Data Visualization

Final Report

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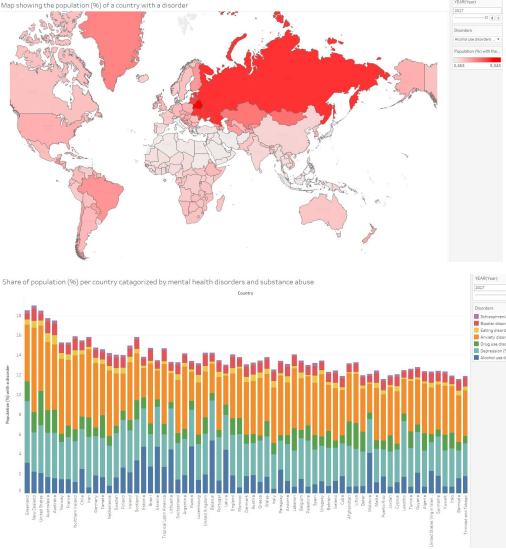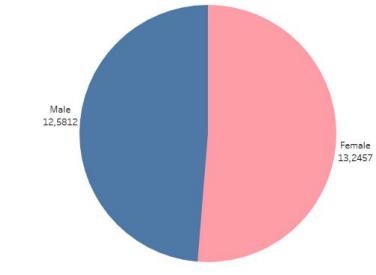
Maikel ter Riet s1589520

Minka Geelen s2194090

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Occurrences

Datasets used	Visualizations
Prevalence of mental health disorders and substance abuse disorders Data set with the share of population (%) per country with mental health and substance use disorders. Institute of Health Metrics and Evaluation (IHME) Reported in Global Burden of Disease (GBD - Collected from documentation of diagnoses - Time span of 1990-2017 - Globally per country and region Presented by Hannah Ritchie and Max Roser Retrieved from Our World in Data First published: April 2018 https://ourworldindata.org/mental-health	Visualization 1 & 4 Map showing the population (%) of a country with a disorder Share of population (%) per country categorized by mental health disorders and substance abuse
Prevalence of mental health disorders and substance abuse disorders males .vs females Dataset with the Prevalence of mental health disorders by genders Institute of Health Metrics and Evaluation (IHME) Reported in Global Burden of Disease (GBD - Collected from documentation of diagnoses - Time span of 1990-2017 - Globally per country and region - Presented by Hannah Ritchie and Max Roser Retrieved from Our World in Data First published: April 2018 https://ourworldindata.org/mental-health#prevalence-of-mental-health-disorders-by-genders	Visualization 2 Male 12,5812 Female 13,2457

Prevalence of specific mental health disorders and substance abuse disorders males .vs females

Multiple datasets with the:
1. Prevalence of alcohol use disorders males. vs females
2. Prevalence of drug use disorders males. vs females
3. Prevalence of anxiety disorders males. vs females
4. Prevalence of depression disorders males. vs females
5. Prevalence of bipolar disorders males. vs females
6. Prevalence of schizophrenia disorders males. vs females
7. Prevalence of eating disorders males. vs females

Institute of Health Metrics and Evaluation (IHME) Reported in Global Burden of Disease (GBD
- Collected from documentation of diagnoses
- Time span of 1990-2017
- Globally per country and region

Gapminder, HYDE (2016) and United Nations Population Division (2019)
- Data constructed by a long-run population series, population estimates and population prospects, Moreover, data have been combined and labeled per continent.
- Time span of -10.000 to 2019
- Globally per country and region

World Health Organization (WHO) international classification of Diseases (ICD).
- Time span 2015
- Global by country
- Collected from documentation of diagnoses

Presented by Hannah Ritchie and Max Roser
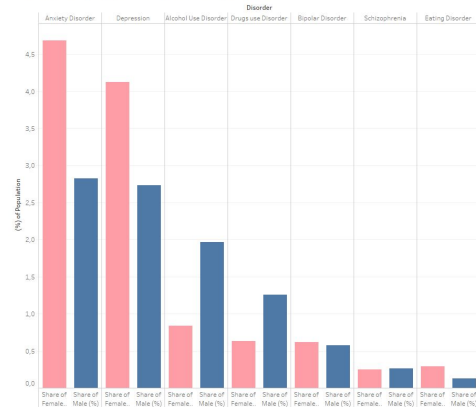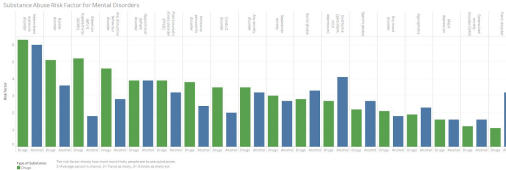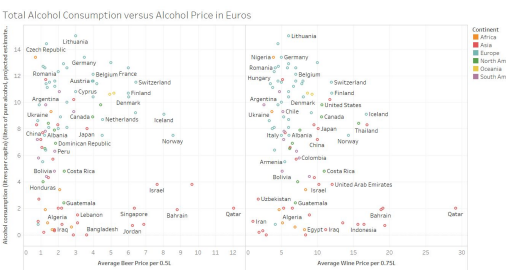Retrieved from Our World in Data
First published: April 2018
https://ourworldindata.org/alcohol-consumption
https://ourworldindata.org/illicit-drug-use
https://ourworldindata.org/mental-health#prevalenc
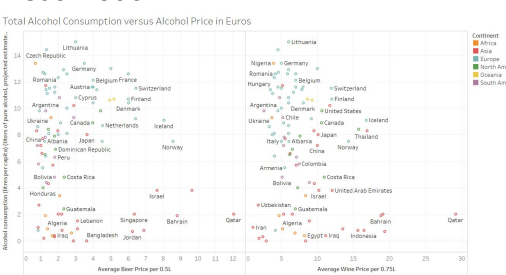
Visualization 3

World Prevalance of Disorders Male vs. Females

| e-of-mental-health-disorders-by-genders | |

Substance Abuse

Datasets used	Visualizations
Dataset 1 - **Organisation** Society for the Study of Addiction - **What data** Alcohol and/or Drugs Addiction susceptibility as a consequence of Mental Health Issues - **Measured** Survey - **Link** https://ourworldindata.org/mental-health-disorders-as-risk-for-substance-use **Original Source:** - doi.org/10.1111/j.1360-0443.2010.02902.x	**Visualization 1**
Dataset 2 - **Organisation** Numbeo - **What data** Prices of alcoholic drinks - **Measured** Consumer input and review - **Link** https://www.numbeo.com/cost-of-living/prices_by_country.jsp?displayCurrency=EUR&itemId=14 https://www.numbeo.com/cost-of-living/prices_by_country.jsp?displayCurrency=EUR&itemId=15	**Visualization 2**
Dataset 3 - **Organisation** World Health Organization, Global Health Observatory Data Repository - **What data** Alcohol Consumption per Capita World Wide - **Measured** The estimates for the total alcohol consumption are produced by summing up the 3-year average per capita (15+) recorded alcohol consumption and an	**Visualization 2**

estimate of per capita (15+) unrecorded alcohol consumption for a calendar year. Tourist consumption takes into account tourists visiting the country and inhabitants visiting other countries. - **Link** https://ourworldindata.org/alcohol-consumption **Original Source:** https://databank.worldbank.org/reports.aspx?source=world-development-indicators	
Dataset 4 - **Organisation** European Monitoring Center for Drugs and Drug Addiction - **What data** Number of Rehab Facilities and Treatments - **Measured** Registration of health care facilities in Europe - **Link** https://www.emcdda.europa.eu/attachements.cfm/att_229688_EN_TDAU14005ENN.pdf	Visualization 3 Drug Rehabilitation Treatment The colour gets darker the more people are in rehabilitation. The numbers show the amount of rehab centers in a country (This data is only about drugs related rehabilitation) People in Rehab 163 — 115,842
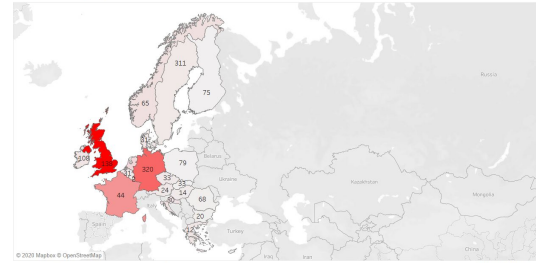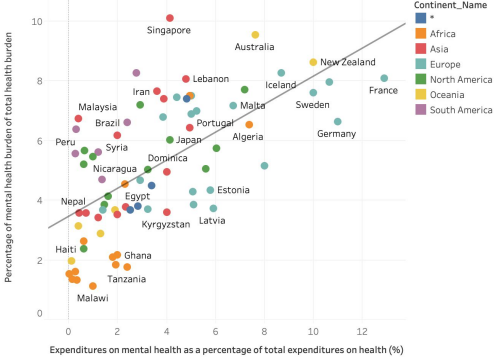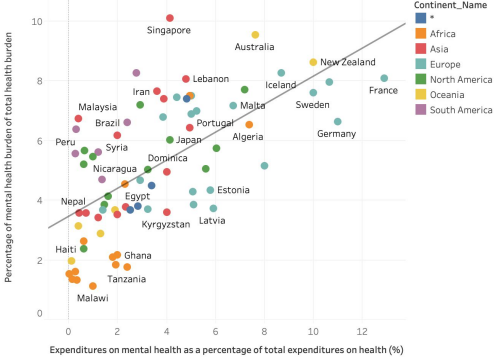
Health Care

Datasets used	Visualizations
Mental health and substance abuse as share of disease - IMHE via our world in data - DALYs (Disability-Adjusted Life Years) - Mental and substance use disorders - Sex: Both - Age: All Ages (Percent) - https://ourworldindata.org/grapher/mental-and-substance-use-as-share-of-disease	 Sum of ValuePercentageHealthcareMoney (MH_4-json-refined) vs. median of DALYs (Disability-Adjusted Life Years) - Mental and substance use disorders - Sex: Both - Age: All Ages (Percent) (%). Color shows details about Continent_Name (continent country code). The marks are labeled by Entity. Details are shown for CountryCode (MH_4-json-refined). The data is filtered on sum of NumericValue (MH_4), which keeps non-Null values only. The view is filtered on sum of ValuePercentageHealthcareMoney (MH_4-json-refined) and Continent_Name (continent country code). The sum of ValuePercentageHealthcareMoney (MH_4-json-refined) filter keeps non-Null values only. The Continent_Name (continent country code) filter has multiple members selected.
Government expenditures on mental health as a percentage of total government expenditures on health (%) (MH_4) - WHO - Expenditures on mental health means the government expenditures on mental health as a percentage of total government expenditures on health. Nominator: Mental health expenditures (in local currency) / Denominator: Total health expenditures (in local currency) x 100 - Measured by WHO survey - Source and more information can be found on: https://www.who.int/data/gho/data/indicators/indicator-details/GHO/government-expenditures-on-mental-health-as-a-percentage-of-total-government-expenditures-on-health-(-) -	 Sum of ValuePercentageHealthcareMoney (MH_4-json-refined) vs. median of DALYs (Disability-Adjusted Life Years) - Mental and substance use disorders - Sex: Both - Age: All Ages (Percent) (%). Color shows details about Continent_Name (continent country code). The marks are labeled by Entity. Details are shown for CountryCode (MH_4-json-refined). The data is filtered on sum of NumericValue (MH_4), which keeps non-Null values only. The view is filtered on sum of ValuePercentageHealthcareMoney (MH_4-json-refined) and Continent_Name (continent country code). The sum of ValuePercentageHealthcareMoney (MH_4-json-refined) filter keeps non-Null values only. The Continent_Name (continent country code) filter has multiple members selected.

Age-standardized suicide rates (per 100 000 population) (MH_12) - WHO - The age-standardized mortality rate is a weighted average of the age-specific mortality rates per 100 000 persons, where the weights are the proportions of persons in the corresponding age groups of the WHO standard population. - Measured data on deaths by cause, age and sex collected using national death registration systems or sample registration systems. - More information: https://www.who.int/data/gho/data/indicators/indicator-details/GHO/age-standardized-suicide-rates-(per-100-000-population) -	
Psychologists working in mental health sector (per 100,000) (MH_9) - WHO - Psychologists working in mental health (per 100,000 population), including professionals working in private and public mental health facilities as well as private practice. - WHO survey - More information https://www.who.int/data/gho/data/indicators/indicator-details/GHO/psychologists-working-in-mental-health-sector-(per-100-000) -	
Psychiatrists working in mental health sector, per 100,000 (MH_6) - WHO - Psychiatrists working in mental health (per 100,000 population), including professionals working in private and public mental health facilities as well as private practice. - WHO survey - More information: https://www.who.int/data/gho/data/indicator	
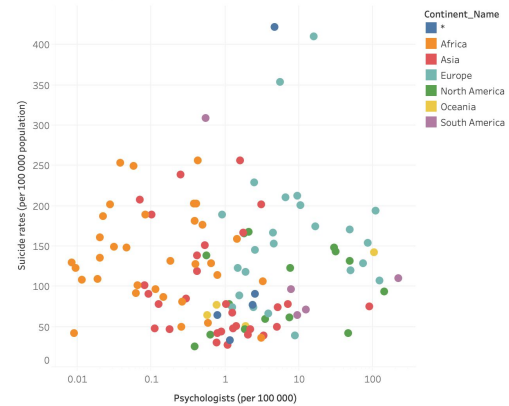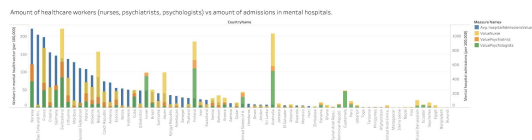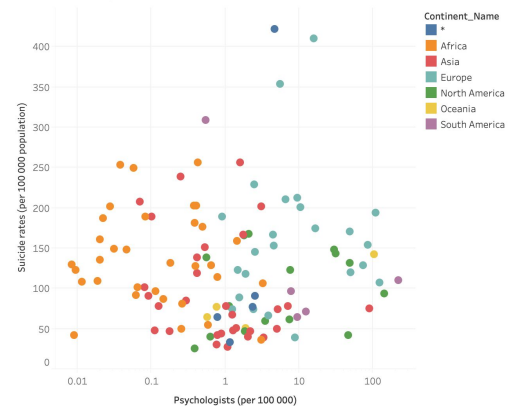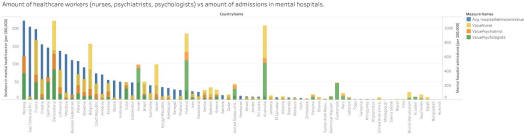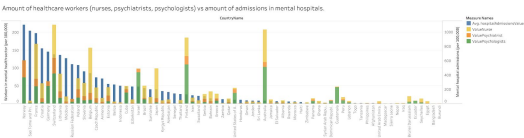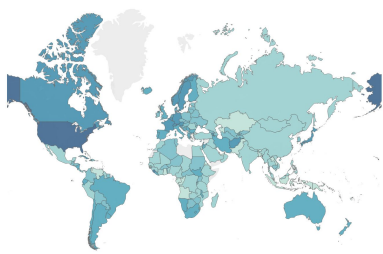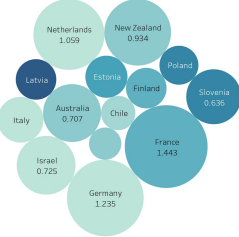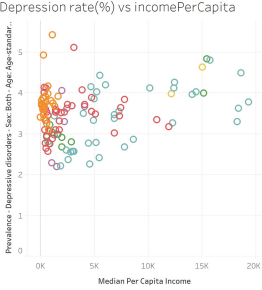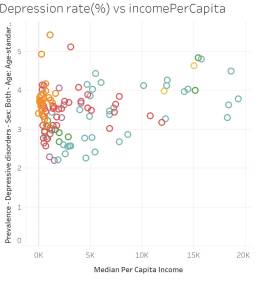
Nurses working in mental health sector, per 100,000 (MH_7) - WHO - Nurses working in mental health (per 100,000 population), including professionals working in private and public mental health facilities as well as private practice. - WHO survey - More information: https://www.who.int/data/gho/data/indicators/indicator-details/GHO/nurses-working-in-mental-health-sector-(per-100-000)	
Mental hospital admissions (per 100,000) - WHO - Retrieved from API, no additional information on the WHO site. - https://ghoapi.azureedge.net/api/MH_19	
Country and Continent Codes List (continent country code) - list of countries by continent. Continent codes and country codes are also included.	All mental health care visualisations use this data set in some way. Either by filter or by color.

Government

Datasets used	Visualizations
Current health expenditure - The world bank - %GDP expenditure - https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS	
Link between mental health and suicide - Our World in Data - Suicide rate vs prevelance of mental health - https://ourworldindata.org/mental-health	
Share with depression - Our World in Data - Share with depression - https://ourworldindata.org/mental-health	
Median income by country - World population review - Median incomePercapita & income Perhousehold - https://worldpopulationreview.com/countries/median-income-by-country/	

Expenditures on health by country
- World population review
- Government expenditures on mental health as a percentage of total government expenditures on health (%)
- https://www.who.int/data/gho/data/indicators/indicator-details/GHO/government-expenditures-on-mental-health-as-a-percentage-of-total-government-expenditures-on-health-(-)

Suicide rate (deaths per 100,000) vs expenditure on mental health as a percentage of total government expenditure on health
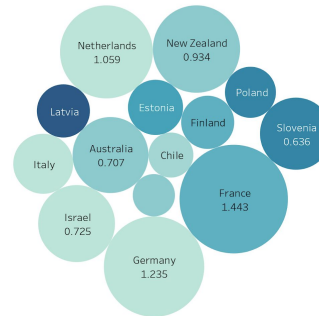
Societal Impact

Datasets used	Visualizations

Mental Health
An elaborate dataset on mental health prevalence, including different disorders, burden in DALYs (Disability-Adjusted Life Years) and suicide rates. This dataset is also used in subtopics Government and Occurrences.
For this subtopic the prevalence of mental health and substance abuse per country per year were used.
 	
Institute of Health Metrics and Evaluation (IHME)
Reported in Global Burden of Disease (GBD
   - Collected from documentation of diagnoses
   - Time span of 1990-2016
   - Globally per country and region
 	
Presented by Hannah Ritchie and Max Roser
Retrieved from Our World in Data
First published: April 2018
https://ourworldindata.org/mental-health	

Population by religion, sex and urban/rural residence Different records from a variety of years (1995-2018) have been combined to give a global overview of religion, sex and global/rural residence. The data on religions per country has been used and filtered on the five religions. Demographics Statistics Database From United Nations Statistics Division Published in the *Demographic Yearbook* Found on UNdata: A world of Information https://data.un.org/Data.aspx?d=POP&f=tableCode%3A28 Last updated: 2020/02/12	
Comparative Political Data Set Dataset with annual political and institutional data for 36 countries over the time span of 1960 to 2017. Only complete data on ideology of government posts (left, right, middle) from 2017 has been used. Armingeon, Klaus, Virginia Wenger, Fiona Wiedemeier, Christian Isler, Laura Knöpfel, David Weisstanner and Sarah Engler Comparative Political Data Set 1960-2017.	

Zurich: Institute of Political Science, University of Zurich.
Last updated in 2019
Retrieved from https://www.cpds-data.org/index.php/data

Mental Illness: NAMI Report Deplores 80 Percent Unemployment Rate; State Rates and Ranks Listed - Model Legislation Proposed
Report including the findings regarding unemployment rates for public mental health service users. This includes rates on how many wish to work (60%) and receive supported employment opportunities provided by states (2%). Some basic information on models for improval as proposed by NAMI is included.
The unemployment rate of adults with mental illness per state is collected using the SAMHSA Uniform Reporting System 2012.

National Alliance on Mental Illness (NAMI)
Road to Recovery: Employment and Mental Illness
Data retrieved from:
https://www.nami.org/Press-Media/Press-Releases/2014/Mental-Illness-NAMI-Report-Deplores-80-Percent-Un
Published: Jan 1 2014

Unemployment amongst mental health care service users.