International Academic Conference

e-methodology

e-methodology

6th International Online Academic Conference

May 21, 2021

HONORARY PATRON

Prof. dr hab Piotr Ponikowski – Rector of Wroclaw Medical University

Book of Abstracts

Edited by

Martyna Madej, Sylwia Bokuniewicz, Katarzyna Kaczmar,

Andrzej Jarynowski, & Luba Jakubowska

Wroclaw Medical University

International Academic Conference
e-methodology

Table of Contents

SCIENTIFIC PATRON

Anna Kołcz, PhD,Dean of the Faculty of Health Sciences of Wroclaw Medical University, Poland

HEAD OF THE ACADEMIC COMMITTEE

Luba Jakubowska, PhD, Wroclaw Medical University, Poland

Members of the Academic Committee

Michael Wilson, Prof., Loughborow University, England

Władysław Jacek Paluchowski, Prof., Adam Mickiewicz University, Poland

Madalina Buga-Moraru, Prof., University of Bucharest, Romania

AllaYaroshenko, Prof., National Pedagogical Dragomanov University in Kiev, Ukraine

StanisławJuszczyk, Prof., University of Silesia, Poland

Krzysztof Konecki, Prof., University of Łódź, Poland

Paolo Di Sia, Prof., University of Padova, Italy

Iwona Mazur, PhD,Wroclaw Medical University, Poland

Mariola Seń, PhD, Wroclaw Medical University, Poland

Eliza Ivanova, PhD, Sofia University St. KlimentOhridski, Bulgaria

Aleksander Kobylarek, PhD, University of Wrocław, Poland

Kristi Vinter, PhD, Tallinn University, Estonia

HEAD OF THE INITIATING COMMITTEE

Luba Jakubowska, PhD, Wroclaw Medical University, Poland

Conference Secretary

MartynaMadej, WSB University in Wroclaw, Poland

Members of the initiating committee

Andrzej Jarynowski, C. Sc, Interdisciplinary Research Institute in Glogow, Poland

Katarzyna Kaczmar, University of Wroclaw, Poland

Kamila Wylęgły, MA, University of Wroclaw, Poland

Katarzyna Kuźmicz, MA, Interdisciplinary Research Institute, Poland

SylwiaBokuniewicz, MA University of Wroclaw, Poland

Magdalena Kazimierska-Zając, PhD, Wroclaw Medical University, Poland

Agnieszka Lintowska, MA, Wroclaw Medical University, Poland

Iwona Klisowska, MA, Wroclaw Medical University, Poland

EwaJurczyk-Romanowska, PhD, University of Wroclaw, Poland

Barbara Grabowska, PhD, Wroclaw Medical University, Poland

International Academic Conference

e-methodology

Introduction

Dear Conference Participants,

we are very excited that you chose *E-methodology* conference to take a part in, which is the first online *E-methodology* conference. We hope we will meet your expectations.

This year's conference is different from the previous ones, for some members of our initiating committee it is even the first online conference, which they help to organise. I am very grateful, and I would like to thanks to each of them as they have done very good job, and they put their heart into help and organisation.

These times require specific solutions, also our conference has changed its form a little. This year's conference consists of four sections: (1) *on telemedicine and virtual reality*, (2) s*ession on e-learning*, (3) *on infectious disease risk perception on the internet*, which is supported by Polish-German science foundation (PNFN 2019-21), and the last one (4) *general track on internet research and its application to the society*. This change was caused the high interest in the Covid-19 topic, which, due to this reason, required separate section. We also tried to adapt to the current worldwide situation and to enable you to participate in the conference freely and safely.

IT is developing so fast and the world needs to adapt to these changes. Education is not the only field that is currently dependent on IT. Nevertheless, teaching methods have evolved over the years, and learning via the Internet, aside from becoming a necessity nowadays, may have become completely common and natural for some. IT has become equally popular in medicine, and therefore requires careful analysis. Internet methodology will certainly help to find numerous benefits that result from the use of modern technologies in various areas of life. We encourage you to read the book of abstracts so that you can find out about the research activities of other participants in our conference.

We are really sorry about the fact that we cannot meet you in real life, even though we did our best to meet our expectations and to provide you the high quality of the conference. Furthermore, we would like to thank you for your interest in our conference, especially those of you, who participate in the conference for the next. We are very grateful that you are with us. We hope that our conference will provide you with a lot of intellectual experience and that you would like to participate in it again next year, hopefully next time in a stationary form.

With the best wishes of fruitful academic discussions and cooperation,

Martyna Madej
Conference Secretary

PSP
PROSCIENTIAPUBLICA

WROCLAW
MEDICAL UNIVERSITY

E-METHODOLOGY 2021 - CONFERENCE PROGRAM

Friday - May 21, 2021

10:10 – 11:20 SESSION I

SESSION 1 „ON TELEMEDICINE AND VIRTUAL REALITY" chaired by Katarzyna Kaczmar

Robert Geisler, Prof. & Marta Geisler, MA (University of Opole, Poland), *Knowledge for Educational Projects in Cardiovascular Disease. Big Data Analysis*

Łukasz Czekaj, PhD, Jakub Domaszewicz, MA (AIDMED, Poland), **Andrzej Jarynowski, C.Sc** (Interdisciplinary Research Institute in Glogow, Poland), **& Robert Kitłowski, MA** (AIDMED, Poland), *Telemedicine multi-centre study of COVID-19 patients using artificial intelligence to analyse data from wearables*

Anna Sterna, MA (Ward for Personality Disorder's and Neurosis's Treatment, Poland), *From online psychotherapy to autonomous psychotherapy. Advantages and drawbacks of this direction*

11.10 - 11.20 POSTERS DISCUSSION

Agnieszka Lintowska, PhD & Mariola Seń, PhD (Wroclaw Medical University, Poland), *New technologies in undertaking and monitoring physical activity of children and adults*

Barbara Grabowska, PhD, Mariola Seń, PhD, & Iwona Klisowska, PhD (Wroclaw Medical University, Poland), *E-prescription in Poland – a preliminary report*

Maja Lidia Piotrowska & Adam Tomasz Pliszka (Jagiellonian University, Poland), *Discourse analysis of attention deficit hyperactivity disorder on the Internet*

Mariola Seń, PhD, Iwona Klisowska, PhD, Barbara Grabowska, PhD, & Agnieszka Lintowska, PhD (Wroclaw Medical University, Poland), *New technologies in the nutritional education of children and adults*

Magdalena Kazimierska-Zając, PhD, Luba Jakubowska, PhD (Wroclaw Medical University, Poland), *Virtual reality (VR) in treatment and therapy of women*

RoksanaKwietniewska, Iwona Zborowska, MSM, Anna Dąbek, MSN (Wrocław Medical University, Poland), *E-prescription- impediment or facilitation?*

Andrzej Jarynowski, C.Sc. (Interdisciplinary Research Institute in Glogow, Poland), **IreneuszSkawina, PhD** (University of Social Science, Świdnica, Poland), *Hospital infection electronic surveillance*

ŻanetaKwasiborska, Marzena Krysa, PhD (Wrocław Medical University, Poland), *Phonoholism - epidemic of the 21st century*

11.40 – 13.45 SESSION II

SESSION II "SESSION ON E-LEARNING" chaired by Kamila Wylęgły

Vahid NorouziLarsari, MA, **Flora Keysan, Radka Wildova**(Charles University, Czech Republic), *A Comparative Study of the Effect of Learning and Retention of Primary Students in English Lessons through Social Network and Face-to-face Training Approach during the Prevalence of COVID-19*

Anna Chmiel, MA (University of Wroclaw, Poland), *Methodology of history of education classes conducted via the Internet*

Michał B. Paradowski, PhD, DLitt (Habil.), Magdalena Jelińska (University of Warsaw, Poland), **& Andrzej Jarynowski, C.Sc.** (Interdisciplinary Research Institute in Glogow, Poland), *Shifting educators and learners into remote instruction during the COVID-19 pandemic*

Paolo Di Sia, A/Prof. (University of Padova, Italy), *On distance learning in Italy during the C-19 emergency*

Karolina Czopek, MA, Michał B. Paradowski, PhD, DLitt (Habil.) (University of Warsaw, Poland)**, & Andrzej Jarynowski, C. Sc.** (Interdisciplinary Research Institute in Glogow, Poland), *Peer interaction loses its impact on second language acquisition in online classes in comparison to face-to-face courses*

Ivana Ivanic, A/Prof., Laura Spariosu, Prof., Daniel Sorin Vintila, A/Prof. (University of Novi Sad, Serbia), *E-methodology and Language Learning: Case Study of Romanian Language in Serbia during the COVID-19 pandemic*

13.40 – 13.45 POSTER DISCUSSION

Iwona Klisowska, PhD, Mariola Seń, PhD, Barbara Grabowska, PhD (Wroclaw Medical University, Poland) *Advantages and disadvantages of e-learning*

Katarzyna Kaczmar(Wroclaw University, Poland) *Was e-scouting real? How did selected social groups work during the pandemic?*

14.15 – 15.40 SESSION III

SESSION III "ON INFECTIOUS DISEASE RISK PERCEPTION IN THE INTERNET"
SUPPORTED BY POLISH-GERMAN SCIENCE FOUNDATION (PNFN 2019-21) chaired by
Andrzej Jarynowski

Andrzej Jarynowski, C. Sc (Interdisciplinary Research Institute in Glogow, Poland), *ASF and HPAI vs COVID-19 in Polish Internet – perception of infectious diseases*

Alexander Semenov, PhD (University of Florida, USA & St. Petersburg State University, Russia),
Andrzej Jarynowski, C. Sc. (Interdisciplinary Research Institute in Glogow, Poland),
MikołajKamiński (Individual Medical Practice Bogdanowo, Poland), &**Vitaly Belik** (Freie Universität Berlin, Germany), *Participatory epidemiology in time of COVID-19 on the example of Sputnik V mild adverse events in Russian Telegram*

Kamila Wyległy, MA (University of Wroclaw, Poland), *The usage of an online survey in the study of risky behaviours*

Katarzyna Kuźmicz, MA (Interdisciplinary Research Institute, Poland) **& Andrzej Buda**
(Interdisciplinary Research Institute in Glogow; Institute of Nuclear Physics Polish Academy of Science in Krakow, Poland), *How to plug out of the networks in jeopardy of ASF, Covid-19, social media or markets toxicity*

15.30 – 15.40 POSTER DISCUSSION

Monika Wójta-Kempa, PhD (Wroclaw Medical University, Poland), *Social Interest of Covid-19 on Polish Internet*

Daniel Płatek, PhD (Lund University, Sweden), *Communities during Protest Movements (farmers, woman and coronasceptic) on the Polish Tweetosphere: epidemiological harm reduction perspective*

16.00 – 17.55 SESSION IV

SESSION IV "GENERAL TRACK ON INTERNET RESEARCH AND ITS APPLICATION TO THE SOCIETY" chaired by MartynaMadej

PawełŁupkowski, Prof., & Barbara Adamska(Adam Mickiewicz University, Poland), *Gathering linguistic data via games - the QRGS case study*

Bianca OrricoSerrão, PhD, Manuel Jacinto Sarmento, A/Prof. (University of Minho, Portugal), &
Juliana Prates Santana, Prof. (Federal University of Bahia, Brasil), *The voices and actions of child activists against the climate crisis through social media*

Dawid Gralik, MA (Adam Mickiewicz University, Poland), *Presentation of military history in social media on the example of YouTube*

Elena Tsankova, PhD & ErgyulTair, PhD (Bulgarian Academy of Sciences, Bulgaria), *Studying the Meta-Accuracy of First Impressions in the Pandemic- and- Post-Pandemic Reality: Challenges and Opportunities Presented by Internet Research*

Kinga Frączkowska, MA (Siedlce University of Natural Sciences and Humanities, Poland), *Internet methodology - difficulties and opportunities offered by the Internet in conducting research. Analysis of the phenomenon in the light of the literature on the subject*

Dawid Ratajczyk, MA & Paweł Łupkowski, Prof.(Adam Mickiewicz University, Poland), *Internet resources in the attitudes towards robots' studies. Non-laboratory insights into human's emotions and opinions concerning robots*

18.00 – 18.05 POSTER DISCUSSION

Sajad Hussain Kawa, PhD (Gunjan Rajput; Glocal University Saharanpore Up, India), *Research methodology and new techniques in IT*

Satpal Gujjar, PhD (Sunil; OSGU, India), *Rural development*

18.05 – the end of the conference

ABSTRACTS

Chmiel Anna (University of Wroclaw, Poland)

Methodology of history of education classes conducted via the internet

Aim. The aim of the research is to show the change in the methodology of the history of education classes, which are taught via the Internet due to lockdown caused by the COVID-19 pandemic.

Methods. The subject of the study was comments and opinions of students who participated in lectures "history of education" in the 2020 and 2021 academic year. They are analysed with the language-oriented, meaning-oriented, and research perspective analysis (Kvale, 2010).

Results. The analysis shows that this new online reality is a chance to expand the lecturer's knowledge about teaching methods and may cause change after returning to universities.

Conclusions. Even though, the "history of education" is one of the less liked lectures, conducting classes in this subject with the use of appropriate methods can positively affect both the lecturer and students – their perception of studies as well as the development of their skills and competencies.

Key words: teaching, online, methodology, history of education, students, lecturers

Czekaj Łukasz (AIMED, Poland), Domaszewski Jakub (AIMED, Poland), Jarynowski Andrzej (Interdisciplinary Research Institute in Glogow, Poland), & Kitłowski Robert (AIMED, Poland)

Telemedicine multi-centre study of COVID-19 patients with data from wearables and application of artificial intelligence

Aim. The aim of this study is to validate a telemedicine solution based on the AIDMED system (1) wearable biosignals recorder - Aidmed One, (2) Mobile application - Aidmed Health, (3) website-based platform – Aidmed Cloud in optimization of the management of patients.

Concept. Patients from Northern Poland with acute-, long- COVID-19 and other diseases are remotely observed for parameters such as saturation, heart rate, breath rate, skin surface temperature, cough intensity, and physical activity. Change of these parameters is measured in response to physical exercises/tests. Based on the analysis of the obtained signals, the patient's condition is assessed and methods for prediction of sudden intensification of COVID-19 symptoms will be developed.

Hypothesis. Implementation of ongoing surveillance (performed on a relatively continuous basis) of patients in home isolation may (as we verify in a clinical trial following observation):

- reduce the number/duration of hospitalizations (LOS rate) by 20%;
- increase patient comfort (subjective and objective index on psychological scales) - by 30%.

Conclusions. We believe that changes occurring in health care due to the COVID-19 global pandemic will cause that telehealth will be more and more involved in medical practice and become standard of care soon

Key words: telemedicine, COVID-19, m-health

Czopek Karolina (University of Warsaw, Poland), ParadowskiMichał B. (University of Warsaw, Poland), & Jarynowski Andrzej (Interdisciplinary Research Institute in Glogow, Poland)

Peer interaction loses its impact on second language acquisition in online classes in comparison to face-to-face courses

Aim. Informal communication networks formed by language learners in face-to-face classes are known to have a favourable impact on progress (Paradowski et al., 2021a; Paradowski et al., 2021b). In the face of the recent transition to remote learning, the aim of this study is to explore the extent to which this instructional mode permits intensive and meaningful peer interactions in the foreign language (L2).

Methods. We perform a comparative analysis of the impact of peer-to-peer dynamics on the effectiveness of L2 learning among the participants of an intensive summer course of the Polish language and culture in Warsaw, comparing two face-to-face (2017 & 2019) with one online edition (2020) taking place during the COVID-19 pandemic.

Results and conclusions. We show, among others, how the relationship between social relations and the acquisition of a foreign language is differentiated according to the mode of learning, particularly in terms of vocabulary and writing skills. We also discuss the connection between learners' subjective perception of language progress and motivation, amount of time spent on peer interaction, and preference for online/face-to-face learning.

Keywords: remote learning, immersion, foreign language acquisition, study abroad, peer interaction, COVID-19

Di Sia Paolo (University of Padova, Italy)

On distance learning in Italy Turing the C-19 emergency

Aim. Due to the Covid-19 (briefly C-19) epidemic, since March 2020 people, businesses and institutions have needed the use of digital services to continue working, studying, informing themselves, maintaining family and social relationships, i.e. a transfer of life online. This paper analyzes the distance learning experiences of children, teenagers, and parents during the lockdown due to C-19 in Italy. Reflections are then carried out on the impact of distance learning at the academic level and on the imposed distance mode of human relations.

Methods. We consider the distance learning experiences of children, youths, and parents during the lockdown due to the C-19 epidemic in Italy, considering in particular data collected with a survey on a national sample of 1028 children and youths, aged between 10 and 18 who use the Internet.

Results. This change in everyday life relied on the idea that society was prepared for this strong change, which did not turn out to be such, highlighting already pre-existing digital inequalities, which have been aggravated. The closure of schools has led to over 90% of children and teenagers enrolled in school worldwide to drop out of school. Italy has been the first European country to implement a national lockdown. Schools and universities began to close at the end of February 2020 and from March 2020 the blocking measures have extended to all Italian regions.

Conclusions. Italian students lost regular school days by a factor 2.5 times higher than the average of lost days among high-income countries around the world and invested in distance learning and teaching solutions delivered through different channels. Millions of children and teenagers aged between 6 and 17 had difficulties in distance learning activities due to a lack of connectivity and/or adequate IT tools in the family; many students have stopped attending school due to that. In an interpretation of the current situation as the beginning of a new way of the relationship between people who are more socially and psychologically detached, that is to say, *less globally human*, distance learning can be interpreted as an unfortunate piece of this new negative social picture.

Keywords: Covid-19 (C-19), distance learning, emergency, Italy, school, university, human relationship, freedom

Frączkowska Kinga (Siedlce University of Natural Sciences and Humanities, Poland)

Internet methodology - difficulties and opportunities offered by the Internet in conducting research. Analysis of the phenomenon

Thesis. Nowadays, thanks to the Internet, we have a huge amount of opportunities to transfer knowledge to others, but it is also becoming a great place to conduct some scientific research.

Aim. Theoretical review of the possibilities and functions of the application enabling the creation of internet surveys. Assessment of their use in accordance with their own opinion and the analysis of the literature on the subject.

Conclusion. The interest in this medium as a tool for social and psychological research has been growing rapidly in the last ten years. The very rapid development of technology that took place during the COVID-19 pandemic allowed us to easily conduct a research survey using the network, which can easily replace us with labour-intensive data collection through intelligence. In addition, many different tools and techniques have been created that use the so-called "Global spider web" in conducting my own research. Often the unit analysed by the researcher is a website, e-mail messages, comments in discussion forums, blogs, or internet diaries. Thanks to them, the scientist analyses the public opinion of a much larger number of respondents than using traditional research techniques. The researcher then abandons direct contact with the respondent and devotes himself to the analysis of the phenomenon that interests him by analyzing the given Internet environment, social groups that express themselves on a given topic or share their works on specific problems. However, the global network is not only a chance for a good, innovative approach to research but also threats and related difficulties. One of the most important weaknesses of the network is the fact that we can never be sure who is on the other side of the computer screen. We can only verify this when making a video call, e.g. using applications such as Skype, Messenger, WhatsApp.

Key words: Internet methodology, Internet, research, education

Geisler Robert (University of Opole, Poland) & Geisler Marta (University of Opole, Poland)

Knowledge for Educational Projects in Cardiovascular Disease
Big Data Analysis

Introduction. Big data is used by businesses especially for the decision-making process (Elgendy, Elragal 2014). Among many information and data, many companies after the IT revolution in the 21st century try to make order among them and find new knowledge for practice (Kitchin 2014,

Ogrean 2018). Public policy, as well as health public policy, may also implement big data analysis for new solutions or educational projects (Anker, Asselbergs, Brobert, Vardas, Drobbee , Cronin 2017, Banerjee, Chen, Fatemifar, 2021, Clarke, Margettes 2014, Kalkman, Mostert, Udo-Beauvisage, 2019).

Aim. The aim of the presentation will be to show the assumptions and methodology of the research project concerning internet resources in public policy/health public policy. The goal of the research project will be the analysis of cardiovascular system diseases in different countries in correlation to diet, style of life, physical activity or other factors defined as reducing morbidity.

Methods. Big Data analysis will be used, which means statistical analysis, especially correlation among different indicators. Internet resources after the technological revolution consist of available information and data, even related to health issues and diseases. It would be analysed also a correlation between health indicators as well as economic, social, cultural, even political indicators.

Conclusion. The outcome of the research will be knowledge regarding risk factors in specific areas and opportunities for health promotion programs (educational projects) as well as prevention programs.

Keywords: Public health policy, education and health promotion, cardiovascular, big data

Grabowska Barbara (Wroclaw Medical University, Poland), Seń Mariola (Wroclaw Medical University, Poland), & Klisowska Iwona (Wroclaw Medical University, Poland)

E-prescription in Poland - a preliminary report

Introduction. E-prescription is a digital version of the previously used standard paper prescription. In Poland, professional arrangements were made, thanks to which it became possible to promote e-prescriptions in pharmacies and doctors' surgeries throughout the country.

Aim. Aim of the paper: to introduce the subject of e-prescription in Poland.

Brief description of the current state of the art. For years in Poland, handwritten prescriptions used to be the preferred method of communication for doctors when making decisions about therapy with medications and for pharmacists to distribute them. Nonetheless, over the last decade, interest in the subject of e-prescription, alongside other e-health solutions for processing health-related data, has increased. E-prescription is filled on the basis of a four-digit code, which we receive by a text message sent to a given phone number or by email to an indicated address. Alternatively, there is a possibility to obtain an information printout, depending on the configuration of our Patient Account. An important change introduced is that we do not have to physically carry the printed prescription with us anymore.

Summary. E-prescription provides benefits for doctors, patients, and pharmacists, such as convenience, time-saving, greater safety of the therapy, less risk of error, less bureaucracy. The main

objectives of the e-prescribing system involve facilitation of the process of prescriptions delivery, reduction of errors, time optimisation for doctors and pharmacists, and eliminating the problem of illegible and fake prescriptions, which have so far been a common occurrence.

Key words: e-prescription, electronic prescription, e-health

Gralik Dawid (Adam Mickiewicz University, Poland)

Presentation of military history on social media on the example of YouTube

Aim. The aim of the study is to analyse how military history is presented in social media on the example of YouTube and to compare the trends on Polish – and English – language channels with a particular focus on popularity, content topics, and historical periods which are presented.

Methods. The subject of the study was a group of more than 4,000 videos on YouTube published on 20 channels (10 Polish-language and 10 English-language) whose main topic is military history. By using a special computer program written in the Python programming language, a complete list of films was downloaded, also with data such as the numbers of views and comments. Then, the acquired data were subjected to quantitative and qualitative analysis according to the principles of Knowledge discovery in databases (KDD).

Results. The analysis shows that English-language channels present a wider spectrum of presented topics, the level of interest in particular eras and the geographical location of the "action" of the films are also different. In the case of Polish channels, the popularity of domestic themes is evident

Conclusions. The comparative analysis shows a strong influence of Polish military traditions on the subject matter of the Polish-language channels, with a simultaneous narrowing of the number of historical periods discussed and a greater frequency of presenting facts rather than historical processes, as well as less interest in topics related to the homelands of the creators of the English-language channels. It is possible to conduct further comparative analyses trying to explain this phenomenon taking into account the phenomenon of content remediation and the influence of factors such as education and historical policy.

Key words: military history, social media, visual culture, YouTube, YouTubers

Jarynowski Andrzej (Interdisciplinary Research Institute in Glogow, Poland)

ASF and HPAI vs. COVID-19 in Polish Internet - perception of infectious diseases

Aim. The COVID-19 pandemic has dominated the socio-economic picture of the last year almost everywhere around the world. The spread of the SARS-CoV-2 virus has made infectious disease, in its broadest sense, one of the dominant topics of interest on the Internet too much of the public today. At the same time, African Swine Fever (ASF) and Avian Influenza (HPAI) are continuing to spread covering more and more areas, affecting the economics of animal production.

Methods. We quantitatively and qualitatively analysed digital footprints of COVID-19, ASF and HPAI on Polish the Internet, in particular, on Google, Twitter, YouTube, and traditional media from 15.01.2020 to 30.04.2021.

Results and conclusion. We show how the topic of infectious disease differs across humans (the highest interest among the general population), zoonotic (average interest with some peak during local events as SARS-CoV-2 outbreaks among Minks) and non-zoonotic (interest only in engaged group) agents on the Internet.

Key words: ASF, HPAI, COVID-19, Internet perception

Kazimierska-Zajac Magdalena (Wroclaw Medical University, Poland) & Jakubowska Luba (Wroclaw Medical University, Poland)

Virtual reality (VR) in treatment and therapy of women

Aim. The aim of the presentation is to show the ways in which VR (virtual reality) can be employed to improve women's health and quality of life.

Methods. Analysis of the scientific literature pertaining to research on the use of VR in women's treatment and therapy.

Results. The analysis shows that virtual reality has found an increasingly broader use in treatment and therapy. There are more and more applications developed with the specificity of women's needs and health problems in mind. One of the most common uses of VR in medicine is pain alleviation. Research shows that VR sessions reduce pain in breast cancer patients, as well as helping them cope with stress and difficulties accepting the consequences of the condition. The use of VR in supporting women in their peripartum period is particularly interesting and innovative. On the one hand, the aim of VR is to alleviate pain and reduce anxiety, on the other, it is to prepare students for perinatal care. VR is also employed more and more frequently in psychotherapy. Because VR makes it possible for people

to experience their own bodies in a different manner than how it happens on a daily basis, the technology may also be employed in, among others, research, diagnosis, and support for women with body dysmorphic disorder.

Conclusions. It can be concluded that the availability of VR technology in healthcare is going to increase. Its current use in helping women consists in, among others, improving their well-being, stress reduction, pain alleviation, as well as helping women cope with distortions of the perception of their bodies.

Key words: virtual reality, women's health, therapy of women, mental well-being, new technologies

Klisowska Iwona (Wroclaw Medical University, Poland), Seń Mariola (Wroclaw Medical University, Poland), & Grabowska Barbara (Wroclaw Medical University, Poland)

Advantages and disadvantages of distance learning

Introduction. E-learning has been known and used in many countries for a long time. It is becoming more and more popular. It's a way of teaching remotely, using the latest information technology. Furthermore, it can be used in any age group, starting with pre-school teaching. In the era of the SARS-CoV-2 pandemic, remote learning has been mandatory due to the need to continue the teaching process while reducing the risk of spreading the virus at once. This revealed many advantages, but also the disadvantages of this type of teaching.

Aim. The aim of the work is to change the advantages and disadvantages of remote teaching as one of the modern forms of education. The work attempted to show the problems related to the risks, difficulties associated with distance learning, and the advantages of the development of information technology.

Conclusions. E-Learning is an excellent form of learning, due to its many advantages such as time savings and access to a wide range of materials, but requires a lot of commitment from the lecturers to encourage students to expand their knowledge and on the part of students self-control and motivation.

Key words: distance learning, e-learning

International Academic Conference
e-methodology

Kwietniewska Roksana (Wroclaw Medical University, Poland), Zborowska Iwona (Wroclaw Medical University, Poland), & Dąbek Anna (Wroclaw Medical University, Poland)

E-prescription – impediment or facilitation?

Aim. The aim of the study was to obtain information about the advantages and disadvantages of using an e-prescription and whether age is a determinant of the problem of e-prescription use

Method. The survey involved 94 people aged between 18 and 92 who, by completing the author's electronic questionnaire, indicated the advantages and disadvantages of e-prescribing.

Results. The largest age group that participated in the study was the one which was aged 18-29 and accounted for 26.6% of all, while seniors were in the minority of 7.9%. Referring to the place of residence, it is concerned, the dominant group was the inhabitants of rural areas - 54%. When analysing the type of education, most respondents had secondary education 40.4% (n = 38) and higher education 30.9% (n = 29). While focusing only on the group of seniors, vocational education came first. 93.5% of respondents had no problem with the redemption of e-prescriptions. Satisfaction with the quality of services was indicated by 93.5% of the respondents, and only 1.1% were dissatisfied. People over 60 had the most problems with e-prescription. They resulted mainly from the inability to reach the clinic and the loss of the access code.

Conclusions. The research proved that age is a determinant of the problem of using an e-prescription. Participation in the study of different age groups showed that the most problems with the realization of the e-prescriptions were occurring between seniors. The difficulties were mainly arising during attempts to carry out phone calls to the clinic, mishearing or loss of the e-prescription code, and finally limited knowledge of using a mobile phone and computer. The vast majority of the respondents are satisfied with using an e-prescription so that they do not mention the disadvantages but indicate only advantages.

Key words: e-prescription, senior, digitization

PSP
PROSCIENTIAPUBLICA

WROCLAW
MEDICAL UNIVERSITY

International Academic Conference
e-methodology

Lintowska Agnieszka (Wroclaw Medical University, Poland) & Seń Mariola (Wroclaw Medical University, Poland)

New technologies in undertaking and monitoring physical activity of children and adults

Aim. The aim of the presentation is to present modern technologies supporting the undertaking and monitoring of physical activity in various groups of recipients.

Methods. We searched Google Scholar library and CORDIS repository held by the European Commission for published literature using keywords "new technologies in physical activity" and "the importance of new technologies in 'physical activity'".

Introduction. Physical activity is an essential part of a lifestyle that maintains and strengthens human health. This applies not only to our physical health, but also mental health, expressed in well-being, the ability to adapt to changing environmental stimuli, or the ability to rest effectively. The omnipresence of modern technologies has changed our habits, also in terms of lifestyle, including physical activity. It applies to children, adolescents, and adults.

Results and conclusion. Knowledge about optimal physical activity for health should base on current and proven sources. Currently, we can use many modern digital tools such as online platforms, applications, or games to disseminate it and to support systematically physical activity. The use of modern technologies in this area can be implemented both on an individual and institutional level, for example in schools. These tools are also useful in health campaigns about physical activity. Summing up, we can say that the use of modern technologies in promoting and supporting systematic physical activity as well as physical rehabilitation has enormous development potential and in the future, we can use them systematically on a huge scale.

Key words: new technologies, physical activity, rehabilitation, children, adults

Łupkowski Paweł (Adam Mickiewicz University, Poland) & Adamska Barbara (Adam Mickiewicz University, Poland)

Gathering linguistic data via games – the QRGS case study

Introduction. QRGS stands for the Question Responses Generation System. It is an online game-like method designed for gathering various types of question responses. QRGS consists of a story with a simple plot.

Methods. A user is asked to read the story and impersonate its main character. As the story unfolds a user is confronted with four questions and she/he should answer them in the way the main character would do that.

Results and Conclusion. The data obtained via QRGS will be useful for a better understanding of the use of questions in natural language dialogues and analysing the response space of such questions. In our talk, we will present the main idea of QRGS and the results of two studies in English. Results' discussion will address issues of the efficiency and accuracy of the proposed approach. We will also present usability studies and discuss potential future improvements of the QRGS.

Key words: gamification, crowdsourcing, question-responses, questions

Norouzi Larsari Vahid, Keysan Flora, Wildova Radka (Department of Pre-primary and Primary education, Charles University in Prague, Czech Republic)

A Comparative Study of the Effect of Using Self-assessment and Traditional Method on Improving Students' Academic Motivation in Reading Competency: The Case of Primary School Students

Aim. The aim of the present study was to make a comparative comparison of the method of learning education through the social network of Whats app program and face-to-face training approach in the English language course of the 9th grade of the first year of the 2020-2021 academic year.

Methods. In the present study, the researcher utilized a Quasi-experimental method in both experimental and control groups. The research design included pre-test and post-test. Using random sampling, a class of 60 primary students from the school was selected as a research sample. Also, the researcher utilized standardized tests to determine the level of learning and retention of learners in the English language course. In order to analyze the findings in the descriptive statistics section, mean indices and standard deviation of scores have been studied and the analysis of covariance and multivariate analysis of variance have been utilized in the inferential statistics section.

Results. According to the findings of the first hypothesis, the students' learning who use telegram social network was more than in-person training (f = 9.556, P < 0.05). Also, the second hypothesis showed that the rate of students' retention during the telegram social network was more than in-person training (f = 7.065, P < 0.05).

Conclusion. It can be concluded that a social network such as a happy program can greatly help to improve teaching and learning.

Keywords: Learning, Retention, Social networks, face-to-face training

Orrico Serrão Bianca (University of Minho, Portugal), Jacinto Sarmento Manuel (University of Minho, Portugal), & Prates Santana Jakuaba (Federal University of Bahia, Brasil)

The voices and action of child activists against the climate crysis

Aim. The present work has as main objective to present some of the actions of children considered activists to face the climate crisis through social media. Technologies and social networks allow them a new form of existence and action through their posts, whether in the video, photo, or text format, promoting interactions and discussions that captivate hundreds or thousands of followers.

Methods. Data collection was carried out from a digital ethnography, analysing the social networks and linked news in the media of 13 children from different countries (Australia, United States, India, Holland, England, Indonesia, South Africa, Uganda, and Sweden) over the 18-month period.

Results. To understand the data, digital ethnography was used as a strategy to follow the main interactions and online mobilizations through different social networks (Facebook, Instagram, and Twitter), as well as linked news in the media about those children, and articulation of them with governmental, non-governmental organizations, and private companies. In relation to the selection of participants, the profile of a child activist was added and through the algorithms of these platforms was found other activists with similar profiles, which promote content about climate justice.

Conclusions. It was possible to identify that the Internet has enabled the visibility and articulation of children's actions on the theme, and how this engagement has promoted awareness and changes to fight against the climate crisis. It is worth emphasizing the importance of digital literacy so that access to these spaces is carried out safely and responsibly for this social group.

Key words: childhood, activism, climate crisis, influence, digital etnograph

Paradowski Michał (University of Warsaw, Poland), Jelińska Magdalena (University of Warsaw, Poland), & Jarynowski Andrzej (Interdisciplinary Research Institute in Glogow, Poland)

Shifting educators and learners into remote instruction during the COVID-19 pandemic

Aim. We present the findings of a global study investigating the 2020 transition to emergency remote instruction.

Methods. From April through September 2020, almost 9,000 teachers and students from 118 countries filled in an online questionnaire.

Results. Among teachers, the breakup of some constructs in clusters of naturally correlating variables suggest that in crisis situations these may function differently than during 'business as usual'. Other findings:

- teachers coped better when they worked in higher education, and used real-time synchronous delivery;
- educators in developing countries were *more* engaged;
- psychological overload was mediated by perception of student coping;
- instructors' stress levels were affected by anxiety about the future, living conditions, self-acceptance, appraisal of the situational impact, course optionality, and perceived effectiveness of virtual delivery;
- language teachers found that remote instruction depressed students' progress by around 64% compared with in-person classes;
- future learning outcomes are the biggest cause for concern in beginner-level classes.

All the survey respondents answered questions about the languages they speak and—where relevant—teach/study and their CEFR-aligned level of competence in each. We will demonstrate how and why the number of languages spoken as well as the proficiency level taught moderates participants' coping behaviour and attitudes to this novel situation.

We also discuss factors distinguishing better- and worse-coping language learners.

Keywords: emergency remote instruction, school closures, COVID-19 pandemic, global survey, coping, stress, learning outcomes

PSP
PROSCIENTIAPUBLICA

WROCLAW
MEDICAL UNIVERSITY

International Academic Conference
e-methodology

Piotrowska Maja (Jagiellonian University, Poland) & Pliszka Adam (Jagiellonian University, Poland)

Discourse analysis of attention deficit hyperactivity disorder on the Internet

Aim. The aim of the research is to analyse Polish discourse about ADHD in terms of its content and potential harmfulness for children and healthcare generally. Biased or highly emotional articles could potentially cause a lack of appropriate treatment for children or harmful misunderstandings of their condition.

Methods. The subjects of the study were popular non-scientific internet health and parenting-themed websites. They were manually analysed in terms of the information contained about the aetiology and treatment of ADHD.

Results. The analysis shows, that fringe and pseudoscientific theories are ubiquitous and very highly ranked by search engines compared to other Polish content concerning the topic. Many sources uncritically recommend eliminative diets, homeopathic therapy, etc., as a superior alternative to the established medical guidelines. Methylphenidate, which is the only dopaminergic drug available on the Polish market, is often presented as an Amphetamine derivative, suggesting it is a drug of abuse, which causes negative connotations. Another common misconception suggests, that ADHD is not a „real" condition, often supported by

a false anecdote of the person who discovered ADHD having admitted this fact on their deathbed.

Conclusion. ADHD is widely misunderstood, and the Polish Internet contains a lot of seemingly reliable and professional websites, displaying misleading and false information about the disorder. The most important problem is: suggesting ADHD pharmacotherapy with corticostimulants as harmful and ineffective, contrary to the current scientific knowledge suggesting ADHD is not a real disorder, and should not be treated at all.

Key words: ADHD, internet discourse, metylphenidate, fake news, Polish Internet

Ratajczyk Dawid (Adam Mickiewicz University, Poland) & Łupkowski Paweł (Adam Mickiewicz University, Poland)

Internet resources in the attitudes towards robots' studies. Non-laboratory insights into humans' emotions and opinions concerning robots

Aim. We start our paper with an overview of the studies concerning attitudes towards robots (with particular attention to the so-called uncanny valley effect).

Methods. We attempt at identifying certain methodologies adapted by researchers within this field (covering e.g. presentation of still images, video, real robots, computer-rendered graphics, etc.). Furthermore, we also address issues related to the unclear empirical support of the uncanny valley hypothesis and bias related to the factors identified as influencing our attitudes towards robots. As one of the possible solutions for the aforementioned issues, we propose using rich internet resources related to human-robot interaction (we present the analysis of YouTube and Reddit threads and comments related to various existing robots).

Results. In our opinion, the data represent (to a large extent) non-biased attitudes towards social robots. Text mining techniques allow us to uncover emotional reactions to robots, personification traits, and generally to theorize on how people perceive robots.

Key words: human-robot interaction, social robotics, attitudes towards robots, emotions, text mining, uncanny valley hypothesis

Sterna Anna (Ward for Personality Disorder's and Neurosis's Treatment, Psychiatric Hospital, Poland)

Online psychotherapy – from face to face meeting to chatting with bots

Aim. Since Sigmund Freud began his journey into the field of psychotherapy implementing psychoanalysis, forms of psychotherapeutic treatment have been multiplied. Not only did new paradigms arise, but also new forms of practice were discovered. One of the great challenges for psychotherapists all over the world is the fact of spreading various forms of online therapy. In the beginning, online therapy was meant to help those, who - because of poor geographical access - could not take part in therapy live. Nowadays, there are a lot of applications used as adjuncts to psychotherapy held by psychotherapists. However, growing popularity is noted in the field of autonomous online therapy, in which the process of treatment is completely held by a program analysing user's difficulties and creating methods of solving them. The presentation is aimed at discussing the pros and cons of this direction, both from the perspective of the patient and therapist.

Methods. The presentation includes already published theoretic and empiric studies in the field as well as commentary to those from the perspective of the clinician.

Results. There are many challenges and opportunities concerning the use of new technologies in the process of psychotherapy which should be broadly discussed.

Practical application. The presentation may put the light on the topic of new technologies in psychotherapy as well as prompt clinicians to reflect on psychotherapy's future directions.

Key words: online psychotherapy, autonomous programmes, future of psychotherapy

International Academic Conference
e-methodology

Tsankova Elena (Bulgarian Academy of Sciences, Bulgaria) &TairErgyul (Bulgarian Academy of Sciences, Bulgaria)

Studying the Meta Accuracy First Impressions in the Pandemic- and- Post-Pandemic Reality: Challenges and Opportunities Presented by Internet Research

Aim. Studying first impressions meta-accuracy (how accurately we understand the first impressions others form about us) is central to enhancing the communication process. It typically requires experimental settings with at least minimal interactions between targets and perceivers. The COVID-19 pandemic has rendered face-to-face laboratory setups almost impossible. Fortunately, the Internet offers a virtual environment where the meta-accuracy of first impressions could be studied safely. We review the opportunities and challenges associated with the Internet study of meta-accuracy and make a call for action to address them.

Concept. In certain ways, the Internet facilitates the study of first impressions meta-accuracy. It is simpler and faster online, compared to the lab, to look at first impressions in asynchronous settings, such as email and social media updates, where targets present themselves via images and/or text and perceivers later form impressions based on this information. The Internet research solution, however, also comes with an array of difficulties. Synchronous communication settings, where targets and perceivers exchange information without delay, (e.g., instant messaging), present three major types of challenges to study of first impression meta-accuracy—*conceptual* (e.g., differences between online and offline first impression situations), *technological* (e.g., implementation of chat applications in Internet surveys), and *policy-driven* (e.g., GDPR).

Conclusions. The opportunities and challenges presented by the Internet in the study of first impression meta-accuracy also apply to the larger field of studying human interaction online. Discussing and addressing them has the potential to enhance Internet research tools and practices for the humanities and social sciences.

Key words: meta-accuracy, first impressions, Internet, technology, policy, challenges