

# **YZV 211E – Introduction to Data Science and Engineering Project Proposal**

## **Project Team:**

Ilayda Kara – 150220747

Aybike Battal – 150200343

Nazrin Abdinli – 150220925

## **Project Title:**

The Effects of Internet Usage on Children in Turkey

## **Summary:**

The project mainly focuses on investigating and visualizing possible correlation between inclined internet usage, physical/mental health and daily life changes of children in Turkey

## **Problem Definition:**

Analyzing the possible relation between the internet usage and its possible

influences such as health problems and changes in daily routines of children in Turkey

### **Dataset(s) Sources:**

#### **1. TUIK**

- a. Internet usage and frequency of Internet usage of children by sex and age group, 2013, 2021

Explanation: The data will be used for accessing the information of internet usage of children from age group 6-15

- b. The percentage of main diseases/health problems of children in the last 6 months by sex, 2016-2019

Explanation: The data will be used for accessing the information of health problems such as visual problems, musculoskeletal system diseases, and mental health problems of children from age group 7-14

- c. Phone usage behaviors of children who use mobile phone/smartphone regularly by sex and age group, 2021

Explanation: The data will be used for accessing the information of mobile phone usage behaviors of children from age group 6-15 such as checking the phone at least every 30 minutes which can be considered as an addiction

- d. Children's thoughts on the situations caused by the time they spend in front of the screen by sex and age group, 2021

Explanation: The data will be used for analyzing the effects of increased internet usage such as studying less and spending less time with family and friends

#### **2. World Health Organization**

- a. Prevalence of obesity among children and adolescents, BMI  $> +2$  standard deviations above the median (crude estimate) (%)
- ([https://www.who.int/data/gho/data/indicators/indicator-details/GHO/prevalence-of-obesity-among-children-and-adolescents-bmi-2-standard-deviations-above-the-median-\(crude-estimate\)-\(-\)](https://www.who.int/data/gho/data/indicators/indicator-details/GHO/prevalence-of-obesity-among-children-and-adolescents-bmi-2-standard-deviations-above-the-median-(crude-estimate)-(-)))

Explanation: This data shows the obesity rates among various age groups of children in different countries from 2005 to 2016. The data for Turkey will be used to investigate the relation between obesity and internet usage.

### Possible Research Questions:

- Is there a relationship between the rate of internet usage and obesity rates in children? ✓
- Does the increase in internet usage by children also lead them to become addicted to mobile devices? ✓
- With the increase in internet usage by children, at what rate have physical and mental diseases increased and which one has increased more? ✓
- Does increased internet usage influence daily lives of children in terms of their academic performance and social skills? ✓