Value

| Value | Indicates how the time of using AI could affect the concentration rate potentially and later layout some consequences |
| --- | --- |
| Purpose | Explore: Observe the phenomenon of the habits of AI usage and the change in brains of high school students who have adequate experience of aI  Explain: Make connections between the phenomenon happening in the brain(change of concentration rate) and that of usage of AI |
| Context | Time: Years after Interactive AI has been released (For chatGPT - Nov 30, 2022)  Place: High schools around the world (KISJ as one of examples)  Genre: Socio-science  Population: Current high school students who have experiences with AI |
| Variables | * Hours of students concentrate when doing their work * Hours of AI usage by high school students |
| Feasibility | This can be investigated through school-wide survey of how much students use AI and how much they concentrate and also through reviews, articles, or research papers on world-wide web related to AI and brain activity |

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**Initial Research Question**: How does the usage of AI in great extent affect the concentration rate of high school students experiencing with AI

**Focused topic:** How does the extensive usage of AI-powered educational tools impact the concentration of high school students during study sessions?

**Purpose**: How does the extensive usage of AI-powered educational tools impact the concentration of high school students during study sessions, and what are some patterns and factors that influence this relationship?

**Variables**: How does the extensive usage of AI-powered educational tools impact the time high school students concentrate during study sessions, and what correlation exists between the time of concentration and frequency of AI tool usage?

**Context/scope**: How does the extensive usage of AI-powered educational tools after the release of interactive AI tools impact the time high school students around the world concentrate during study sessions, and what correlation exists between the time of concentration and frequency of AI tool usage?

Updated Research Question: How does the extensive use, for more than 5 hours per week, of specific AI-powered educational tools, like ChatGpt, impact the concentration duration, the time students remained focused without distraction or completed their tasks, of KISJ high school students?

Draft RQ: How does the extensive use and dependence, for more than 1 hour per day, of specific AI-powered educational tools, like ChatGPT, impact the concentration duration, the time remained focused without distraction or completed their tasks, of students and educators around the world?

“Final” RQ: How does the extensive use and dependence, for more than 1 hour per day, of specific AI-powered educational tools, like ChatGPT, impact the cognitive brain activity like concentration duration, memory, processing speed, and executive functions(ex. Reasoning, planning, problem, solving, and multitasking) of students in KISJ?