(2) to explore associations between these digital phenotypes and loneliness, social support, and other psychosocial factors and compare for people with and without type 2 diabetes.
Methods:
Data come from a longitudinal observational study in the Republic of Ireland that ran between March and August 2021. Participants are seventy-four adults (64.8% female; median age-group = 50-54) with (N = 40) and without (N = 34) diabetes. Continuous GPS data were recorded for 2 months through the Beiwe smartphone application. Loneliness (UCLA-3), social support (MSPSS), diabetes stigma (DSAS-2; diabetes cohort only) as well as other demographic, psychosocial, and lifestyle questionnaires were assessed at baseline, 1 month, and 2 months follow-up.
Analysis:
GPS data are being processed. The GPS-derived features of time-at-home, overall movement, and location variance will be computed. Associations between these digital phenotypes and psychosocial factors will be explored and changes over time examined using multilevel modeling.
Conclusions:
We expect this study to be the first to describe and compare the digital phenotypes of people with and without diabetes during varying societal COVID-19 restrictions, providing new insights into the effects of such policies on the psychosocial health of people with diabetes.

11.E. Workshop: Urban Green Spaces, Built Environment and Urban - Mental - Environmental Health outcomes

Abstract citation ID: ckac129.704
Organised by: EUPHA-URB, EUPHA-PMH, EUPHA-ENV
Chair persons: Stefano Capolongo (EUPHA-URB), Marija Jevtic (EUPHA-ENV)
Contact: andrea.rebecchi@polimi.it

Environmental sustainability, especially in an era of growth health inequality, is one of the most important challenges facing Public Health systems around the World. Environmental sustainability is responsibly interacting with the planet to maintain natural resources and not jeopardize the ability for future generations to meet their needs. The SDGs put environmental sustainability at the center of sustainable development. Environmental Health is the branch of Public Health concerning all aspects of the natural and built environment affecting human health. It is targeted towards preventing disease and creating health-supportive environments. It encompasses the assessment and control of those environmental factors that can potentially affect health, such as pollution, poverty and inadequate energy solutions. Urban Health is an intersectoral arena that links both the public health and the urban planning sectors, mainly captured by SDG3 (including Mental health) and SDG11. Both during the first waves of the Covid-19 pandemic period and in contemporary cities, urban environments were stressed; the resilience of our cities were tested, highlighting the strengths and weaknesses of the urban contexts, not always capable to pro-mote and protect the population health status. Urban Green Spaces (UGS) have proved essential role as ''tools'' to improve Urban Public and Mental Health. Unfortunately, the heterogeneous distribution of UGS inside the contemporary cities, together with the disparity in quality of such spaces, led to some exclusion phenomena. Evidence/experience-based research strongly demonstrated the positive effects on Public Health of the UGS, and for this reason, they are now becoming the strategic and challenging issue of many urban regeneration programs. The importance of UGS as a key infrastructure has generated the necessity of developing new health-centered design criteria able to conform to their new role in urban environments. The augmentation of UGS surface alone, does not necessarily make cities more livable. An increase in area and surfaces does not translate in ease of accessibility from all social groups or from all the cities' neighborhoods, or not does it give data on the qualities of such areas, like potential for social engagement or Physical Activity.

Aim of the Workshop - organized by the three EUPHA Section URB+MEN+ENV - it would like to be to build the capacity and knowledge between participants about the main topics and urban features capable to have relevant Urban Public, Mental and Environmental Health outcomes. Additional scope is to collected case studies and research experiences considered virtuous at the international level, analyzed in detail to highlight the main urban and architectural features of those healthy experiences and the related health outcomes, such as sedentary lifestyle reduction, increase of the attractiveness of places, reduction of air and noise pollution.
Key messages:
- Promotion of healthy places - with particular reference to the green spaces - that enhance the experience and Mental Health needs to be part of green and inclusive recovery at all levels.
- Policy Makers, Public Health experts, civil societies & citizens are driving forces to implement the development equation, allowing cities to become greener, inclusive, safer, resilient & sustainable.

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Bridging Epidemiological Data with Features of the Urban Context: An experience of Urban Public Health within the City of Milan, Italy

Andrea Rebecchi

A Rebecchi[1], AA Johnson[2], A Brambilla[1], M Buffoli[1], AG Russo[3], S Capolongo[1]
[1]Design & Health Lab, DABC - Politecnico di Milano, Milan, Italy
[2]Columbia University, Vagelos College of Physicians and Surgeons, New York, USA
[3]ATS della Città Metropolitana di Milano, Milan, Italy
Contact: andrea.rebecchi@polimi.it

Referring to the Research Project ''Enhancing Healthcare and Well-Being Through the Potential of Big Data: An Integration of Survey, Administrative, and Open Data to Assess Health Risk in the City of Milan with Data Science'' the Authors present preliminary results regarding a survey distributed to a sample of citizens across all neighborhoods of Milano city. This survey sought to collect data regarding health risk factors of this population, including both individual (e.g. socio-demographic characteristics, behaviors, etc.) and community (e.g. environmental/morphological features, available social services, etc.) data. A digital survey was designed to collect

information on the health conditions, risk factors, and lifestyle characteristics of a representative sample of the Milanese population at the neighborhood level, with reference to the census tracts and Local Identity Units (NIL). Collected survey data are entered into a system containing corresponding individual health information acquired from the Local Health Authority databases, creating a synthesized information profile with each respondent's state of health, including existing conditions, health services used, and drug therapies. The disseminated survey was developed from comparisons with similar experiences at the national/international level and divided into 60 multiple choice questions (6 for Sociodemographic profile; 8 for Context of residence; 12 for Functional limitations; 25 for Behaviors and lifestyles; 9 for Access to health services). The data from urban analysis conducted on the NIL of the City of Milan are assessed with particular reference to the theme of bicycle-pedestrian accessibility (Walkability) in the urban context and repercussions on the adoption of Healthy Lifestyles. The models developed through this research are expected to provide critical insight for designing health promotion, health protection, and disease prevention interventions aimed both at individual and community level.

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Urban places and Mental Health challenges (lessons learned from Covid-19 crisis)

Marija Jevtic

M Jevtic[1,2,3], V Matkovic[4], MP Kusturica[1], C Bouland[3]
[1]Faculty of Medicine, University of Novi Sad, Novi Sad, Serbia
[2]Institute of Public Health of Vojvodina, Novi Sad, Serbia
[3]School of Public Health, Université Libre de Bruxelles, Brussels, Belgium
[4]Health & Environment Alliance, Brussels, Belgium
Contact: marija.jevtic@uns.ac.rs

Nature deprivation under COVID-19 lead to reduced well-being. Urban design interventions were also identified as an important contributor to the restoration of community confidence, choice, and safety. Factors related to sociodemographic, housing and lockdown were linked to changes in exposure to nature during the pandemic lockdown. Changes in exposure to nature and mental health outcomes during the COVID-19 lockdown were strongly linked. Especially young people had an increased number of mental health problems. Children and youth were more bored and worried in comparison with the pre-pandemic period. The educational institutions worldwide were closed or changed to online education during the pandemic, leading to great disturbance in students' education and outdoor events. All ''green infrastructure'' (GI) resources (including parks, gardens etc.) received great attention as ''essential infrastructure'' supporting well-being. But, the quality, functionality and position of GI in urban areas showed inequality in distribution. Frequently, societies with greater ethnic diversity, lower income and larger health inequality suffered from unsatisfactory or lack of access. GI is important in decision-making to address inequality. This work will also present an open-air activity for all generations: A reflective walk through the oldest part of Novi Sad (EU Capital of Culture 2022), as a part of Project Reflective citizens in Novi Sad. This walking tour was led by pupils from primary school - where all generations spend useful time in open space and a safe atmosphere walking tour, learning and listening about the cultural history of the oldest part of the city. It is vital to enhance urban planning and design practices in making healthier and more resilient communities. It is necessary to underline the importance of planning green spaces that need time to form in urban areas, and which have proven to be very important for mental health in the midst of the pandemic crisis.

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Green space availability and mental health – results from a cross-sectional study in Northwestern Germany

Felix Sisenop

F Sisenop[1], J Lindert[1]
[1]University of Applied Sciences Emden/Leer, Brandeis University, Emden, Germany
Contact: felix.sisenop@hs-emden-leer.de

Background:
A relationship between green space and health has been shown in several epidemiological studies. The impact of different types of green space is still relatively unknown. To start filling this gap, we looked at associations between different green space types and health outcomes (depression and mental health).
Methods:
Data are obtained from a cross-sectional study (n = 479). Depression (assessed with PHQ-9) and mental health (assessed with GHQ-28) are dependent variables. Availability of green space in the surrounding neighborhood was assessed as independent variable by the percentage of green space (> = 1ha) within a 250m radius participants residence. Survey data were analyzed using IBM SPSS 26 and Geo data using QGIS 3.18.0.
Results:
N = 479 participants of a cross-sectional study in 2018 provided data (49.4%, n = 240 women; 49.6%, n = 239 men). Participants had a mean age of 57.55 years (SD: 18.80, min-max:18-95), majority (75.2%, n = 360) were married or partnered, had a lower educational qualification than A-levels equivalent (56.8%, n = 272), were not employed (53%, n = 254), had a net household income of at least 3. 000€ per month (40.1%, n = 192) and at least sometimes financial worries (51.4%, n = 246). Green areas without agricultural areas show an association with frequency of depression (B(SE) = 0.056(0.024), p = 0.018). This contrasts with green spaces including agricultural areas, where there is no statistically significant association (B(SE) = 0.007(0.012), p = 0.564).
Discussion:
We found an association between type of green space and depression. Further studies are needed to establish a grid for assessing characteristics and quality criteria of green spaces. However, it can already be assumed that there is an association between quality of green spaces and psychosocial outcomes.

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How breaks in nature can affect the users' wellbeing: an experience based survey during the lockdown

Marco Gola

M Gola[1], M Botta[2], AL D'Aniello[3], S Capolongo[1]
[1]Design & Health Lab, DABC - Politecnico di Milano, Milan, Italy
[2]Monica Botta Architects, Novara, Italy
[3]HUB 4 MIND, Varese, Italy
Contact: marco.gola@polimi.it

Background:
In the occasion of COVID-19 pandemic in Italy, the life of citizens was greatly disrupted - from healthcare professionals to the smart workers - and consequently also the state of mood. On the basis of the scientific evidences in relation to the relationship between the built environment and health, a research group has promoted an investigation on the benefits that greenery can have on the psychophysical state of the users, especially healthcare staff and users at home.
Objectives:
The methodology adopted is the Profile of Mood States, which provides experiential activity in nature - without any technological distraction- to evaluate the benefits on mood. The methodology adopted refer to the shorter version

(34 items) designed by prof. Grove at the University of Western Australia. In relation to the COVID-19 pandemic, the experience based questionnaire is differentiated for healthcare staff and general users. The questionnaire is composed of a few questions, to be completed before and after an experience in nature of 20/30 minutes. The investigation requires to be carried out in private gardens, balcony and/or terrace with greenery, public green areas, etc.
Results:
300 participants (subdivided into 225 general users and 75 healthcare professionals) took part in the investigations. Data analysis highlighted the higher performances in anxiety, depression, anger, force, fatigue and confusion, in particular for users who had the experience in garden (-50/70%), and among the healthcare staff the best outcomes are related to who did the investigation during or after the workshift (-60/-90%).
Conclusions:
Although it is well-known the benefits that nature affects positively on well-being and stress level of users, the investigation underlines that brief breaks in the nature - especially in period of great stress such as pandemic - can influence the well-being and mental health of users.

11.F. Workshop: Can digital health literacy act as a protective factor for students in times of crisis?

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Organised by: University of Graz (Austria), EUPHA Working Group on Health Literacy
Chair persons: Barbara Gasteiger-Klicpera (Austria), Michaela Wright (Austria)
Contact: michaela.wright@uni-graz.at

As mental health related issues become more and more prevalent across all ages and social groups around the globe, the identification of protective factors related to well-being is of high importance. In times of the COVID-19-pandemic, this proves to be even more crucial. Young adults and especially students were particularly burdened by social isolation and missing opportunities for personal exchange and supporting relationships during the pandemic. Within this workshop we will discuss the significance of a possible protective factor for the promotion and strengthening of well-being: digital health literacy (DHL). It involves the ability to search for health-related information, to add self-generated content, to evaluate the reliability of health information, to determine the relevance of health information and to protect one's privacy. Findings suggest that it plays a vital part as a protective resource when it comes to maintaining or promoting well-being. This might be particularly the case when the possibility of accessing health-related information is restricted due to reduced social contact. Since important sources for health information are available within the digital space, digital competencies are becoming important to access such information and to conduct a successful and healthy life. The competence of adequately dealing with digital health information, in particular, became more relevant during the COVID-19-pandemic. DHL can be seen as a two-dimensional construct. On the one hand, it refers to the ability to use digital resources to gather health information and, on the other hand, it refers to critical information literacy. Critical information literacy is the ability to collect, understand, evaluate and apply information. Within the proposed workshop, findings of a university survey, conducted within the global COVID-HL network, will be presented. Presentation 1 seeks to address the role of individual factors for the interaction between well-being and DHL. It will further examine the importance of being able to properly assess the relevance of health information. Presentation 2 sheds light on actions, such as adding self-generated health content, when it comes to mental health promotion. It will also take up the relevant individual factors that mediate the relationship between DHL and well-being. Presentation 3 highlights the ability of students to search for health-related information and to use it as a factor to improve their well-being. Presentation 4 provides insight into the importance of DHL for future health professionals in a health sector that is under digital transformation. Lastly, presentation 5 argues for the necessary enhancement of DHL and sense of coherence of students and stresses the need for health promoting and target group specific interventions. In a second step, the audience will be encouraged to ask questions and to engage in a discussion about the suggested conclusions and implications.
Key messages:
- It has been shown internationally that there is a strong relationship between digital health literacy and students' well-being.
- Individual factors are relevant mediators in the relationship between well-being and digital health literacy.

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Digital health literacy and well-being of university students in Austria during the pandemic

Franziska Reitegger

F Reitegger[1], M Wright[2], B Gasteiger-Klicpera[1,2]
[1]Institute of Education Research &Teacher Education, University of Graz, Graz, Austria
[2]Research Center for Inclusive Education, University of Graz, Graz, Austria
Contact: franziska.reitegger@uni-graz.at

Background:
Previous findings suggest that depressive and anxiety-related symptoms have doubled among students since the beginning of the pandemic. Digital health literacy can act as a protective resource to strengthen well-being.
Objectives:
This paper analyzes the relationship between digital health literacy, socioeconomic status and well-being and future-anxiety among students in Austria.
Methods:
480 students from Austrian higher education institutions were surveyed via online questionnaire during the second wave of the Corona pandemic. Sociodemographic data, students' self-assessments of well-being, fears regarding future development and perspectives, and digital health literacy were collected. Variance and regression analyses were used for the evaluation.
Results:
About 50% of the students reported low scores in well-being and distinct fears about the future. A higher socioeconomic status correlated with higher well-being as well as lower fears about the future.Regarding digital health literacy, the ability to assess the relevance of information showed the highest correlation with well-being.
Conclusions:
Individual factors such as gender or the study-program are relevant for the interaction between well-being and digital