Research Plan/Project Summary

Student: Lilah Winter, Mr. Langley 5th Grade

Rationale: I was listening to the radio while my mom was driving, and there was a "news you can use" blurb that said "scientists think people are less likely to use electronic devices if they have less or no color". They did not cite a source for this. I am curious how this idea impacts cellphone usage. Will screentime usage decrease in people who have their phones set to grayscale?

Research Question: How do the color settings of phones affect phone usage?

Procedures: I will survey people to collect many willing participants (25+). I will try to have a variety of ages and genders. I will ask people, when they sign up for my experiment, to send me their screentime statistics. I am asking people to send the statistics for their past week of usage ahead of the experiment (assuming their phone was in color), so that their thoughts on the experiment do not affect how they may use their cell phones during that first week. I will then ask everyone to change their cellphone settings to grayscale for an entire week. I will then have them tell me their screentime usage for that second grayscale week.

Risk/Safety: Because I am doing an experiment that involves human participants, I will need to have them all sign my informed consent form giving them permission to participate.

Data Analysis: I will compare the data from the full week of screentime on a color device to the full week of screentime on a grayscale device.

Bibliography:

-*"(Be Smart About) Screen Time!" by Rachel Brian*
-*"Screentime Solutions" by Andrew Donaldson*
-*"The Science of Color" by Sergio Rijo*

nsent Form- "How does screen color ct screentime usage?-

ou are invited to participate in a research study for my science fair project. The purpose of his study is to determine how the color display of a screen affects screentime usage.

NFORMATION

You will be asked to record your weekly "screen time report" from your iPhone in the measurement of average hours per day in a week. You will be asked to use your phone in regular display mode for 3 weeks, and then in grayscale mode for 3 weeks.

RISKS

There will be no risks unless changing the display causes distress.

BENEFITS

This project will help me to understand how color displays vs. grayscale may affect the daily usage of a phone.

CONFIDENTIALITY

The information in the study records will be kept confidential. Data will be stored securely and will be made available only to persons conducting the study unless you specifically give permission in writing to do otherwise. No reference will be made in oral or written reports which could link you to the study. No identifiers (name, age, etc.) will be disclosed to anyone, and all information will be destroyed at the completion of the study.

CONTACT

If you have questions at any time about the study or the procedures, (or you experience adverse effects as a result of participating in this study,) you may contact my sponsor, Mrs. Winter.

PARTICIPATION

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any time without penalty.

* Indicates required question

1. **CONSENT**

   I have read the above information, reviewed the questionnaire and agree to participate in this study.

   Mark only one oval.

   ◯ Option 1

2. Electronic Signature *

   _____

3. Gender

   Mark only one oval.

   ◯ Male
   ◯ Female
   ◯ Other

4. Age Group

   Mark only one oval.

   ◯ 18-36
   ◯ 37-55

5. What is your average daily screen time this week (black and white)?

   1/4-1/11

   _____

6. Did you have major changes to your schedule this week?

1/4-1/11

Mark only one oval.

- Yes
- No

7. What is your average daily screen time this week (black and white)?

1/11-1/18

_____

8. Did you have major changes to your schedule this week?

1/11-1/18

Mark only one oval.

- Yes
- No

9. What is your average daily screen time this week (black and white)?

1/18-1/25

_____

10. Did you have major changes to your schedule this week?

1/18-1/25

Mark only one oval.

- Yes
- No

11. What is your average daily screen time this week (regular color)?

12/14-12/21

_____

12. Did you have major changes to your schedule this week?

12/14-12/21

Mark only one oval.

- Yes
- No

13. What is your average daily screen time this week (regular color)?
12/21-12/28

_____

14. Did you have major changes to your schedule this week?

12/21-12/28

Mark only one oval.

- Yes
- No

15. What is your average daily screen time this week (regular color)? 12/28-1/4

_____

16. Did you have major changes to your schedule this week?

12/28-1/4

Mark only one oval.

- Yes
- No

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Google Forms

CONSENT I have read the above information, reviewed the qu	Electronic Signature	Gender	Age Group
Option 1	Melinda Fanning	Female	37-55
Option 1	Lizbet Sanria	Female	37-55
Option 1	Mindy Prefiln	Female	37-55
Option 1	Erica Sainz	Female	37-55
Option 1	Bobby Rascon	Female	37-55
Option 1	Emily Gray	Female	37-55
Option 1	Leslie Owens	Female	37-55
Option 1	Sandy Fontaine	Female	37-55
Option 1	Manny Escobar	Male	37-55
Option 1	Rich McCann	Male	37-55
Option 1	Ellis Murphy	Male	37-55
Option 1	Harry Booth	Male	37-55
Option 1	Chris Saints	Male	37-55
Option 1	Jim Chandler	Male	37-55
Option 1	Will Weeks	Male	37-55
Option 1	Charles Burnett	Male	37-55
Option 1	Gracie Garay	Female	18-36
Option 1	Sarah Foster	Female	18-36
Option 1	Jaz Green	Female	18-36
Option 1	Tori MacKenzie	Female	18-36
Option 1	Jenny Singer	Female	18-36
Option 1	Talia Lake	Female	18-36
Option 1	Maya Johnson	Female	18-36
Option 1	Alia Lee	Female	18-36
Option 1	Hazel Prather	Female	18-36
Option 1	Mike Winters	Male	18-36
Option 1	Troy Firkin	Male	18-36
Option 1	Easton Wallace	Male	18-36
Option 1	Taylor Speaks	Male	18-36
Option 1	Matt Oden	Male	18-36
Option 1	Jason Hurwitz	Male	18-36
Option 1	Mason Kolntz	Male	18-36

CONSENT I have read the above information, reviewed the qu	Electronic Signature	Gender	Age Group
Option 1	Alex Smith	Male	18-35
Option 1	Steven Gehring	Male	18-35