues; psychotherapy, the state and institutions, including the law and ethics, and psychotherapy in healthcare; and working at the interface, examples of therapy in political action from Croatia, the USA, the UK and Israel/Palestine

How to 'place' political issues in therapy is highly controversial for example, whether political themes should be interpreted psychologically in the consulting room, or respected as valid in their own right: similar issues arise for the role of therapeutic insights in political reality. Seeing is believing - the healing powers of community gardening - PLANT - Tayport Community Garden



Most ecotherapy remains private and concerns the private sphere, just like traditional anthropocentric psychotherapies. However, like some anthropocentric therapies that are explicitly political in nature (e.g. feminist or liberation-based therapies), some ecotherapy approaches operate as a form of social and environmental activism – a sort of environmentalist therapy – and utilize individual therapeutic experiences to resolve a cultural-level split from wild nature in developed societies that is seen to impact health and identity and to drive ecologically destructive behaviours.



HOME | ECOTHERAPY - AN AFFORDABLE PRESCRIPTION FOR BETTER HEALTH

### **Ecotherapy - An Affordable Prescription for Better Health**

Spending time enjoying Mother Nature complements western medical treatment.

#### Print O Save For Later

ARTICLES | UPDATED: NOVEMBER 29, 2017



Time spent surrounded by nature is time well-spent. Photo credit: bigstockphoto.com

Your cultural background and society that you live in influences many aspects of your daily life. For example, western medicine typically relies heavily on surgery, radiation and medication while some eastern cultures embrace acupuncture and herbal remedies. Americans have come to expect that when they see their health care provider for an ailment, they will receive a prescription for a medication. Imagine your surprise if your primary care provider handed you a prescription indicating you should engage in 30 minutes of physical activity in a parklike setting several days a week!

Health care providers in the United States are increasing their use of the

x

unconventional but effective practice of prescribing Ecotherapy. Ecotherapy as it is termed refers to growth and healing by interacting with nature. It is a version of Shinrin-Yoku, a Japanese practice also described as "forest bathing". The term was first introduced in a 1996 book authored by Howard

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#### How Trees Improve Your Physical Health



#### Helping Our Local Forests



Angeles National Fore

## Ecotherapy: How Trees Make You Healthier & How You Can Help Them

Last updated March 23, 2019

Arbor Day is celebrated nationally in the United States on the last Friday of April each year, although individual states celebrate it at different times. So in honor of National Arbor Day, I figured

Quick Navigation [show]

I'd share some fascinating information about ecotherapy as it relates to trees, and at the same time discuss some important aspects of tree care and stewardship!

Ecotherapy is a reasonably new term, and refers to the process of growth and healing by interacting with nature. I've discussed it at length before while talking about **gardening for the elderly**. But did you know that just being in and around trees can be a healthy addition to people of all ages?

Let's start out by discussing some of those important health benefits that being under the living canopy can bring you!

### future of ecotherapy



Eco-therapy camps

"Digital de-tox" retreats in nature

Occupational wellness retreats in rural landscapes

Re-discovering spirituality through nature and landscape "pilgrimages"

Eco-spas and retreats using only local and indigenous materials, products and treatments

Adventure spas based on outdoor fitness or "Green Gyms"

Nutritional retreats based on local, organic ,slow', bio or ,foraged' foods

Green festivals



### nature climate change

### PUBLISHED ONLINE: 2 FEBRUARY 2015 | DOI: 10.1038/NCLIMATE2507

### Public division about climate change rooted in conflicting socio-political identities

Ana-Maria Bliuc<sup>1\*</sup>, Craig McGarty<sup>2</sup>, Emma F. Thomas<sup>3</sup>, Girish Lala<sup>3</sup>, Mariette Berndsen<sup>4</sup> and RoseAnne Misajon<sup>1</sup>

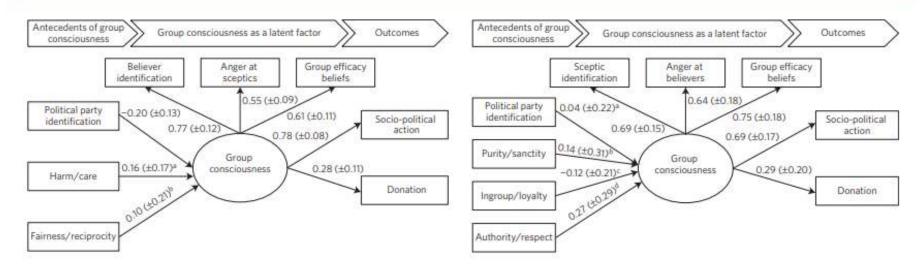
Of the climate science papers that take a position on the issue, 97% agree that climate change is caused by humans<sup>1</sup>, but less than half of the US population shares this belief<sup>2</sup>. This misalignment between scientific and public views has been attributed to a range of factors, including political attitudes, socio-economic status, moral values, levels of scientific understanding, and failure of scientific communication. The public is divided between climate change 'believers' (whose views align with those of the scientific community) and 'sceptics' (whose views are in disagreement with those of the scientific community). We propose that this division is best explained as a socio-political conflict between these opposing groups. Here we demonstrate that US believers and sceptics have distinct social identities, beliefs and emotional reactions that systematically predict their support for action to advance their respective positions. The key implication is that the divisions between sceptics and believers are unlikely to be overcome solely through communication and education strategies, and that interventions that increase angry opposition to action on climate change are especially problematic. Thus, strategies for building support for mitigation policies should go beyond attempts to improve the public's understanding of science, to include approaches that transform intergroup relations.

between two groups with conflicting views-that is, climate change believers and sceptics (rather than between scientists and sections of the public). As such, the public division in opinions about climate change can be understood in similar terms to other social conflicts, such as that over abortion, the campaign for equality of the sexes, the US civil rights movement, and campaigns for marriage equality. Although positions in these conflicts are related to, and can emerge from, membership of political parties, gender and religion they are not reducible to any of these categories. In relation to abortion, for example, a Republican, male Catholic is more likely to be pro-Life than pro-Choice, but the conflict between pro-Life and pro-Choice supporters is not a conflict between Republicans and Democrats, men and women, or between Catholics and persons with other religious beliefs. Rather, the key defining feature of the pro-Life (or pro-Choice) position is a shared opinion, and such opinions provide the psychological basis for the intergroup conflict. Although it is very plausible that the climate change divide reflects and draws on partisan and ideological conflicts8,14, we consider the possibility that it is a conflict that can be understood in opinion-based terms. Although US believers may tend to be Democrats and sceptics may tend to be Republicans, we ask: can believers and sceptics be treated as real groups with distinct identities?

Although there are multiple shades of opinion about climate

### LETTERS

### NATURE CLIMATE CHANGE DOI: 10.1038/NCLIMATE2507



**Figure 1 | Structural model for believers.** p < 0.05 except where marked 'a', when p = 0.099, and 'b', when p = 0.324. N = 328, Comparative Fit Index (CFI) = 0.973, Root Mean Square Error of Approximation (RMSEA) = 0.054,  $\chi^2(17) = 33.109$ , p = 0.011. Coefficients show the 95% confidence interval around the estimate.

**Figure 2** | Structural model for sceptics. p < 0.05 except where marked 'a', when p = 0.622, 'b', when p = 0.349, 'c', when p = 0.381, and 'd', when p = 0.125. N = 120, CFI = 1.00, RMSEA = 0.000,  $\chi^2(21) = 16.400$ , p = 0.747. Coefficients show the 95% confidence interval around the estimate.

### **COUNSELING & ECOTHERAPY**,

Substance Use and Mental Health Therapy for Waynesville and Highlands

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#### FINANCIALS



Therapy is not an impulsive decision. Therapy is an investment in yourself, for your health and your wellness. As your therapist, 1 am committed to being respectful of your time and your financial investment. My goal is to be upfront and transparent about financial conversations and I invite you to do the same.

Our visits will be between 50 and 60 minutes. My rate per visit is \$150 and can be paid by cash, check or card.

I also accept the following insurance plans: Blue Cross Blue Shield, Aetna, Crescent, Medcost



### How Data Science Can Improve Mental Health Care

### The Current State of Mental Health Treatment

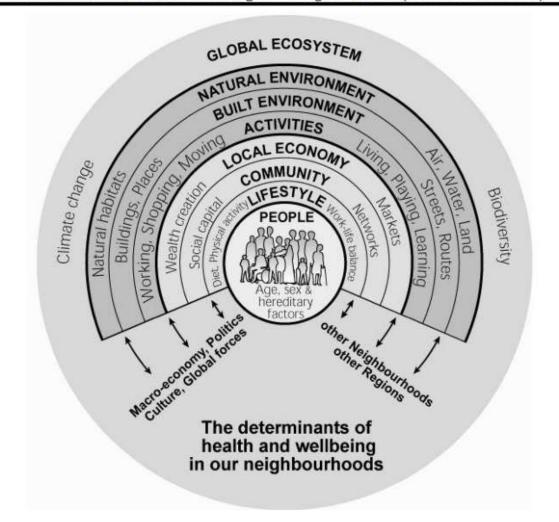
Mental illness can affect tens of millions of people every year. The following statistics provide a look into how many people face a mental health illness:

- · In the United States alone, 46.4% of adults will experience a mental illness during their lifetime.
- 5% of adults ages 18 or older experience a mental illness in any one year 

   this is equivalent to 43.8
  million people.
- Of adults in the United States with any mental disorder in a one-year period, 14.4% have one disorder, 5.8% have two disorders and 6% have three or more.
- Half of all mental disorders begin by age 14 and three-quarters by age 24.
- In the United States, only 41% of the people who had a mental disorder in the past year received professional health care or other services.

Other mental health disorder statistics include:

- Mental health disorders account for several of the top causes of disability in established market
  economies, such as the U.S., and include: major depression (also called clinical depression), manic
  depression (also called bipolar disorder), schizophrenia and obsessive-compulsive disorder.
- Many people suffer from more than one mental disorder at a given time. In particular, depressive illnesses tend to co-occur with substance abuse and anxiety disorders.
- Most people who die by suicide have a diagnosable mental disorder most commonly a depressive disorder or a substance abuse disorder.



The determinants of health and well-being in our neighbourhoods (Barton & Grant, 2006)



**Photo Caption**: From left, Kayla Spaeder, Megan Gresgott and Sara Swanson, Slippery Rock University psychology majors, pose at SRU's ecotherapy garden, where they are studying the effects nature has on people's cognitive functions.

# SRU ecotherapy study examines nature's effect on working memory

September 30, 2019

Nature's restorative effects on the human brain is not a recent discovery. Many college students have cleared their minds by taking a walk outside before returning indoors to write a term paper or study for an exam. However, a collaborative research project at Slippery Rock University is using science to back up a nature-based wellness intervention known as ecotherapy.



y o p

Outside

GEAR ADVENTURE HEALTH TRAVEL CULTURE LONG READS

### Health Companies Want to Reward You for Going Outside

Spending time in nature is increasingly considered legitimate medicine, and doctors and insurance carriers are treating it as such. But how exactly can we expect this movement to play out-and affect our wallets and gear purchases-in the future?

ith nature-prescription initiatives popping up across the country (at the time of publication, there were 71 such programs in 32 states, according to the Institute at the Golden Gate's 2018 ParkRx Census), the acceptance of nature as a legitimate form of medicine is finally here.

We've gotten to this point in large part thanks to a growing body of research that indicates a strong correlation between spending time outside and living a long and healthy life. For the first time, doctors, medical centers, and insurance companies (including behemoths like Aetna, Blue Cross Blue Shield, and Kaiser Permanente) are interested in investing big in nature-prescription initiatives. "There's a broader understanding of the importance of the social and environmental factors that go into making one healthy," says Garth Graham, president of the Aetna Foundation.



### Inspiring Communities through Movement and Conversation

With an aim to make hope and health accessible to all, our doctor-led walking groups are a safe, fun, and FREE place to get some steps, learn about health, and meet new friends. Join us by attending a Walk near you, or let us help you start a healthcare provider-led Walk of your own.



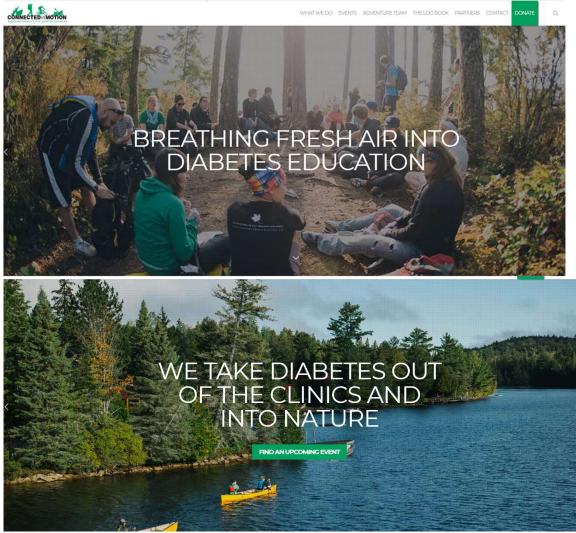
### Healing Gardens & Outdoor Spaces - Stanford Children's Health



There is compelling evidence that suggests connection to nature actively supports the healing process. Patients of all ages – and especially children – can greatly benefit from the restorative effects that the outdoors can have on our minds and bodies. With 3.5 acres of green space and gardens, this concept is front and center in our hospital design. Outdoors eating and acres and acr



### Connected in Motion | Diabetes Education Through Adventure



Outside

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GEAR ADVENTURE HEALTH TRAVEL CULTURE LONG READS VIDEO PODCAST

### Do a Med School Rotation at a National Park

Wallace J. Nichols, author of the book *Blue Mind*, wants the benefits of nature-based therapies to be common knowledge. To achieve that, "it needs to become part of the curriculum for students becoming teachers and for men and women becoming nurses, doctors, and therapists," he says.

Walk with a Doc is trying to deliberately bridge this knowledge gap through its <u>Walk</u> with a Future Doc program, which aims to be in every medical school by 2020. Medical schools offer rotations in wilderness medicine and aspiring doctors, nurses, and physician assistants can complete a clinical elective in rural medicine in Yellowstone National Park, another opportunity to talk more about relationship between nature and health.

### Get Reimbursed for Your Season Lift Pass

Hear me out. Right now, some insurance plans cover a portion of your gymmembership fees, provided that the facility meets some basic requirements and you complete a specific number of visits within six months or a year. Maybe one day your health insurance company will reimburse you for a portion of the cost of your season lift pass. Ski and snowboarding wearables already exist and can provide documented proof of the day's distance and vertical drop.



### PEOPLE.COM > ROYALS

### Kate Middleton Just Revealed the Surprise Project She's Been Secretly Working on for Months

The royal mom has a secret garden!

By Simon Perry January 15, 2019 02:13 PM





# RHS Replying to @The\_RHS · Jan 15, 2019

The RHS Back to Nature Garden will encourage generations to enjoy growing plants for health and well-being. After #RHSChelsea, elements of the garden will be rehomed to an NHS Mental Health Trust.

Today the Duchess visited @KHWGarden @grdnclassroom to meet community gardeners





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### Prevention research and practice

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#### News

Social return on investment analysis of the health and wellbeing impacts of Wildlife Trust programmes

Author(s) Publisher(s): Publication year:

BAGNALL Anne-Marie, et al Leeds Becket University 2019

An analysis the social value of the Wildlife Trusts' nature conservation projects, which offer outdoor volunteering opportunities and programmes that support people experiencing problems such as anxiety, stress or mild depression. The analysis, carried out by researchers at the Centre for Health Promotion Research at Leeds Beckett University, draws on the conclusions of three years of research on Wildlife Trusts' projects. The results show that people participating in outdoor nature conservation activities felt better both emotionally and physically. The analysis calculates that for every £1 invested in general volunteering projects to tackle problems like physical inactivity or loneliness for people with average to high wellbeing, the social return on investment (SROI) was £8.50. For every £1 invested in targeted nature projects to tackle specialised health or social needs for people with low wellbeing at baseline, there was a £6.88 return. The report concludes that conservation activities should be encouraged as part of psychological wellbeing interventions. (Edited publisher abstract)

#### Prevention in social care What it means, the policy context, role for commissioners and practitioners and the evidence base.

#### H4All wellbeing service Practice example about how H4All Wellbeing Service is using the Patient

Activation Measure (PAM) tool

#### Moving Memory

Practice example about how the Moving Memory Dance Theatre Company is challenging perceived notions of age and ageing.

#### Chatty Cafe Scheme

Practice example about how the Chatty Cafe Scheme is helping to tackle loneliness by bringing people of all ages together



#### **Oomph! Wellness**

Practice example about how Oomph! Wellness is supporting staff to get older adults active and combat growing levels of social







# Nature's Lessons About Emerging from a Pandemic