# An investigation of

## Which design feature in Facebook for mobile is causing Catfishing and How to correct them through design changes.

Name: Zihui Huang

## Abstract

The investigation found it easy to create a fake gorgeous profile on Facebook without scrutiny. In addition, Facebook's built-in 「Message」provides users with emotional and persuasive real-time chats. In order to protect users' privacy, Facebook has no monitoring and evaluation features to protect users from pisher harassment. These digital features have contributed to the high incidence of phishing on Facebook. Therefore, to ensure online safety and user security, this report was tested and iterated twice, resulting in a graphical Checklist built into the 「Message」chat interface to assist users in identifying pishers. The Checklist helps users avoid catfishing scams. When the user opens a chat with a stranger, it will automatically pop up and ask if they need help. It also warns pishers that their behaviour is being monitored and evaluated, thereby regulating user behaviour on the internet and building user integrity.

## Study Methodology
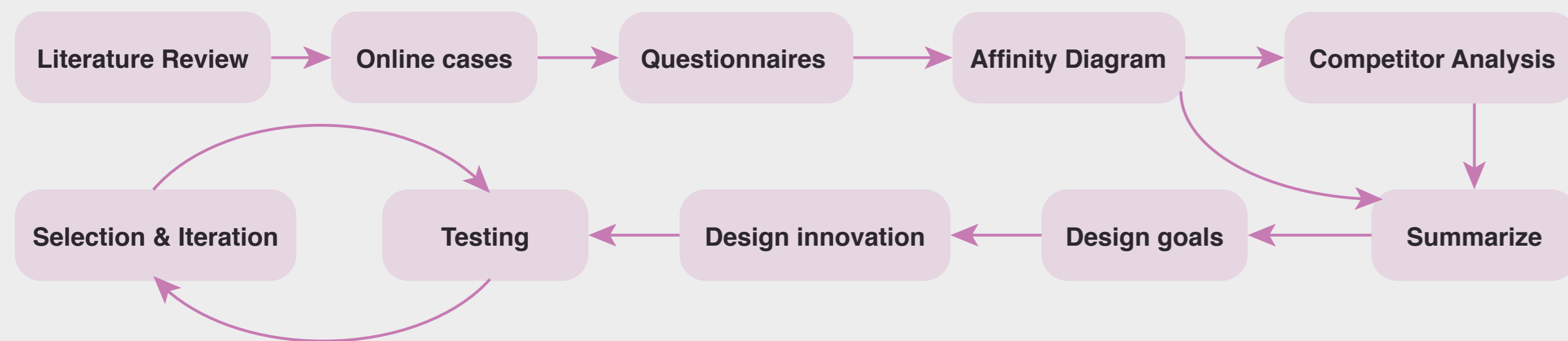


Catfishing fraud is a private matter, so very few cases of Facebook catfishing were found in the survey. As there is a large number of relevant research data in the literature, we decided to support this study with those research. Through the literature review, we found the digital functions and design features which lead to catfishing on Facebook.
1. the low cost of creating a profile, unregulated and uncensored.
2. built-in live online chat function 「Message」. (Competitive analysis found that many social apps have automatic system monitoring to alert users to pisher, but 「Message」does not have this feature).
3. the small size of Facebook's mobile interface reduces the user's ability to read the text as well as cognitive ability.

## Conclusions

The Checklist assists users in identifying pishers, protecting them from catfishing, but not defining a pisher instead. In addition, the Checklist is designed to maintain user privacy and never read and judge chat logs. Instead, it requires users to make their judgements. Consequently, it also interrupts user behaviour in some way.
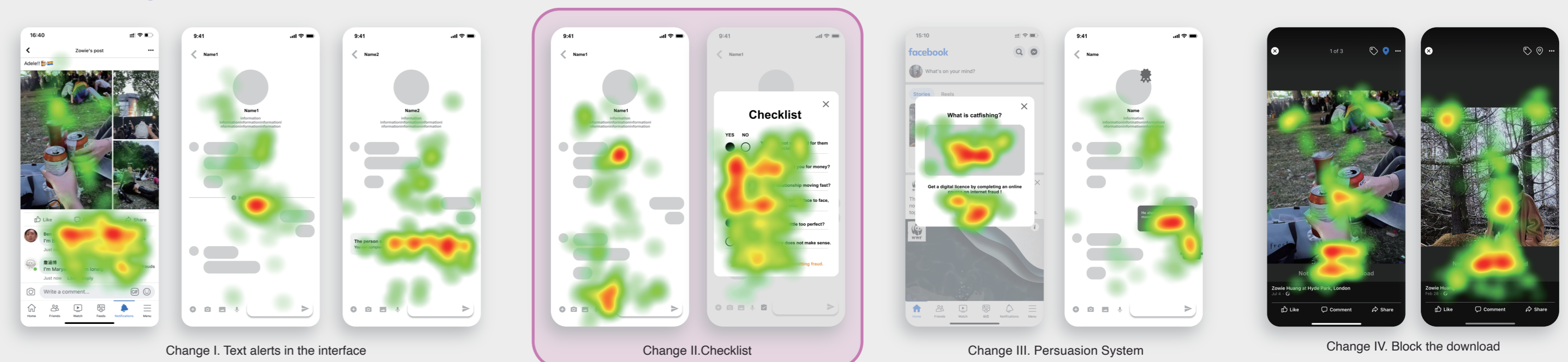
## Future work:

Recruit real Facebook users who have experienced catfishing to test the prototype and verify the feasibility of the Checklist in real-life situations.

## Introduction & Background

Catfishing means stealing someone's photos, videos or personal information to create a fake profile and using it as bait to get personal details or money from the victim. (Waring, 2018) Due to the coronavirus (COVID-19) pandemic, there has been a significant increase in people engaging in online activities worldwide, increasing the frequency of online deception (Eian et al., 2020). Facebook, the world's most popular social networking platform, has nearly 2 billion users, with nearly 83 million accounts created through fake profiles, making it the most likely channel for phishing (Vishwanath, 2017).

Therefore, this project aims to investigate the digital functions and design features that lead to catfishing on Facebook and how this fraud can be corrected through design to foster user integrity.

## Testing & Evaluation



Change I. Text alerts in the interface　Change II.Checklist　Change III. Persuasion System　Change IV. Block the download

In order to verify the feasibility of the Checklist, there were two prototype tests.
The first test was with the Eye Gaze Tracker. From this test, checklist 1.1 was selected from the four designs for further development, and analysis of the test data showed that the text of the Checklist was hardly ever read by the testers. Thus, the design was iterated to checklist 1.2.
The second test was a usability test of checklist 1.2. After receiving feedback from the tests, checklist 1.3 was iterated based on the feedback.

## Design. Checklist