Users and Use Context for Instagram Users At The University of Maryland

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Introduction

Instagram has emerged as a versatile social media platform, serving various purposes for personal, social, and business interactions. In today's highly competitive social media landscape, understanding and improving user experience is essential for success. User experience (UX) research plays a pivotal role in uncovering user preferences, challenges, and areas for enhancement in digital products and services. The work of Goodman et al. (2012) emphasizes the significance of qualitative data in comprehending user experiences and addressing their needs effectively, particularly on platforms like Instagram.

This study aims to extend the existing research by delving into the Instagram experiences of the University of Maryland (UMD) students. By utilizing a Google Forms survey and nano-usability test, data was collected from 44 participants within the specific demographic. The primary focus of the study is to gain valuable insights into the distinct user personas of university students, offering practical information to enhance their Instagram experience. The design of the Instagram interface significantly influences user engagement and satisfaction. Consequently, this study investigates various aspects related to user motivation for using Instagram. This includes exploring preferred types of content, examining both personal and business use cases, identifying effective workarounds for information needs, uncovering the benefits of the platform, evaluating user engagement, and assessing the impact of Instagram's algorithm.

The findings obtained from this research endeavor provides valuable guidance for developing a more seamless user experience tailored specifically to the UMD students community. Moreover, the study highlights the utmost importance of qualitative data in comprehending user experiences, aligning with the core principles underscored in the writings of Goodman et al. (2012).

Brief Literature Review

Instagram is a social media platform primarily used for sharing photos and videos, connecting with friends and family and to market products for numerous businesses. It is owned by Facebook, now known as Meta, and helps people to engage with the community. Instagram is available on iOS, Android and can also be used on PC's which facilitates daily growth in user numbers.

UX research defines users' preferences or difficulties and identifies areas for improvement in digital products and services. Goodman et al. (2012) emphasizes the significance of finding users' tactics for addressing their needs and targeting specific audiences on platforms like Instagram. The book also reiterates the relevance of qualitative data in gaining a more profound understanding of user experiences.

The purpose of this study is to support existing research by examining the Instagram experiences of students at UMD. A Google Forms survey and nano-usability test were utilized for data collection, garnering 44 responses from the target demographic for the survey, and two participants in nano-usability tests. This focused research produces insights into university students' unique user persona's practical information for enhancing their Instagram experience.

Interface design is crucial in shaping user engagement and satisfaction on Instagram. The study investigates how aspects of Motivation for using Instagram, such as:

- Preferred types of content
- Business and personal use cases
- Workarounds for information needs
- Benefits of the platform
- User engagement with Instagram
- Assessment of Instagram's Algorithm

The research into the UMD students' Instagram usage provided valuable information into the preferences of this particular user segment. The study locates the areas for improving Instagram's user experience and promoting user engagement and satisfaction by utilizing UX research methods and analyzing the survey data. The research findings emphasize the importance of qualitative data in understanding user experiences, as highlighted in Goodman et al. (2012).

Purpose of the Study

The purpose of this study was to gain a deep understanding of the experience of UMD students who use Instagram and their interactions with the platforms by applying the principles and methods of UX research. We aimed to identify the user's needs, pain points, and areas of satisfaction to provide recommendations for improving the user experience of Instagram users, with a focus on enhancing engagement and satisfaction. To achieve this goal, we employed research methods outlined in the literature, specially in Travis and Hodgson (2019) and Goodman et al. (2012). Our approach involved conducting a survey to collect data from UMD students on their interactions with Instagram. By using surveys, we gained insight into how users

perceive their use of the app and what kind of information they seek. This method yielded a comprehensive understanding of the users´ perspectives. The survey also addressed some screening questions to ensure that the participants selected for the study are appropriate and relevant to the research. This identified and excluded individuals who do not meet the criteria for inclusion in the study, which can help to increase the accuracy and reliability of the study findings.

In addition, we also conducted usability tests. Usability testing involves observing the users as they interact with the app or product to identify areas of frustration and confusion. This method allowed us to gain insights into the challenges users face while using the app, as well as the features and functions they find useful.

By combining these research methods, the study generated recommendations that can enhance the user experience, increase user engagement, and promote user satisfaction on Instagram for UMD students. The findings from this study hope to contribute to the continued success of Instagram by providing insights into the user experience and recommendations for improving the platform´s features, design, and functionality.

Data Collection and Analysis Methods

After reviewing the data collection methods we could utilize, we settled on conducting a survey and, initially, a diary study. We shifted away from the diary study as the time commitment was too daunting for the volunteers. Surveys are a research method which can help researchers learn more about a population, as they can demonstrate behaviors and patterns in those participating in the survey (Goodman, Kuniavsky, & Moed, 2012, p.327). Our survey was entirely electronic, with responses being automatically recorded and archived upon participant completion. Usability tests are a useful research method, as they can help to identify any problems in the user interface of a product (Goodman, Kuniavsky & Moed, 2012. p.11). After all team members reviewed the survey and usability tests to remove any potential biased questions, we began to provide them to potential participants.

In order to find participants for our studies, each group member reached out to fellow students at UMD for participation. In this study, every student at the University was a potential participant. To find our participants, our survey was provided to students through messages on ELMS, the University of Maryland subreddit forum, and a WhatsApp group made up of fellow students. From there, those willing to be participants took a few minutes to complete the survey or usability study, where data was recorded automatically.

After a week passed for survey responses, analysis of the data began. The analysis for this study consisted of careful review of the responses to the survey and nano-usability study.

The survey questions were designed to identify various trends in reasons for the usage of Instagram and time spent on the app, and a usability study was conducted to look for difficulties in information seeking. The responses to these studies informed our findings and results, as it showed trends in desired information, as well as difficulties in achieving their information goals.
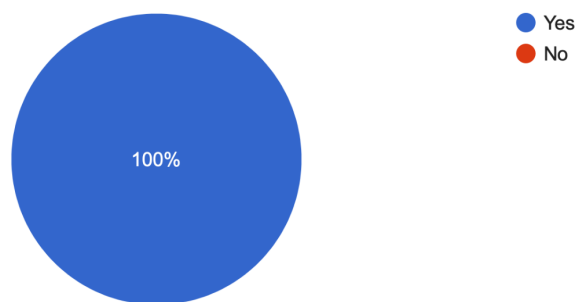
Findings

Survey Findings:
There are a total of 44 students who provided their responses to our survey.

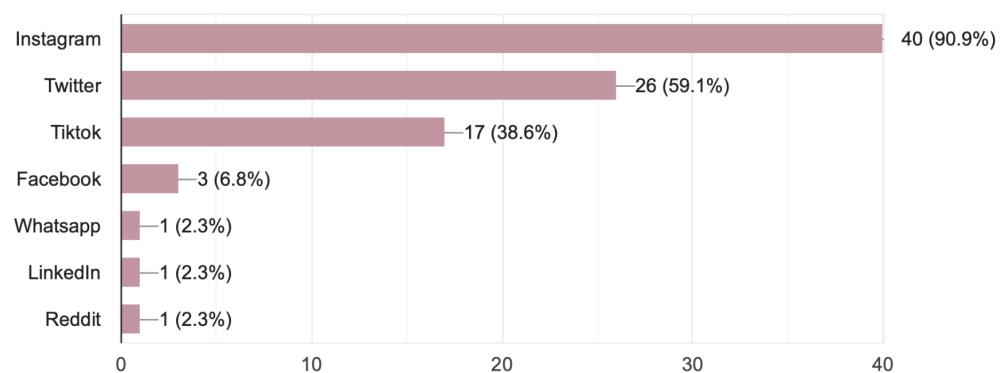**Are you a student at the University of Maryland (undergrad or grad)?**
44 responses

- Yes
- No

100%

All the participants who responded were students at the UMD.

Which social media do you use?
44 responses

| Social Media	Responses
Instagram	40 (90.9%)
Twitter	26 (59.1%)
Tiktok	17 (38.6%)
Facebook	3 (6.8%)
Whatsapp	1 (2.3%)
LinkedIn	1 (2.3%)
Reddit	1 (2.3%)

It can be observed that most of our participants, which is 90.9% of them, employ Instagram. Almost 60% of them also use Twitter, while nearly a third of them also use Tiktok. Only a few of the participants also use Facebook, Whatsapp, Linkedin and Reddit.
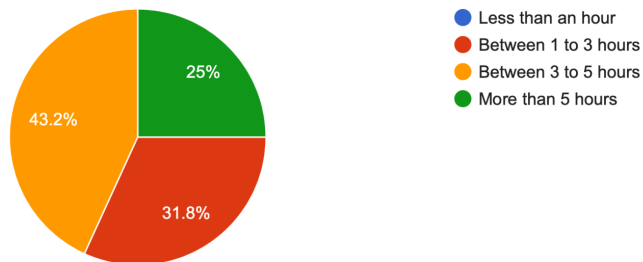
Are you an Instagram user?

44 responses

- ● Yes
- ● No

9.1%

90.9%
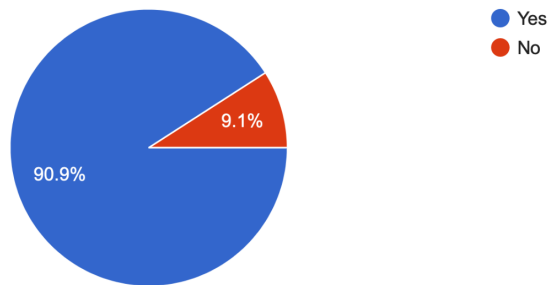
As noted from the pie chart, 90.9% of the participants are Instagram users.

How long do you spend on your phone on a typical day?

44 responses

- ● Less than an hour
- ● Between 1 to 3 hours
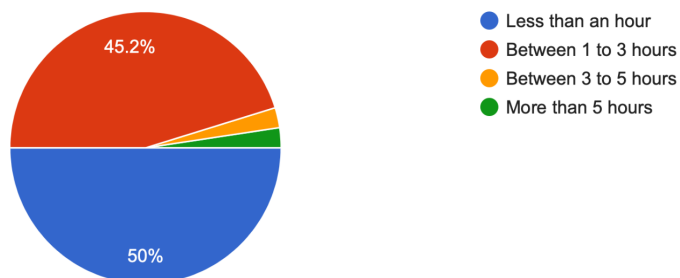- ● Between 3 to 5 hours
- ● More than 5 hours

25%

43.2%

31.8%

43.2% of the participants spend between 3 to 5 hours a day on their phones while 31.8% spend between 1 to 3 hours. A quarter of them spend more than 5 hours.

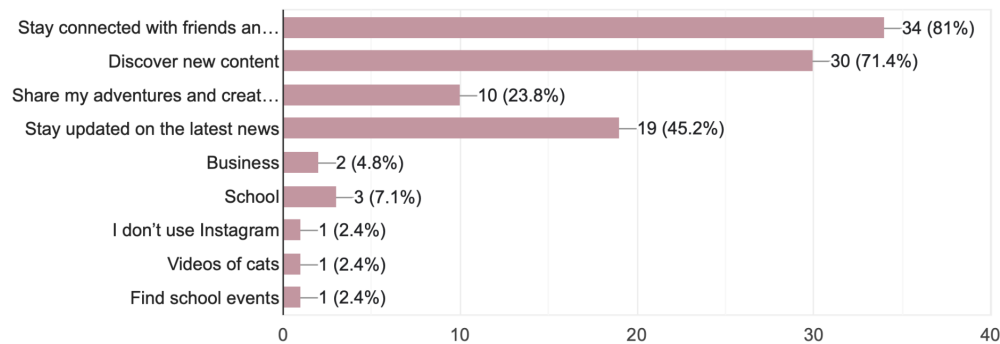**How many hours a day do you spend on Instagram?**

42 responses

- ● Less than an hour
- ● Between 1 to 3 hours
- ● Between 3 to 5 hours
- ● More than 5 hours

45.2%

50%

Based on the amount of time spent on their phones, it can be observed that half of the respondents spend less than an hour on Instagram while 45.2% of them spend between 1 to 3 hours. Only a few of the remaining participants spend at least more than 3 hours.

**What do you primarily use Instagram for?**
42 responses

Stay connected with friends an…	34 (81%)
Discover new content	30 (71.4%)
Share my adventures and creat…	10 (23.8%)
Stay updated on the latest news	19 (45.2%)
Business	2 (4.8%)
School	3 (7.1%)
I don't use Instagram	1 (2.4%)
Videos of cats	1 (2.4%)
Find school events	1 (2.4%)

81% of the respondents appear to use Instagram to stay connected with their friends and family, whereas 71.4% of them also use it to discover new content. 45.2% of them also use it to stay updated on the latest news, and 23.8% of them also share their adventures and creativity. Only a few of the research participants also use Instagram for business purposes or school. A few of them also use it for miscellaneous activities.

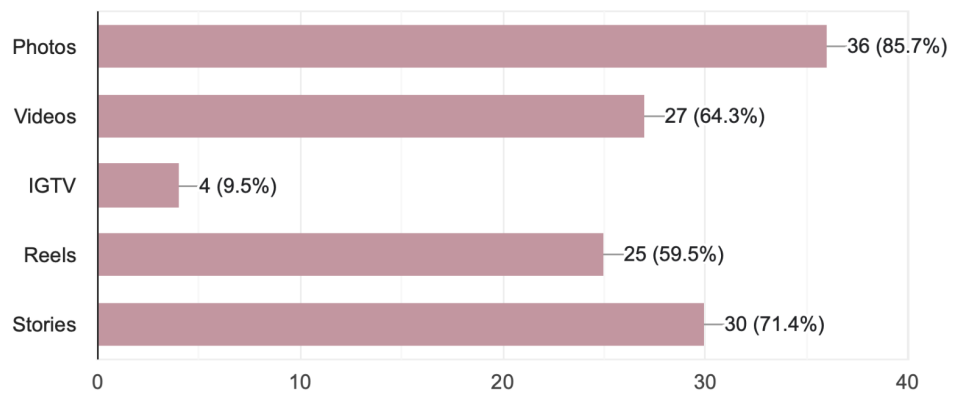**Do you use Instagram primarily for personal or business purposes?**
42 responses

Personal	42 (100%)
Business	1 (2.4%)
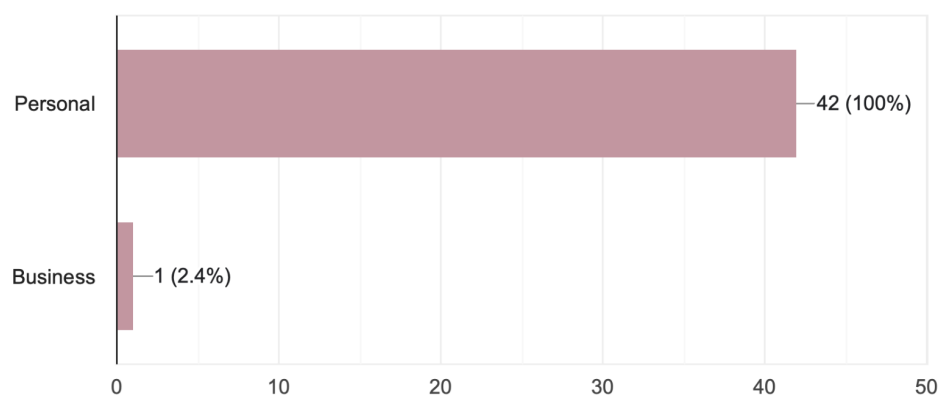
All of our participants tend to use instagram for personal use except for one who uses it for business purposes as well.

**What types of content do you enjoy viewing on Instagram?**
42 responses

Photos	36 (85.7%)
Videos	27 (64.3%)
IGTV	4 (9.5%)
Reels	25 (59.5%)
Stories	30 (71.4%)

(Horizontal axis: 0, 10, 20, 30, 40)

85.7% of the users enjoy viewing photos while 64.3% of them are inclined towards videos as well. 71.4% like watching stories of the users they follow and 59.5% also scroll through Instagram Reels. Only a few, 9.5% of them appear to watch IGTV videos.

**Do you use Instagram to showcase your personal identity or interests (i.e. posting stories)?**
42 responses

Legend:
● Yes
● No

40.5%

59.5%
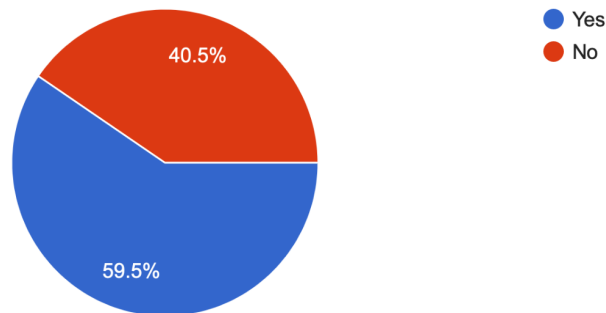
59.5% of the participants use Instagram to showcase their personal identity or interests.

How often do you interact with content on Instagram (like, comments, share with contacts, etc.)?
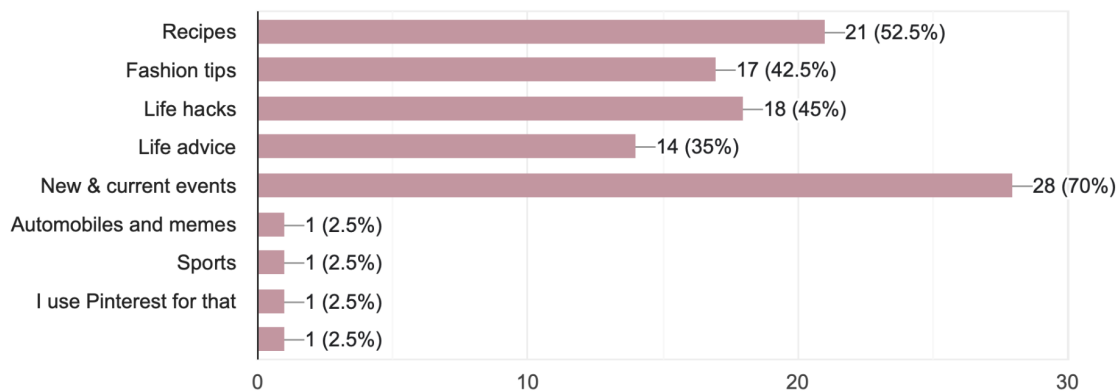42 responses

- Most of the time
- Sometimes
- Rarely
- Never

23.8%
40.5%
33.3%
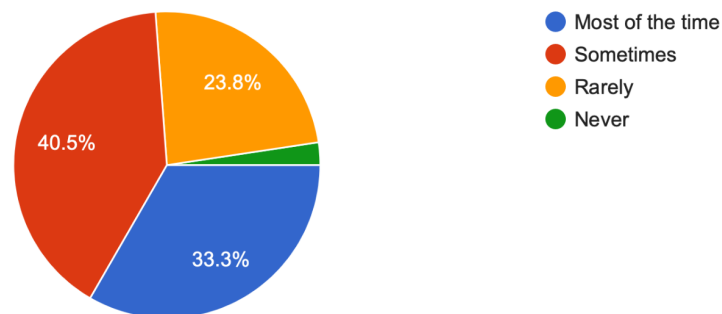
A third of the participants interact with the content on Instagram most of the time. 40.5% of them sometimes interact and 23.8% of them rarely do interact with content on Instagram.

If you're looking for new content or information on Instagram, what would you like your feed to show you?
40 responses

Recipes	21 (52.5%)
Fashion tips	17 (42.5%)
Life hacks	18 (45%)
Life advice	14 (35%)
New & current events	28 (70%)
Automobiles and memes	1 (2.5%)
Sports	1 (2.5%)
I use Pinterest for that	1 (2.5%)
	1 (2.5%)

For our respondents, the most desirable content topics are "News & Current Events"(70%), "Recipes"(53%), "Life Hacks"(45%) and "Fashion Tips"(43%).

Do you interact with Ads on Instagram?
42 responses

- Yes
- No

81%

19%
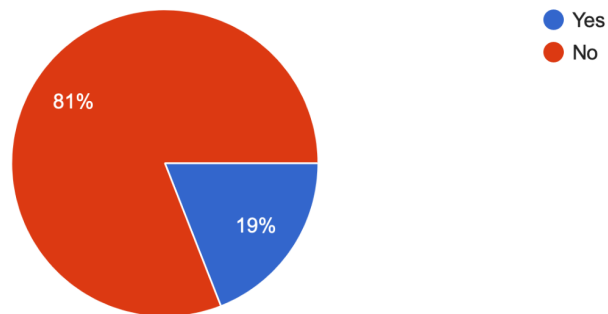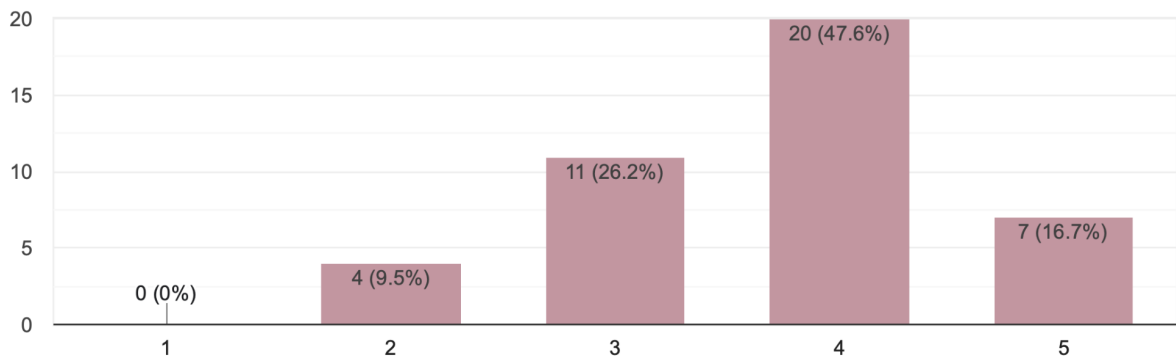
Most of the participants - 81% of them - prefer not to interact with Ads on Instagram

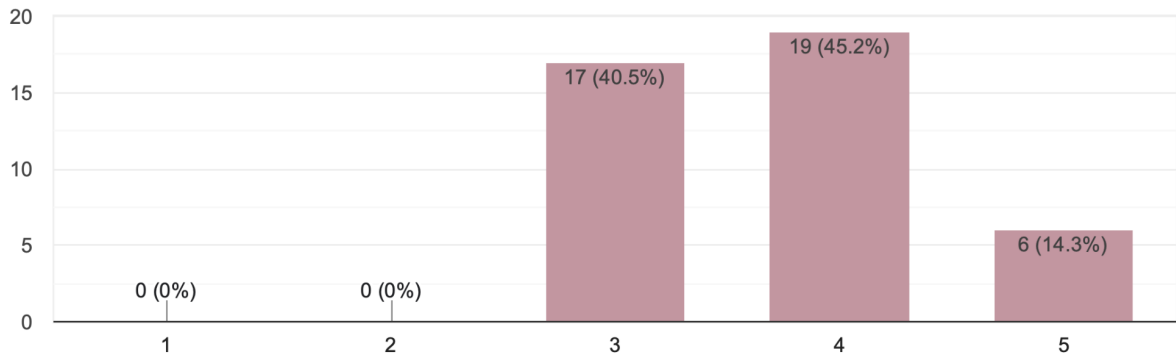**How accurate do you think the algorithm is at assessing your interests?**
42 responses

On a scale of 1 to 5, 47.6 % of participants rate the algorithm as 4 in regards to assessing their interests. 16.7% of them rate it as 5. Not a single participant rated it 1.

How satisfied are you with the overall user experience on Instagram?
42 responses

On a scale of 1 to 5, all the participants are at least moderately satisfied with the overall user experience with a rating of at least 3. No participant rated it either 1 or 2

Lastly, the participants were also asked for suggestions on how Instagram could improve their user experience. Only a quarter of them had suggestions. Their replies were:
- It is vexing to view recurring ads several times. It would be great if Instagram could optimize their ad user experience!
- Limiting the number of reels you can watch per day on Instagram by setting a cap could be beneficial
- The time limit for video chats should be increased
- There has to be less "suggested posts"
- They should take in more user data and have instagram polls for everyone
- It would be great if Instagram had a feature that would allow you to rearrange your posts in different orders (would be helpful to content creators looking to maintain a theme)
- Instagram should let users choose to see posts in the order they were posted, so they don't miss anything important.

Usability Test
 A majority of our participants use instagram to stay connected with their friends and family while 52.5% of them search for recipes while looking for new content. We arranged to observe a couple of users navigate Instagram regarding these particular aspects.

Nano Usability Test 1 Observation: (To stay connected with friends and family)
 As Samuel opened Instagram, we observed that he refreshed the home feed immediately which provided them with recently uploaded content by the people he is following. The user

then started scrolling and navigating the home feed, as well as liking their posts and also viewing the stories posted by the people he follows.

The user then searched for Ajay - their friend's profile - to locate their most recent post and engage with it by liking and commenting on it. The user also employed the messenger feature to send a direct message to another friend to initiate a conversation to catch up with them and also replied to a message from another follower to discuss their plans for the summer holidays.

Analysis for Usability Test 1:
Observing Samuel's engagement with the content on the home feed showcases Instagram's effectiveness such as the image quality of the post, visibility of likes, comments and the time required for the post to load as well as how intuitive the user interface is although the "Suggested Posts" feature aggravated the user since he only wanted to view content that his friends posted.

The user could navigate from one story to another smoothly and conveniently go back to the previously viewed story. However, the user faced confusion trying to go back to the main feed. The exit point from stories can be hard to discover. Transitioning from stories to main feed smoothly could improve navigation from one section to another.

We could see that it was convenient for the user to locate the profile of their friend using the search feature. The user hardly encountered any pain points or difficulties employing this functionality. The direct messaging functionality was utilized successfully with the user composing and sending messages without any hindrance, and making use of emoticons and stickers.

Nano Usability Test 2:
During our second usability test, we observed that the user (who wished to remain anonymous) - mainly used the Instagram app for recipe inspiration by browsing through the search feature and observing IGTV videos and Instagram Reels. However, she reported frustration with the search algorithm as she had to shift through many irrelevant posts before finding what she was looking for. This was particularly problematic as she had a gluten allergy and often encountered recipes that she could not use. Despite this, she engaged with content that she found interesting by liking, commenting, saving, and sharing it with her contacts. We also noted that she experienced frustration as some videos were not playing/loading properly.

Analysis for Usability Test 2:
While the user scrolled through the media content, we saw some frustrations with the algorithm, as she had to scroll through many "irrelevant" posts. She wished that either she could

use settings to filter out the posts that are irrelevant to her, or that her algorithm would update to reflect her tastes, but this never seemed to be the case.

It was also inconvenient to use the video playing feature of instagram, as it was not intuitive for the user. The replay feature was hard to get to function properly. In addition, the direct messaging functionality was utilized successfully with the user composing and sending messages without any hindrance, as well as the saving option in folder and liking features, where features are effectively used.

Recommendations

As fictitious consultants for Instagram, our research intends to provide insight on user preferences for the UMD student persona. Based on the data collected, we know the primary use-case for Instagram is to stay connected to friends and family, and secondarily to discover new content. Considering that respondents continue to return to Instagram for new content, this implies that the algorithm accurately provides content that the user is interested in consuming. Sixty four percent of respondents rate the accuracy of the algorithm at four and above. However, our nano-usability test showed some users struggle against the algorithm, so allowing users to manually make suggestions or changes to their personal algorithm could greatly improve the user experience.

Fifty percent of respondents spend less than 1 hour a day on the platform, suggesting that users are able to find what they are looking for rather quickly. It also leads us to believe that the UX design is either easy to use, or easy to learn quickly. Ninety five percent of respondents spend three or less hours a day on the platform, however users request that Instagram implement ways for the user to self-select limits. Some suggested enhancements from respondents are to let the user set a cap on the number of reels they can watch in one day, or the amount of time spent on reels. This implies that users may feel that they spend too much time on the platform. One hundred percent of our respondents rated their overall user experience as three or above on the likert scale. There are some areas where users were less satisfied with the experience. These revolve around the user's ability to customize the interface. For example, being able to see close friends first, rearrange posts and change the order of posts. The nano-usability testing showed that some dissatisfaction also stems from technical problems with the app, so maintenance on the app should continue to mitigate these problems.

The majority of our respondents (70%) rated "News & Current Events" as desired content. Combined with the desire to customize their interface, Instagram may want to consider making it easier to find and consume this type of information.

Conclusions

User interface design significantly influences user engagement and satisfaction. For a platform as popular as Instagram, understanding and improving user experience is vital to continue being competitive. Through a survey distributed to UMD students and a conducted usability test, user data was collected to explore Instagram user content preferences and assess the successes or shortcomings of Instagram's interface.

Instagram successfully provides a platform for users to connect with friends and family, but there are still various complaints; for example, ad repetition, reel restrictions, and post filtering. Instead of expanding their features further, it would seem that users have simple accessibility issues that they would like addressed as minor pain points to increase their existing appreciation of the platform. Instagram continues to be one of the most popular social media platforms, and to continue their trajectory, they should be mindful of features that users would like them to implement.

References

Goodman, E., Kuniavski, M. and Moed, A. (2012). *Observing the user experience: A practitioner's guide to user research*. Morgan Kaufman.

Travis, D. and Hodgson, P. (2019). *Think Like a UX Researcher: How to Observe Users, Influence Design, and Shape Business Strategy*. CRC Press.