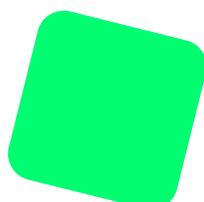
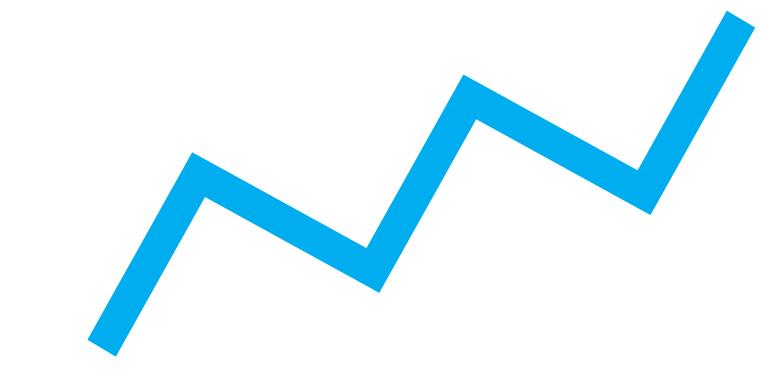
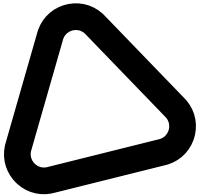


Portfolio Review

Lukas Sexton

blink





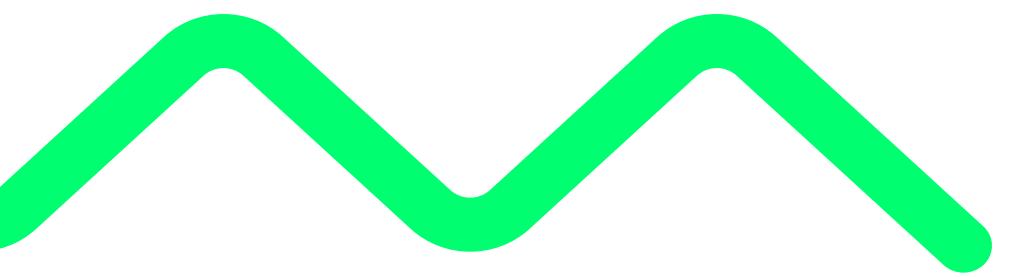
Lukas Sexton
User Researcher



M.S.



B.A.



Background



PNW LOCAL



TRAVEL

Studying abroad to
Nepal in the Fall



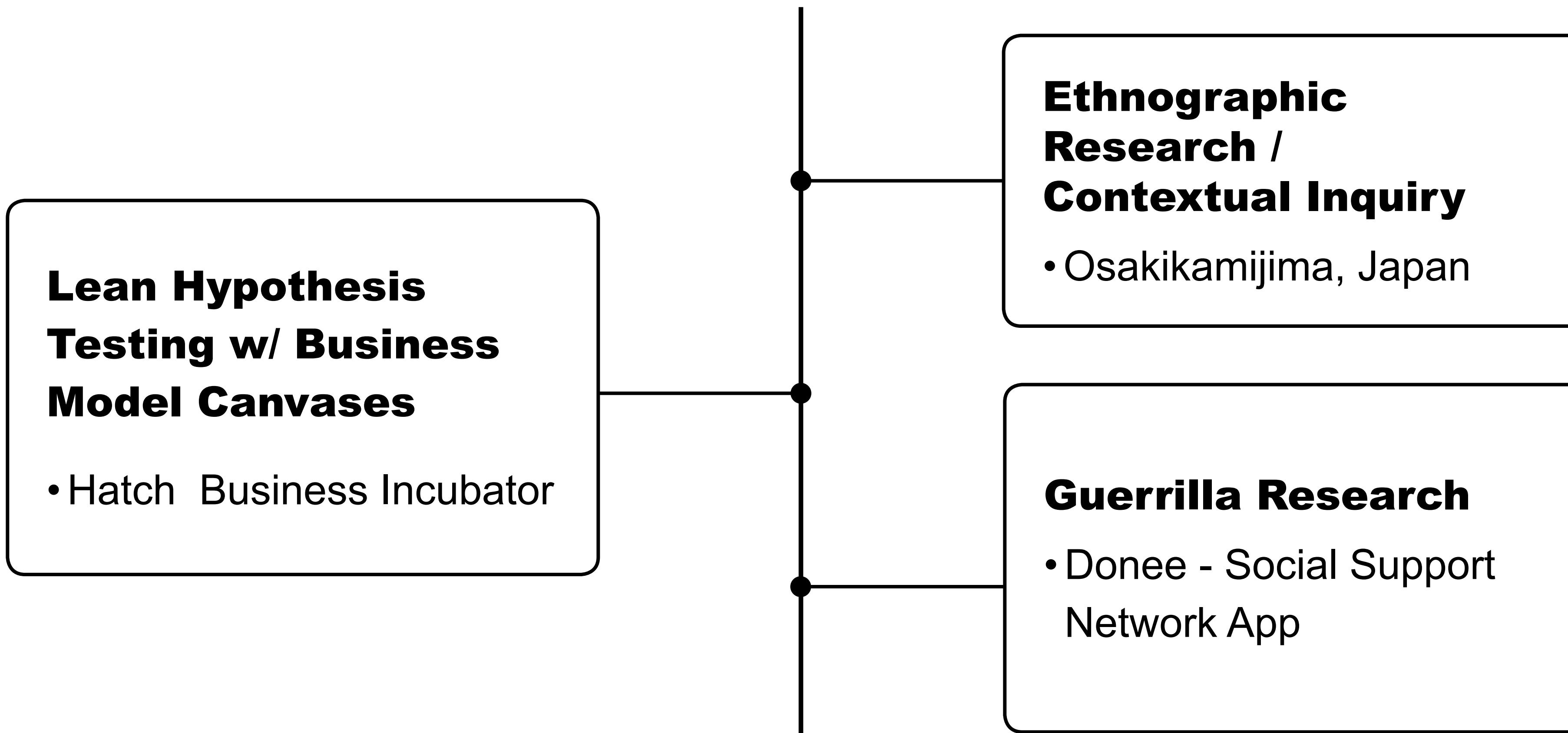
ADAPTABLE

Education



Applied HCDE Methods

2015 - Present



Experimental Research

- “The Influence of Advertisements and Memes On The Perception Of Marijuana’s Carbon Footprint”

Front End Design

- Lukassextion.com
- Internship - Makerspace

Persona Development

- E.D.D.
- Donee - Social Support Network App

User Centered Research and Design

- Hospital Discharge Interface* (W/ Geoff Harrison)
- E.D.D.

NOW

USABILITY TESTING

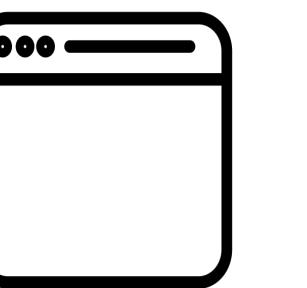
The SIPA (Sleep Innovations for Preschoolers with Arthritis) Sleep Study System

- A web-based intervention designed to help parents better manage their children's sleep when their child has arthritis.
- The website is currently under development.



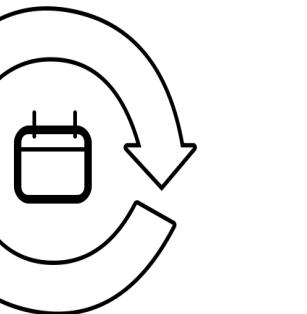
Parents

of children with
Sleep Issues and
Arthritis



Web-based

Medical Education
Platform



Offering

- Weekly Learning Modules
- Goal Setting





The Target Audience:

Parents of Preschoolers with Sleep Issues and Arthritis

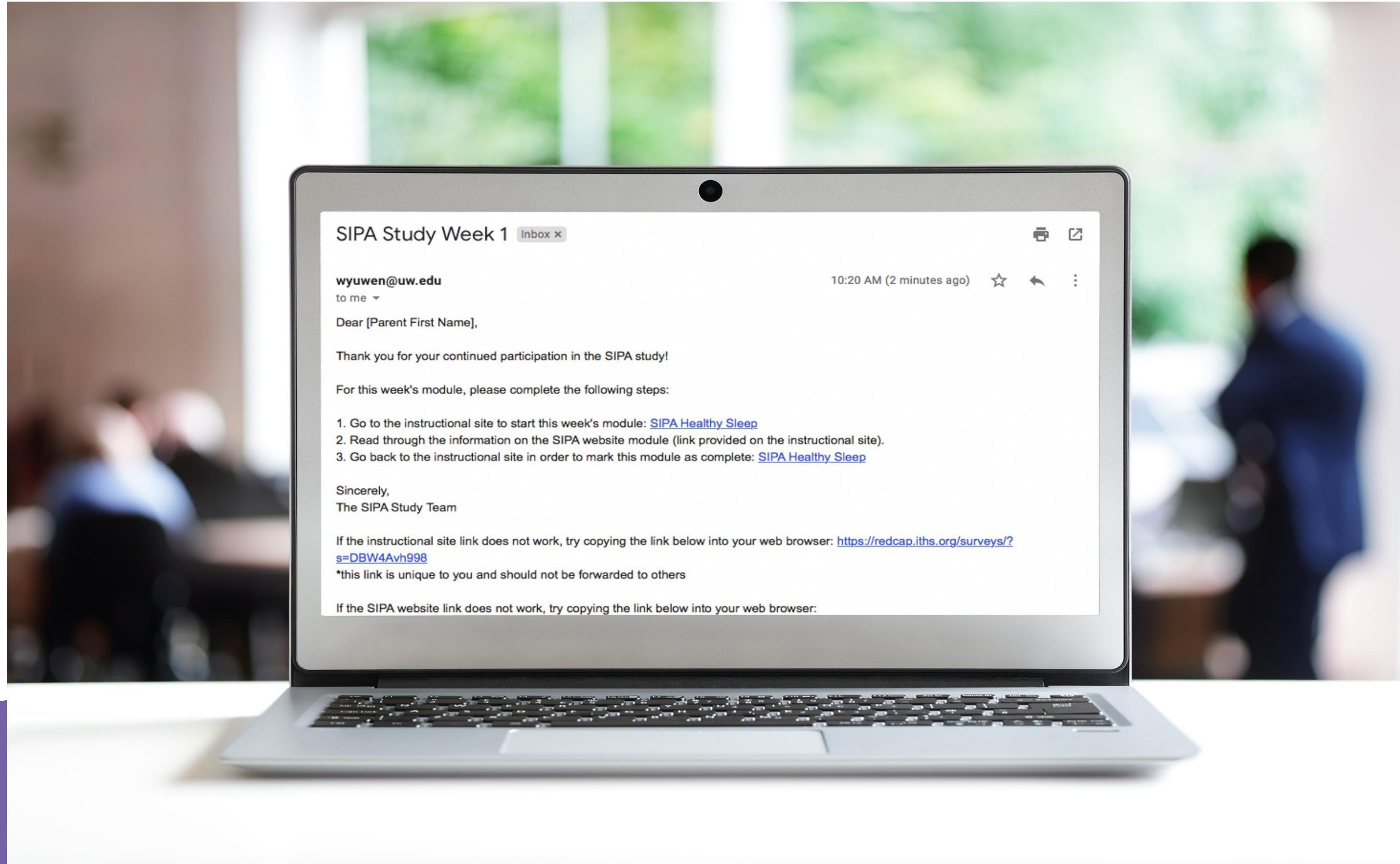
Parents whose children:

- Are between the ages of 3-6
- Have arthritis
- Suffer from poor sleep quality

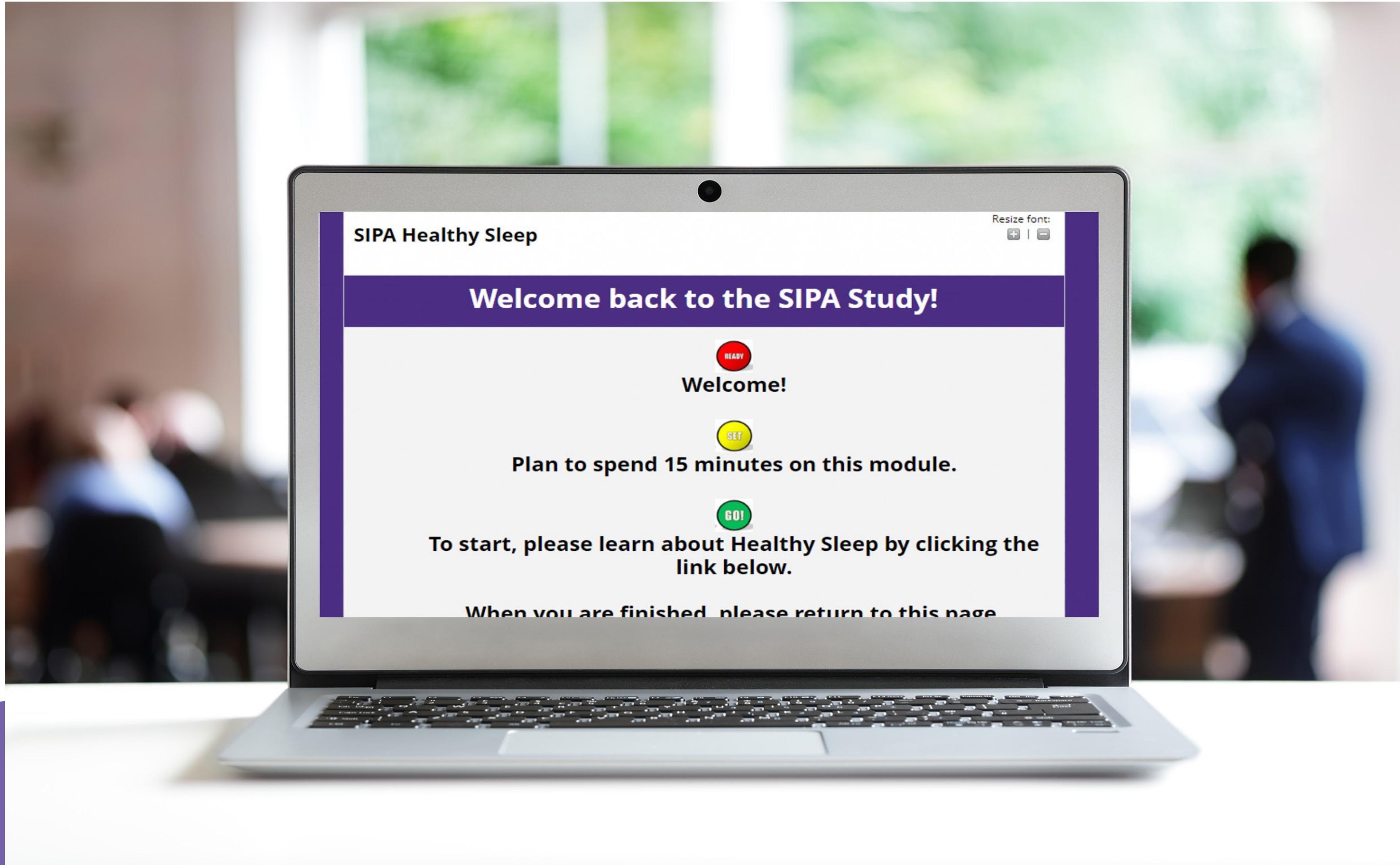
The parents must:

- Be fluent in English
- Be over the age of 18
- Have access to the internet

Step 1: Weekly Email



Step 2: Instructional Site



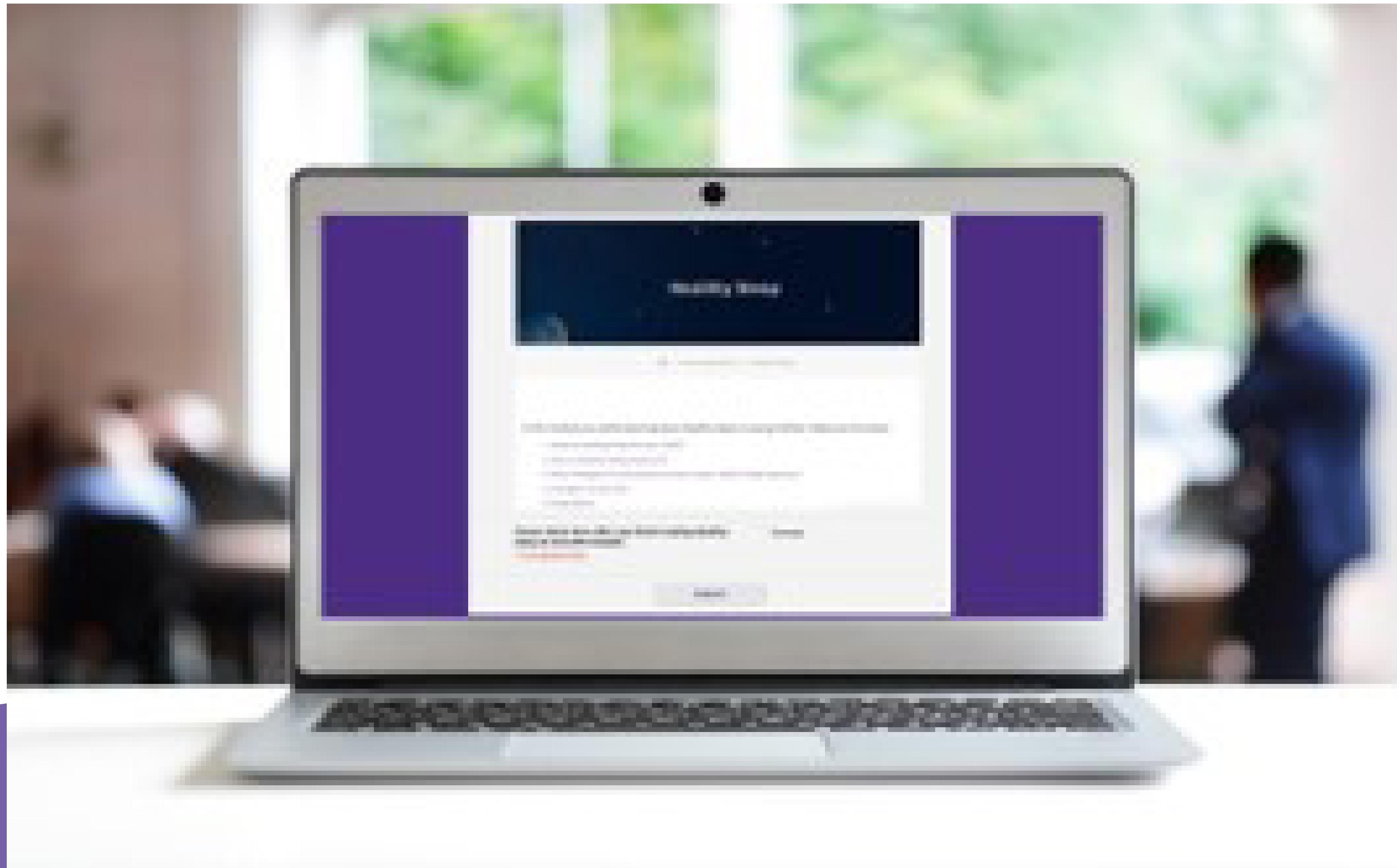
Content Management
System: Redcap

Step 3: SIPA Learning Module



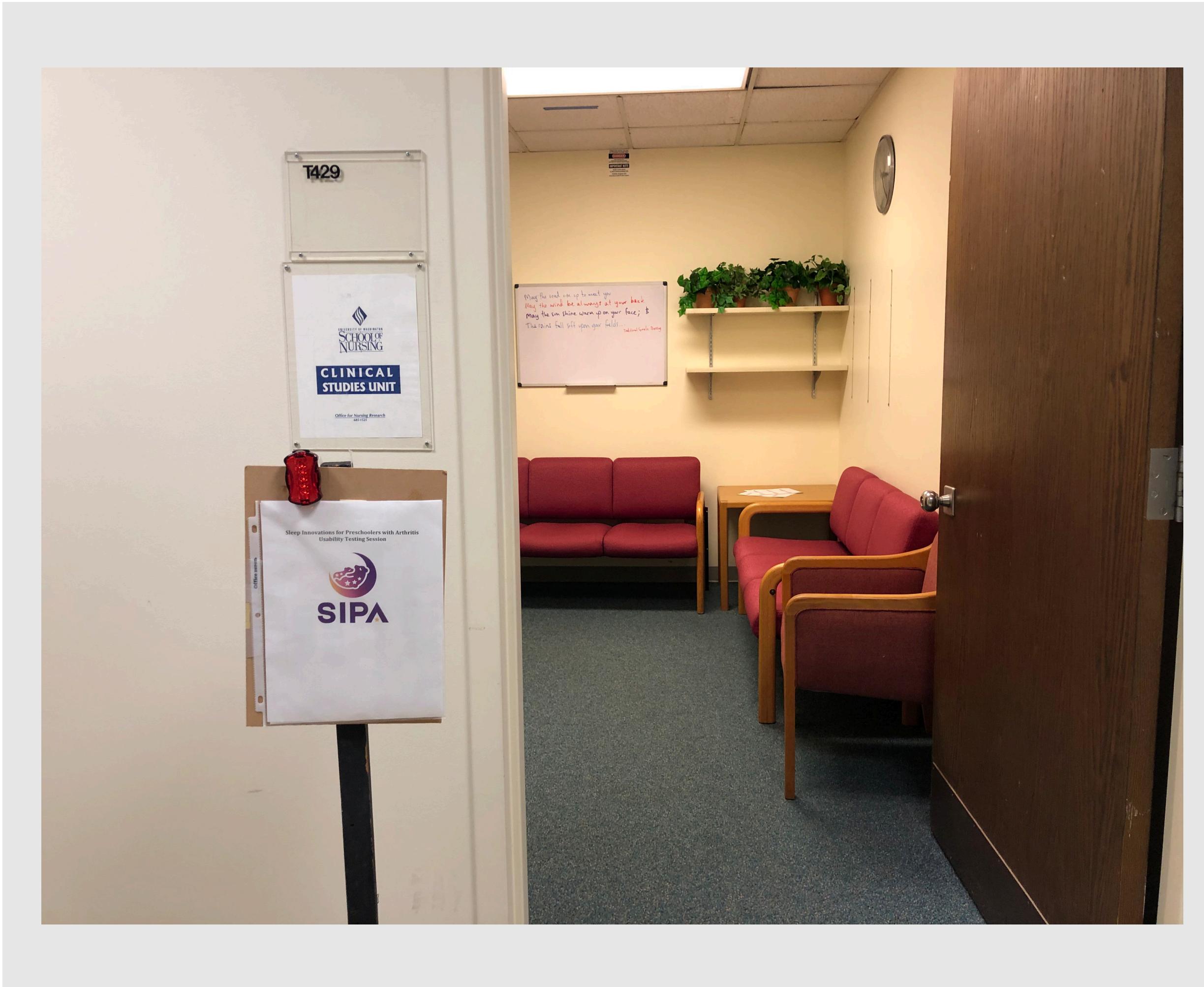
Content Management
System: Wordpress

Step 4: Instructional Site



Content Management
System: Redcap

Goals and Objectives



1. To assess the overall usability of each of the three platforms
2. To assess the overall usability of navigating between the three platforms
3. To assess task comprehension of the first learning module
4. To determine the level of ease in completing the core tasks required by each platform
5. To identify obstacles to completing key tasks

Usability

Comprehension

Completion

Obstacles

The Research Questions

Obstacles

What obstacles do participants encounter when:

- Navigating from the email they receive to the Redcap site
- Navigating from the Redcap site to the learning module on the SIPA website
- Navigating from the SIPA website back to the Redcap site
- Submitting their “completion” on the Redcap site?

Navigation

- How easily and successfully do participants navigate through their first learning module in the SIPA study?

Experience

- How do participants feel about the overall experience of going through the learning module?
- What do participants like about the experience?
- What did participants find frustrating or unpleasant about the experience?
- What would participants have appreciated having as part of their experience?

Understanding

- How clearly do participants understand the steps they need to take to complete their first learning module in the SIPA study?



The Usability Test

Purpose of Study

Understand the usability of navigating through the SIPA system

Participants

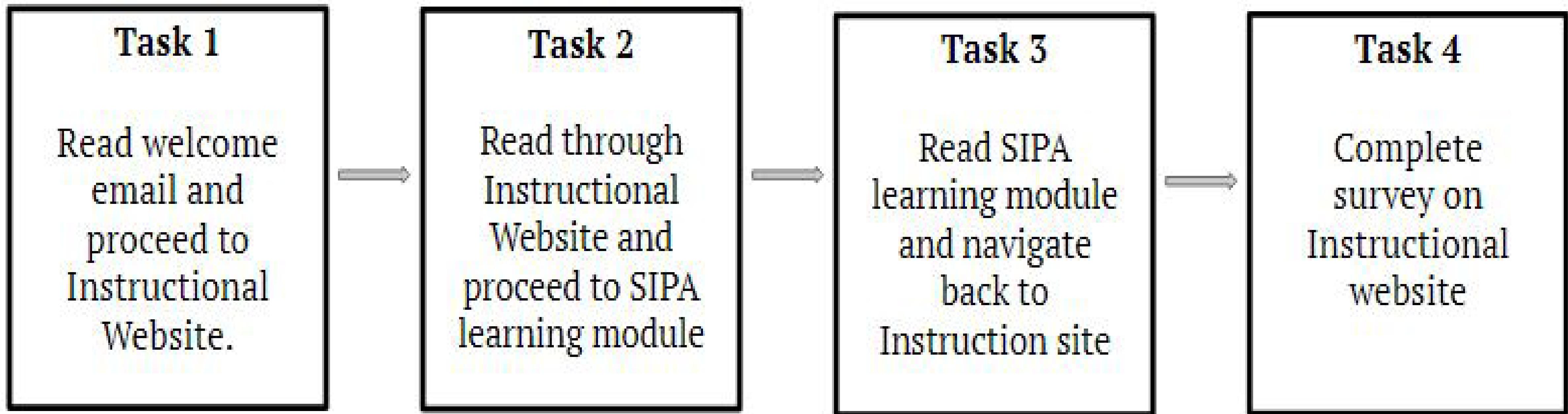
Criteria:

1. Parents of preschoolers
2. 25-50 years old
3. Comfortable using email and the web
4. English-speakers*

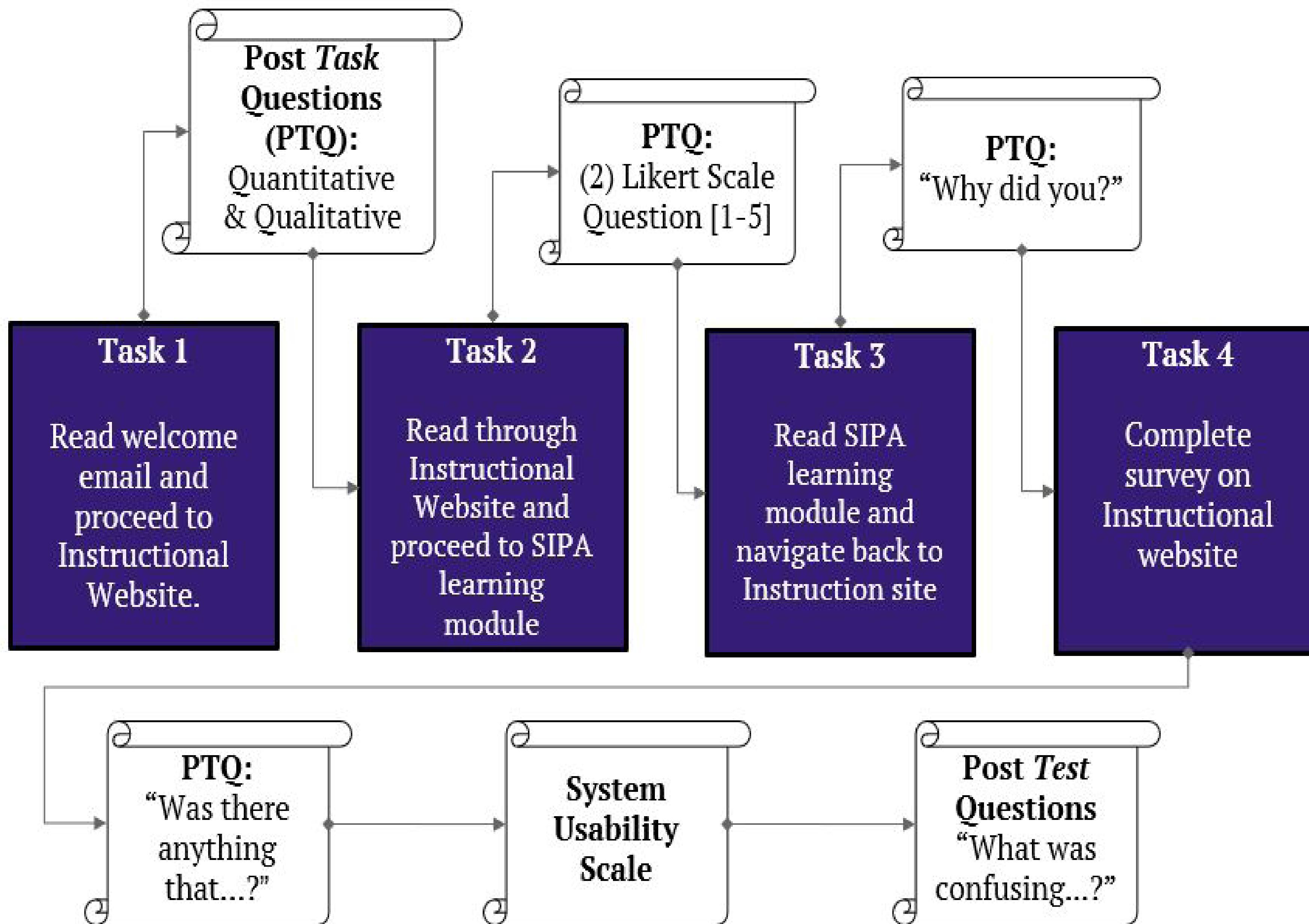


*P3 was not a fluent English speaker and thus was removed from the data analysis of the study.

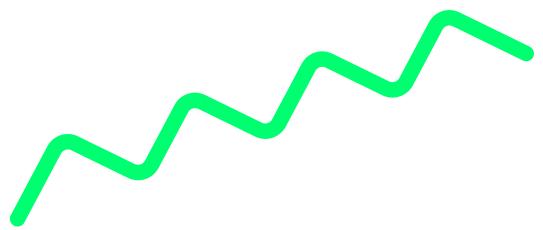
Tasks



Protocol

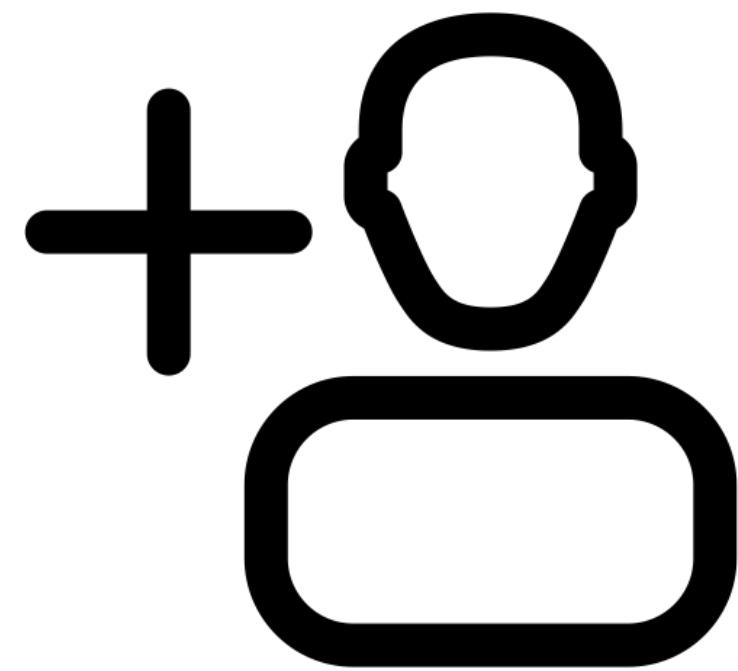


Findings & Recommendations



Visual Design of the SIPA Website

- Universal acclaim (4/4) for the modern aesthetic design as well as being fun to look at.



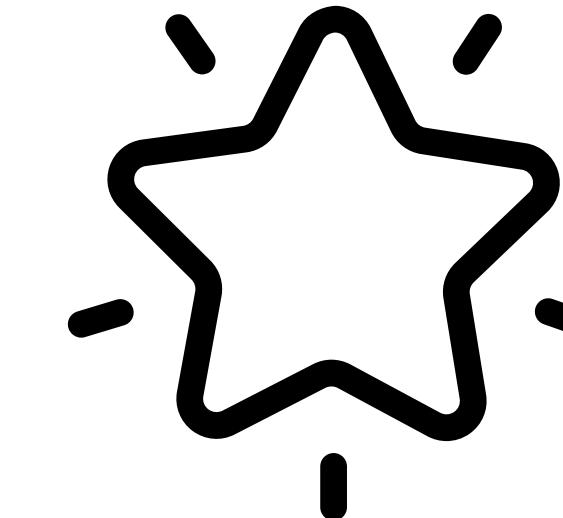
5

PARTICIPANTS



4

SAMPLE SIZE



81

**AVERAGE SUS
SCORE**



75%

**TASK SUCCESS
RATE**

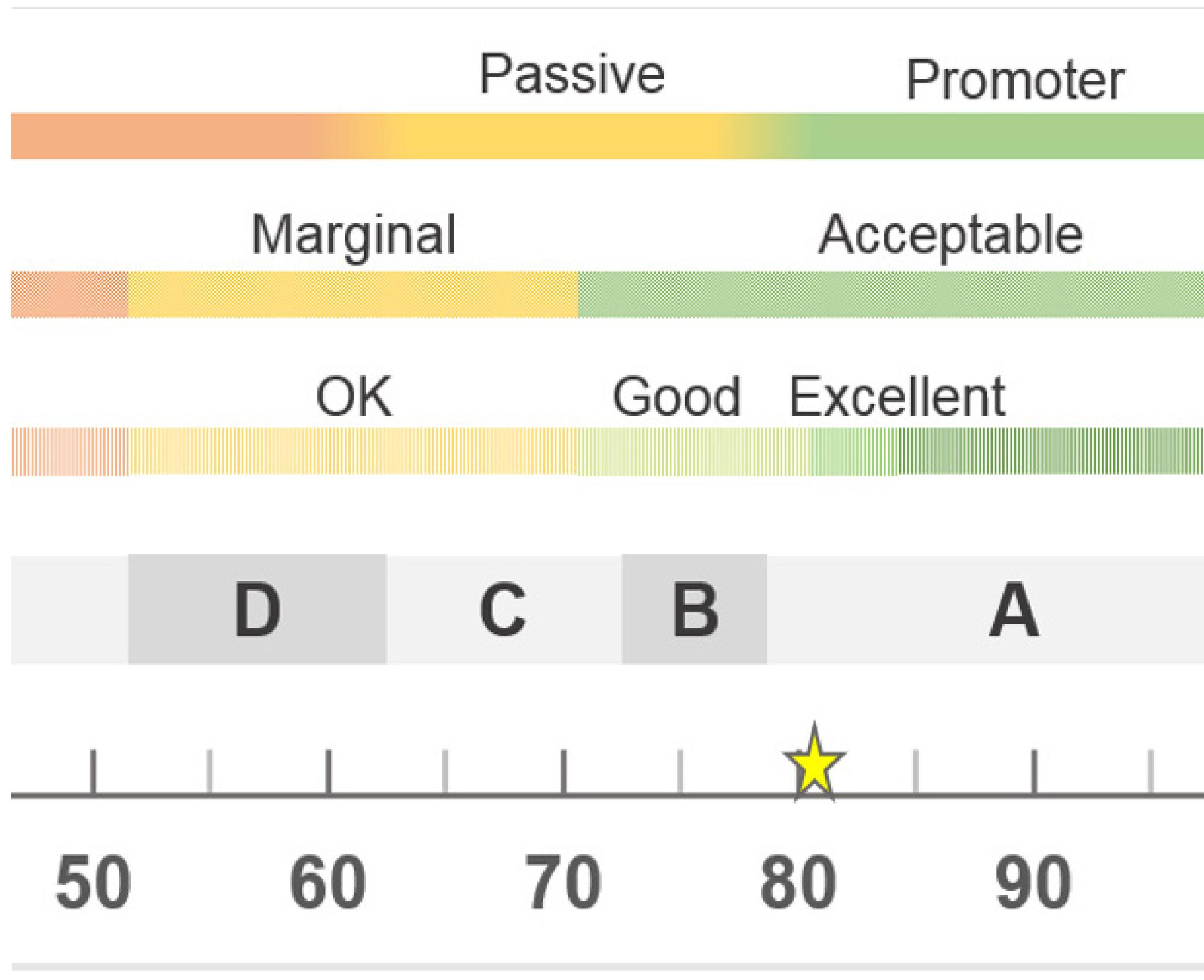
Quantitative Data

Task	Success Rate	Q1 Average	Q2 Average
#1	4 / 4	5	4.75
#2	3 / 4	4.25	5
#3	3 / 4	4.25	4.25
#4	3 / 4	4.5	4.5

Post Task Summary

- Q1: How easy or difficult was it to identify the next step to take?
(1 = Very difficult, 5 = Very Easy)
- Q2: How easy or difficult was it to complete the next step?

Quantitative Data



System Usability Scale (SUS) Summary

- Average Score = 81 (n=4)
- Target > 68

¹ Severity Scale (Dumas and Redish)

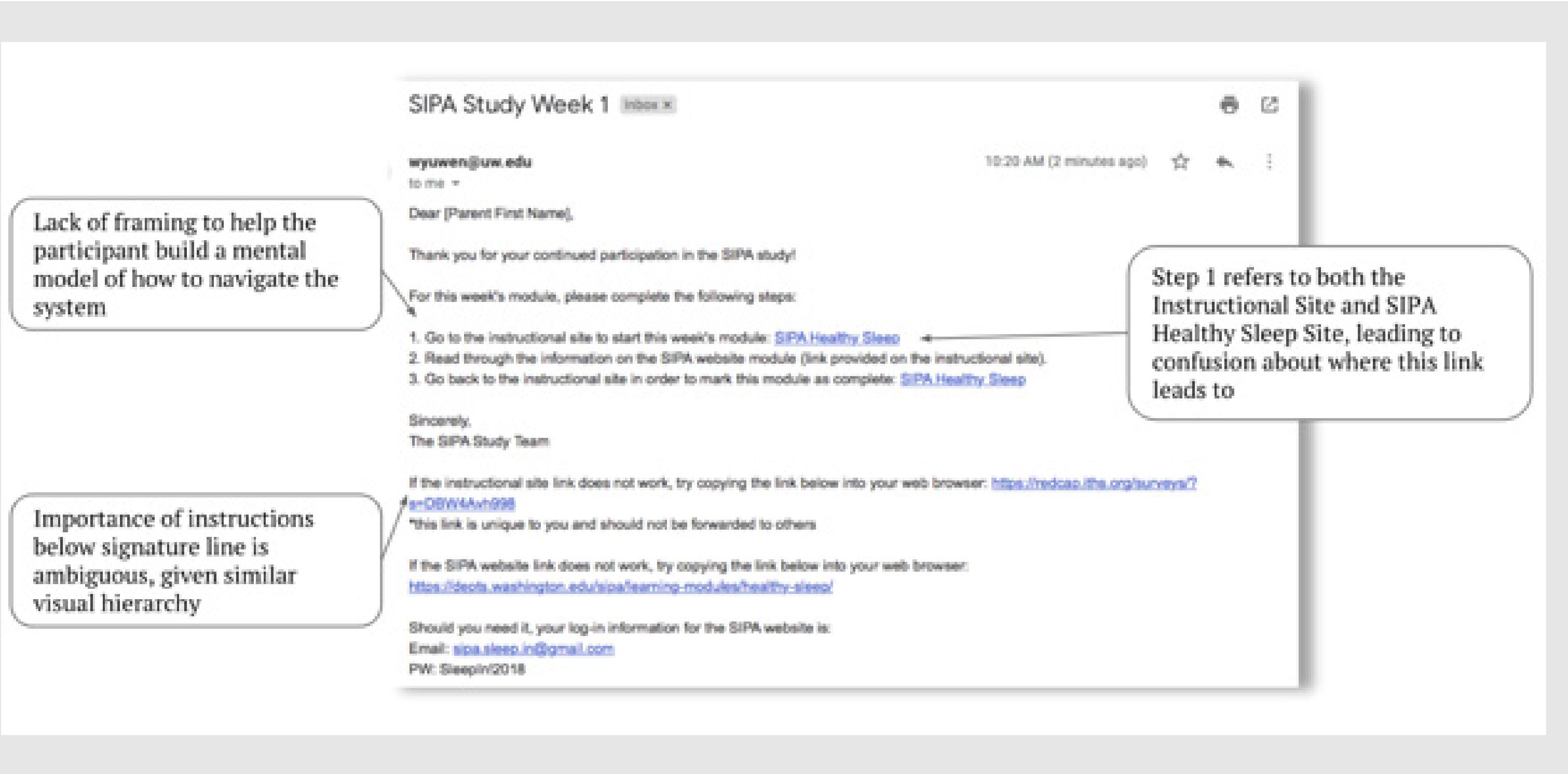
1. (High) Level 1: Prevents task completion
2. Level 2: Creates significant delay and frustration
3. Level 3: Problems have a minor effect on usability
4. (Low) Level 4: Subtle and possible enhancements/suggestions

Overview of Usability Issues

Issue	Detail	Frequency	Severity ¹	Recommendation
1. Unclear instructions lead to confusion while navigating system.	The email and subsequent pages do not provide context to help the participant understand steps.	4/4	1	<ul style="list-style-type: none"> 1. Provide more context 2. Use differentiated titles across websites & email 3. Make important information easy to see
2. Instructions to return to instructional site not easily discoverable	Instruction is hidden at bottom of page and participants must rely on active memory to remember what the 'Instructional Site' is.	3/4	1	<ul style="list-style-type: none"> 1. Increase visual cues 2. Reduce reliance on active memory by using familiar terms
3. Visual hierarchy on Instructional Site impedes understanding	The participant must scroll to find the link, and it's not immediately obvious what to do on the site.	3/4	2	<ul style="list-style-type: none"> 1. Increase visibility of link in relation to instructions 2. Make full set of instructions viewable on one page without scrolling
4 Visual conventions violated on Instructional Site	Visual/UX conventions are violated, such as images that look like buttons and hyperlinks but don't function as such.	4/4	2	<ul style="list-style-type: none"> 1. Remove buttons and screenshot 2. Leverage visual conventions and web design best practices to enhance understanding
5 Navigation flow is confusing Participants felt that navigation should be linear.	Participants felt that navigation should be linear.	4/4	3	<ul style="list-style-type: none"> 1. Use email as source of truth 2. Provide participants with a clear mental model of navigation flow 3. Adopt a linear navigation flow

¹ Severity Scale (Dumas and Redish)

1. Unclear Instructions in the Email (Severity Level 1)



Recommendations

- Instructions should be consistent throughout the system, using consistent wording for page names and links.
- Providing context through an overview of the system within the email or on the first website that participants interact with may help users build a mental model that will help them understand instructions in context.
- Important information should be visually distinctive and easy to read.

No information about how to navigate this page, leaving participants to wonder if the bottom of the page matters

Welcome back to the SIPA Study!

Welcome!

Plan to spend 15 minutes on this module.

To start, please learn about Healthy Sleep by clicking the link below.

When you are finished, please return to this page.
Note - separate window will open.

<https://seps.washington.edu/marines/pch/healthy-sleep/>

SIPA

Healthy Sleep

In this module, you will be learning about healthy sleep in young children. Below are the topics:

1. What is Healthy Sleep for your Child?
2. Why is Healthy Sleep Important?
3. What Changes Can you Expect to See as your Child's Sleep Improves?
4. Changes can be Hard
5. Sleep Myths

Please check here after you finish reading Healthy Sleep on the SIPA website.

I have completed the module.

Submit

Participants were confused when they returned to this page and saw the same content as before

One participant thought this was an instruction

Instructions do not tell participant to click 'Submit'

Lack of context about what the instruction is referring to. Website names are also very similar.

1. Unclear Instructions in the Email (Severity Level 1)

Recommendations

- Instructions should be consistent throughout the system, using consistent wording for page names and links.
- Providing context through an overview of the system within the email or on the first website that participants interact with may help users build a mental model that will help them understand instructions in context.
- Important information should be visually distinctive and easy to read.

Sleep Myth 2: Children Grow Out of Their Sleep Problems

Down the road

Just as children don't grow out of using diapers without being potty trained, children don't grow out of their sleep problems without their parents teaching them how to fall asleep and stay asleep all night long. When childhood sleeping problems go unsolved, they can turn into long-term sleeping problems in later childhood, adolescence, and adulthood. Fortunately, fixing sleep problems at this age is much easier than trying to fix them later on in life.

Your role in your child's sleep

Children need their parent's help to learn healthy sleep habits. Teaching your child how to sleep better doesn't necessarily mean making huge changes. Small changes can go a long way in improving your child's sleep. By taking an active role in your child's sleep, you can prevent these sleeping problems from turning into life-long problems.

After reviewing this module, please return to the instructional site to complete this week's activities.



No visual distinction between
text of the learning module and
the text of the instructions to
return to instructional site

2. Instructions to Return to Instructional Site Not Easily Discoverable (Severity Level 1)

Recommendations

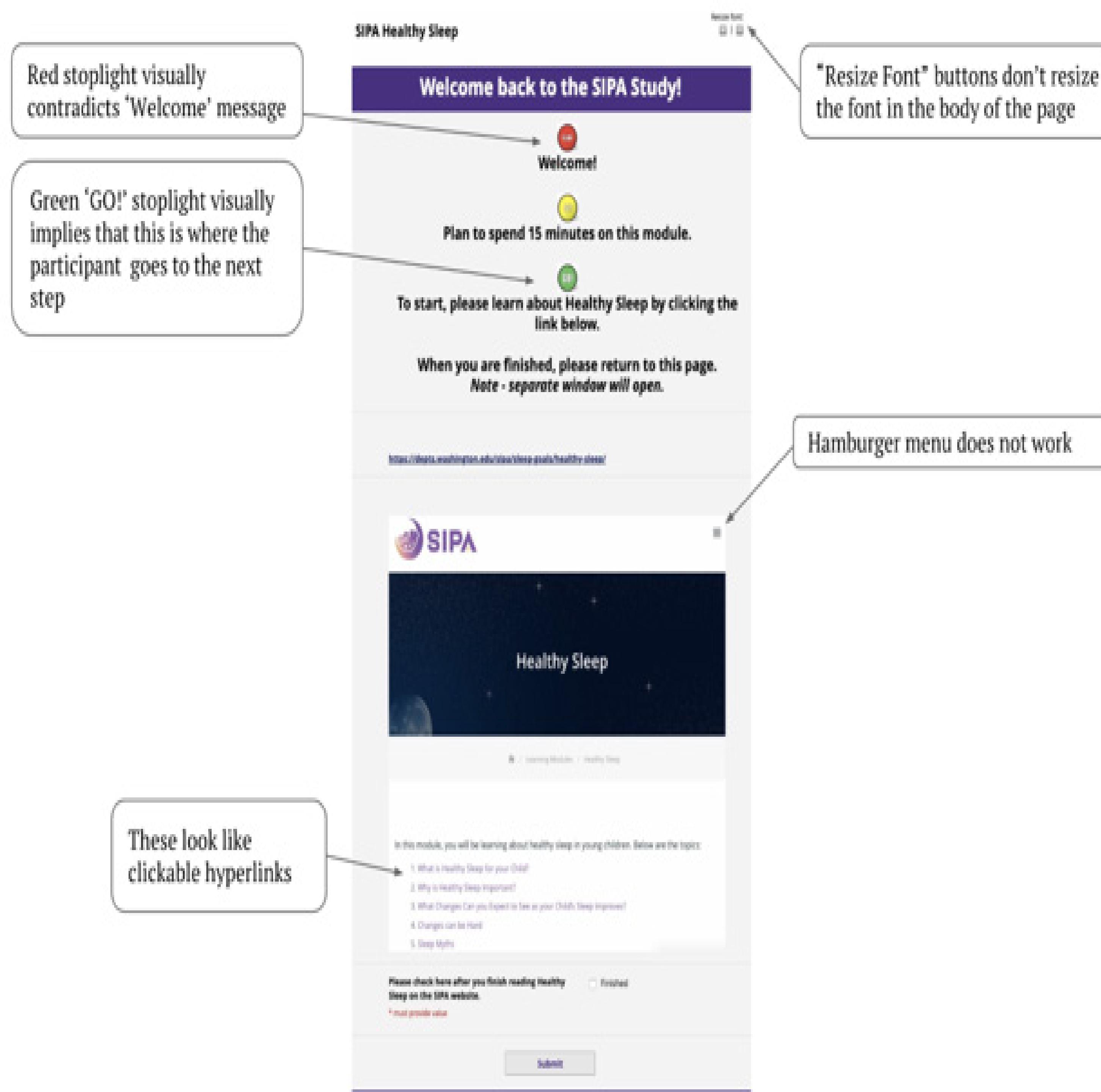
- Consider Increasing the visual cues to improve discoverability of the text on the SIPA website that instructs the user to return to the instructional site.
- Clarify wording, relate visual cues and create consistency across the websites, to reduce reliance on memory.



3. Visual Hierarchy on Instructional Site Impedes Understanding (Severity Level 3)

Recommendations

- Increase the visibility of the link in relation to the instructions of the site.
- Have the link to the SIPA website immediately follow the instructions relating to going to the SIPA website.
- Make the full set of instructions included on the site viewable on the page, without any scrolling needed.
- Remove any non-essential information or visuals from the site.

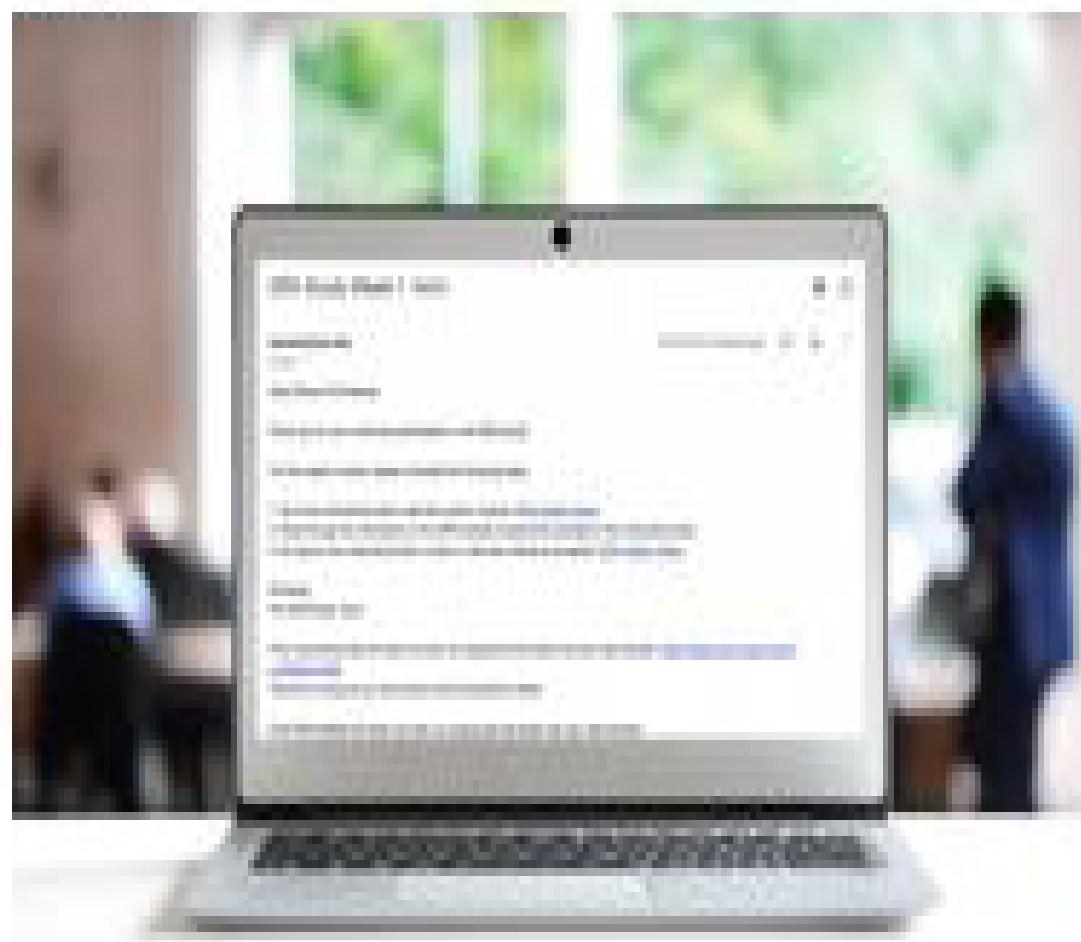


4. Visual Conventions Violated on Instructional Site (Severity Level 2)

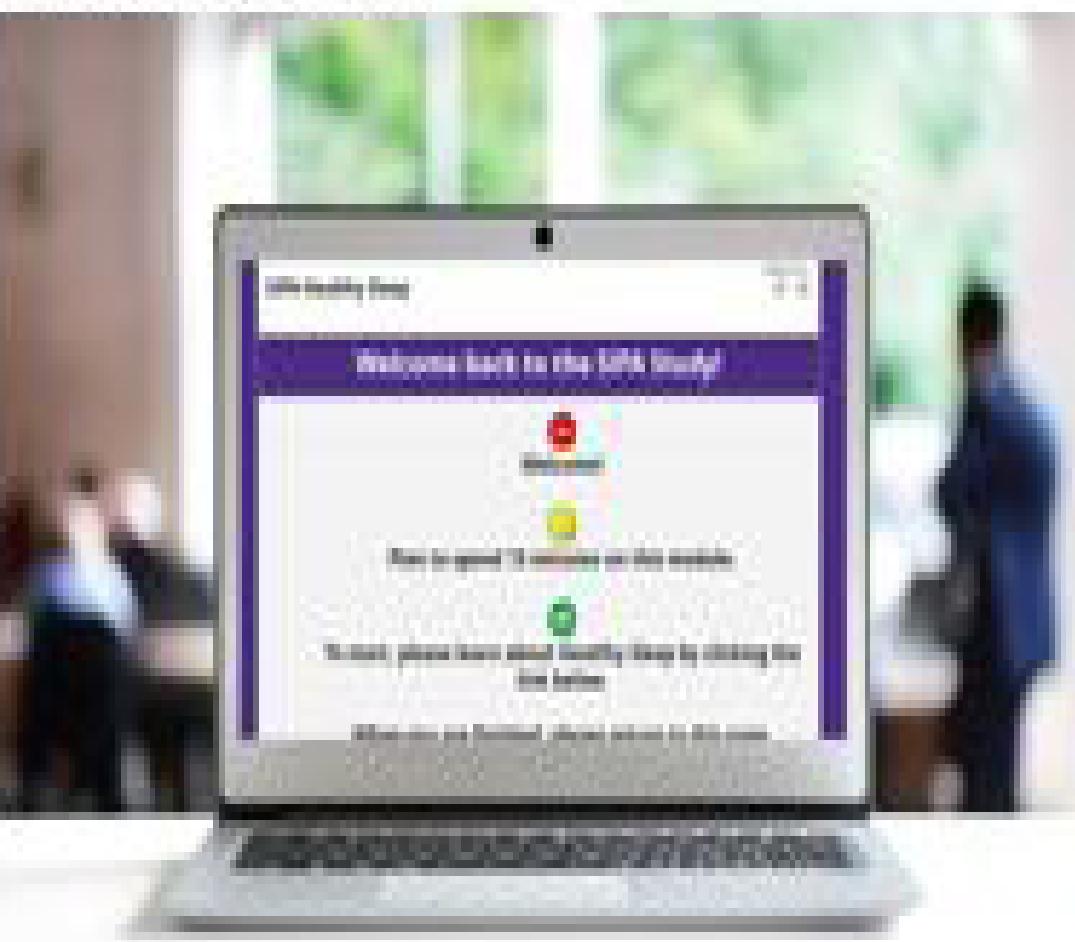
Recommendations

- Remove the images that look like clickable buttons or switch them for elements that don't have intrinsic expected behaviors.
- Since the SIPA Site screenshot was confusing to the user, reduce its size to a clickable thumbnail that links to the actual website or remove it entirely.
- The font resizer working for either the full site or be removed.
- Implement web design best practices, such as a “Progress Tracker Design.”

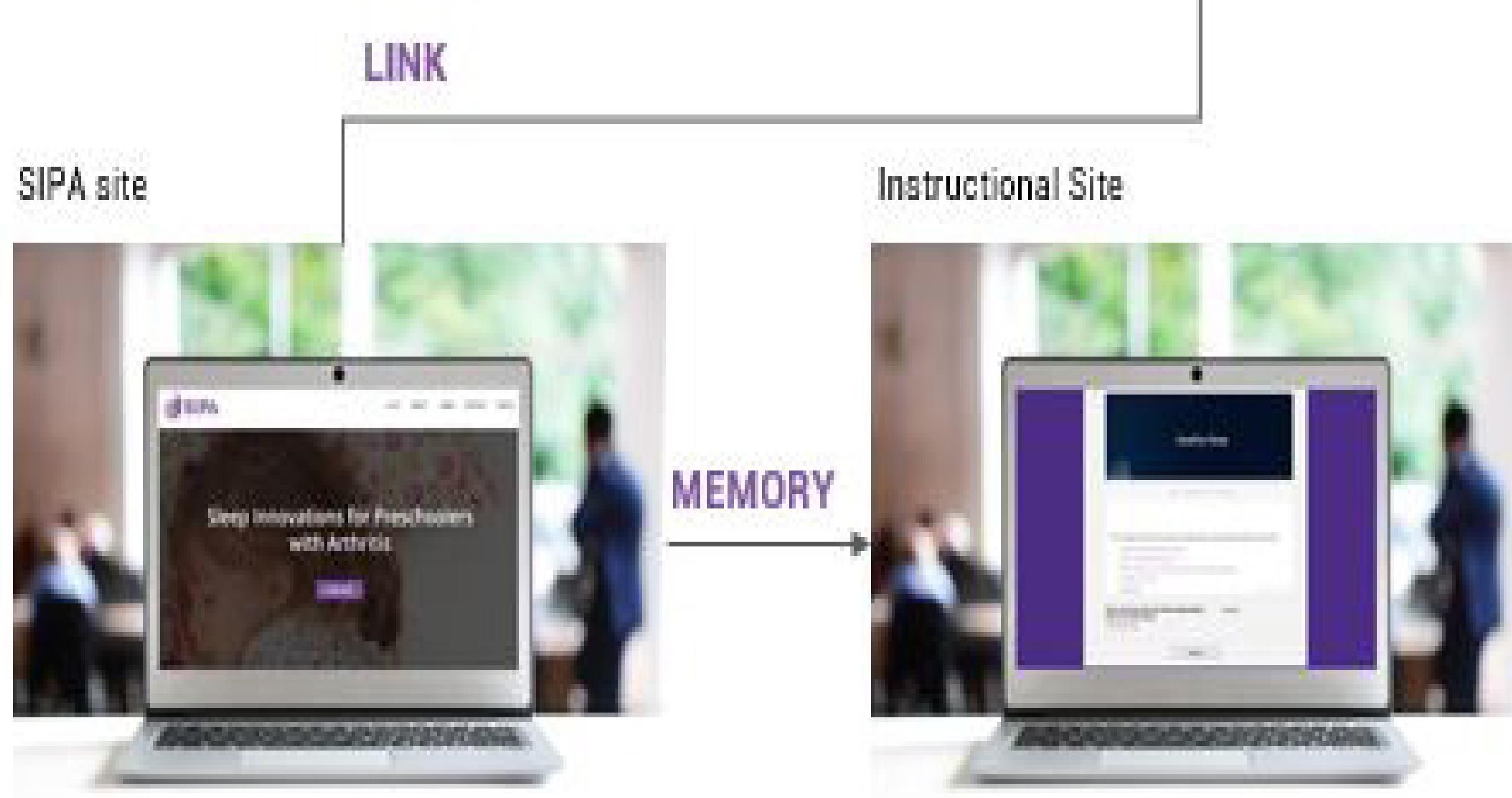
Email



Instructional Site



LINK



5. Navigation Flow is Confusing (Severity Level 3)

Recommendations

- Leverage the initial email as primary navigation key and source of instructions,
- Provide participants with a clear mental model of the navigation flow, outlining it with familiar terms (e.g. Step 1: link, Step 2: link, etc).
- Use key terms and page titles consistently throughout the system.
- Adopt a linear navigation flow across platforms to avoid errors.

Next Steps



Round 2 Usability Testing

1. May or June of 2019
2. Introduce Second Learning Module and The Post-Study System Usability Questionnaire (PSSUQ)
 - To assess the overall quality of information on each of the three platforms
3. Goal is to Co-author a Research Paper and hopefully publish by the end of August

Thank You!



 **Lukas2@uw.edu**

SOURCES



Papers

Dumas, J. & Redish, G. (1999).
Tabulating and Analyzing Data.
A Practical Guide to Usability

Sauro, J. (2011). Measuring
Usability with the System
Usability Scale (SUS).
MeasuringU.



PHOTOS

Photo by Annie Spratt on
Unsplash

ICONS

Parents by Kokota from the
Noun Project

Recurring Event by Kero from
the Noun Project

web by L.k. Tam from the Noun
Project

Sign Up by Chunk Icons from the
Noun Project

sampling by Nithinan Tatah from
the Noun Project