Social Media Addiction and Student's Self-Control

Exploring impacts on time, emotions, and academics

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Executive Summary

- Survey of 705 students from 16 25 years old (2024 data)
- High social media addiction → lower self-control
- High group: 6 hours/day usage, 3 conflicts, 100% report academic impact
- Recommendation: school support, awareness workshops, digital campaigns



Introduction

- Social media is a core part of student life
- Risks: Addiction may affect academics, emotions, relationships
- Research gap: Unclear if heavy use lowers self-control
- Aim: Examine link between addiction level & self-control



Dataset Description

The dataset includes survey responses from **705 students** (Kaggle, 2024), covering behavioral and academic aspects of social media use.

| Variable | Description |
|------------------------------|--|
| Student_ID | Unique identifier for each student |
| Addicted_Level | Level of social media addiction of the student (1-3: Low, 4-6: Medium, 7-10: High) |
| Avg_Daily_Usage_Hours | Number of hours students spends using social media per day |
| Conflicts_Over_Social_Media | Number of arguments or disagreements student have with their family, friends and/or partners |
| Affects_Academic_Performance | Student have had their academic result impacted by using social media (1: Yes, 0: No) |

Processing data

- Categorized Addicted_Score into Addicted_Level:
 - Low (1–3), Medium (4–6), High (7–10)
- Recoded Affects_Academic_Performance to binary (1 = Yes, 0 = No)
- Removed irrelevant variables

Methods

Our research question is:

Does social media addiction reduce students' self-control?

To explore this, we examined differences across three addiction groups (Low / Medium / High) in relation to:

- Time management → Avg_Daily_Usage_Hours
- Emotional regulation → Conflicts_Over_Social_Media
- Academic impact → Affects_Academic_Performance

We applied descriptive analysis, summarizing each variable by addiction group and visualizing patterns using bar plots and box plots.

Descriptive Summary

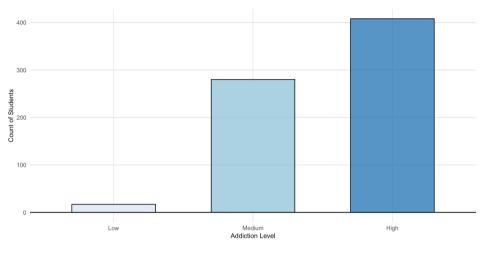


Figure 1: Number of Students by Addiction Level

Summary Points

- Main: Medium-High addiction level
- Average daily use: 4.8h
- Conflicts: median = 3
- 64% reported academic impact

Table 2: Summary statistics of three dependent variables

| Variable | Mean | Median | Min | Max |
|------------------------------|------|--------|-----|-----|
| Avg_Daily_Usage_Hours | 4.92 | 4.8 | 1.5 | 8.5 |
| Conflicts_Over_Social_Media | 2.85 | 3.0 | 0.0 | 5.0 |
| Affects_Academic_Performance | 0.64 | 1.0 | 0.0 | 1.0 |

Results: Usage Hours

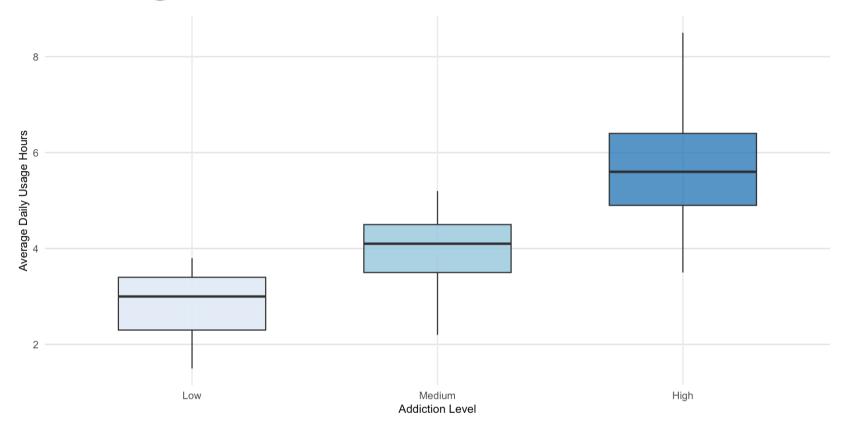
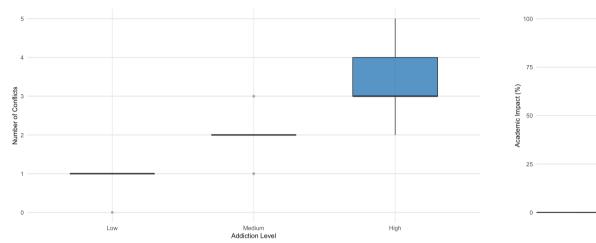


Figure 2: Daily Social Media Usage by Addiction Level

- High group: ~6 hours/day
- Medium (4h) and Low (3.5h)

Results: Conflicts & Academic Impact



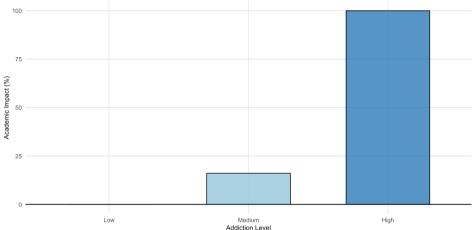


Figure 3: Number of Social Conflicts by Addiction Level

Figure 4: Percentage of Students Reporting Academic Impact by Addiction Level

Key Findings

- Conflicts:
 - Median: High = 3, Medium = 2, Low = 1
- Academic impact: 100% High group affected

Discussion & Conclusion

Discussion

- Time Loss: Students lose track of time → Less personal growth
- Conflicts: Stress, Toxic content → More arguments
- Academics: Social media displaces study time; Promotes low-effort habits

Conclusion

- Clear link between addiction & lower self-control
- High users: more conflicts, time loss, poor academics
- Suggests serious long-term developmental risks

Recommendations

- Awareness workshops in schools
- Digital detox challenges (e.g., 30-day screen reduction)
- Parent-school coordination for support skills
- Further research: expand sample & examine psychological/addictive content

