Smartphone Addiction Project Report

Designing the XLS Form

Structure and Worksheets

The XLS form was structured with three main worksheets:

1. **Survey Worksheet**:
    - Included columns such as **type**, **name**, **label**, **hint**, **required**, **relevant**, **parameter**, and **appearance** to enhance efficiency and effectiveness.
    - Created **Sections 1-7**, each separated with `begin group` and `end group` for clarity and readability.
    - Used `select_multiple` with an "other" option but avoided creating a separate row in the choices worksheet or additional text rows for "other."
2. **Choices Worksheet**:
    - Contained predefined response options for select questions.
3. **Settings Worksheet**:
    - Included metadata for the form, such as the **title** and **version**.

Deploying the Form in Kobo Toolbox

1. The designed XLS form was uploaded to **Kobo Toolbox**.
2. A preview of the form was conducted to identify and correct errors.
3. Necessary adjustments were made to simplify and enhance usability (e.g., avoiding unnecessary "other" rows).
4. The form was successfully deployed to collect responses.
5. Data was downloaded in **CSV format** for further analysis.

Data Cleaning and Preparation in Power BI

Cleaning Steps

- Removed irrelevant columns and metadata from the CSV file.
- Eliminated empty rows to ensure a clean dataset.

New Columns and Measures

- Created calculated columns and measures for enhanced analysis:
  - **Categorized responses**: (e.g., phone usage categories, frequency of phone checks).
  - **Developed measures**: (e.g., averages, percentages, correlations like percentage of negative impacts).

The cleaned dataset was then loaded into **Power BI** for visualization.

Visualizations and Analysis in Power BI

Key Visuals

1. **Phone Check Frequency**:
   - Bar chart showing the count of respondents by phone check frequency (e.g., "Every few minutes," "Several times a day").
2. **Top Phone Checking Triggers**:
   - Bar chart ranking triggers like boredom, notifications, and work responsibilities.
3. **Impact of Phone Use on Productivity**:
   - Percentage-based visual showing how phone use impacts productivity (e.g., "Much more productive," "No change").
4. **Daily Phone Usage**:
   - Stacked bar chart displaying respondents' daily phone usage (in hours).
5. **Negative Impacts by Gender and Occupation**:
   - Pie and bar charts analyzing quality of life impacts by gender and occupation.
6. **Excessive Phone Use Reasons**:
   - Bar chart ranking reasons like staying connected with friends, work/study tasks, and entertainment.
7. **Strategies for Healthier Phone-Life Balance**:
   - Visualization of strategies like screen time limits, offline hobbies, and phone-free times.
8. **Social Media Usage**:
   - Analysis of the most used platforms and time spent on social media.

Key Insights

1. **Frequent Phone Checks**:
   - Most respondents check their phones frequently due to boredom and notifications.
2. **Daily Phone Usage**:
   - High daily phone usage negatively impacts productivity and quality of life.
3. **Gender and Occupation**:
   - Gender and occupation influence how smartphone addiction is perceived.

4. **Recommendations**:
    - Healthier phone use strategies include implementing phone-free times and engaging in offline activities.