

EXHIBIT 18
WIT: Pell
DATE: 10/14/25
Maureen O. Pollard, RDR

Adolescent Wellness & Social Media (AWSM) Survey

May 2023 Pilot Survey: Descriptive Data

November 14, 2023

Courtney FitzGerald, UNM PRC
Jeremy Gonzales, UNM PRC
Dylan Pell, NM DOH

Defendant's Exhibit

DX0855

Case Number:
D-101-CV-2023-02838

CONFIDENTIAL
NMAG-3P-UNM-00019

NMAG-3P-UNM-00019

Overview

- Background & Significance
- Pilot project summary
- Sample description
- Measures



Background and Significance

- Increasing behavioral health concerns across age groups
- Suicide deaths among NM adolescents (ages 12-17) increased by 34.2% from 2011 to 2020
- Concurrent increases in adolescent use of social media and video games have led to speculation about a connection (Haidt, 2021, US Surgeon General, 2023)
- There is a lack of information about (1) NM population's use of social media and associated mental health concerns, (2) reasons why young people use social media, and (3) risks and benefits of social media use among NM youths

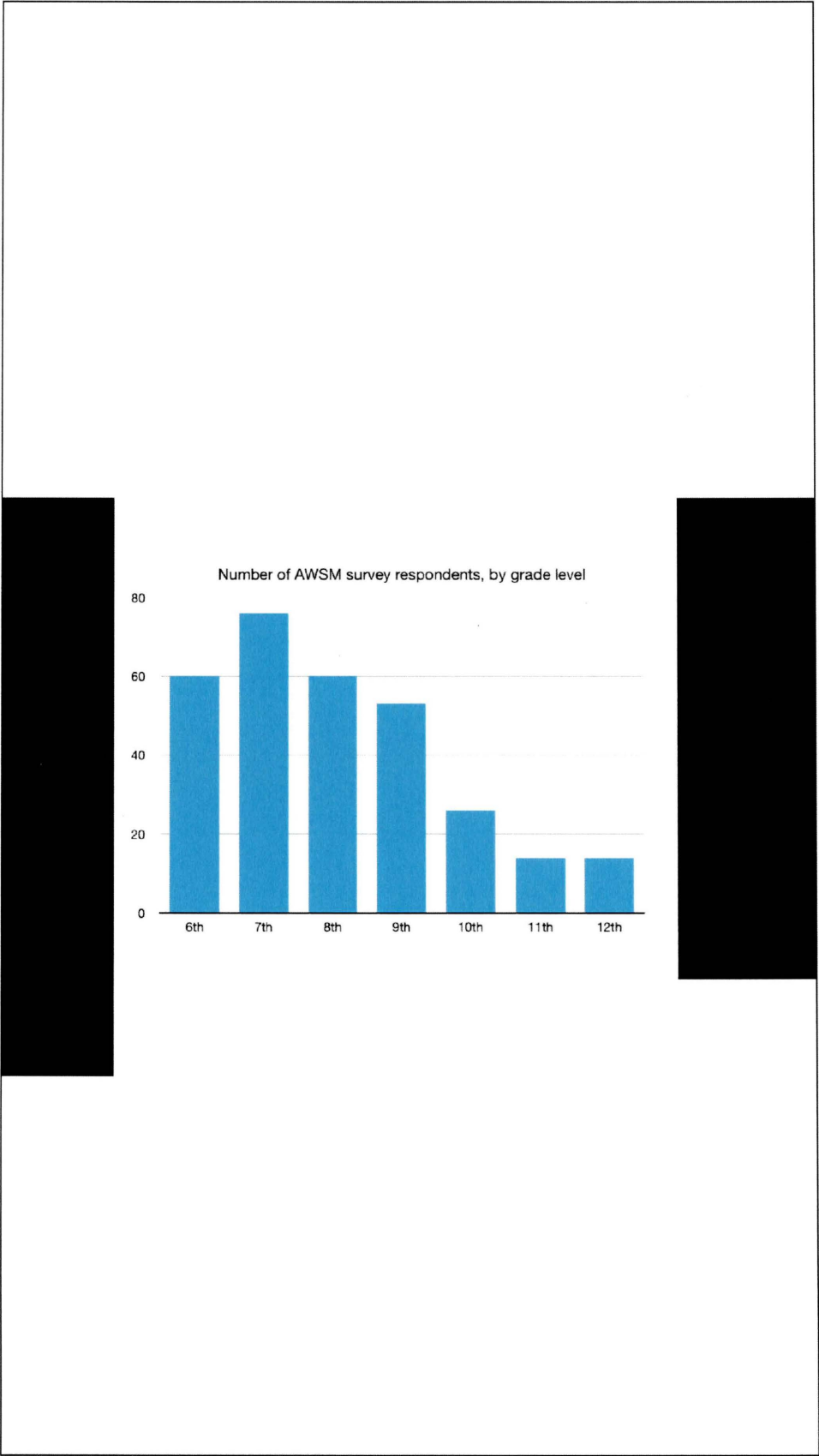
We now have the 2nd highest suicide death rate among children in this age group in the U.S.

Pilot project summary

- Funding from UNM Health Sciences Center RAC Committee
- Collaborative instrument development with national experts in adolescent media use & mental health
- Pilot tested at a public charter school in the ABQ metro area, with students in grades 6-12 in May, 2023

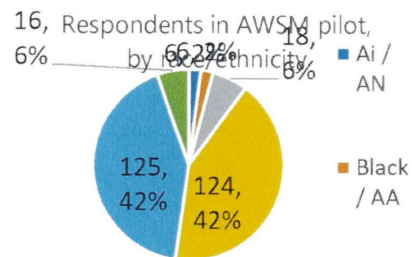
Description of the sample

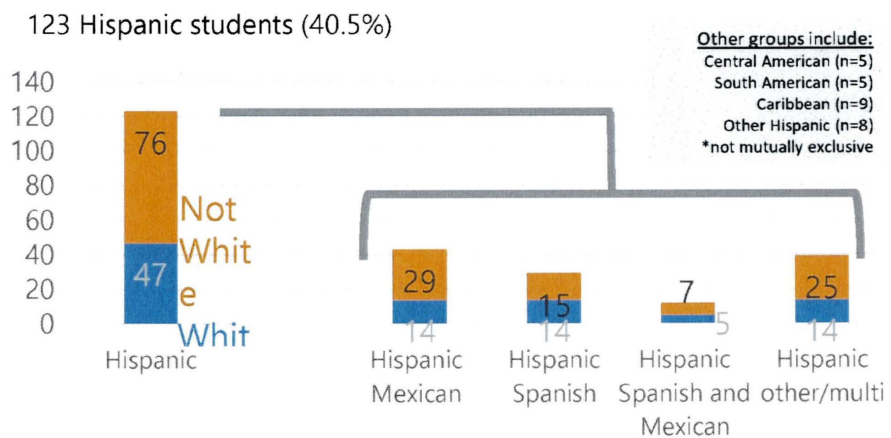
- Complete* responses from 304 students
- 56.9% female, 42.1% male, 1% other (sex assigned at birth)
- Most respondents (65%) were in middle school



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- Race/ethnicity of respondents

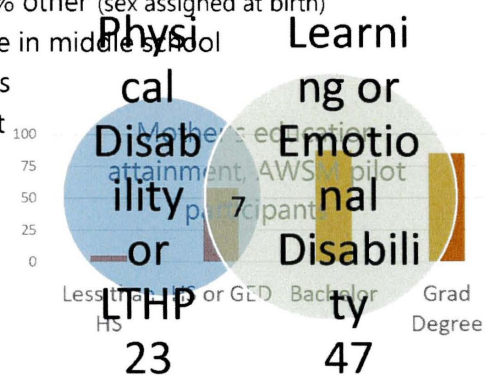




Race was asked separately. Among students who answered "Yes" to the question, "Are you Hispanic or Latino?" here is how they answered question about Hispanic heritage/background.

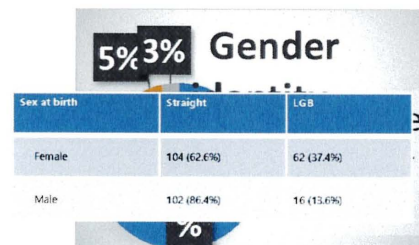
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- Disability status



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- Complete* responses from 304 students
- 56.9% female, 42.1% male, 1% other (sex assigned at birth)
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- Race/ethnicity of respondents
- Mother education attainment
- Disability status
- Gender identity
- Sexual orientation



Cisgender 279
TGNC 15
Other/Refused 10

Social Media Use Measures



Access to devices

Smartphone – 279 (92.1%)

Computer – 287 (95.4%)

Tablet – 187 (65.2%)

Gaming console (like PlayStation, Switch, etc.) – 239 (80.5%)

Access to wifi at home – 289 (97.0%)

Access to wireless data – 217 (77.8%) ← 181 had unlimited data

Social media use

Do you ever use social media?

- 238 (78.8%) answered 'yes'
 - Of the 64 students who answered 'no,' 62 reported using at least one form of social media when asked about specific platforms

For example:

- Only 4 used TikTok, but...
- 26 used Discord
- 59 used YouTube

Social media use

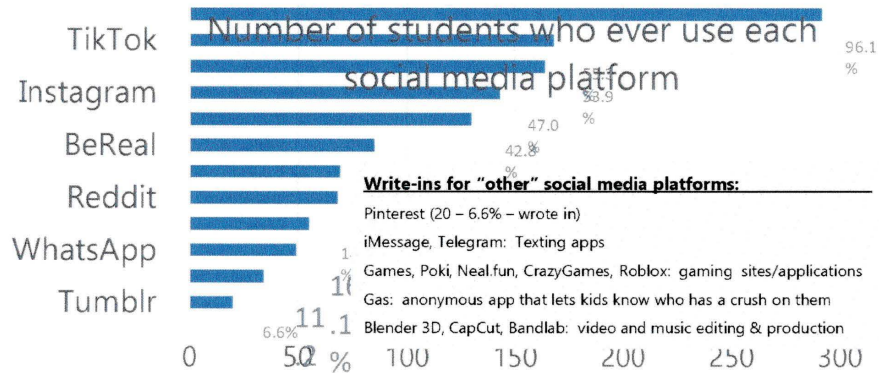
Frequently used media platforms

How often do you use each of the following apps or sites?

- 1 Never
- 2 Rarely
- 3 Sometimes
- 4 Often
- 5 Frequently
- 6 Almost constantly

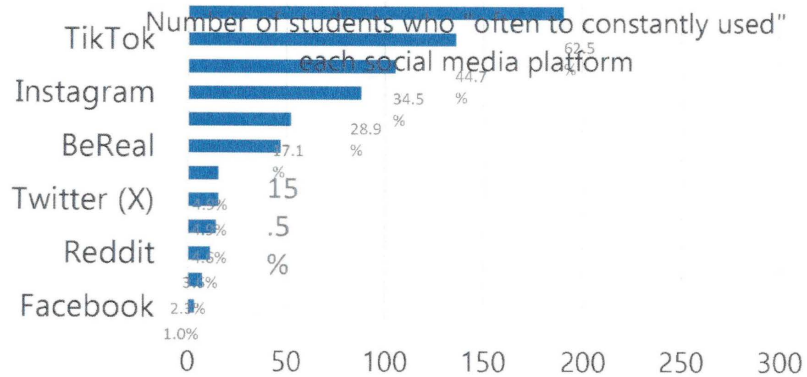
Social media use

Frequently used media platforms



Social media use

Frequently used media platforms



Social media use

For each social media platform, we asked...*

How often do you **create content** for [App]?

How often do you **comment on other people's content** on [App]?

How often do you **share other people's content** on [App]?

Each one that they used at least "often"

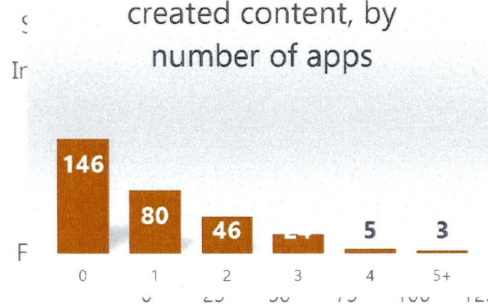
Social media use

For each social media platform, we asked...*

How often do you **create content** for [App]?

158 students (52%)
created content for
at least one social
media application

Number of students who
created content, by
number of apps



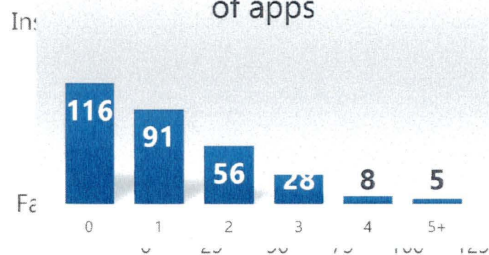
Social media use

For each social media platform, we asked...*

How often do you **comment on other people's content** on [App]?

188 students (62%) commented on others' content on at least one social media application

Number of students who commented, by number of apps



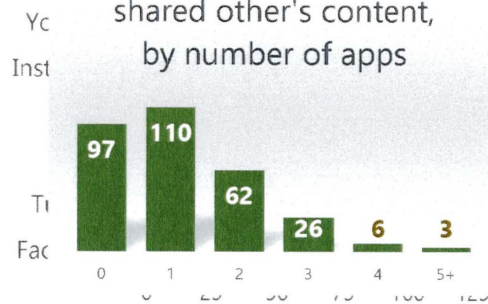
Social media use

For each social media platform, we asked...*

How often do you **share other people's content** on [App]?

207 students (68%)
shared others'
content on at least
one social media
application

Number of students who
shared other's content,
by number of apps



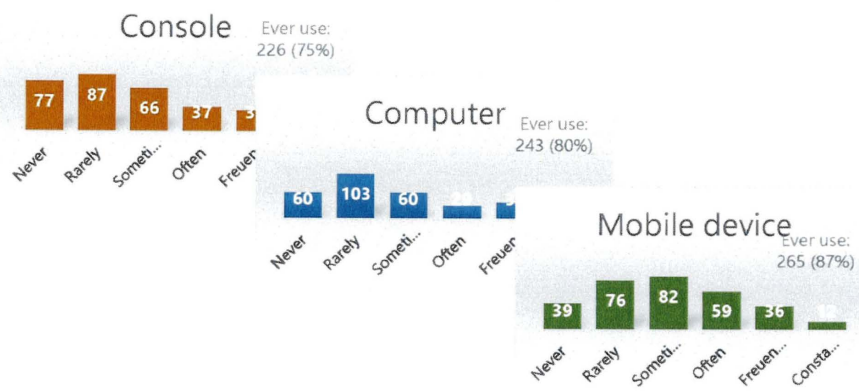
Online Video Gaming

How often do you play **online video games** on a console, like an X-box, PlayStation, or Switch?

How often do you play **online video games** on a computer?

How often do you play **online video games** on a mobile device?

Online Video Gaming



Mental Health Measures



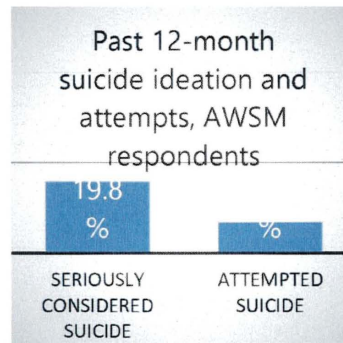
Suicide Ideation and Attempts

(from CDC's Youth Risk Behavior Survey)

The next question asks about attempted suicide. Sometimes people feel so sad or depressed about the future that they may consider attempting suicide, that is, taking some action to end their own life.

During the past 12 months, did you ever seriously consider attempting suicide
(1=Yes, 0=No) 19.8% considered

During the past 12 months, how many times did you actually attempt suicide?
(1=0 times, 5=6 or more times) M=1.16, SD=.60
(1=1+times, 0=0 times) 8.5% attempted



Suicide Attempt in the past 12 months by student characteristics

- No significant difference between girls and boys for suicide attempts (8.1% vs. 8.6%)
- No significant difference by grade level or age
- Sexual minority youth had higher rate (18.3% vs. 5.3%)
- Gender minority youth had higher rate (36.8% vs. 7.2%)
- No significant difference for students with physical disabilities, but students with *emotional/learning* disabilities had a higher rate (14.8% vs. 5.5%)

Associations with *any* social media use and past-year suicide attempts

Students who **ever**...

- used **BeReal** were more likely to attempt suicide (15.1% vs. 6.5%, $p=.02$)
- used **Discord** were more likely to attempt suicide (13.0% vs. 5.9%, $p=.03$)
- used **Reddit** were more likely (18.8% vs. 6.0%, $p=.001$)
- used **TikTok** were more likely (13.6% vs. 2.9%, $p=.001$)
- used **Twitter** were more likely (21.4% vs. 6.1%, $p<.001$)*

No differences for respondents who often to constantly used **BeReal**, **Instagram**, **Reddit**, **Snapchat**, **Tumblr**, **Twitch**, **WhatsApp**, or **YouTube**, or for those who often to constantly played video games on a **console** or **mobile device**.

Associations with *frequent* social media use and past-year suicide attempts

Students who **often to constantly**...

- played **video games on a computer** were more likely to attempt suicide (16.1% vs. 6.3%, $p=.01$)
- used **Discord** were more likely to attempt suicide (17.0% vs. 7.2%, $p=.02$)
- used **Facebook** were more likely (50.0% vs. 8.4%, $p=.004$)*
- used **TikTok** were more likely (13.1% vs. 5.4%, $p=.02$)
- used **Twitter** were more likely (50.0% vs. 6.6%, $p<.001$)*

No differences for respondents who often to constantly used **BeReal**, **Instagram**, **Reddit**, **Snapchat**, **Tumblr**, **Twitch**, **WhatsApp**, or **YouTube**, or for those who often to constantly played video games on a **console** or **mobile device**.

Facebook users, n=4
Twitter users, n=8

Used chi-square test to determine statistical significance.

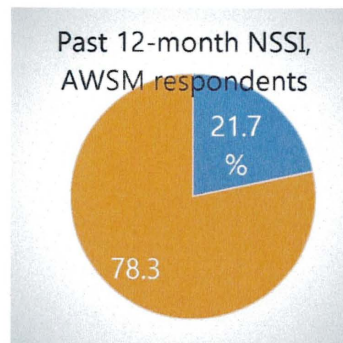
Non-Suicidal Self-Injury (NSSI) (from CDC's Youth Risk Behavior Survey)

The next question asks about hurting yourself on purpose.

During the past 12 months, how many times did you do something to purposely hurt yourself without wanting to die, such as cutting or burning yourself on purpose?

(1=0 times, 5=6 or more times) $M=1.23$, $SD=.60$

(1=1+ times, 0=0times) 21.7% of students engaged in NSSI



Associations with social media use and past-year NSSI

Students who **often to constantly**...

- played **video games on a computer** were more likely to attempt suicide (16.1% vs. 6.3%, $p=.01$)
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No differences for respondents who often to constantly used **BeReal, Instagram, Reddit, Snapchat, Tumblr, Twitch, WhatsApp, or YouTube**, or for those who often to constantly played video games on a **console or mobile device**.

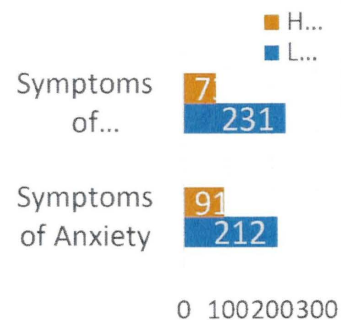
Facebook users, n=4
Twitter users, n=8

Used chi-square test to determine statistical significance.

Symptoms of Depression and Anxiety (from PHQ and GAD screening items)

Over the last 2 weeks, how often have you been
bothered by the following problems
(1=not at all, 4=nearly every day)

- Little interest or pleasure in doing things $M=1.8$, $SD=1.0$
- Feeling down, depressed or hopeless $M=1.8$, $SD=.9$
- Feeling nervous, anxious, or on edge $M=2.1$, $SD=1.1$
- Not being able to stop or control worrying $M=1.9$, $SD=1.0$



| phq_de~s phq_pl~e gad_an~y gad_wo~y
-----+

phq_depress	1.0000			
phq_pleasure	0.6843	1.0000		
gad_anxiety	0.5972	0.5240	1.0000	
gad_worry	0.6097	0.5717	0.7257	1.0000

Depression and Anxiety by student characteristics

- Girls were more likely than boys to have high depression (27.8% vs. 18.1%) and anxiety (37.6% vs. 19.8%)
- No significant differences by grade level or age
- Sexual minority youth had higher depression (53.7% vs. 12.7%) and anxiety (51.2% vs. 21.6%)
- Gender minority youth had higher depression (78.9% vs. 19.4%) and anxiety (68.4% vs. 27.4%)
- Students with *physical* disabilities had higher depression (48.3% vs. 20.0%) and anxiety (50.0% vs. 26.9%)
- Students with emotional/learning disabilities had higher depression (33.3% vs. 15.4%) but not anxiety

| phq_de-s phq_pl-e gad_an-y gad_wo-y

-----+-----
phq_depress | 1.0000
phq_pleasure | 0.6843 1.0000
gad_anxiety | 0.5972 0.5240 1.0000
gad_worry | 0.6097 0.5717 0.7257 1.0000



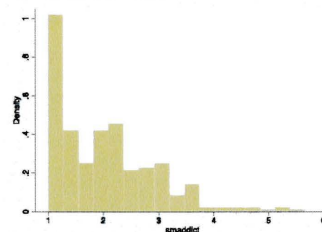
Other Measures

Social Media Addiction Scale

(adapted from Andreassen, Torsheim et al., 2012)

- I spend a lot of time thinking about social media or planning how to use it.
- I feel an urge to use social media more and more.
- I use social media in order to forget about personal problems.
- I have tried to cut down on the use of social media without success
- I become restless or troubled if I am prohibited from using social media or if my phone is taken away
- I use social media so much that it has had a negative impact on my studies.

M=2.08, SD=1.18
Scale properties:
M=2.01, SD=.93
alpha=.82
M=2.45, SD=1.65

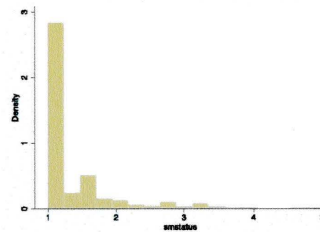


Digital Status Seeking Scale

(adapted from Nesi & Prinstein, 2019)

- I think it is important to have a lot of followers or friends on social media.
- I think it's important to have a lot of people "like" or comment on things I post.
- I purposefully post on social media during 'high traffic' times (times that I know most people will see it).
- If I post something that does not get a lot of likes or comments, I might take it down.
- I try hard to get more activity (likes, comments, shares, etc.) on my social media profiles.
- I try hard to get more followers on my social media profiles.

M=1.43, SD=.81
Scale properties:
M=1.38, SD=.67
alpha=.90



Media Use Motivations

(adapted from Hou, Zhu et al., 2020)

To search for the latest information about others and know about friends' posts	To express my own attitudes and opinions
For entertainment	To access useful knowledge and information
To share my ideas and feelings	To communicate with my friends
To express myself creatively	To keep in touch with family members
To follow other people, celebrities, or organizations I'm interested in	To access the latest news
To keep up with trends and avoid being out-of-date	To pass time
To confide in others and get advice	
To rest and relax	

SURVEILLANCE = Blue
PERSONAL IDENTITY = Purple (?)
PERSONAL RELATIONSHIPS - Orange
Passive use = Green

Hou, Zhu et al - they found four factors: Cognitive motivation, emotional motivation, leisure motivation, and herding motivation.

Media Use Motivations

(adapted from Hou, Zhu et al., 2020)

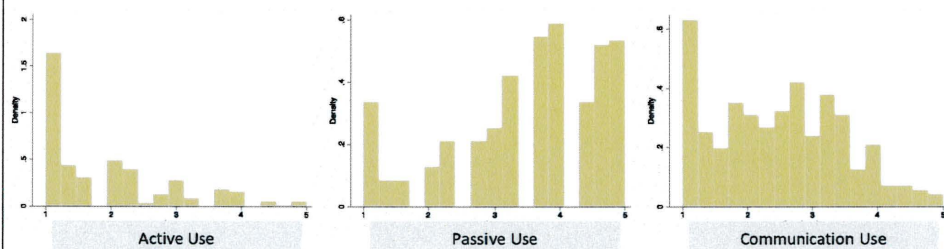
Factor analysis revealed 3 constructs among 15 items:

1. **Active use** – use SM to share opinion, express self, and create content (3 items; M=1.90, SD=1.02, alpha=.86)
2. **Passive use** - use SM to rest & relax, pass time, and for entertainment (3 items; M=3.52, SD=1.17, alpha=.85)
3. **Communication use** – use SM to search for information, communicate with friends & with family, access news, get latest information, keep up with trends (7 items; M=2.48, SD=1.01, alpha=.86)

15 items, answer range 1-5.

Media Use Motivations

Distribution of each use type



15 items, answer range 1-5.

Media Literacy Training

(derived from Maynard media literacy survey)

- | | |
|---|-------|
| 1. In class, have you ever analyzed an advertisement? | 61.6% |
| 2. In class, have you ever discussed how media can be beneficial or harmful to your health, identity, or relationships? | 76.4% |
| 3. In class, have you ever learned how to spot the differences between a news story and an opinion story? | 80.1% |
| 4. In class, have you ever analyzed media to identify stereotypes? | 65.7% |

Media Literacy Training

(derived from Maynard media literacy survey)

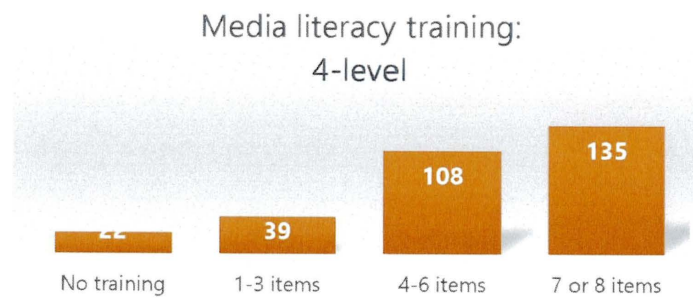
- | | |
|--|-------|
| 5. Have you ever learned about how selling audience's attention is the way media companies make money? | 63.8% |
| 6. Have you ever discussed with an adult what makes media sources more trustworthy? | 71.7% |
| 7. Have you ever discussed with an adult about what to share online? | 77.5% |
| 8. Have you ever discussed with an adult the potential risks and harms of false information online? | 82.3% |

KMO measure of sampling adequacy = .811
Based on eigenvalue, single-factor solution is best,
However alpha=.79, so I'm not convinced it's that great

Generated medialit as a count of how many kids have:

Media Literacy Training

(derived from Maynard media literacy survey)



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Personal Resilience

(Brief Resilience Scale – Smith et al., 2008)

The next six questions ask about your ability to deal with problems and hardship. Please think about your experiences dealing with difficult situations, and select the answer that best describes you.

(1= strongly disagree, 5= strongly agree)

- | | |
|---|-------|
| 1. I tend to bounce back quickly after hard times | M=3.3 |
| 2. I have a hard time making it through stressful events (R) | 4 |
| 3. It does not take me long to recover from a stressful event | M=3.1 |
| 4. It is hard for me to snap back when something bad happens (R) | 6 |
| 5. I usually come through difficult times with little trouble | M=3.1 |
| 6. I tend to take a long time to get over setbacks in my life (R) | 9 |
| | M=3.3 |
| | 7 |
| | M=2.9 |
| | 1 |
| | M=3.5 |
| | 0 |

Resilience

(Brief Resilience Scale – Smith et al., 2008)

Resilience scale properties: $M=3.25$,
 $SD=.77$, $\alpha=.77$

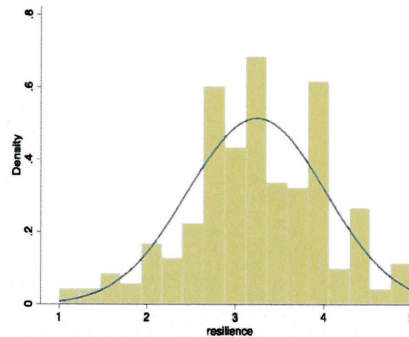
High resilience was associated with
reduced risk for mental health
concerns:

Suicide attempt: $OR=.33$, $p=.007$

Depression: $OR=.26$, $p<.001$

Anxiety: $OR=.26$, $p<.001$

And reduced risk for social media
addiction: $OR=.43$, $p<.001$



Other measures...

Body Image items:

- Past 24-hour satisfaction with physical appearance, weight, size, looks (4 items: 1 very dissatisfied - 5 very satisfied) $M=3.15$, $SD=1.06$, $\alpha=.88$

Disordered eating behaviors:

- Binge eating (29.6%)
- Purging (7.6%)
- Fasting (19.9%)
- Taking diet pills (3.6%)

Other measures...

Electronic bullying:

- Ever electronically bullied (25.3%)
- Ever electronically bullied another person (17.2%)

Encountered prejudiced content online:

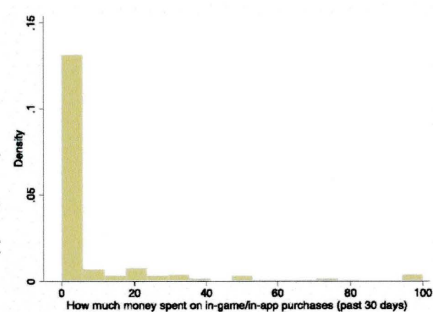
- Encountered prejudiced posts, prejudiced comments, ads for prejudiced events, online hate groups
(4 items: 1=never - 5=always)
M=2.10, SD=1.14, alpha=.89

Other measures...

Parent Oversight and Contro

Each item: 1=0 days, 5=all 7 days

- Parent checked websites you've vis
- Parent checked your social media p
- Parent used parental controls for yc
- Parent used monitoring tools to tra



Money spent on in-app/game purchases, past 30 days:

\$0 - \$100+: 204 (69.4%) spent \$0; 90 (30.6%) spent at least \$1

Other measures...

Alcohol, Drugs & Tobacco:

In the past 30 days, on how many days did you use
(1=0 days, 7=30 days)

- Alcohol M = 1.19, SD = .66 (11.9% used alcohol)
- Cigarettes M = 1.06, SD = .47 (2.3% used cigarettes)
- Electronic vapor products M = 1.18, SD = .81 (7.3% used EVPs)
- Marijuana M = 1.18, SD = .86 (6.3% used marijuana)
- Other illicit drugs M = 1.11, SD = .72 (3.3% used other drugs)



Questions?
Comments?
Thoughts?
Ideas?



