



Moderated Usability Testing

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Executive Summary

The goal of this moderated usability research was to assess the accessibility of Park Dental's website. A team of technical communication students and computer science majors conducted 8 moderated usability sessions of the Park Dental website in the fall of 2020. The group created a protocol that focused on interviewing participants and encouraging the use of *think aloud protocol* for data collection.

The students collected feedback from participants as they completed a set of tasks using the website. Among the data collected were issues encountered while completing tasks, recommendations for improvement, ease of completion for each task, and additional information that the participant gave.

Each participant was given 4 curated scenarios and tasks to complete in their session. Our top findings are listed below:

- Locating the Event calendar:
 - More than half of participants displayed difficulty finding the event calendar.
 - The search feature embedded within the event calendar did not provide complete search results.
- Searching for locations:
 - Participants were not able to find locations in Wisconsin within the drop down menu.
 - Locating the nearest office was not possible in the Request an Appointment menu.

Introduction

We are students from UNT's Technical Communication Department, taking a Usability and User Experience class. We've been given an assignment to demonstrate our understanding of Moderated Usability testing by evaluating a Dentist's office's website.

As a team, we conducted moderated usability testing with users who have not used your website in the past. In this report you will find our methods, findings, and recommendations.

Methods

This section will explain our procedure for conducting moderated usability testing.

Our first step to conducting test was creating specific scenarios (tasks) for users to complete. Each task has an overall goal, scenario, and Specific Task. Once we were able to create our scenarios, we developed a script to be used in the room with our tester.

Each user that participated in our testing was greeted, introduced to the tasks and reason for testing, and voiced movements and concerns as they completed tasks.

Interview Questions

Before beginning the testing, each user was asked several preliminary questions to gather demographic data and initial thoughts on the website. We also used questions during and after the test. These questions are a part of our *protocol* for this test.

The protocol can be thought of as a script for the testing session. It contains questions for before, after and during the test. Specific testing scenarios are also considered to be a part of the protocol.

Preliminary Questions

- How often do you see the dentist?
- Why do you visit your dentist's website?
- How often do you access the website for a doctor?
- What device do you use to access their website?

Post Questions

- Which task did you have the most trouble with?
- What is one thing about the website you wish you could improve?
- How does this website compare to other Medical websites that you have visited?
- What was your favorite part of this website?

Each test was conducted with two members of our group so we could capture notes and compare after the testing was completed. Each testing session was timed and recorded to help us catch all findings and difficulties that the user experienced.

Scenarios

We found participants at the University of North Texas within the Technical Communication department to conduct the testing with us. During testing, we asked that each participant voice what they were thinking as they completed their task, otherwise known as *think aloud protocol*. Below you will find the scenarios that we used:

#1 Scenario: A small group of parents would like to get their kiddos more involved in their dental hygiene. The parents would like to find an organization that provides events to support the small dentistry practices in the area.

Task: Navigate to the Event calendar. Find the event “Harvest Festival”. What date will this event take place?

#2 Scenario: You have recently graduated and now looking for a job as a Dental Assistant. You would like to find opportunities for employment within Wisconsin.

Task: Find the current career opportunities. Determine if there are Dental Assistant opportunities at any of the Park Dental locations in Wisconsin.

#3 Scenario: You missed your last dentist appointment, and now you have to get in on short-notice to get an artificial crown.

Task: Find the nearest Park Dental location, and request an appointment to get Same-Day Crowns on a Monday afternoon (*but don’t actually make the appointment*).

#4 Scenario: You want to get Invisalign, but you don’t trust easily. You’re looking for a dentist of high pedigree to handle your treatment. You’d like to find a local dentist who provides Invisalign treatments, but you want to know where they went to college before you let them anywhere near your mouth.

Task: Find a Dentist near Hudson, Wisconsin (zip code 54016) who provides Invisalign services. Then, find more information about them. Where did they go to college?

Once testing was completed, we compiled our data and ranked findings using the 0-1-2 rating scale. The findings and recommendations are found in the next section.

Findings and Recommendations

The following section contains an explanation of our ratings scale, findings and recommendations.

Task Success Ratings

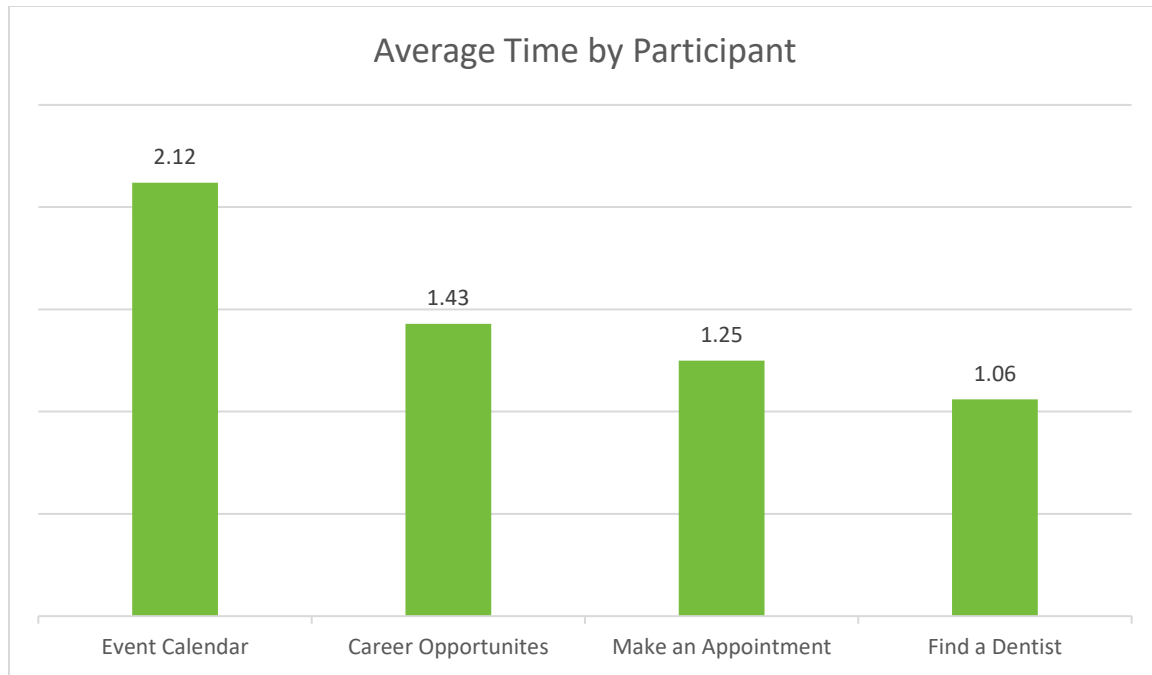
We rated each participant’s completion of each task on a scale of 0-2.

Tasks rated lower than 2 signaled areas that could be improved.

Rating	Meaning
0	The task could not be completed
1	The task was completed with difficulty or assistance
2	The task was completed easily

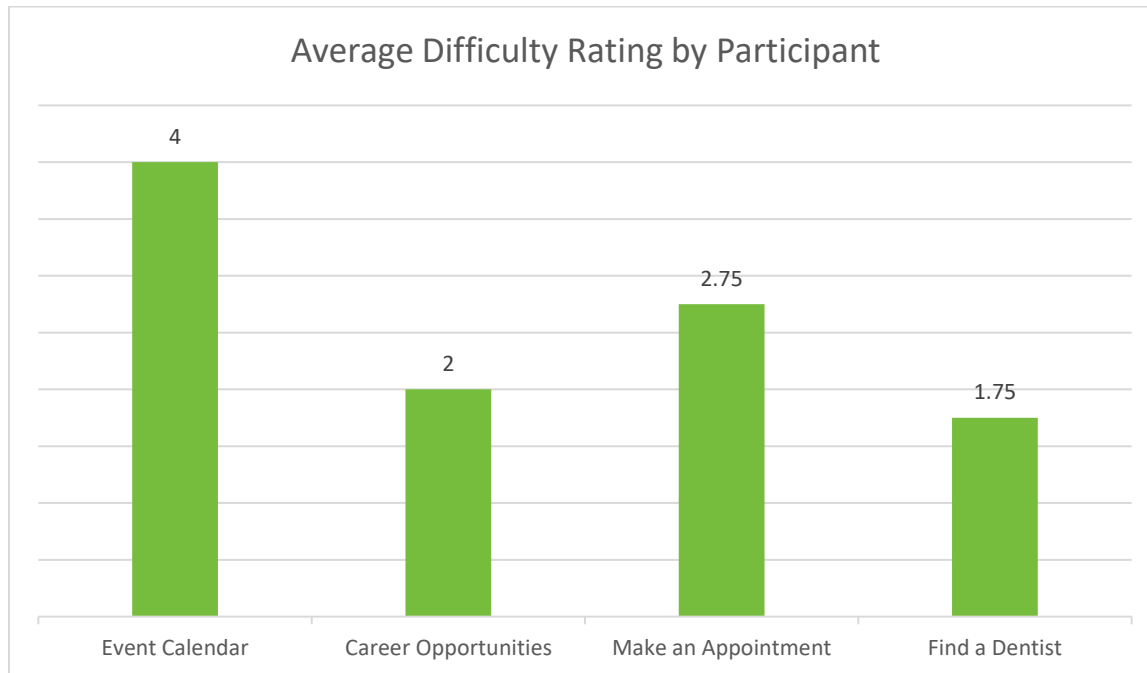
Task Time by Participant

The following table displays the amount of time, in seconds, that each participant took to complete each task. As reflected in our findings below, the first task took the longest for majority of the participants to complete. The Event Calendar task proves to be one of the most difficult tasks for the participants to complete.



Difficulty Rating by Participant

The table below shows the exact Likert Scale ratings by participant. The graph below supports the above finding that the Event Calendar task was the most difficult to complete when compared to the averages of the other tasks



Severity Scale Ratings

This scale rates the severity of the issues that our participants encountered while completing tasks using the Park Dental website. The ratings are based on the frequency with which we encountered each issue and whether or not it prevented participants from completing the task.

The following ratings were used to evaluate our findings:



Major Issue

The site element caused participants to give up/fail a task



Minor Issue

The site element negatively affected the site's usability

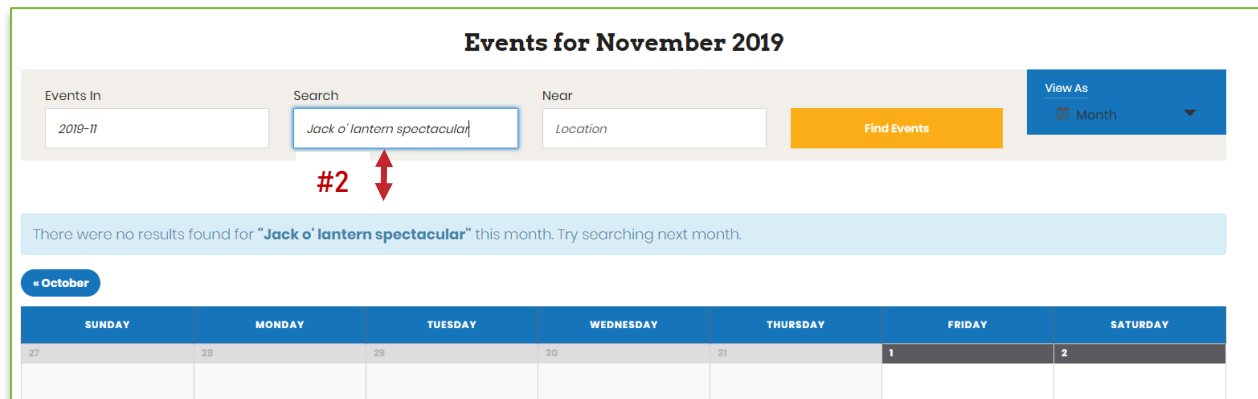
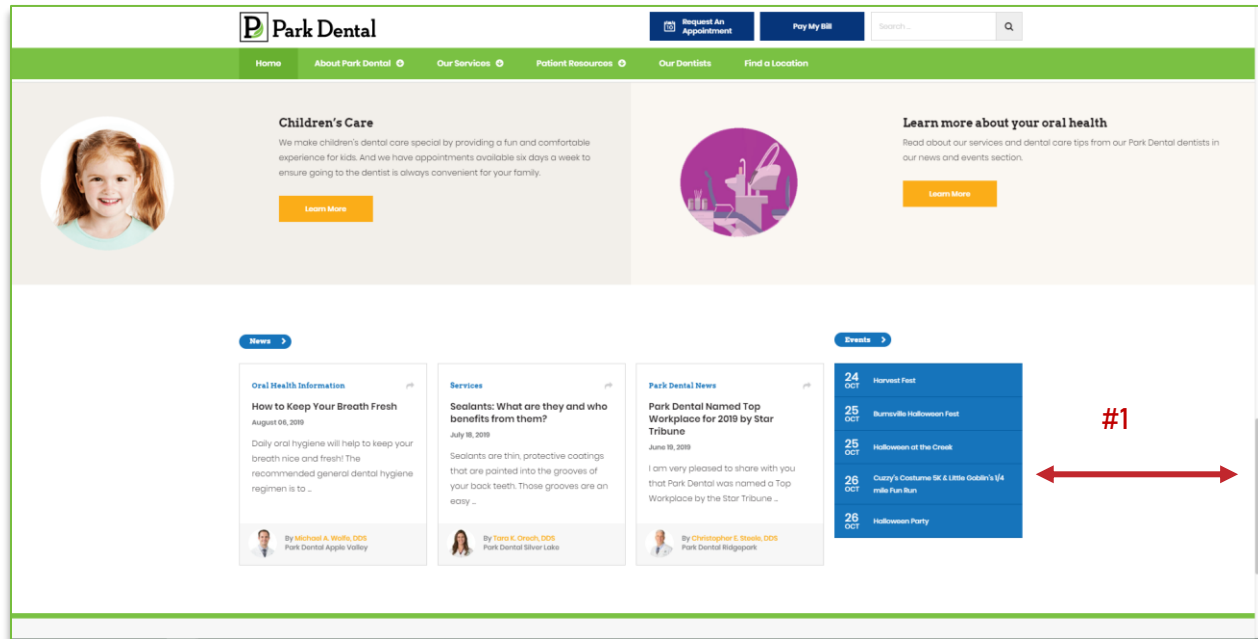


Positive Finding

The site element positively affected the site's usability

Findings

Task #1: Find the event calendar





Finding #1
Major Issue



Finding: Participants had issues finding the Event Calendar because it was not located in the Main Menu bar.

5 out of 8 users displayed difficulty when attempting to locate the calendar. One user attempted to use the search bar but was not able to come up with the correct event.

Recommendation: Move the Event Calendar to the Main Menu bar so users are able to access event details easily.

<p>Finding #2 Minor Issue</p> 	<p>Finding: Participants had issues using the calendar's search feature because it only searched for events in the currently selected month. The task asked them to find an event that happened before the current month and several participants were confused when the search did not yield any results.</p> <p>Recommendation: Modify the event calendar's search feature to allow users to find events in any month. This will allow users to find locations, times and other information about events easily and promote their attendance.</p>
<p>Finding #3 Positive</p> 	<p>Finding: 2 out of 8 participants when unable to find the Event Calendar, searched for the event in the sites' main search bar. The results yielded the correct event and event details page. This feature was quicker than navigating to the calendar although it would not help users find events that they didn't already know about.</p>

Task #2: Find Career Opportunities

[Welcome page](#)

[Returning Candidate? Log back in!](#)

Job Listings

Here are our current job openings

Use this form to perform a search

Start your job search here

Category

Licensed Dental Assistant

US-MN-Maple Grove
US-MN-Maplewood
US-MN-Minnetonka
US-MN-Owatonna
US-MN-Plymouth
US-MN-Rosemount
US-MN-Roseville
US-MN-Saint Anthony
US-MN-Saint Louis Park
US-MN-Saint Paul
US-MN-Savage
US-MN-Shakopee
US-MN-Woodbury
US-WI-Hudson

US-WI-Hudson

or more information, and apply from that page if you are interested.

Search

Search Results Page 1 of 1

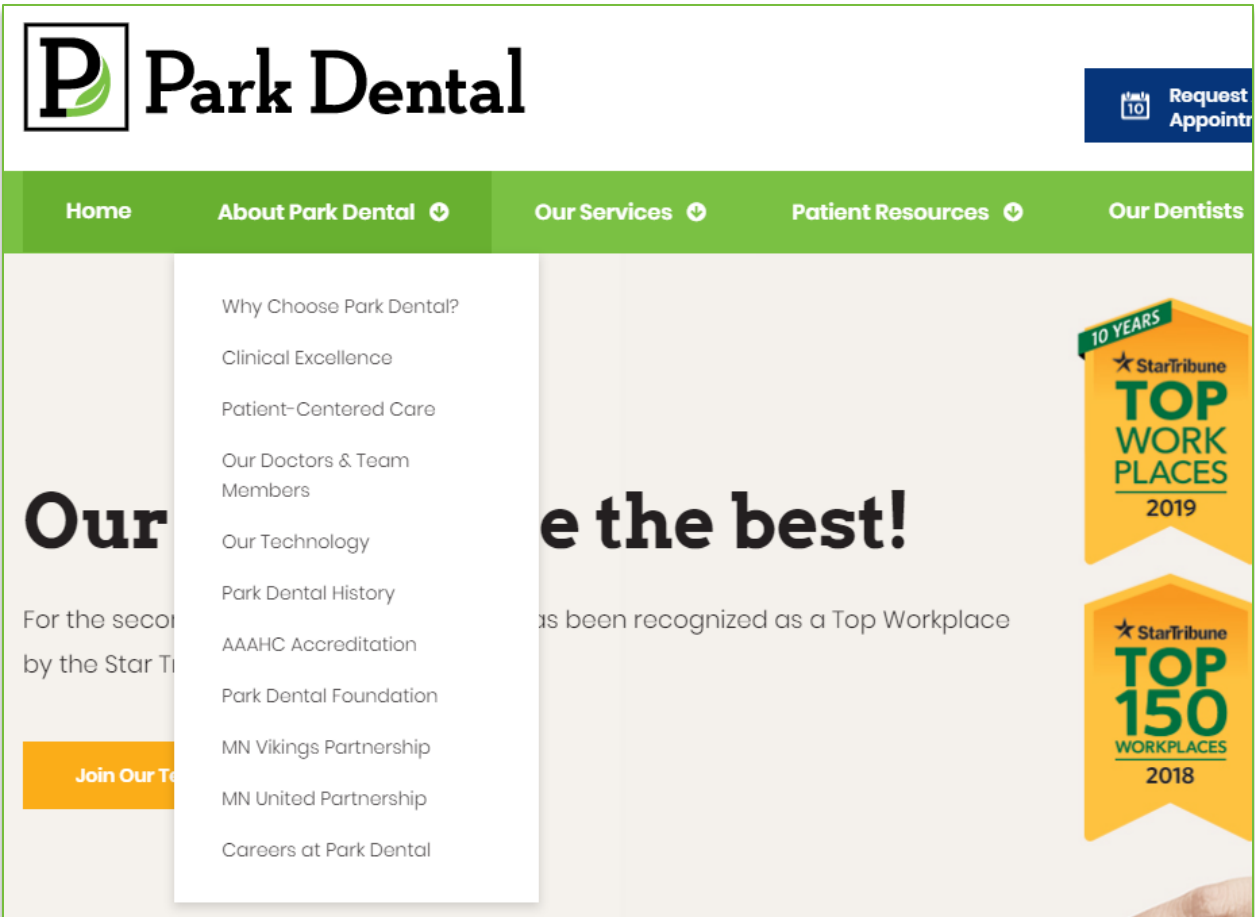
Sort By...



US-WI-Hudson

Licensed Dental Assistant - Hudson



Park Dental Hudson is seeking a compassionate, professional Licensed Dental Assistant to join our team-oriented practice.

ID 2019-1806





<p>Finding #4 Minor Issue</p> 	<p>Finding: Several participants mentioned difficulty finding jobs in Wisconsin. Participants noted that it was difficult to find because it is located at the very bottom of a drop down menu.</p> <p>Recommendation: Include visual representation or map to aid users in finding career opportunities based on location. One way to do this would be to utilize the map feature from the Find a Location menu option.</p>
<p>Finding #5 Positive</p> 	<p>Finding: Participants had no trouble locating the Careers at Park Dental page as it was easily accessible from the main menu.</p>

Task #3: Make an Appointment

<p>Finding #6 Major</p> 	<p>Finding: Three participants found difficulty completing this task because there are multiple ways to complete the task. The participants attempted to use the main Make an Appointment feature which did not allow them to search for a nearby location.</p> <p>Recommendation: Include a location finder in the Request an Appointment window. This will allow users to find location that are near them without having to use the Find a Location tab.</p>
<p>Finding #7 Positive</p> 	<p>Finding: The Request an Appointment window is very user friendly. One user commented that it was very convenient that the Request an Appointment window opened separately so that they could close it and return to the page that they were previously on.</p>

Task #4:Find a Dentist

<p>Finding #8 Minor</p> 	<p>Finding: We had one outlier in our testing that was older than the other participants. This participant thought they had to fill out each field before searching for a dentist.</p> <p>Recommendation: Provide messages that clearly state the user does not need to know all the information for a specific dentist before searching. This will assist older users in finding important information for their dentist without confusion or frustration.</p>
<p>Finding #9 Positive</p> 	<p>Finding: The option to locate a dentist was prominently featured on the main menu bar and included a helpful search feature that accounted for name, location and services provided.</p>

Conclusion

This report covered the presentation of data from a moderated usability research project that a group of UNT students conducted. The findings were focused around stagnant search features on your website.

We would be happy to provide copies of this report and coinciding presentation upon request. The recommendations for this report are purely for research purposes and do not have to be implemented, though we encourage you to take our findings into consideration.

If you would like to contact us regarding this report, please email Danielle Wanke at daniellewanke@my.unt.edu.

Appendix

- Appendix A: Summary of Participants
- Appendix B: Success Ratings
- Appendix C: Task Time by Participant
- Appendix D: Difficulty Rating by Participant

Appendix A: Summary of Participants

Our team recruited 8 users who fit Park Dental's customer profile. All participants have used a dental or medical based website for patient needs.

User	Age, Gender	Relationship to Target Audience	Frequency of seeing the Dentist	Reason for using Medical Office websites
1	22, Male	Makes own appointments	Every 6 months	Set Appointments
2	19, Male	Uses Invisalign	Every 4 months	Payments
3	22, Female	Makes own appointments	Every year	Coupons, payments, appointments
4	54, Female	Makes appointments for herself, children, husband	Every 6 months	Payments, Surgery dates, Appointments
5	32, Male	Makes own appointments	Every year	Appointments
6	22, Male	Makes own appointments	Every 6 months	Appointment times, monitoring treatment progress
7	21, Male	Makes own appointments	Every few years	Appointments
8	22, Male	Makes own appointments	Every 6 months	Appointments

Appendix B: Success Ratings

Each task was coded with the corresponding success rating that was assigned by the test moderators.

	P1	P2	P3	P4	P5	P6	P7	P8
Task 1	1	2	1	1	0	1	2	2
Task 2	2	2	1	1	2	2	2	2
Task 3	1	1	2	0	2	2	2	2
Task 4	2	1	2	1	2	2	2	2

Appendix C: Task Time by Participant

The following table displays the amount of time, in seconds, that each participant took to complete each task.

	P1	P2	P3	P4	P5	P6	P7	P8
Task 1	00:41	02:13	01:56	02:56	05:36	02:36	01:15	00:26
Task 2	02:57	02:30	03:06	01:54	00:58	00:43	00:58	00:43
Task 3	01:50	01:01	00:56	04:56	00:33	00:49	00:33	00:49
Task 4	00:37	01:02	01:29	02:51	00:45	00:53	00:22	00:53

Appendix D: Difficulty Rating by Participant

The table below shows the exact Likert Scale ratings by participant.

	P1	P2	P3	P4	P5	P6	P7	P8
Task 1	3	2	3	5	7	4	7	1
Task 2	2	2	1	2	3	2	3	1
Task 3	2	7	1	6	3	1	1	1
Task 4	2	3	1	2	1	1	1	3