Project: Summarizing and Analyzing Research Papers

**Learner Name** : Manas Jain

**Learner Email** : manas.21b1531161@abes.ac.in

**Topic** : Social Sciences: Summarize and analyze research on the effects of social media on mental health

**Research Paper :** <https://www.researchgate.net/publication/354631254_Social_Media_and_Mental_Health>

**Initial Prompt**

**Description** : summarize the given research paper result in not more than 100 words (research paper was uploaded in the form of pdf)

**Generated Summary** : The research paper results indicate that the introduction of Facebook at U.S. colleges increased symptoms of poor mental health, particularly depression and anxiety. Students exposed to Facebook reported a significant decline in mental health, which also negatively impacted academic performance. The effects were most pronounced among students predisposed to mental illness, such as those with lower socioeconomic status or those who lived off-campus. The study suggests that unfavorable social comparisons fostered by Facebook are likely responsible for the deterioration in mental health, rather than other factors like internet addiction or substance use.

**Iteration 1**

**Description** :

provide a concise summary including the reasons and effects of social media on mental health in not more than 100 words

( to get a better understanding on the reason and effects of social media on mental health)

**Generated Summary** : The research reveals that social media, particularly Facebook, worsens mental health by increasing symptoms of depression and anxiety. This is mainly due to unfavorable social comparisons, where users compare themselves negatively to others, especially regarding social activities and body image. The study shows that students more vulnerable to mental illness are most affected. Additionally, this decline in mental health correlates with a drop in academic performance. However, no significant links were found between social media use and increased substance use or disruptive internet behavior, suggesting that social comparisons are the key factor behind the negative effects.

**Iteration 2**

**Description :**

concise a summary on the effects on physical health, mental health, reason which cause it to become an addiction and measure taken to prevent its effects by using the research paper.

( can see what causes social media to become like a addiction and measure to prevent it effects)

summary should be in less than 100 words

**Generated Summary :** The research highlights social media's negative effects on mental health, such as increased depression and anxiety, but finds no substantial impact on physical health. The primary cause is unfavorable social comparisons, which lead to feelings of inadequacy. Social media becomes addictive due to constant engagement in these comparisons and seeking validation through likes and comments. To prevent its harmful effects, the study suggests increasing awareness of these issues, promoting mental health interventions, and implementing strategies like limiting screen time and encouraging healthy social media habits to reduce addiction and its impact on mental well-being.

**Final Prompt**

**Description :** generate a concise summary of the research paper in a well defined manner, with the initial meaning of the research and the result of the research,

summary not more than 300 words

**Generated Summary :** The research paper examines the impact of social media, particularly Facebook, on mental health, focusing on U.S. college students. The study uses a quasi-experimental approach by analyzing Facebook's staggered introduction across colleges, comparing mental health outcomes before and after its roll-out. The primary objective is to assess whether social media contributes to the growing mental health crisis, especially among adolescents and young adults.

The results show a significant link between Facebook use and increased symptoms of depression and anxiety, especially among students predisposed to mental illness. Unfavorable social comparisons—where users compare their lives negatively with peers—emerged as the main reason for this decline in mental health. Students who lived off-campus, those with lower socioeconomic status, or those who felt socially isolated experienced more pronounced negative effects. Additionally, students exposed to Facebook reported worsening academic performance due to poor mental health, though there was no observed effect on their physical health.

Social media’s addictive nature is attributed to the need for social validation and the constant cycle of comparison with others. This reinforces negative emotions and mental distress over time. However, the study finds no evidence that the introduction of Facebook significantly increased risky behaviors like drug use or cyberbullying.

To mitigate these harmful effects, the research recommends promoting mental health awareness and encouraging healthy social media use, such as limiting screen time and fostering positive online interactions. It suggests that interventions targeting the root cause of social media addiction—unhealthy comparisons—could reduce its negative impact on mental health.

In conclusion, while social media offers valuable opportunities for connection, its negative effects on mental health, particularly through social comparisons, pose a significant concern, necessitating strategies to counteract these issues.

**Insights and Applications**

**Key Insights :** Key insights from the research are:

Mental Health Decline: Facebook use significantly increases symptoms of depression and anxiety, particularly in students vulnerable to mental illness.

Unfavorable Social Comparisons: The primary cause of this decline is users comparing themselves negatively to others, leading to feelings of inadequacy.

Addiction Mechanism: Social media becomes addictive through a cycle of social validation (likes, comments) and continuous engagement in comparisons.

Impact on Academic Performance: The mental health decline correlates with poorer academic performance among college students.

No Major Physical Health Effects: The research found no significant impact of Facebook on physical health.

Preventive Measures: The study suggests raising awareness about social media’s risks, promoting mental health interventions, and encouraging responsible usage to mitigate addiction and negative effects.

Vulnerable Groups: Students from lower socioeconomic backgrounds or those isolated socially experienced stronger negative impacts, highlighting the need for targeted mental health support.

**Potential Applications :** The research paper can guide real-life strategies to mitigate the negative effects of social media on mental health. Key uses include:

Public Awareness Campaigns: Highlight the risks of unfavorable social comparisons and social media addiction to educate users, particularly young adults, on healthier online behavior.

Policy Implementation: Schools and universities can introduce mental health programs focused on responsible social media use, while encouraging digital detox practices.

Social Media Platforms: Platforms can redesign features that reduce emphasis on social validation (likes, followers) and promote mental well-being through supportive content.

Implications of Findings: The research underscores the link between social media and mental health issues, calling for stronger mental health interventions and policy reforms. It highlights the need for targeted support for vulnerable groups and urges social media platforms to take responsibility for their role in promoting unhealthy comparisons.

**Evaluation**

**Clarity :**

Strength: The summaries are concise, easy to understand, and avoid technical jargon. The core findings are well-explained.

Improvement: Incorporating a few technical terms from the research could enhance depth without sacrificing clarity.

**Accuracy:**

Strength: The key insights accurately reflect the research's findings, including mental health impacts, social comparisons, and addiction mechanisms.

Improvement: Including more specific data or results from the research would improve precision.

**Relevance :**

Strength: The summaries focus on timely and relevant issues, like social media's mental health impact, making it highly applicable to current societal concerns.

Improvement: Adding more actionable recommendations for individual users could enhance real-world relevance.

**Reflection**

Reflection on Learning Experience:

Taking the Gen AI helped me to gained a deep understanding of artificial intelligence, specifically in generating, processing, and analyzing information. The project tasks enhanced my skills in summarizing, analyzing, and creating content based on complex documents, ensuring clarity and relevance in output.

Challenges Faced:

One of the major challenges was maintaining accuracy while summarizing lengthy research papers Balancing clarity and depth without oversimplifying or losing key information required careful attention.

Insights Gained:

The project provided valuable insights into the ethical implications of AI, particularly around bias, and its potential in real-world applications, such as mental health interventions. I learned the importance of balancing human input and AI capabilities to create meaningful, precise, and context-aware outputs.