

MSc Epidemiologie

Vorstellung des Studiengangs 18.04.2024

Prof. Dr. Gabriele Bolte⁽¹⁾ & Prof. Dr. Hajo Zeeb⁽²⁾

1) Institut für Public Health und Pflegeforschung - IPP

2) Leibniz-Institut für Präventionsforschung und Epidemiologie - BIPS

Konzept des Studiengangs

- Epidemiologie als interdisziplinäre Wissenschaft
- Theorien, Modelle und Konzepte, sowie aktueller Forschungsstand
⇒ konkrete Fragestellungen
- Planung & Durchführung epidemiologischer Studien
- kritische Methodenreflexion und Methodentransfer
- Einsatz fortgeschrittener epidemiologischer/statistischer Methoden zur Lösung gesundheitswissenschaftlicher Probleme
- Einsatz der gewonnenen Erkenntnisse im Kontext internationaler Epidemiologie-/Public-Health-Diskussionen

Wen möchten wir als Studierende gewinnen?

- Interesse an einer starken quantitativen Fundierung
- Wissenschaftlich ausgerichtete Berufstätigkeit im Bereich der gesundheitswissenschaftlichen Forschung & Anwendungsfeldern

Tätigkeitsfelder

- Universitäre und außeruniversitäre epidemiologische Forschungseinrichtungen
- Forschungsnahe Tätigkeit in staatlichen Einrichtungen (z.B. Gesundheitsberichterstattung am RKI)
- Forschende Industrieunternehmen
- Nationale und internationale Organisationen (z.B. WHO)

Übersicht Studienverlauf (Semester 1-4)

4	Epi-Master Epi-Begleit	Masterarbeit und Kolloquium Begleitseminar zur Masterarbeit		
3	EpiStat3 Fortgeschrittene epidemiolog. & statist. Methoden	EpiProjekt3 Projektstudium epidemiolo- gische Forschung - Datenanalyse & Interpretation	2 Wahlpflichtmodule Spezielle epidemiologische Themen	
2	EpiStat2 Epidemiologische und statistische Methoden	EpiProjekt2 Projektstudium epidemiolo- gische Forschung - Studiendesign & Instrumente	2 Wahlpflichtmodule Spezielle epidemiologische Themen	
1	EpiStat1 Epidemiologie und statistische Anwendungen	EpiProjekt1 Projektstudium epidemiologische Forschung - Grund- lagen & Fragestellung	EpiSkills Skills Lab Epidemiologie	FuAFEpi Forschungs- und Anwendungsfelder der Epidemiologie

Einführende Module im 1. Semester

- **FuAFEpi**: Forschungs- und Anwendungsfelder der Epidemiologie
 - Ringvorlesung zu aktuellen Forschungsthemen
 - Seminar Geschichte, Konzepte und Public Health-Einbettung der Epidemiologie

- **EpiSkills**: Skills Lab Epidemiologie
 - Wissenschaftliches Arbeiten in der Epidemiologie
 - Übungen zur Literaturrecherche und zu wissenschaftlichem Schreiben
 - Ethik und Datenschutz in der Epidemiologie

Epidemiologische & statistische Methoden

- 1. Sem. **EpiStat1**: Grundlagen Epidemiologie und Statistik
(dient zur Wiederholung und Festigung der Grundlagen)
- 2. + 3. Sem. **EpiStat2** und **EpiStat3**
 - Enge Verzahnung Epidemiologie & Statistik
 - Übungen mit Statistikprogrammen
 - Viele Studienbeispiele / aktuelle epidemiologische Forschung

Projektstudium Epidemiologische Forschung

- 1. Sem. **EpiProjekt1**: Forschungsprojekt Grundlagen
 - Themenfindung Forschungsprojekt
 - SAS-Kurs & Übungen zum SAS-Kurs
- 2. Sem. **EpiProjekt2**: Studiendesign und Instrumente
 - Seminar Projektbegleitung
 - SAS-Kurs Teil II & Übungen zum SAS-Kurs Teil II
- 3. Sem. **EpiProjekt3**: Datenanalyse und Interpretation
 - Seminar Projektbegleitung
- Arbeit in Kleingruppen / Forschungsteams
Projektplanung und –durchführung, Datenanalyse, kritische Bewertung,
Präsentation & Projektbericht

Forschungsprojekt

Das Besondere im Epidemiologie-Master:

Sie haben die Möglichkeit, eine (kleine) epidemiologische Studie vollständig

- von der Formulierung der konkreten Fragestellung vor dem Hintergrund der aktuellen wissenschaftlichen Literatur,
- über die Entwicklung des Studiendesigns und der Erhebungsinstrumente,
- sowie die Durchführung der Datenerhebung,
- bis hin zur statistischen Auswertung der Daten und kritischen Interpretation der Ergebnisse

selbst durchzuführen.

Dabei lernen Sie das selbstständige Projektmanagement und den Umgang mit Fehlern und unvorhergesehenen Schwierigkeiten.

Beispiele für Forschungsprojekte der letzten Semester

- Welche Faktoren sind mit der Impfbereitschaft bei SARS-CoV-2 in Deutschland assoziiert?
- SERiNE-Studie: Soft-Enhancement und pharmakologisches Neuro-Enhancement unter Studierenden in Deutschland
- Nutzung von Kopfhörern in Verbindung mit tragbaren Tonabspielgeräten (PLDs): Epidemiologie von risikohaftem Hörverhalten bei Studierenden in Deutschland
- Verkehrssicherheit und nicht motorisierte Alltagsmobilität
- Alkoholkonsum im Bremer Amateurfußball
- DeCaHB-Studie. Regionale Deprivation und Krebsinzidenz in Bremerhaven und Bremen
- Association between ingestion behaviour and occurrence of adverse events due to analgesics in Germany: a nationwide cross-sectional study
- Schimmelvorkommen in Bremer Haushalten und das Wissen ihrer Bewohner*innen über Schimmel und Schimmelvermeidungsstrategien

Research article

Changes in Digital Media Use and Physical Activity in German Young Adults under the Covid-19 Pandemic - A Cross-Sectional Study

Jasmin Helbach and Katharina Stahlmann ✉

Health Sciences Bremen, University of Bremen, Bremen Germany

The **aim of this study** was to assess the differences in digital media and social media use during the period of the strict infection control measures in Germany (March until the end of May 2020) and the time before March 2020 (in normal times) among German young adults. In addition, the association of digital media/social media use and PA during the period of strict infection control measures and during normal times was examined. In accordance with current research, this study tested for an interaction by sex on the association of digital media use and physical activity.

Cross-sectional study with 884 adults aged 18-26 years

Wahlpflichtmodule im 2. und 3. Semester

3 SWS: Seminar & Übung

2. Semester

- **EpiKuR** – Kontext- und Raum-bezogene Epidemiologie
- **EpiGV** – Epidemiologie des Gesundheitsverhaltens
- **KlinPharm** – Klinische Epidemiologie und Pharmakoepidemiologie

3. Semester

- **MonSurGBE** – Monitoring, Surveillance und Gesundheitsberichterstattung
- **SozialEpi** – Sozialepidemiologie
- **MolEpi** – Molecular and genetic epidemiology

Masterarbeit

im 4. Semester **EpiMaster & EpiBegleit**

- **Masterarbeit** (22 Wochen)

Optionen:

- in Form eines Publikationsmanuskripts
- in englischer Sprache
- Durchführung an anderer Einrichtung

- **Begleitseminar**

- Diskussion Forschungsfrage, Konzept, Daten & Methoden, Ergebnisinterpretation

- Abschluss: **Kolloquium**

Aus Projekt 2020 / 2021

Journal of Sports Sciences and Medicine (2021) 20, 642-654
http://www.jssm.org/DOI: https://doi.org/10.10083/jssm.2021.642

Research article

Changes in Digital Media Use and Physical Activity in German Young Adults under the Covid-19 Pandemic - A Cross-Sectional Study

Jasmin Helbach and Katharina Stahlmann
Health Sciences Bremen, University of Bremen, Bremen Germany

Abstract
Many studies observed a reduction of physical activity (PA) and an increase in digital media use in young adults during the COVID-19 pandemic. However, few studies have been conducted in Europe or looked at changes in the association between both behaviors. Hence, this study aims at investigating the changes in digital media use/social media use and PA as well as in its association among young adults in Germany. Cross-sectional data of 884 German young adults (mean age 23.36 (s.d. 0.99), 76% female) collected via an online questionnaire between August 1 and September 30, 2020 were analyzed. Participants reported on digital media use (smartphone, television, computer, gaming console), social media use (Facebook, Instagram, Snapchat, Twitter, YouTube, TikTok) and PA (days/week of ≥30 min PA) separately for the period of strict infection control measures in Germany (March–end of May 2020) and for normal times (before March 2020). Descriptive statistics of digital media use, social media use and PA were compared between both periods. Linear regression adjusted for sociodemographic and work-related characteristics were conducted for both periods with total media use, the various media devices and social media use, respectively, as independent and PA as dependent variables. Whereas PA did not differ between both periods, mean total digital media use increased by 1 hour during the period of strict infection control measures. Digital media use and social media use were negatively associated with PA in both time periods. Differences in these associations by sex could be found for some digital media devices. However, 60% of respondents did not comply with the WHO recommendations for PA. Under consideration of possible recall bias, young adults' digital media use, but not PA, seemed to have changed under the strict infection control measures. However, interventions are needed to increase PA and to prevent its reduction in the course of the pandemic.

Key words: Screen time, social media, exercise, COVID-19, young adults.

Introduction

COVID-19 has a major impact on the individuals and society (Nicola et al., 2020; Singh and Singh, 2020). To protect people's health and to reduce the spread of the COVID-19 virus, the German government – as did most other countries around the world – imposed several measures restricting people's movement (Die Bundesregierung, 2021; Roser et al., 2020). In mid-March 2020, cultural, recreational- and sport institutions as well as catering and restaurants were closed, and social contact restrictions were imposed as social distancing measures (Robert Koch-Institute (RKI), 2020a). Later, people were also ordered to use face masks while using transportation

Received: 26 May 2021 / Accepted: 02 July 2021 / Published (online): 01 October 2021

services and going shopping (RKI, 2020b). Over the time, the measures were regularly evaluated and adjusted (RKI, 2021). These strict measures were gradually lifted from the end of May.

The restricted everyday life not only affects the social interaction (Ammar et al., 2020), but also the individual health behaviors (Ammar et al., 2020; Rolland et al., 2020). People are more likely to have a less active lifestyle than they had before COVID-19, as they stay at home more often, do more sedentary work and have fewer opportunities to exercise (Alomari et al., 2020; Ammar et al., 2020; Colley et al., 2020; Meyer et al., 2020). In addition, screen time and media use has increased (Jia et al., 2020; Kee et al., 2020; Qiu et al., 2020). Qiu et al. (2020), for instance, examined the effects of COVID-19 on the screen time among adults (18–80 years old) from China. Overall, mean screen time was 202.3 ± 159.9 minutes per day with significant higher screen time for young adults (20–29 years) (305.6 ± 217.5 min per day). Furthermore, Qiu et al. (2020) showed that young adults (20–34 years) had a lower level of physical activity (PA) during the COVID-19 pandemic than older adults. Current studies show both a positive and a negative association between digital media use and PA. For example, higher video gaming (Ballard et al., 2009) and smartphone use (Grimaldi-Puyssat et al., 2020) is associated with a lower likelihood of daily exercise. In contrast, the use of social media, especially sports content such as “fitnesspiration” posts, can act as a motivator for PA (Ragant et al., 2018; Shimoga et al., 2019; Vateriaus et al., 2015). Furthermore, Kelsey and Gormaker (2017) suggest that there are differences in the association of digital media use and PA between men and women. Kee et al. (2020), for example, indicate that women had a greater increase in social media use than men who, in turn, had a greater increase in gaming than women during the COVID-19 lockdown. In summary, restrictions that are supposed to protect the people's health simultaneously increase the prevalence of health-damaging behavior. For instance, pandemic-caused worries and a concurrent decline in PA is associated with several physical and psychological health problems, such as cardiovascular diseases (Ostroff et al., 2020), obesity (Jia et al., 2020; Kee et al., 2020), depression, anxiety, and mental illness (Huckins et al., 2020; Meyer et al., 2020; Qiu et al., 2020). However, there is very little evidence assessing the impact of COVID-19 infection control measures on digital media use and PA among young adults in Europe.

Consequently, the aim of this study was to assess the differences in digital media and social media use during

RESEARCH

Open Access

Restrictions and their reporting in systematic reviews of effectiveness: an observational study

Jasmin Helbach^{1*}, Dawid Pieper^{2,3,4}, Tim Mathes^{2,5}, Tanja Rombey^{2,6}, Hajo Zeeb^{2,6}, Katharina Allers¹ and Falk Hoffmann¹

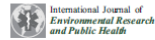
Abstract
Background: Restrictions in systems is important to report whether an errors regarding language, publica effectiveness.
Methods: A retrospective observ indexed in PubMed between 2007 the statistics.
Results: Of the total 535 SIs incli restrictions considered (language, tion on restrictions regarding pub included SIs, language was restri It was unclear whether the restrict restrictions were justified for publi and language in 3.2% (8/248), Diff and non-Cochrane reviews.
Conclusions: This study suggest as well as editors and reviewers sh increase the transparency of SIs.
Keywords: Reporting quality, Me reviews

Check for updates
Correspondence: jasmin.helbach@uni-bremen.de
¹Department of Health Sciences Research, SHe Bremen, Carl-Neuberg University Oldenburg, Full list of author information is available at the end of the article
BMC
The
prints
order
to the
legal
warn
text

Received: 12 April 2022
Accepted: 20 May 2022
Published: 1 June 2022

Check for updates
Citation: Helbach JM, Mathes T, Rombey T, Zeeb H, Allers K, Hoffmann F (2022) Restrictions and their reporting in systematic reviews of effectiveness: an observational study. *BMC Medical Research Methodology* 22:230. <https://doi.org/10.1186/s12874-022-01710-w>

Int. J. Environ. Res. Public Health 2022, 19, 6760. <https://doi.org/10.3390/ijerph19166760>



Article
Social Inequalities in the Association between Social Infrastructure and Mental Health: An Observational Cross-Sectional Analysis of Children and Adolescents in Germany

Katharina Stahlmann^{1,2}, Emily Menz^{2,3,4}, Ronny Kuhmert^{4,5}, Andre Conrad⁴ and Gabriele Bolte^{2,6}

¹ Department of Medical Bio 20201 Hamburg, Germany;
² Department of Social Upsta 26019 Bremen, Germany; ³ Health Sciences Bremen, U Bremen
⁴ Department of Epidemiologic kulnort@uk.de
⁵ German Research Network Age and non-Cochrane reviews.
⁶ Correspondence: e.menz@uk.de

Abstract: The mental health status (SES) benefits from a fit in the association betw adolescents. The sample CS (2014–2017). KJGCS provid pools, parks) for all children time to SI for a subsamp. : of Socioeconomic deprivat logistic regression analyses MH problems. Children and deprivation at the municipal SI places. At the individual and adolescents were assoc socioeconomically deprived.

Keywords: mental health, b

1. Introduction
Mental health probl more pronounced health in early and later adult health problems start in neighborhood-levels affe life events [4] or parent) while coping strategies a In particular, children wit detrimental risk factors [1 than those with high SES. mental health problem On a neighborhood level, problems in children livr

Int. J. Environ. Res. Public Health 2022, 19, 6760. <https://doi.org/10.3390/ijerph19166760>

- Beispiele -
Publikationen nach
Masterarbeiten
der letzten Jahre



RESEARCH ARTICLE

Accelerometer-assessed outdoor physical activity is associated with meteorological conditions among older adults: Cross-sectional results from the OUTDOOR ACTIVE study

Birte Marie Albrecht^{1,*}, Imke Stalling, Carina Recke, Karim Bammann

Institute for Public Health and Nursing Sciences (IPP), University of Bremen, Bremen, Germany

Abstract

Background: Meteorological conditions are potential determinants of physical activity (PA). A profound understanding of the determinants of PA behavior is required for PA promotion. This study examined the association between accelerometer-assessed PA and meteorological conditions among older adults.

Methods: This cross-sectional study included data of 577 adults aged 65–75 years living in Bremen, Germany (52% female; 3278 days). PA was measured with accelerometers for seven consecutive days (10/15–08/16). A threshold of 240 k was used to differentiate between outdoor physical activity (OPA) and indoor physical activity (IPA). Linear mixed models estimated the association between PA (daily accelerometer counts per minute (CPM)) and meteorological factors (temperature, cloud cover, wind, and no precipitation) derived by principal component analysis.

Results: The analyses showed associations between PA in CPM and the meteorological factors temperature (93.7; 95%-CL: 64.9, 122.5) and no precipitation (48.4; 95%-CL: 19.8, 77.0) in women and wind (-40.2; 95%-CL: -59.7, -20.8) and no precipitation (30.1; 95%-CL: 5.6, 54.6) in men. After distinguishing in OPA and IPA for a subsample of 128 participants (473 days), the sex differences were no longer present. OPA in CPM was associated with temperature (women: 174.5; 95%-CL: 81.3, 267.6; men: 183.3; 95%-CL: 81.2, 285.4), cloud cover (women: -153.0; 95%-CL: -200.3, -105.7; men: -123.2; 95%-CL: -174.7, -71.7), and wind (women: -118.6; 95%-CL: -189.6, -47.7; men: -96.9; 95%-CL: -177.0, -16.7). No association between OPA and no precipitation was found (women: 2.9; 95%-CL: -89.0, 94.8; men: -17.1; 95%-CL: -116.7, 82.4).

28-year incidence and time trends of childhood leukaemia in former East Germany compared to West Germany after German reunification: A study from the German Childhood Cancer Registry

Maïke Wellbrock¹, Claudia Spix², Desiree Grabow², Arndt Borkhardt³, Hajo Zeeb⁴, Friederike Erdmann⁵

RESEARCH

Open Access

Destinations fostering older adults' walking for transport: a cross-sectional study from Germany

Plia Hasselder^{1,2*}, Tanja Brücher^{1,2}, Sabine Baumgart^{1,3} and Gabriele Bolte^{1,2}

Abstract: Little is known about the types of destinations fostering older adults' walking for transport in urban and rural communities. The aim of this study was to explore the association between different destinations and walking for transport among older adults living in communities.

Methods: In September 2019, self-reported data from 2242 older adults (≥ 65 years) living in the West (Germany) were collected within the project AFOT – Securing urban mobility of an 837 study participants were eligible for this analysis. Logistic regression models were performed between the perceived destination availability of 19 different destinations within the home, respectively, and the engagement in walking for transport. Crude and adjusted ORs for each destination and distance category. Exploratory subgroup analyses examined the availability of destinations within a 20-min walk from home and walking for transport stratified by sex and car availability.

Results: Each of the investigated destinations within a 20-min walk and of nearly all of these destinations from home was significantly positively associated with walking for transport in crude models. Significant after adjustment for covariates. The strongest associations were found for shops, pharmacy, and bakery. The availability of a bus stop showed the weakest association with walking for transport after adjustment for covariates.

Conclusions: Local amenities within walking distance may be a promising approach to foster older adults in smaller communities with less than 100,000 inhabitants and to enable active and quantitative and qualitative research is needed to validate these findings and to better design walking behavior.

Keywords: Walking for transport, Built environment, Destinations, Neighborhood, Older adults, Age-friendly environment

Background: The health needs of a rising number and proportion of older adults poses a major public health challenge to many countries in the world [1]. This is especially true for Germany which is one of the countries with the highest

© The Author(s) 2022. **Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>. The Creative Commons Public Domain Dedication waiver (<http://creativecommons.org/publicdomain/zero/1.0/>) applies to the data made available in this article, unless otherwise stated in a credit line to the data.

geographical provides a unique with substantial assessment of

ite myeloid an childhood in former East

any compared to ease in Eastern reached the eastern rather Germany West Germany = time in Western 191–2018 = 1.3 IS.

in inconclusive.

Lehrende im M.Sc. Epidemiologie

- Universität Bremen
 - Institut für Public Health und Pflegeforschung (IPP)
Prof. Gabriele Bolte, Prof. Karin Bammann,
Dr. Klaus Telkmann, Dr. Stefanie Dreger, ...
 - Forschungszentrum Ungleichheit und Sozialpolitik (SOCIUM)
Dr. Jonas Czwikla, Franziska Heinze, ...
- Leibniz-Institut für Präventionsforschung und Epidemiologie (BIPS)
Prof. Hajo Zeeb, Prof. Ulrike Haug, Prof. Krasimira Aleksandrova,
PD Tilman Brand, ...

in enger Zusammenarbeit mit weiteren Lehr- und Forschungseinrichtungen

Aufnahmevoraussetzungen (1)

- **Erster berufsqualifizierender Hochschulabschluss** (mind. 180 CP)
 - Public Health/Gesundheitswissenschaften
 - Humanmedizin
 - Soziologie
 - Psychologie
 - Biologie
 - Mathematik
 - *Fach mit inhaltlicher Nähe zu diesen*
 - ⇒ *Zusatzbogen: Nachweis der inhaltlichen Nähe*

- **Kenntnisse in quantitativen Methoden** (mind. 12 CP),
z.B. Epidemiologie, Statistik, empirische Sozialforschung
 - ⇒ *Zusatzbogen: Nachweis 12 CP quantitative Methoden*

Aufnahmevoraussetzungen (2)

- **Englisch-Sprachkenntnisse**
(Niveau B2)

- **Deutschkenntnisse**
(für Universität Bremen allgemein geltende Voraussetzungen)

- **Motivationsschreiben**
 - Begründung des Interesses an dem Studiengang
(eigene Qualifikationen und Ziele, Motivation für Studiengang)
 - Bezugnahme auf ein aktuelles epidemiologisches Thema

Auswahlverfahren

- Pro Wintersemester 20-25 Studienplätze
- Bewerbungsfrist 15.07.

- Vergabe der Studienplätze nach Rangfolge
 - 60% Gesamtnote des Hochschulabschlusses
 - 20% Note einschlägiger Studienschwerpunkte und/oder einschlägige berufliche oder außerberufliche Erfahrung
 - 20% Motivationsschreiben

Informationen

<https://www.uni-bremen.de/fb11/studium/epidemiologie-msc/>

Wichtige Informationen zum Download

Aufnahmeordnung

- [Aufnahmeordnung M.Sc. Epidemiologie](#) (AO 2014)

Hinweise Module

- [Hinweise Modul 5 und 8](#) (Wahlseminare)

MA-Arbeit

- [Prüfende Master-Arbeit](#) (Stand: 04/2023)
- [Merkblatt Master-Arbeit-Manuskript](#)

Elektronisches Modulhandbuch ab Wintersemester 2023/2024

- [MSc Epidemiologie](#) (Stand: 10/2023)

Modulbeschreibung

- [Modulbeschreibung: bis einschl. Studienbeginn Wintersemester 2022/2023](#) (Stand: 01/2023)
- [Modulbeschreibung: ab Studienbeginn Wintersemester 2023/2024](#) (Stand: 05/2023)

Prüfungsordnungen

- [Prüfungsordnungen M.Sc. Epidemiologie](#)

Studienverlaufsplan

- [Studienverlaufsplan: bis einschl. Studienbeginn Wintersemester 2022/2023](#) (Stand: 05/2023)
- [Studienverlaufsplan: ab Studienbeginn Wintersemester 2023/2024](#) (Stand: 05/2023)

Zugangsvoraussetzungen (Bewerbung zur Aufnahme in den Masterstudiengang Epidemiologie)

- [Zusatzbogen Nachweis 12 CP quantitative Methoden](#)
- [Zusatzbogen Nachweis inhaltliche Nähe](#)
- [Nachweis Englisch B2](#)
- [Wege zum B2-Nachweise](#)

FAQ-Liste des Masterportals:

<https://www.uni-bremen.de/master/faq>

Nachweis B2 Englisch:

<https://www.uni-bremen.de/sprachenzentrum-der-hochschulen-im-land-bremen/angebote/sprachnachweise-sprachzeugnisse-internationale-zertifikate/internationale-zertifikate-und-anerkannte-sprachnachweise-fuer-die-studienzulassung>

Haben Sie noch Fragen?

Kontakt:

gabriele.bolte@uni-bremen.de

zeeb@leibniz-bips.de