



Systematic review of studies measuring social media use and mental health in adolescents: 2018-2020

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INTRODUCTION:

- Half of all mental health conditions start by age 14
- The prevalence of severe major depression episodes among adolescents increased to almost 10% in 2021
- Prior systematic reviews have observed associations between social media usage and mental health
- No systematic reviews to date have assessed how study characteristics may influence these associations

The purpose of this systematic review was to examine social media measures and demographic stratification in previous studies of social media and adolescent mental health.

METHODS:

This systematic review study was completed between 2020 and 2021. The protocol for this systematic review was registered with the International Prospective Register of Systematic Reviews (Prospero; CRD42021237729).

Eligibility Criteria

- Eligible studies included:
- Mean age of participants was 13-18
 - A social media use measurement as an exposure
 - An outcome measure of depression, anxiety, or physiological distress assessed by validated instruments
 - Publication in a peer-reviewed journal with full text available in English
 - Publication between 2018 and June 2020

Search Strategy and Screening

- The databases PubMed, Embase, PsycINFO, Cumulative Index to Nursing and Allied Health (CINAHL), and Social Sciences Citation Index (SSCI) were systematically searched on June 30th and July 1st of 2020
- Papers were screened by title and abstract and sorted by exclusion reason
- Remaining papers were screened by full text and sorted by exclusion reason

Data Extraction

- Data was systematically extracted by two investigators and disagreements were resolved by a third investigator

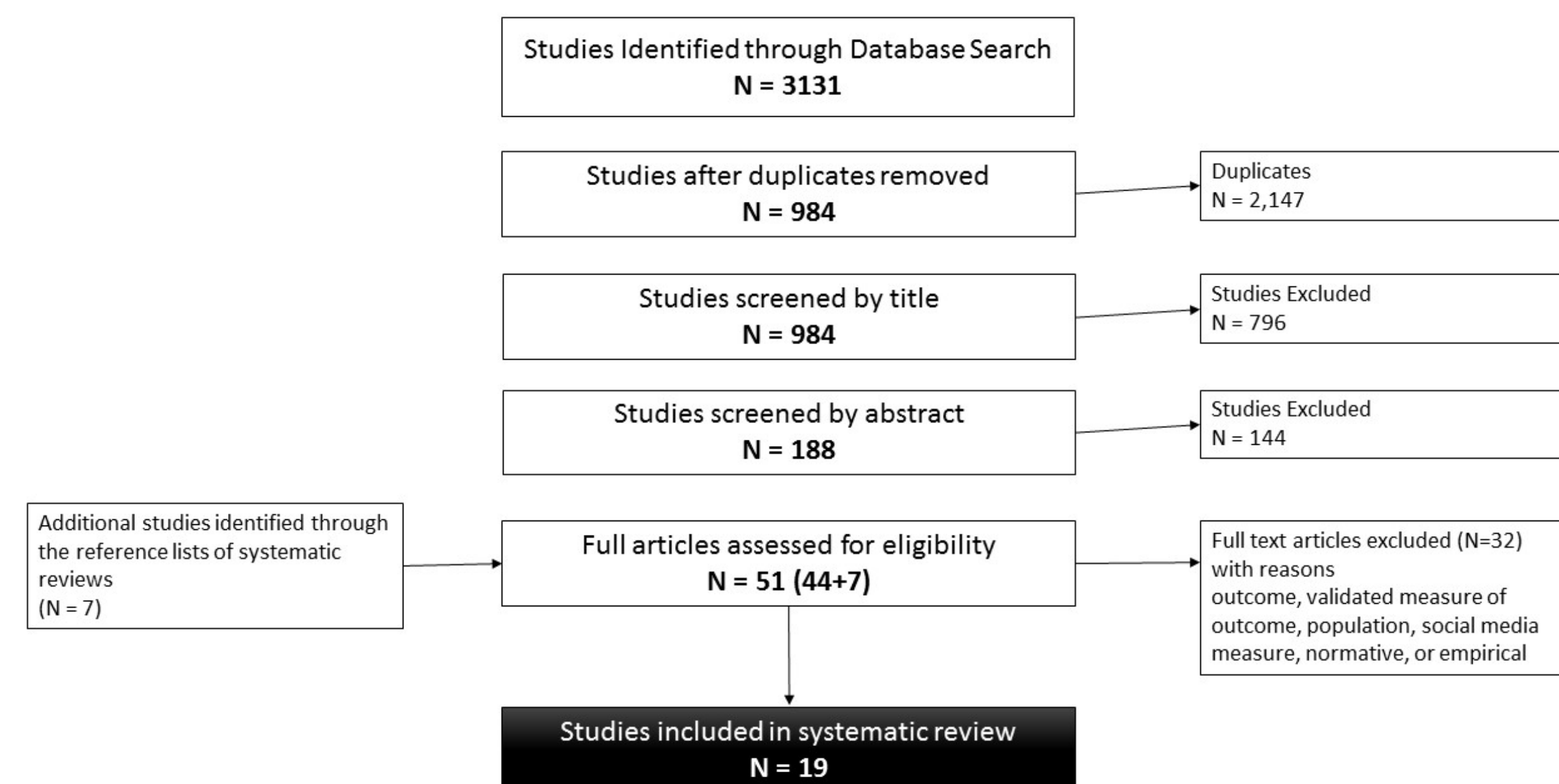
Measurement	Definition
Association Type	Positive, negative, or null association between exposure (social media usage measurement) and outcome variable (depression, anxiety, or psychological distress).
Measurement of Social Media Usage	Method in which social media use was measured (ex. time spent on social media).
Demographics	Stratification by demographic measures including gender, race, and socioeconomic status.

Data Analysis

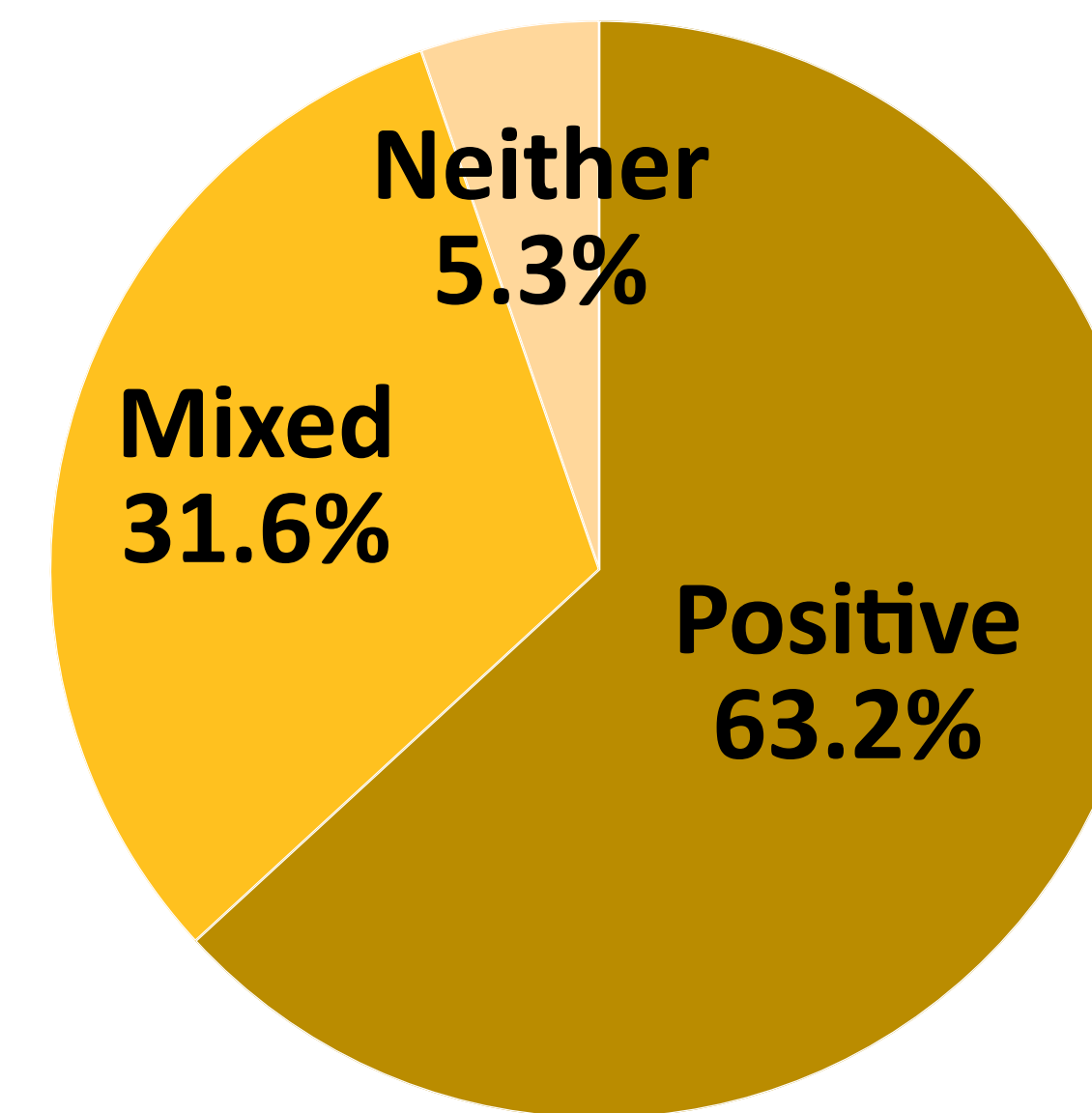
- Descriptive statistics were calculated

RESULTS:

PRISMA Flow Chart



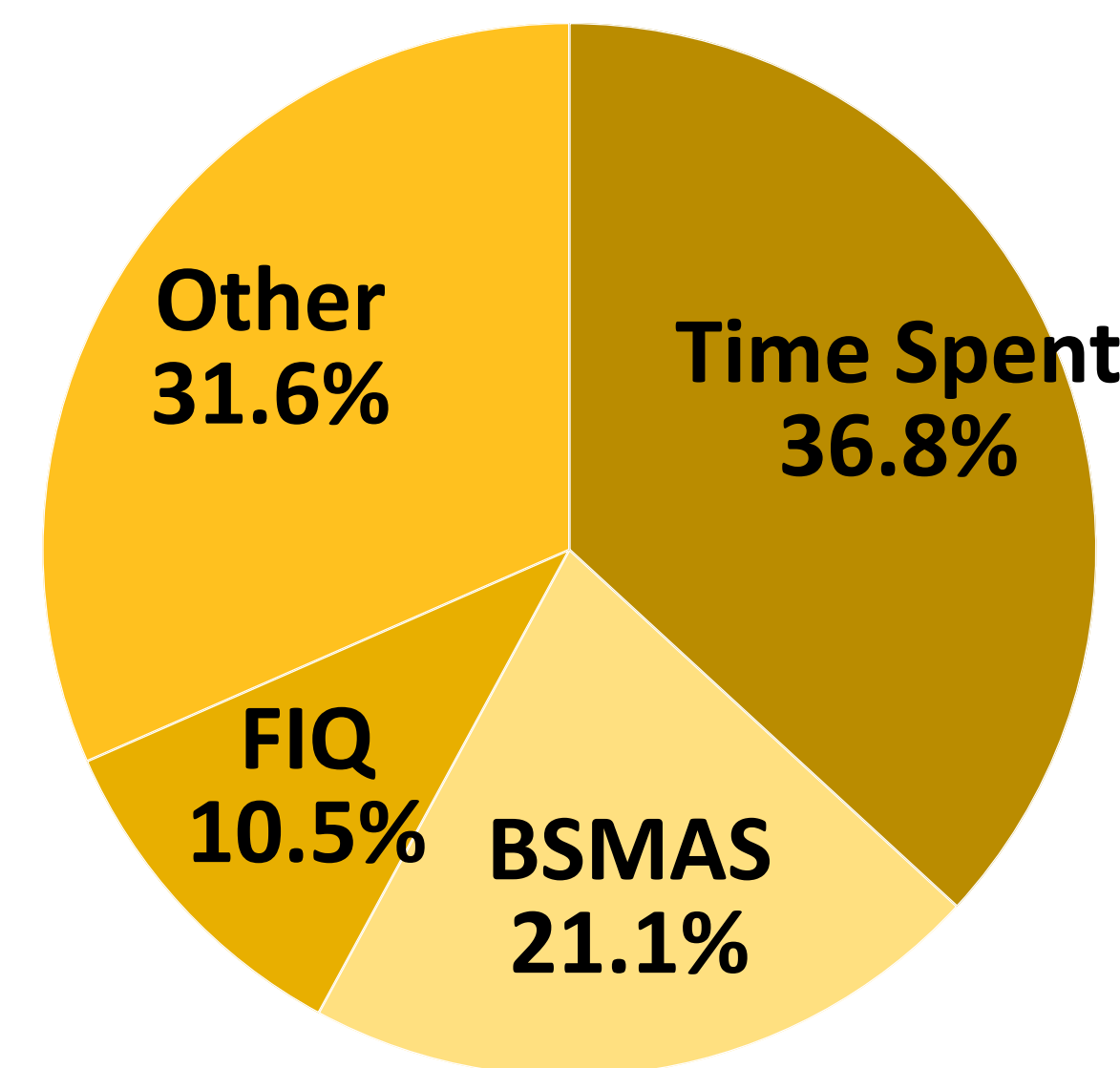
Association Type



Out of all eligible studies, 12 reported finding a **positive association** between social media usage and the mental health outcome variable.

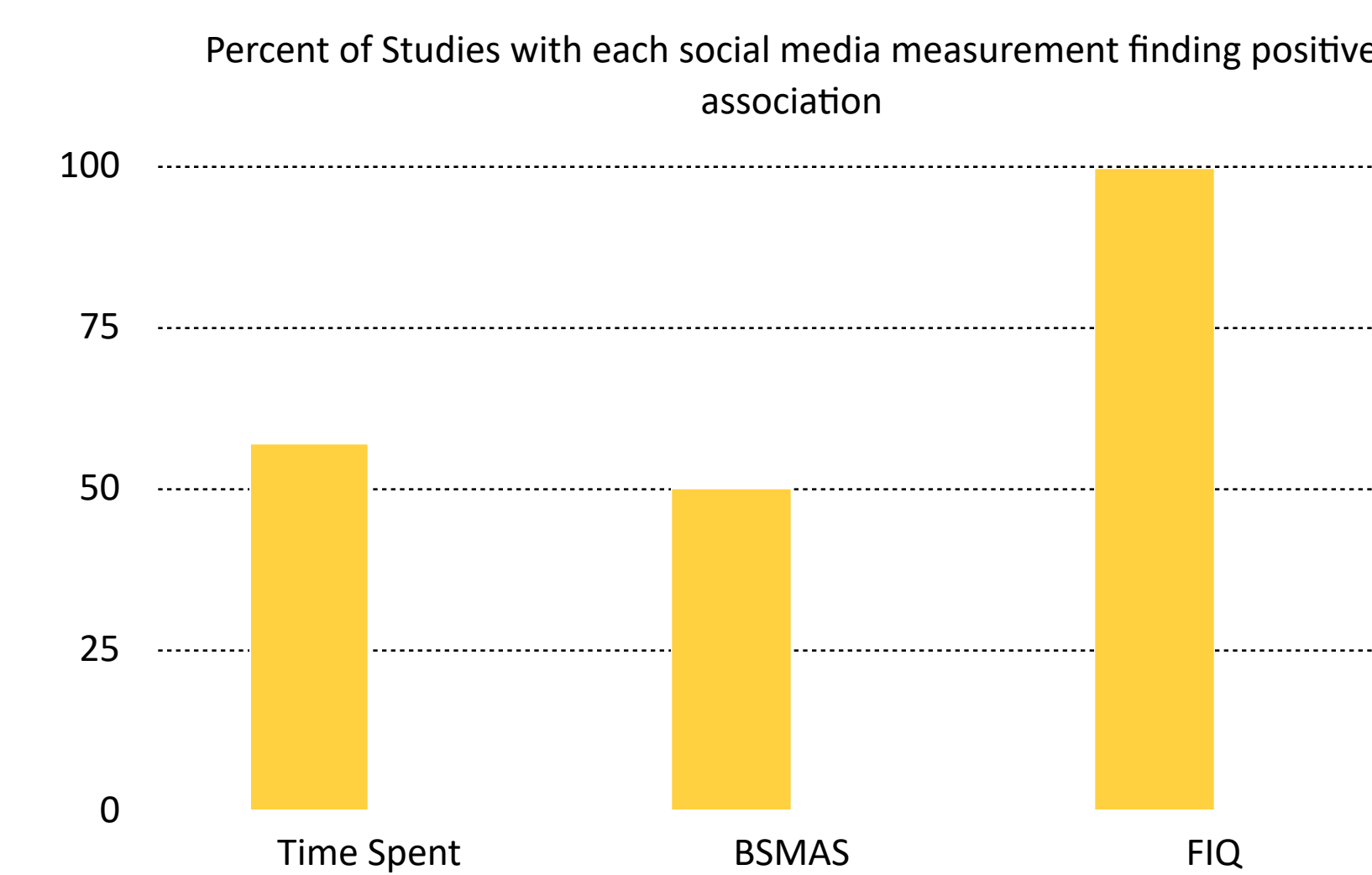
No studies reported a **negative association** between social media usage and mental health outcome variable.

Social Media Use Measures



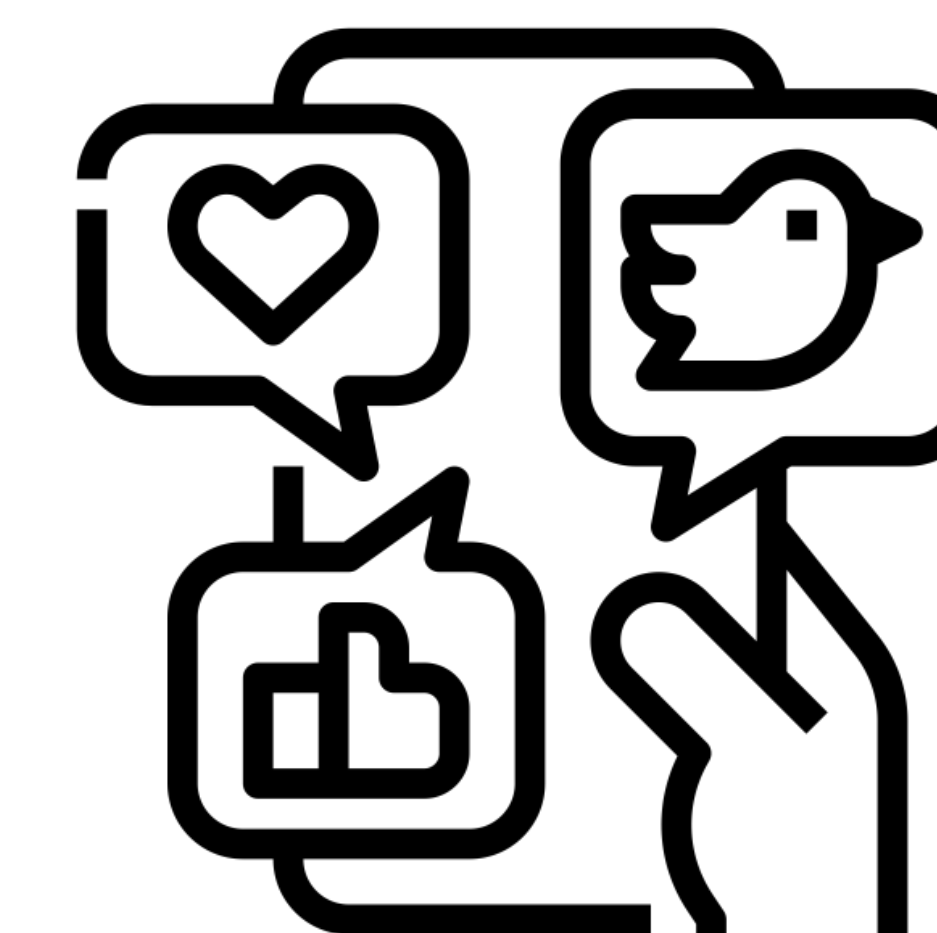
Out of all eligible studies, measures for social media use included:

- Time spent on social media (n = 7)
- Bergen Social Media Addiction Scale (BSMAS) (n = 4)
- Facebook Intrusion Questionnaire (FIQ) (n = 2)



Stratification by Demographic Measures

Demographic Measure	Reported in Study (n, %)	Results Stratified by Demographic Measure (n, %)
Gender	19, 100.0%	11, 57.9%
Race	6, 31.6%	0, 0.0%
Socioeconomic Status	9, 47.4%	2, 10.5%



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MAIN FINDINGS:

- Several different measures of social media usage were used to test an association between social media usage and mental health
- Associations found between social media and mental health outcomes could reflect bias towards social media measures reflecting problematic social media use
- We did not find any study results that included groups vulnerable to mental illness, such as teens who are transgender or low socioeconomic status



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CONCLUSIONS:

- Next steps: Quality Analysis
- Future reviews and media reports should indicate whether observed associations between social media use and mental health reflect problematic use, screen time, or other features of social media use
- Future work should investigate how demographic variables such as gender identity, race, and socioeconomic status may mediate the relationship between social media use and adolescent mental health

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CONTACT INFORMATION

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