BIG FAT NONSENSE:
A discussion tool to reduce weight-related stigmas in the direct social environment

Master Thesis
Sam van Eijk
4234545

30 October 2019

Design for Interaction
Industrial Design Engineering
Delft University of Technology

In collaboration with:
Centrum Gezond Gewicht
Erasmus MC Rotterdam

Fat Acceptance Activist Group
Dikke Vinger

Supervisory team:
Chair
Dr. V. T. Visch (Valentijn)

Mentor
Dr. ir. A. G. C. van Boeijen (Annemiek)

Credits:
Photography
Anoesjka Minnaard

Websitedevelopment
Floris Janssen

Podcast
Kitty Munnichs
Weight stigma is defined as the negative attitudes and beliefs that are manifested by stereotypes, rejection and prejudice towards individuals because they are overweight. Weight stigmas have a negative impact on the mental health of people with excess weight. They internalize the weight stigmas and therefore blame themselves and feel less worthy. This can cause their physical health to deteriorate and can lead to weight gain. One of the most harmful types of weight-related stigmatization is the interpersonal stigmatization within the direct social environment.

The central aim of this research has been to explore solutions to reduce weight-related stigmatization within the direct social environment of people with obesity. To narrow down the scope, the project was focused on stigmatized women who show interest in body positivity and fat acceptance. This thesis refers to these women as ‘fat’ instead of ‘obese’ in order to respect their cultural values. The research was divided into a theoretical background study, a qualitative user research and an explorative study with methods including interviews, quick prototyping and user tests.

The insights gained throughout the project come together into an overview of the most stigmatizing beliefs: (1) Fat people eat too much and exercise too little; (2) Becoming fat due to an unhealthy lifestyle is your own fault; (3) Losing weight is a matter of self-discipline; and (4) Slim people are healthier, happier and more successful. According to this research, the stereotypes and prejudices manifested in these stigmatizing beliefs are the
result of misunderstandings and lack of knowledge. Therefore, the overview is complemented with facts and myths about weight that unravel the beliefs.

**Based on this overview, an interactive platform for fat women was designed: Big Fat Nonsense (in Dutch: Dikke Onzin). This platform consists out of a website, podcast, a discussion template and social media channels.** The design is based on the finding that stigmatized women often cope with internalized stigma. They first need to be empowered in order to stand up for themselves. By reading facts and myths about weight, answering the reflective questions on the website and listening to stories via the podcast, they gain the confidence to start a discussion with a stigmatizer in their direct social environment.

A discussion template can be downloaded on the website to structure their conversation about stigmatizing beliefs. By answering the questions on the discussion template, the users are forced to set agreements on the desired weight-related communication within their relationship. In order to reach the target group, the design is promoted via social media channels and ambassadors.

Finally, the design of Big Fat Nonsense has been evaluated with the target group and their close relationships. The design succeeded to provoke nuanced and in-depth conversations. However, to fully validate the effect of the design, it should be evaluated by measuring the amount of stigmatization before and after usage.
PREFACE

This thesis is one of the final deliverables of my graduation project for the Design for Interaction master program of the Delft University of Technology. The project addresses the problem of weight-related stigmatization, which is why I (a relatively slim person) was challenged to put myself in the shoes of a fat person. Becoming aware of my own ‘thin privileges’ made me furious and motivated me even more to fight this stigma. This is why the project became very dear to me and I want to thank some people for fighting with me.

First of all, a big thanks to my supervisory team. I would like to thank Valentijn Visch and Annemiek van Boeijen, as my chair and mentor, for all the constructive feedback and fruitful discussions. Thank you for always supporting me and helping me to tackle the complexity of the project.

Thanks to my supporting team at Centrum Gezond Gewicht: Liesbeth van Rossum and Annemieke van der Zwaan. Thanks for being involved, giving me insight in the complexity of being fat and giving feedback on the content of my design.

And of course, a special thanks to all my new friends from Dikke Vinger! Thanks for taking me in trust, sharing personal stories with me and criticizing my work from a fat acceptance point of view. A big thanks for always reminding me of the fact that fat people are NOT weak, lazy or stupid. And yes, a “Dikke Vinger” (showing the middle finger) to all of those who are not willing to see this!

A big thanks to Anoesjka who has made the beautiful pictures for Big Fat Nonsense. Thanks to Kitty for recording and editing the podcast episodes; I am so proud of the results so far! And credits to Floris for developing the website and thanks for being always patient with me. Also, thanks to my friend Merlijn and my mother Ellen for giving very useful feedback on the writing of this thesis.

Above all, I want to thank my own “direct social environment” for always supporting me throughout the project. Thanks for giving me motivational speeches. But also, thanks for sharing your stigmatizing thoughts with me and discussing this sensitive topic with me over and over again.

Dear reader, I truly hope this thesis challenges your own stigmatizing beliefs and triggers you to help me to stop weight-related discrimination. Enjoy!

Sam
# CONTENTS

**Executive Summary**  
4

**Preface**  
7

**Table of Contents**  
8

1. **Project Introduction**  
   1.1 Design Brief  
   1.2 Introductions  
   1.3 Design Approach  
   11

2. **Literature Study**  
   2.1 Research Approach  
   2.2 Weight  
   2.3 Weight stigma  
   2.4 Key Takeaways  
   19

3. **User Research**  
   3.1 Research Approach  
   3.2 Stigmatizing Experiences  
   3.3 The Stigmatizer  
   3.4 The Stigmatized  
   3.5 Cultural Sensitivity  
   3.6 Stigmatizing Beliefs  
   3.7 Key Takeaways  
   31

4. **Design Focus**  
   4.1 Design Focus  
   4.2 Vision of the Designer  
   4.3 Design Goal  
   47
5. Design Explorations 55
  5.1 Design Process 56
  5.2 First Ideas 57
  5.3 Quick Prototypes 58
  5.4 Co-Creation 63

6. Final Design 67
  6.1 The Concept 68
  6.2 User Journey Phases 70

7. Evaluation & Recommendations 85
  7.1 Evaluation Approach 86
  7.2 Test Results 87
  7.3 Recommendations 92

8. Conclusion & Reflection 95
  8.1 Conclusion 96
  8.2 Personal Reflection 98

List of References 101

Appendices 105
  1. The Themes (Dutch) 106
    1.1 Oorzaken 106
    1.2 Leefstijl 108
    1.3 Afvallen 110
    1.4 Acceptatie 112
  2. Design Brief -
  3. User Research Documents -
  4. Design Requirements -
This chapter introduces the goal of the project, the scope, the approach and the involved parties.

Overview Chapter:
1.1 Design Brief
1.2 Introductions
1.3 Design Approach
Introduction

Weight stigma is defined as the negative attitudes and beliefs that are manifested by stereotypes, rejection and prejudice towards individuals because they are overweight or obese (Puhl, Moss-Racusin, Schwartz, & Brownell, 2008). Weight-related stigmatizing beliefs are the foundation of discrimination, which is largely socially accepted by society (Boon & Van Rossum, 2019). A lot of (slim) people have less sympathy for people who are overweight, as they believe becoming fat and losing weight is something you can fully control. Weight stigmas have a negative impact on the mental health of people with excess weight, because they internalize the weight stigmas and therefore blame themselves and feel less worthy. This in turn causes their physical health to deteriorate and can lead to weight gain (O’Brien et al., 2016).

Politics and health care worry about the obesity pandemic and send out alarming messages. The core idea of existing solutions is motivating and helping people to lose weight. But, while the western world is becoming increasingly obsessed with being slim and fit, the obesity rates are still increasing. Nowadays more or less 15% of the Dutch population has obesity (CBS, 2018).

An opposite approach of reducing obesity would be to reduce the fear of being fat and thus: reduce stigma. By reducing stigma and breaking the taboos, people may actually be more likely to talk about their weight, to seek for help and to feel more confident during their weight loss attempts. Is it possible that a reduction of stigmatizing beliefs to a healthier society?

Research- and Design Question:
How to reduce weight-related stigmatization within the direct social environment?
The project aims to find solutions for people who are overweight or have obesity and experience weight-related stigmatization within their direct social environment. There are two relevant focus groups within this study: the stigmatized and the stigmatizer.

The stigmatized is someone who suffers from being stigmatized because of his or her excess weight. It is not relevant to the project what his or her weight or BMI is, as long as they experience weight-related stigmatization within their direct social environment.

During the project it became clear that it was very hard to find males who suffer from stigmatization within the given amount of time for the project. This is why the project mainly focuses on females. As - in general - women share specific values and men other ones, the role of gender differences is taken into account.

The stigmatizer is someone who is in the direct social environment of the stigmatized and stigmatizes him or her, with or without the intention to do so. For this project, the direct social environment is defined as: all intimate relationships, such as a spouse, close friend or parent.

The project focuses mainly on middle class Dutch-speaking families in the area of Rotterdam. The solution should be able to be used within the private context of the homes of the target group. The research must show what is the most suitable time and place for the designed intervention. The research will also demonstrate which focus group will be the primary user and whether the intervention involves both focus groups at the same time or separately.

Figure 1: Context of design
INTRODUCTIONS

E-Health lab TU Delft
This project is executed in collaboration with e-Health Lab, one of the research labs of IDE, TU Delft. Since last year Annemiek van Boeijen, Valentijn Visch and Niko Vegt are working on the research-through-design project ‘Healthy Storytelling’, which is focusing on eHealth design by storytelling for obesity prevention among low-literate and low-educated people in Rotterdam, i.e. low socio economic status (SES) populations. During their research process, they repeatedly encountered the issue of weight-related stigmatization and asked me to map out this problem and design tools in order to reduce stigmatization in the direct social environment of people with obesity. For the scope, feasible for a graduation project, I did not limit the research and design to (difficult to reach) low SES populations or be limited to an e-Health design. This means I focused on people with higher economical status and non-digital solutions were possible too.

Centrum Gezond Gewicht
The problem owner of the project is Centrum Gezond Gewicht. The institute Centrum Gezond Gewicht is committed to an innovative and effective approach to combat obesity. In Rotterdam, at the Erasmus MC, the institute supports scientific research and focuses on tailor-made care, adapted to the individual characteristics of a person. The hospital is specialized in diagnosing and treating complex causes, for children and adults with severe obesity. My contact person was Prof. Liesbeth van Rossum. Her research shows obesity is a complex disease with many different influencing factors, which need to be taken into account in order to provide effective treatment (Van der Valk et al., 2017). At the end of her oration, she emphasized the importance to support people with obesity, because they are not ‘fat for fun’. The design question evolved on the question how to support people. One of the promising directions is to reduce weight-related stigmatization and is therefore an important matter for Centrum Gezond Gewicht.
Another important stakeholder of the project was the fat people community of Dikke Vinger. Dikke Vinger was not involved from the start of the project. During the research phase I heard about the support group meetings of Dikke Vinger and I asked to join one meeting. One year ago Merel Wildschut and “Non” (her full name is unknown) initiated Dikke Vinger by organizing support group meetings in Rotterdam. A support group meeting of Dikke Vinger is a safe place where fat people are able to share their weight-related struggles without being stigmatized. During a support group meeting in April, where I was present, some people came up with the idea of starting a movement. They felt the need to fight for equal rights as fat people. The activist group of Dikke Vinger is still very young but aims to organize campaigns and support projects, such as this one. The platforms of Dikke Vinger offered a great possibility for the design project to be distributed. My contact persons of Dikke Vinger were: Merel Wildschut, Meike Schipper, Anouk Erkelens, Jenny Klijnsmit, Ginger Haasbroek, Sigrid van der Meer and Anoesjka Minnaard. When referring to Dikke Vinger in this report, I refer to the information and stories they have shared with me. The pictures in this report are also made in collaboration with Dikke Vinger. The photographer is Anoesjka Minnaard and the models were recruited via the private Facebook group of Dikke Vinger.

Figure 3: Women who visit the Dikke Vinger support group
1.3 DESIGN APPROACH

Introduction
In the context of this graduation, the problem (stigmatization in the direct social environment) is approached as a design project. This means that idea generation, creative thinking, diverging and converging, and iterating are important ingredients of the approach. An important characteristic of the entire design process is that it is human-centered. The goal is to design meaningful products and services for the end-users and therefore the end-users were closely involved during each step in the process.

This project followed the three main phases of the design process: a research phase, an ideation phase and a concept development phase. In the next sections I will explain what design activities took place during each of these phases.

Research Phase
The project started with a design brief, with a very broad research question. In order to frame a design goal, research was done to define the problem.

This research consisted of two parts: literature research and user research. A literature study was done to get familiar with the existing knowledge on the topics of weight and stigmatization.

In order to understand the needs and concerns of the target group and analyze their context, a user research was conducted. By doing interviews with people who suffer from weight stigmatization the problem was explored.

The insights of the research led to a design focus, existing of a problem definition and a design goal.
Ideation Phase

During the ideation phase of this project, solutions were created for the problem of weight stigmatization that fit the design goal. During this phase, the goal was to come up with out-of-the-box, yet effective, ideas.

The ideation started with a design focus that was translated into a set of design questions. Design questions helped to start the idea generation with brainstorming techniques.

For this project an iterative design approach was applied. For each iteration, quick prototypes were made and feedback was gathered from experts and/or the target group. In total three iterations were preceded to reach the final concept.

Concept Development Phase

The last phase is the concept development phase where the final concept was developed into a final design. A prototype has been made to demonstrate the design and in the end, it has been evaluated with the target group. As an addition to the project the design has been developed and launched on November 1st of 2019.

A design process actually never ends, because each evaluation of the design will lead to improvements of the design, which will lead to new ideas and a renewed design. But, due to the time frame of this project, this graduation project ends with recommendations, a conclusion and a personal reflection.
LITERATURE STUDY

This chapter provides an overview of what is known about being overweight and weight-related stigmatization in literature.

In this chapter:
2.1 Research Approach
2.2 Weight
2.3 Weight stigma
2.4 Key Takeaways
Research Approach

In order to get a better understanding of the subject theoretical research has been done. The research started with a background study on body weight and later dived into the problem of weight-related stigmatization. For the analysis research papers, books (Figure 4) and interviews with experts were used primarily. Other sources, such as news articles, online lectures and documentaries have been used to evaluate the insights. Some sources are written from the perspective of someone who is fat, and that is why the insights have also been included in the study of the target group of the stigmatized (Chapter 3).
2.2 WEIGHT

Obesity vs. Fat

Weight-related stigmatization means someone is stigmatized, or discriminated, by his or her weight. This happens mostly to people who are either relatively thin or fat. This project looks into the stigmatization of people who are very fat, or in medical terms: people who have obesity. Obesity is acknowledged by the American Medical Association (AMA) as a chronic disease. People with obesity have an excessive amount of body fat which may have a negative effect on health.

To know whether someone is overweight or has obesity, it is most common to use BMI (body mass index) which is a key index for relating weight to height. It is possible to calculate someone’s BMI by dividing his/her weight in kilograms by his/her height in meters.

**Body Mass Index**

25 - 29.9: Overweight or pre-obese  
30 - 34.9: Obesity Class 1 (low-risk obesity)  
35 - 39.9: Obesity Class 2 (moderate-risk obesity)  
> 40: Obesity Class 3 (high-risk obesity)

Some people disagree with the use of body mass index, because it does not take into account how muscular someone is. According to the BMI, a body builder may have obesity. Other measuring methods, such as fat percentage or abdominal circumference, can lead to a more trustworthy indication of health risk related to weight (Boon & van Rossum, 2019). But up to now, the body mass index is mostly used worldwide in studies.

Some people with excessive fat acknowledge they have obesity and do not mind to use this term. It may also help them to seek for effective treatment. However, some people have difficulties using the BMI-related terms. People who fight for fat acceptance believe that they contribute to the negative associations of being fat, whilst they are trying to accept their fat bodies no matter what. They mention that a BMI between 20 and 24.9 is called ‘normal weight’ which indicates fat people are not normal, even though half the Dutch population is overweight. Instead, they prefer to use the term ‘fat’. Dikke Vinger explains that the word ‘fat’ can be used as a descriptive word without containing any judgment (Dikke Vinger, 2019). A lot of people have negative associations with the word ‘fat’, but they want to remove those associations by using it more often.

**Terminology**

Because of the close collaboration with Dikke Vinger, I have chosen to use the word ‘fat’ as well. However, when referring to medical situations or to scientific studies, the BMI-related terms are better to use in order to avoid misinterpretation.

**Thus, in this report I will talk about ‘fat people’, without any negative intentions.** But, when talking about ‘fat people’, who am I exactly referring to? To that question, there is no specific answer, because there is no universal limit of being fat. It is better to think of it as saying someone is tall or blond. It is a relatively subjective term and the definition of it differs per individual. In this report, when talking about fat people, it addresses the people who consider themselves as fat, varying from being slightly overweight to having high-risk obesity.

---

**Sofie Hagen:** “I know not everyone likes it. I used to say ‘overweight’. But fat is a neutral word. If you look it up, it doesn’t say good or bad. I want to remove the negative associations.”

(Khan, 2019)
Health Risks
As we all know, the reason why being fat is a concern for society, is because an excessive amount of body fat increases the risk of health problems, such as heart type 2 diabetes, high blood pressure, heart diseases and strokes. It is estimated that of all people with excess body weight roughly half of them have one or more complications (Boon & van Rossum, 2019).

National statistics show that the obesity rates have increased enormously over the years. In 2017, 14.2% of the population in the Netherlands had obesity, while fifty years ago this was only 5.5% of the total population (Centraal Bureau voor de Statistiek, 2018). This also results in higher national health care costs.

Because of this increase, a lot of politicians and scientists try to think of solutions for the obesity pandemic. One way to do this is to prevent people of becoming fat, which is mainly targeted on education, health care and laws. Another solution direction is to think of ways to help people who are fat to lose weight again. The research institute of Centrum Gezond Gewicht mainly focuses on diagnosing and treating people with obesity.

Note 1: Being in Shape
A lot of people assume that all people with obesity are unhealthy (as in: not being in good shape). Though, the fact that fat people have a higher risk of facing physical health complications, does not mean that they do not feel fit. A (young) person with obesity might not suffer from any health implications yet. Besides this, a person with obesity who works out a lot might be in a better health condition than a thin person who never works out and smokes.

Note 2: Quality of Life
Physical health does have an influence on someone’s quality of life. That said, a person’s quality of life is not only defined by his or her bodyweight. In fact, someone can live a very happy life while being fat, and even while suffering from health complications. Unfortunately, a lot of people who are fat are not happy, but this is not only caused by the physical health complications fat people my deal with. A lot of fat people describe feelings of less-worthiness, which affects their mental health situation. I feel like mental health is often overlooked when talking about the obesity pandemic. Tatjana Almuli (2019) writes in her book that everyone was always so focused on her body weight and losing weight, that they paid too little attention to her mental health issues. Her mental health was actually on of the underlying causes of her excess weight.

Causes of Obesity
Researchers have developed a better understanding of the reasons why people become fat, in order to develop more effective treatment strategies. It is relevant for the topic of weight-related stigmatization to have more knowledge on why people become fat, because this knowledge may reduce the social stigma (Van der Valk et al., 2017). It is widely believed that obesity is simply the consequence of over consuming unhealthy foods and lack of exercise. However, there are many other contributing factors or underlying diseases, which explain weight gain and the barriers to weight loss (van der Valk et al., 2019).

Figure 5 shows an overview of the underlying causes of obesity based on research by Centrum Gezond Gewicht (Van der Valk et al., 2017). In this overview it is possible to see that there are several underlying causes for being fat, divided into six categories: (mono-)genetic or syndrome, hypothalamic, endocrine, medication, mental disorders and lifestyle (Appendix 1.1). In almost every case, lifestyle contributes to weight gain, but it is rarely the only reason why someone has obesity.

But again, an unhealthy lifestyle is also caused by several contributing factors. In short: someone does not become fat for fun. Van der Valk et al. (2019) say that there is often a complex interplay of multiple social, psychological and biological factors altogether resulting in excess energy intake. For example, some people are unable to prioritize a healthy lifestyle due to financial problems or other circumstances that require their attention (Appendix 1.2). Another reason why people overeat, is because of an increased feeling of hunger after they have followed low calorie-diets. This is also called the “yo-yo-effect”, which I will elaborate on in the next section. A lot of people are unaware of the severe effects of diets. People may also over eat as a coping strategy for other, psychological factors such as emotions.
These emotions may be triggered by trauma, stigma or discrimination. The discrimination, again, may be triggered by someone’s weight, resulting in a vicious cycle.

**Diets**

Obesity is a disease that involves excess body weight, which is why the cure seems easy: losing weight. There are a lot of people trying to lose weight by following dieting programs or using dieting products. Unfortunately, the effect of a low-calorie diet may be the opposite from the desired effect: it may actually cause you to gain weight. This is why following diets is one of the contributing factors of obesity (Appendix 1.3).

Most people who go on a diet will regain the weight they lost, plus more, which is affirmed by many studies on dieters. When starting a diet, people lose weight rather quickly, but after a while, the weight does not drop as fast anymore, and it gets harder to fight the hunger. What happens is that the psychological and biological mechanisms of the body try to protect the body from starving (ten Broeke & Veldhuizen, 2013, pp. 130-143). First of all, the body wants to eat. People who have followed a diet have therefore more ghrelin in their blood, which regulates the appetite. Studies also found that people had less satiety hormones (leptin) after dieting. So, because of these changes in hormone levels, people felt hungrier after dieting. Secondly, the body tries to save energy. In order to compensate for the low calorie-intake, it needs to burn fewer calories. For this reason, the metabolism slows down during a diet. This is known as the “starvation mode”. This means that after a diet, a person will never be able to eat the same number of calories again, whilst being hungrier than before starting the diet. For this reason, people are very likely to gain weight again after finishing a diet. This is called the yo-yo effect. The tragic conclusion is that people who are fat and have followed many crash diets, can eat less than a slim person who has never been overweight (Boon & Van Rossum, 2019). In general, it is much harder to lose weight than we think and it only becomes harder when dieting.

The question is: Why do people keep dieting? I have spoken to fat people who think that the social norm of being slim and the pressure of being ‘healthy’ triggered their obsessions with dieting. Dieting is the most important predictor of developing an eating disorder (Golden, Schneider, & Wood, 2016). The focus on body weight causes people to become so obsessed with eating and establish an unhealthy relation to food.
Stigma
One of the reasons why people fear becoming fat and start dieting is the social stigma (Appendix 1.4). Stigma may cause people who are fat or ‘feel fat’ to establish a low self-esteem and to overeat as a coping mechanism. I will try to explain this by giving an example of a story I have heard at a support group for fat people (April 2019). Her fictive name is Julia.

“As a child she used to be a bit bigger than her classmates, which is why she started to be bullied. Her parents tried to help her by being stricter and punishing her for eating candy. They always asked her about her weight and what she had been eating, but they never asked her why she was eating so much. She met a nice slim friend whom she liked talking to. But whenever they went to a bar together, her friend got way more attention than she did. And whenever they went shopping, her friend fitted all clothes, but they never sold the same clothes in Julia’s size. She started to develop negative feelings towards herself: she hated herself when looking into the mirror. She comforted herself by eating. During the day she didn’t eat much, in order to avoid the bullying and the comments of her parents. But at night she ate all kind of snacks until feeling sick, time after time. After each time she would hate herself even more. She started trying diets, but she never succeeded to lose weight permanently. Instead, she gained more after each try, even though her colleagues told her success stories only. She started to feel more and more ashamed of herself and she stayed inside the house more often. At one point she decided to look for help and her general practitioner sent her to a psychiatrist, who prescribed her anti-depressive medicines. It helped to reduce her suicidal feelings she was dealing with, but it also caused her to gain more weight. “But I’d rather be fat than dead”, she says now.”

This story shows that it is often way too complex to tell what caused what. But the question rises: Would Julia have become as fat as she is now if her classmates did not bully her or if she felt more accepted by society? It is also proven that there is a relation between weight-bias internalization and lower physical health, such as binge eating (Figure 6). Thus, stigma may cause weight gain. In the next section I will explain what weight-stigmatization exactly is and what psychological effects explain the negative effects of being stigmatized on body weight.

Figure 6: Hypothetical model of weight stigma (O’Brien et al., 2016)
Weight Stigma

Weight stigma is defined as the negative attitudes and beliefs that are manifested by stereotypes, rejection and prejudice towards individuals because they are overweight or obese (Puhl, Moss-Racusin, Schwartz, & Brownell, 2008). In many research papers they also use the term: weight bias. In Europe thirty-eight percent of people with severe obesity experiences stigma (WHO, 2017).

Weight stigma leads to discrimination. There is evidence of fat people that experienced discrimination in different contexts, including employment practices, medical and health settings (Durso & Latner, 2008). A side-effect of discrimination is avoiding places where there is a high risk of stigmatizing experiences. Some women who are fat therefore even avoid going to the general practitioner. Though, weight stigma does not only affect fat people who have faced discrimination or are afraid for discrimination, but it affects any individual who directs the stigma on him or herself.

Internalized Stigma

We often think that stigmatization takes place towards the stigmatized, but it is also possible to stigmatize yourself. Researchers call this: self-directed stigma or internalized bias. “Internalized weight-stigma means you accept the negative descriptions, labels and beliefs of other and apply them to yourself, so that you also blame yourself,” explains Bulent Turan, lecturer in psychology in an interview (Ivanova, 2018). “You feel guilty and ashamed. But most importantly: you feel inferior.” For fat people it is commonly thought that they are to blame themselves for this, which is a stigmatizing belief. Because of internalized stigma, fat people actually do blame themselves for being fat. I have witnessed this phenomenon myself during my entire research process. Participants told me they lacked discipline and they were guilty for being fat, as you can read in Chapter 3.

Fat people are not the only ones dealing with the feeling of guilt because of internalized stigmatization. Also, other groups of people, such as HIV patients or people with mental illnesses are more likely to blame themselves, according to Rebecca Puhl (Brown, 2018). In general, the more socially accepted a stigma is, the more likely people are to internalize this stigma. Unfortunately, a lot of stigmatizing ideas are confirmed by the media, health care and social environment around us. Prejudices about race are more openly contradicted than prejudices about weight or HIV.

“Sam said that one glimpse of himself in a mirror can destroy his mood for days.

“I have this sense I’m fat and I shouldn’t be,” he says. “It feels like the worst kind of weakness.””

(Hobbes, 2018)

Tatjana: “When I was eleven years old, my grand mother used to say: “If you do not lose weight and stay fat, you will always be alone, you will never get a husband or a job.” […]

“Thus, being fat was by definition negative.. In order to become a nice and successful person I had to do something about it!”

(Almuli, 2019)
Motive of Stigmatizers

The reason why the problem of weight-related stigmatization is so big, is because the negative beliefs about weight are mostly considered as common knowledge in society. For example, a negative belief is that fat people eat too much an exercise too little, which is why being fat is your own fault. The majority of the population supports this idea, and this is why people feel there is nothing wrong with their stigmatizing behavior. They believe they are just saying nothing but the truth. Some people even support fat-shaming, because they think it will help to decrease obesity. They seem to ignore the fact that whilst stigmatization has increased, obesity rates have not decreased (Puhl, 2007). In contrary, the obesity rates keep increasing, as mentioned in the previous chapter.

Jeska admits in an article of Viva (van Drimmelen, 2018) that she stigmatizes people who are fat. She tells that she sometimes sees fat people and yells at them that they should eat less. In the same interview she also explains she is convinced most people are solely responsible for the amount of body fat they have. Her mom told her: “Every pound goes through the mouth”, which is a common Dutch saying (VIVA, 2018). This belief causes Jeska to think negatively about people who are fat.

Jeske: “When I see that someone is struggling to move forward due to being overweight, I think: Come on dude, do something about it! On the train they take a seat and a half without any pardon. And on the plane, I find it totally miserable to be clamped down by the person next to me.”

(Viva, 2018)

Nevertheless, whether or not the stigmatizing beliefs are true, stigmatization of people who are different is a common phenomenon for human beings. The suggested motivations for stigmatization by Phelan, Link and Dovidio (2008) are exploitation (keeping people down), enforcement of social norms (keeping people in) and avoidance of disease (keeping people away). Basically, stigmatizing is normal behavior to protect the social group you are in. Nevertheless, it is possible for stigma to decrease, as you can see is happening for race and gender stigma.
Implicit Bias

Sometimes weight bias is explicit, and people openly speak about their aversion of fat people, which is seen as stigmatizing behavior. But a lot of people are biased without being aware of this, and they might even tell you they have no preference for thin people at all, whilst their behavior shows otherwise. For example, they do not have any fat friends or have never dated someone who is fat. I figured out that I have an implicit weight bias too. Through an implicit association test online (IAT Corp., 2019) I discovered that I have a ‘strong preference for thin people compared to fat people’. The IAT is a test that measures your subconscious association of different concepts in your memory. The test on weight associations assesses whether you have a preference for fat or thin people. Thus, for me, this was the case. And whilst talking to my friends and family about my graduation project I discovered a lot of friends who considered themselves as fat-friendly were in fact very biased.

It may seem as if an implicit bias causes less harm than an explicit bias, but an implicit bias can lead to very painful stigmatization too. The title of Tatjana Almuli her book “Good looking for a fat girl” (2019) shows why. Whilst someone had the intention of giving her, a fat person, a compliment, he implies fat people are ugly, which is very painful to hear for Tatjana.

Types of Stigmatization

Weight-related stigmatization occurs on an interpersonal level and on a societal level. On an interpersonal level stigmatizing behavior occurs within social interactions. On a societal level, the stigma is in our policies, our education and our healthcare. People are continuously exposed to stigma by watching television, reading books or going to the doctor. Both types of stigmatizations reinforce each other. Due to the scope of the project, the research focuses mainly on the interpersonal stigmatization. There is a distinction between two types of interpersonal stigmatization: public stigmatization and private stigmatization.

Public stigmatization is often referred to as fat-shaming. Fat-shaming takes place in public areas such as on the street, in public transport or at restaurants. But, nowadays, a lot of fat-shaming occurs on the Internet, by commenting on video’s, blogs or sending private messages on social media. During my research I have seen a lot of fat-shaming, see Figure 8.

The other form is private stigmatization. Private stigmatization takes place with people you are close with. This type of stigmatization is experienced worst according to people with obesity (Puhl et al., 2008). In an article of the Huffington post (Hobbes, 2018) Hobbes mentions that another research also finds that their worst experiences of discrimination come from their own families. Unfortunately, I have not been able to track down the source of those surveys. I will elaborate on private stigmatization in the next section.

Figure 8: An example of stigmatizing comments towards a person with obesity on Twitter
Most effort is done to reduce stigma on a societal level. Fat activists, politicians and scientists are fighting for better educational programs, trainings for health care professionals and even changes in laws. The body positivity movement has grown, fashion industries are using more plus-size models, selling plus-sizes clothes and there is more diversity of body types present in movies. These societal focused initiatives may have a big impact on an individual level too, as social stigma is closely related to interpersonal and individual stigma. If weight stigma will lose some of its social acceptance world-wide, it will most likely have a positive effect on the internal bias and stigmatizing behavior towards one another. Though, there are hardly any successful initiatives that focus directly on the interpersonal level. It is unclear to people how to stop stigmatization at the moment it occurs, at the place it occurs. Or at least, there is not much knowledge being shared on this. Is it actually possible to reduce someone’s anti-fat weight bias and stop him from expressing his stigmatizing ideas towards fat people? And what if your fat, how do you stop someone from stigmatizing you?

While trying to find an answer to these questions, I interviewed Eva van Eijk, a psychiatrist of group counseling with a focus on lifestyle intervention, at Centrum Gezond Gewicht. She explained to me that for their lifestyle therapy program, they find it very important to involve the close relationships of their patients. There are a couple of group sessions where they are allowed to bring a friend, family member or spouse. Here they are challenged to talk with each other about how they can support each other, without being stigmatizing. “There is not one way to support someone who is overweight, this differs per person.” They also encourage their patients to re-educate their social environment. She explained to me that they often need to be empowered to speak up and tell others how they want to be called/addressed/treated. The weight-related topics are considered as taboo, she tells me. This is one of the biggest problems, according to her. It is really hard to start a conversation with your direct social environment about weight.

Figure 9: Comments underneath a Facebook post about the most annoying weight loss-related comments
Weight stigma may cause weight gain

The first conclusion of the study was that weight stigmatization might actually cause people to gain weight, because of the psychological mechanism of internalized stigmatization. This finding explains why it is so important to reduce stigmatization. As the worst stigmatization is caused by the direct social environment, this is what the project focuses on. It is important to also take the internalized stigmas into account when designing for fat people.

Stigmatizing beliefs are based on a lack of knowledge

Probably the most common stigmatizing belief is that being fat is your own fault. This is what causes people to judge fat people and say they are lazy and weak. The theoretical analysis leads to the conclusion that the cause of being fat is way more complex than people think and it is never solely someone’s own fault and no one just becomes fat for fun. Each person's weight is influenced by multiple factors. It seems promising to uncover the truth in order to reduce stigmatizing beliefs about being fat.

Weight stigma may be reduced by breaking the taboo

Another insight is the relationship between weight-related stigmas and the taboo to talk about weight. Because of the many stigmatizing beliefs among weight, it is very difficult for people to have an open conversation about it. On the other hand, breaking the taboo may actually help to reduce the stigma. By sharing stories with each other people can better empathize with each other and stigmatizing thoughts are more likely to decrease.
This chapter presents an overview of the results from interviews with fat women that were conducted to create a better understanding of their stigmatizing experiences within their direct social environment.

In this chapter:
3.1 Research Approach
3.2 Stigmatizing Experiences
3.3 The Stigmatizer
3.4 The Stigmatized
3.5 Cultural Sensitivity
3.6 Stigmatizing Beliefs
3.7 Key Takeaways
3.1 RESEARCH APPROACH

Research Approach
In order to get a better understanding of the context of design, the target group and their social interactions, qualitative research was conducted. The research approach is explained below.

Research questions:
RQ1: What do people who are fat think their direct environment (friends, family, peers) believes about being fat (obesity)? And how do people who are fat experience these beliefs?
RQ2: What would people who are fat like their direct social environment to know about being fat?

Method:
Semi-structured individual interviews were conducted with three participants with overweight:
P1: Woman, 25 years old, Delft, designer
P2: Woman, 59 years old, Haarlem, nurse
P3: Woman, 26 years old, Zoetermeer, psychiatric caregiver

The participants were recruited through my own social network. The participants were informed about the procedure of the interview in advance. The interviews took place in an informal environment, such as the home or the office of the participant. Before the start of the interview, the participants were asked to sign a form of consent, which was also signed by the interviewer. Because of the sensitivity of the topic, they were explicitly made aware of the fact they could withdraw from the study at any moment without any implications.

Data analysis
The interviews were transcribed but kept anonymous. The data was analyzed qualitatively. The results are stories that result into themes related to the stigmatizing experiences and their direct social environment. I used the themes to make personas of the stigmatizer and stigmatized and a visualization of the interaction.

Other research
(A2, A3, J, M): Annemieke van Boeijen en Valentijn Visch provided me with transcripts of interviews they conducted with people who have had a gastric surgery.

Dikke Vinger
(DV): During the project I have attended two support groups and three activist meetings from Dikke Vinger. It was not possible to record any of the meetings. The limitation of this method is that I, in order to gain trust of the group, did not make any recordings while attending the meetings. Therefore, I was not able to include the observations in the data analysis. Though, the amount of time spent with the target group helped to empathize with fat people and therefore better understand their needs. Besides this, I have been following the discussions in their WhatsApp group and their private Facebook group.

Figure 10: A brainstorm session during a Dikke Vinger activist meeting
STIGMATIZING EXPERIENCES

3.2

Stigmatizing Experiences

A stigmatizing experience is defined by the person this is experienced by. During this research none of the participants explicitly mentioned that they were stigmatized by their direct social environment. Nevertheless, the participants did talk about situations where they felt judged and misunderstood by their loved ones, family and surroundings. For many of these situations, it was clear that the judgmental behavior of their direct social environment, was related to prejudice and thus stigma.

It seems like the participants did not want to call these encounters ‘stigmatization’ because they empathize with their stigmatizers. Mainly, because they do not recognize the stigmatizing beliefs, because they have the same beliefs (the internalized stigma). But also, because they associate stigmatization with negative intentions (such as fat-shaming). In most cases the direct social environment has no negative intentions when stigmatizing and the stigmatized is aware of that fact. This is why they do not call it stigmatization, but for example ‘unpleasant behavior’. In the following sections the themes of stigmatizing experiences are explained.

A. Commenting on body weight

Within close relationships people tend to comment on each other’s weight. Commenting on someone’s weight or talking repetitively about it can make someone feel insecure. Some people I talked to said that due to the comments of others they felt ‘fatter’, they became more conscious of their figure and they started thinking something was wrong with them. Someone from DV said: “I am not blind! I can look in the mirror and see I am fat or have become fatter. There is no point in telling me so.”

P3: “For example, my mom says to my sister: ‘Jesus, your thighs have become fatter!’ I can see it hurts her feelings and she can feel down for days.”

P1: “My father says: “You really have to lose weight. You are fat. You’re just really overweight.” And I say: “Well, it’s not too bad?” But he is a doctor.”

A3: “During my entire youth they called me fat. Looking at old pictures, I was not. But I started to feel that way because of those comments.”

B. Commenting on eating behavior

Fat people often have to deal with others commenting on their eating behavior. The comments suggest that they have no control of what they are doing. The participants all agreed on the fact that such comments were, so to say, mood-killers. After a comment like this, they lost their appetite and joy. The fear of receiving such comments makes people avoid risky situations. A slim person can eat two slices of cake at a birthday party and others will laugh about it. But a fat person is always scared of what others think when eating something unhealthy in public.

P1: “For example, when eating cake, my mom said: “You can also take a hal! You do not need to eat it.” [...] It is so frustrating it makes you feel like you do not have it under control. Everything goes well, accept from this and then someone needs to something about it!”

P1: “Well, my boyfriend thinks I should eat less and that I shouldn’t eat ice cream! Or he thinks I should not order a desert when we’re in a restaurant. It makes me feel like I do it for him, instead of for me.”

P3: “I remember when I was on a diet, I sometimes treated myself on a small piece of chocolate. My boyfriend said: “Would you really do that? Maybe not so smart honey…” Well, I completely lost my appetite and I felt twenty kilos fatter again!”

C. Encouraging to work out more

Fat people are often encouraged to work out more, which is done with good intentions, but fat people often feel like the expectations of others are too high. For people who are fat it is harder to do exercises than for slim people. Besides this, any unsolicited advice about how to live your life may hurt someone’s feelings, especially when those
advices are not given to someone with a normal weight. Women of Dikke Vinger often say they just want to be treated normally, like anyone else. I often heard them using expressions like: “Mind your own business and let me live my life”. On top of that, most fat people I talked to have a lot of knowledge about losing weight and they know that working out a bit more will not help them to solve their weight problems.

P1: “My boyfriend works out five times a week and he believes I should do the same. But I just feel my body is not able to do so. I just cannot keep that up.”

J: “ Mostly when you want to lose weight, like 15, 20, 30 kilos, you get to hear: “Let’s go for a run together!” But I am 130 kilos, what do you think that does to my knee’s? That is impossible. They go a lot faster than me and then they say: “Yeah, but you have to push a bit harder!””

P3: “My in-laws have difficulties accepting my weight. For example, when we talk about the sports of my boyfriend, they say: “Oh, shouldn’t you go do sports sometime?””

D. Expressing curiosity about weight loss
People tend to interfere with the weight loss process of their loved ones. All of the participants of the interviews were trying or did try to lose weight. Their direct social environment tried their best to be supportive. The participants told me their loved ones or family members asked questions like: “How much weight did you lose already?” It is hard to tell whether a question like this is judgmental or not, but most fat people experience it as an unpleasant pressure. Sometimes people who have tried to lose weight tell me: “Sometimes you feel like you have to lose weight for others, while you have to do it for yourself.” They do not want to disappoint their loved ones or family members. The anxiety of not succeeding may hinder someone in his weight loss process. Not many people find it motivating when they feel a lot of pressure.

E. Commenting on appearance
Some people I talked with received comments about their appearance from their loved ones, but it was less than expected. The focus of the stigmatizing behavior within the direct social environment was mainly on health and not on beauty standards. During one support group they talked about beauty standards and some women did share some nasty comments they received from people they were intimate with. But, in most cases, they stopped seeing those persons. Overall, the fat people from my research did not encounter a lot of stigmatizing experiences with their current close relationships.

P2: “My mom accepted the fact I did not have size 36, but she did tell me: “Wear black, that makes you look slimmer. Don’t wear too many bright colors or horizontal stripes.””

P3: “He would like me to be slimmer. He says: “I would really like it if you would lose some weight.””

F. Talking about others
Sometimes, the stigmatizer speaks negatively about fat people or extremely positive about people who are thin or lost weight, and thereby insult the person talking with. This last stigmatizing experience that was identified is different from the others, because the stigmatizer is not directly stigmatizing the stigmatized. In some cases, this is intentionally, because they do want the fat person to hear their implicit message. However, it also happens accidentally, because they do not realize it is insulting for the fat person who is around. At Dikke Vinger a girl told me that when she is hanging out with a group of friends, her best friends make stigmatizing comments about fat people, but they seem to forget about the fact their friend (the girl) is fat too. Remarkable is that close friends of fat people often say: “But you are not fat!” First of all, they think it is the more friendly thing to say. Secondly, someone explained to me: “Because we have negative associations with fat, we do not consider someone
we like as fat.” This is why people say things like: “Okay, maybe you’re fat, but you are different than others!” To fat people, this is not a compliment, because it reminds them of how strangers see them.

P1: “In the past my mom said about my niece: “Be careful, otherwise you will get as fat as her!” But now my niece lost weight and my parents are always talking about how amazing that is. Which is very annoying as well, because they just seem to be so obsessed with it!”

M: “For example, when you sit in a group and someone fat walks away, they say: “He shouldn’t have eaten that cake.” But you know you’re fat too, so I think: There is cake, but I am not eating it. But whenever they leave and I’m alone, I take it. I just don’t eat when others are around.”

Overall, most stigmatizing experiences have to do with conversations about weight and losing weight. The tone of voice is experienced as biased and has a negative impact on the stigmatized person his or her mood. Below, a visual overview is shown of the most common stigmatizing comments.
### Introduction

The stigmatizers are the people in the direct social environment of the stigmatized who cause a stigmatizing experience. In order to get a better understanding of the stigmatizer I analyzed the motives for expressing their stigmatizing beliefs. In other words: Why do they cause the unpleasant experienced interactions which are mentioned in the previous chapter? The analysis led to types of stigmatizers as described in the next section.

### Motives to Stigmatize

The following themes explain the reasons why people in the direct social environment have a weight-related stigmatizing attitude towards someone.

#### Worries

The participants all assumed that their social direct environment expressed their stigmatizing beliefs out of love, because they were worried, and they wanted to help. My best friend told me she is so worried about her fat father that she even expresses anger towards him. She is afraid to lose him, and she has frightening thoughts, such as: “If he continues like this, he will not be with us anymore when we (the children of the family) are older and get children ourselves.” On the other hand, she knows he is not fat on purpose and he tries his best to lose weight, but whenever she sees him eating and drinking unhealthy things, it makes her feel frustrated. The participants of my interview confirmed this insight. They know that their close relationships are worried about their health, which is why they want them to lose weight. However, as explained in the previous section, the well-intended comments are negatively experienced.

P3: “They do not think: You need to be slim, because that is the norm. They are more like: You need to be slim because it is healthier for you. We care about you. They say it out of love.”

P1: “The reason my boyfriend thinks it is a problem, is because he knows it’s a problem for me. At times, I tell him I feel ugly while dressing. That is why he wants to help me.”

#### Disgust

The participants of the research did not experience stigmatization out of a feeling of disgust and hatred. Despite this, I have heard stories about certain situations. I would rather call this verbal abuse, which is out of my scope.

#### Level of Stigmatization

The stories of the interviewees showed a difference between two types of close relationships: one where both are relatively fat, and one where there is a big difference in body types between two people. The stigmatizing behavior was much more present when the loved one or family member was not fat. Two of the three participants I interviewed had fat family members and experienced little stigmatization from them. The other participant had many issues with the behavior of her parents, who both had difficulties to understand her situation because they never had weight issues themselves. This proves people tend to base their opinion partly upon their own experiences. If someone is very sporty him/herself, has no trouble eating healthy food or loses weight relatively easily, it is more difficult for him/her to empathize with someone who is totally different.
That being said, stigmatization also takes place within relationships where both persons are fat, because of internalized stigma. For example, two sisters who are fat can tell each other how ugly they find themselves, which is how they make each other feel worse.

P1: “My boyfriend for example, he used to be a bit heavier, but he lost a lot weight, and for him it was super easy! I try to eat so healthy; it is just not fair. [...] He thinks it must be easy for me too!”

P3: “My in-laws are super sporty. [...] They have a different world view. She just do not get that being fat is more than eating, because you can.”

P3: “My sister is becoming fatter and she is afraid she will become as fat as me, she said.”

Types of Stigmatizers
The direct social environment mostly interferes with someone’s weight and weight loss process out of care for someone they love. The most stigmatizing experiences are caused by people who are slimmer and who are unable to imagine what it is like to be fat. The following five characters explain the types of stigmatizers that were identified in this research:

Encouraging boyfriend: The slim and sporty boyfriend loves his beautiful girlfriend. But he wants her to be happier with her weight. He believes she just needs the extra push, and he is willing to help her with that.

Caring mommy: The caring mommy feels very responsible for her daughter’s health. This is why she tries to keep track of her daughter’s weight loss processes as much as possible.

Wise father-in-law: The father-in-law does not know his daughter-in-law very well. Though, he is worried about her health and because he is a very intelligent man, he wants to share all his knowledge with her.

Insecure sister: The fat little sister feels very closely connected to her big sister, because they share the same issues. She has the need to share her feelings with her sister, and therefore shares internal stigma.

‘Ass holes’: Unfortunately, there are also people in the direct social environment that stigmatize in order to hurt someone. Even though none of the participants from my research experienced this, I have heard stories during the Dikke Vinger meetings of others. By lack of data on this type of stigmatizer they are left out the data analysis.
3.4

THE STIGMATIZED

Introduction

As expected, the qualitative research showed that the way fat people dealt with stigmatizing experiences was different. Because of the limited size of my own research (3 participants) it was important to enrich my data with other resources. The transcripts of the Healthy Storytelling project and the visits to Dikke Vinger support group helped to validate the insights from the interviews.

Responses to Stigma

The themes in this chapter describe the different responses to stigmatizing behavior by the stigmatized. It is important to understand that the behavior of the stigmatized is related to someone's character and someone's life experience. The 59-year-old participant explained to me that during her life her attitude changed a lot. Nowadays she has less stigmatizing experiences, as she deliberately chose to disconnect with people with whom she felt uncomfortable with and she avoids many risky situations.

1. Avoiding risky situations

Instead of dealing with the stigmatizing experiences, some people rather avoid situations that are associated with stigmatization. The most frequently mentioned situation is eating unhealthy food when others are around. Fat people tend to feel uncomfortable in such situations because of the judging glances and nasty comments, such as: “Are you sure you’d eat that?” This is why fat people choose to eat in secret or behave differently when slim people are around. The women of Dikke Vinger explained to me they really love hanging out with fellow fat people, because at those moments they can be themselves the most.

M: “I eat in secret. Whenever people ask: “Do you want a piece of cake?” “No.” I am fat and if they see me eating cake, well... You know what people think.”

P2: “Whenever I feel people pay attention to me [...] it’s a no. It depends on the situation, like eating ice cream on the streets, I avoid that.”

2. Making jokes

For some people, humor is used as a way to deal with difficult and uncomfortable situations. Making a joke, shows confidence and hides vulnerability. A person who used to be fat said: “It helps to use self-directed humor as protection, like a big wall. But if you don’t watch out, it gets dangerous”. Humor is a means to prevent stigma (if you say it first, others cannot say it), but it is also a form of self-stigma. People who respond to stigmatizing behavior with humor, do not show any vulnerability. The risk is that the stigmatizers do not become aware of the pain they cause.

A2: “For example at work, when there is a plate of cookies, I joke: “Hurry up, before I eat them all!” It helps to use self-mockery.”

P3: “Whenever my family in law makes a comment, they get one back. I do it in a fun way. Those comments, I make a joke about it. I am an extravert person.”

3. Getting angry

For some people, stigmatization is a reason to become angry with someone. This type of response was not mentioned much by the participants, but it does happen occasionally. Someone may decide to end the relationship, to set an ultimatum or to express clearly how they feel about the behavior of the other. A person needs to be very confident to do so.
Based on the different responses to stigma (on the right page) it is possible to divide the stigmatized into four characters.

The avoider: The avoider often lives in a single person household. She avoids stigmatizing situations, for example at work and tends to eat in secret. The avoider prefers to hang out with friends who are fat too.

The clown: The clown is known for her extravert character and her sense of humor. She deals with stigmatizers by putting them in place. The clown tries to stay ahead of stigmatizing situations, by making a self-direct joke before anyone else can.

The grumpy: The grumpy wants people to mind their own business. In stigmatizing situations, she tells the stigmatizers to ‘fuck off’. She thinks the whole world is unfair and wants to fight for her equal rights.

The wallflower: The wallflower does not like attention. Whenever she experiences stigmatizing behavior of others, she keeps her mouth shut. She prefers to let discussions pass her by, because she loses them anyways. This is why the stigmatizing behaviour continues, which is why it would be interesting help the wallflower speak up with the design.

4. Not responding
So, some people have the courage to speak up and confront their stigmatizers with the behavior, with humor or anger. Though, it is not in everyone’s nature to do this. First of all, it always depends on someone character. But secondly, it is hard to speak up when having developed a low self-esteem. Due to a psychologist, dr. G. E. M. van Eijk, people who are fat are more likely to develop an inferiority complex, caused by stigmatization. My assumption is that there are relatively more fat people with a low self-esteem than thin people. This leads to an interesting phenomenon: if fat people get more insecure because of stigma and therefore do not fight stigma, the stigma can only increase.

P1: “When they start about my weight again at a party, it ruins the vibe and it makes me super moody! Once I said very clearly to my parents: “If you’ll start about it one more time, I will go and never come back!””

P2: [About colleagues talking about calories in cakes] “Well, I don’t always dare to say anything about it.”

P1: [About a comment in a restaurant from her boyfriend] “On the moment it happens, I don’t say much.”

Types of Stigmatized
Based on the different responses to stigma (on the right page) it is possible to divide the stigmatized into four characters.
CULTURAL SENSITIVITY

Introduction
As part of the user research, the cultural values and practices of the target group have been studied. As mentioned in the introduction (Chapter 1) the design will focus on women who suffer from stigmatizing experiences. During the research phase it was discovered that there is a large group of Dutch women between the age of 25 and 35 years old who are fat and who share an interest in the body positivity movement or fat acceptance, which translates into common values and practices. Together they form a subculture.

The body positivity movement is a social movement rooted in the belief that all human beings should have a positive body image, while challenging the ways in which society presents and views the physical body (Wikipedia). In the Netherlands, Mayra Louise who calls herself a ‘self-love blogger’ and who is fat, has over 50.000 followers on Instagram of which most followers are Dutch women who are overweight and who want to have a more positive self image.

The women who go to the Dikke Vinger support groups in Rotterdam also follow a lot of body positive social media accounts and belong to this subculture. Some of them actively contribute to the body positive (or fat acceptance) movement, while most of them do not. It was very important for this project to understand the difference between an influencer (or activist) and a follower. The project did not focus on the influencers, because there are only a few of them. They have the courage to expose themselves and to deal with the many fat-shaming comments (Chapter 2.3). Though, there are many followers of these influencers, who would never share a picture in bikini themselves, but who do share common values. The followers are within the target group because they took the first step towards self-acceptance but they are still afraid to talk about it with their direct social environment (type: wallflowers). During the research phase I talked to both ‘influencers’ and ‘followers’ to get a better understanding of their values and practices.

Socio-Cultural Dimensions
The socio-cultural dimensions of the subculture are visualized in Figure 11 and explained below:

Gender (and weight): Equal
The women who support body positivity also consider themselves as feminists. Equality is very important to them regardless of weight or gender. Weight discrimination is often compared to other forms of discrimination and if you are against it, you are against all of it. At Dikke Vinger support group meetings, there are also transgender and non-binary people and they feel very welcome. Equality is probably one of their most important values.

Space: Private
Typically for this subculture is their sensitivity for privacy. It is very difficult to be admitted to their private groups on Facebook or to private gatherings, such as support groups. They always talk about guarding a ‘safe space’ for fat people, by which they actually mean that slim people are not allowed to join. The community comes across as exclusive, because they are hesitant about newcomers. It makes sense, as some women have literally said they have built a wall around themselves to protect them from stigma.

Figure 11: Socio-cultural dimensions
The cultural values translate into practices on different levels: rituals, heroes and symbols, which are visualized in the onion-model (Figure 12).

**Rituals** are procedures that symbolize the values. Someone who becomes part of the subculture often takes a special moment to throw away his/her scale which symbolizes a change of mindset. This is why this act is experienced as a ritual.

**Heroes** are the role models of the women with these values. There are many icons, such as Lizzo, who inspires fat women to also go on stage.

**Symbols** are literal symbols such as art, media, fashion or products that symbolize the values. But symbols may also be the activities, such as routines and the use of language. An example is reclaiming the word ‘fat’, as explained in Chapter 2.2.

**Expression: Emotional**
The women feel comfortable with sharing their emotions. They share much of their expressions with each other on social media too. Even though, the women are not body positive influencers, they do spend a lot of time on social media I noticed. They post life updates in their Instagram stories daily, which is interesting to see as an opportunity when designing for this subcultural group.

**Identification: Individual / Aim: Achievement**
The women are very independent, and they also place great value on their personal career. This probably has to do with their relatively high level of finished education. Many of them are very busy and some are even suffering from a burnout. It is recognizable for this generation, where many young professionals feel like they are under a lot of pressure.
Personas

Based on user research two personas have been created that represent the main users of the design. The persona of the stigmatized (Figure 13) is based on ‘the wallflower type’ and is enriched with the cultural analysis as shown in the onion model of body positivity (see Figure 12). The persona of the stigmatizer (Figure 14) is based on ‘the encouraging boyfriend’ type.

Sacha
- 27 years old
- Rotterdam
- Freelance journalist
- Lives together with her two cats and her boyfriend Johan

“I have recently found out I am suffering from a binge eating disorder since I was 15. I am now following other fat women on Instagram to inspire me during my treatment process.”

Johan
- 29 years old
- Rotterdam
- Photographer
- Lives together with his girlfriend Sacha and their two cats

“I am happy to see that Sacha is doing better now that she quit dieting. But I am also worried she will gain more weight, because in the future we want to have kids and she needs to be healthy.”
Introduction

One of the design-focused questions was: What do the stigmatized want their stigmatizers to understand better? The interviews showed that people want others to be more aware of mainly two things: the complexity of gaining weight and the difficulty of losing weight. Besides this, fat activists want people to know that they are allowed to accept themselves the way they are. During the design project, I did exploratory research into what information would help most to tell to people who are slim. By confronting my own ‘slim environment’ with the information I retrieved from books, I learned what stories helped to change their perspective. Right now, friends tell me: “Since you are doing this project, I became so much more aware of how obsessed we are with becoming thin.” The stories are linked to the most common stigmatizing beliefs.

A2: “I think it has to do with the empathy of others. […] About how complicated it is, metabolism, heredity, posture. But also, the consequences of dieting. […] If there would be more understanding for these aspects... Not that judgmental: You do it all yourself, it is your own fault. But that there is more underneath!”

P1: “I used to be prejudiced too, that I thought: those people just don’t have discipline. Really, how hard is it? […] But it’s not true at all! Because, look at society, look at the supermarkets! If you are for one moment not completely focused, it is very very easy to gain weight, but it is so hard to lose it again!”

P2: “If you do not understand why a fat person is eating an ice cream; get in contact with that person and ask him, but do not judge! […] There are people who are truly interested in me. They ask me: I can see you are fat; does it have a reason? Is the cause a disease or how did it happen? And is it hard for you to lose the weight? Well, those questions aren’t easy for me either! But they ask me in a neutral way and those people care for me. That is honesty.”

3.6 STIGMATIZING BELIEFS

![Diagram of the stigmatizing beliefs process]

- **Motive to Stigmatize**
- **Stigmatizing Beliefs**
- **Stereotypes, Prejudice**
- **Stigmatizer**
- **Stigmatized**
- **Impact of Stigmatizing Behaviour**
- **(lack of) Response to Behaviour**
- **Stigmatizing Beliefs (internalized)**
- **Stereotypes, Prejudice**
Stories to Tell

The following four stories resulted from user research combined with the theoretical research of Chapter 2. The stories are more extensively described in Dutch and form the basis for the final design (Appendix 1).

1. Why becoming fat has more causes than ‘just’ eating too much and exercising too little.

A common stigma is that fat people are lazy. People assume they eat a lot and they never work out, but this is not always the case. A lot of fat people have underlying reasons for being fat, such as the patients of Centrum Gezond Gewicht. By explaining to others why people become fat, such as Boon and Van Rossum (2019) do in their book: “Vet Belangrijk” people better understand why the belief of “Elk pondje gaat door het mondje.” is a false belief.

2. Why lifestyle (such as eating unhealthy) is not something you have complete control over.

Another stigma is that people are stupid for becoming fat. When people have become fat for eating too much, others are likely to say: it is your own fault. But it is more complex, as I explained in chapter 2, a lot of environmental factors influence someone’s lifestyle. During the interviews, each participant shared with me the story of their life and how they became fat. When talking about their childhood and life circumstances, I always understood why they became fat and it was never because they were stupid. You could say they were unlucky in a lot of ways. For me, it was insightful to hear these stories, because I realized how ridiculous it is that we blame individuals for being fat, whilst the problem is way bigger. The book “Eet mij” of Ten Broeke and Veldhuizen (2012) points out that it is really hard to actually stay slim in a society where a lot of industries earn their money by making people fat.

3. Why losing weight is not so easy as people think and why diets do not work.

The third stigma is about the lack of will-power of fat people. People assume that if the fat people would have had will-power they would have lost weight, because losing weight is a matter of discipline. Fortunately, the myths about dieting are brought to light more and more (Kamsma, 2019). The scientific facts about diets help people to better understand the complexity of losing weight. Whenever I explain to my own surroundings the severe effects of dieting, people are shocked and say that it changes their perspective of fat people a lot.

4. Why it is unfair to treat people differently based on their appearance and health, and why it is possible to be fat and happy.

The strong preference for slim people in society creates the bias that it is always better to be slim or become slim. This is what makes people who are fat feel less worthy. I recommend everyone to read these two inspiring books: “Good-looking for a fat girl” by Tatjana Almuli (2019) and “Happy fat; Taking up space in a world that wants you to shrink” by Sofie Hagen (2019). Both women explain why they deserve to be respected, while being fat in a very good way. Unfortunately, not many slim people read the books yet. For many people, it is too far-fetched to start accepting people who are fat due to health concerns. As I explained in Chapter 1, I believe that loving yourself is very important in order to become healthier.
The wallflowers needs to be empowered to speak up

The wallflower does not dare to speak up when being stigmatized, which is why the stigmatization continues. The wallflower needs to be empowered in order to defend him/herself, which is why the wallflowers are most interesting to design for. It is important to take the internalized stigma of the wallflower into account, because this is one of the main reasons he/she is afraid to start a discussion.

People who are not fat tend to stigmatize most

Friends, family members and partners who are not fat themselves are more likely to express weight-related stigmatizing beliefs. They think that if it is possible for them to be and stay slim, it is possible for everyone. In most cases, they are unaware of the fact that diets do not work. Telling someone who is obese to lose weight, is not the same as telling someone who wants to lose 2 kilo’s. The design will focus on relationships with slim people.

Fat people only trust other fat people

Because of the many stigmatizing experiences in someone’s life, a fat person is more careful when it comes to weight-related matters. Fat people have started to create their own ‘safe space’, which is mainly online, such as on social media. It is only allowed for people to join such groups when they are fat. In order to distribute the design, it is therefore important to have fat allies.
Based on the key learnings from theoretical research and user research, this chapter describes the focus of the design project. The design goal and the interaction vision will be explained, next to the personal vision of the designer herself.

Chapter overview:
4.1 Design Focus
4.2 Vision of the Designer
4.3 Design Goal
The Current Interaction

The starting point of the project was: reducing stigmatization within the direct social environment. Before thinking of solutions, it is important to better understand the problem of stigmatization within the direct social environment. The theoretical and user research has led to an interaction model that explains the complexity of the problem.

To explain the interaction model, I have written a short story about Emma (stigmatized) and her boyfriend Daniel (stigmatizer). Daniel is worried about his girlfriend’s health, but lately he talked to some people about this new way of losing weight by not eating carbs which is supposed to be pretty easy (social stigmas). He strongly believes she would be happier and healthier if she would be thinner (internal bias). This is why he wants to help her (motive to stigmatize) by keeping an eye on her constantly and warning her whenever she tends to eat something ‘by mistake’ (stigmatizing behavior). All the well-intended help of Daniel makes Emma think she is failing and she lacks discipline (internalized bias). That’s what everyone says about fat people, isn’t it (social stigmas)? She starts to doubt herself and she looks to herself with disgust in the mirror: Why am I so stupid? (impact on mental health). In order to cope with all her negative emotions she cannot resist to eat a lot of chocolate whenever she’s alone, which is why she actually gains more weight (impact on physical health). Meanwhile, she thinks she deserves the comments of Daniel, so she does not talk to him about it (lack of response to behavior), which is why the stigmatizing behavior of Daniel continues.

This story shows many aspects that are related to each other. The vicious cycle of stigma (Chapter 2) is shown with the blue arrows. The problem of stigmatization is not caused by one aspect, but they are intertwined. In order to solve the problem, the loop needs to be broken at least at one place.
The Starting Point

It is possible to initiate designed interventions at different starting points of the interaction. For example, a starting point may be society, or the stigmatized, or the stigmatizer. Society has never been within the scope because this project leads to designed solutions that can be used within the context of a household. This is why two starting points were explored: the stigmatizer or the stigmatized.

It seems to make more sense to focus on the stigmatizer because he is the one causing the behavior directly. The downside is that the stigmatizer does not experience this problem himself, which is why it is hard to convince him of starting to use a product that solves this. Nevertheless, if the stigmatizer does not become aware of his stigmatized behavior, it is very unlikely the problem will be solved.

As for the stigmatized, they do experience the problem, but they lack the courage to speak up and talk about the stigmatizing behavior and other weight-related issues with their direct social environment. The question arose: What if the designed tools help the stigmatized to speak up and improve the communication between the stigmatized and the stigmatizer? This way, the stigmatizer becomes aware of his behavior but is not targeted in the first place. By starting with the person who experienced the stigma in private, it is possible to reach out to the people who cause this stigma and they can reach out to others. Experts mention that empathy is needed in order to achieve stigma reduction (Felten, 2016). This means that stigmatizers are more likely to listen to their close relationships than to a stranger. I believe that this is why it may be very effective to aim a confrontation initiated by the stigmatized towards the stigmatizer. When many people start using the design, this may have a (small) impact on the social stigma as well, and in the end may even reduce the public stigma, such as fat-shaming.

For the definition of a starting point, the capabilities of the project were also taken into account. Due to the strong connection with the activist group Dikke Vinger, an opportunity arose to distribute the designed tools through the digital platforms of Dikke Vinger. The visitors of their digital platforms are people, mostly women, who consider themselves as fat, and thus belong to the stigmatized. For this reason, a successful distribution of the design is more feasible when it focuses on stigmatized people as the initiators of the intervention.
The Users

So, the stigmatized will be the primary users of the design. Looking at the insights of research, the design will focus mainly on the wallflower types, as they have most difficulties speaking up to their loved ones in person. If the design manages to empower the wallflowers, there is a big chance the clown and the angry are able to use it too.

Because the platforms of Dikke Vinger will be the places where the tools are introduced, the design targets the women using such platforms. The Dikke Vinger support groups and online groups are mostly visited by women between the age of 20 and 40 who have a shared interest in body positivity and/or fat acceptance. Most women have finished further education (after high school) and they are eager to learn and discuss. The design will take their cultural values and practices into account as described in Chapter 3.5.

The secondary users are partners or family members of the primary users. Good friends or house mates also belong to the direct social environment, but there is usually less weight-related communication amongst them, so they were not included.

The most stigmatizing experiences that fat people encountered were with people who did not have the same body type. The focus of the design is therefore on close relationships where there is a notable difference in body type between the individuals. The secondary user may be either male or female, depending on the type of relationship. The design will focus mainly on the interaction between two people, although it is a possibility that the primary user wants to reduce stigma of multiple people at the same time, such as two parents or within a polyamorous relationship.

Thus, the design focuses on a social interaction between a young woman and her partner or parent, someone who truly loves her. The partner or parent in this situation is slimmer than the young woman and therefore has difficulties to empathize with being fat. The young woman deals with internalized stigma and is therefore afraid to speak up when she receives biased comments. The stigmatization causes the young woman to blame herself even more for being fat. Therefore there is a higher risk the women will obsessively diet and/or develop an eating disorder, which may result in an unhealthier lifestyle and weight gain.

The Stories

Stigmatizing beliefs are sometimes caused by lack of knowledge and can be reduced by telling people stories about these beliefs. The design needs to address the false beliefs about weight in order to help the stigmatizer to understand why what he is saying is stigmatizing. The most common false beliefs that were mentioned by the stigmatizers led to the framework of four themes:

1. Being fat is a matter of eating too much.
2. Becoming fat is your own fault.
3. Losing weight is a matter of discipline.
4. It is only possible to be happy and fit when slim.

These themes form the basis of the design and are described in detail in the Appendix (in Dutch only).

I was concerned with losing weight since adolescence. This is what I wrote in an e-mail when I was 14 years old:

“I’m doing better now, because I lost two kilo pounds. But I am afraid they are coming back already, I can feel it. I have to be very very careful, because like the way I feel right now, I could eat ten kilo’s of chocolate!”

50
I personally believe it is more important to focus on self-acceptance instead of losing weight. First of all, because I started to consider excess weight as a symptom of other problems and not as a problem itself. Weight gain is the result of underlying causes and influencing factors. By solely focusing on weight loss, those underlying issues are not solved.

Of course, it is better for someone's physical health to lose weight, as fat is also the cause of other diseases (Boon & Van Rossum, 2019). But, I think that someone's mental health is as important (or even more important) as someone's physical health. I asked myself: Why is that? Why are we more worried about having a ‘healthy weight’ than just ‘feeling good’? I think it is because we believe that in order to feel good, you need to be slim, which is probably the most shocking stigmatizing belief I became aware of. You do not need to be slim in order to live a happy life. Dikke Vinger helped me to realize this: You can be fat and happy. You can be fat and pretty. You can be fat and loved.

A personal note: For as long as I remember I have been obsessed with my weight and I did many attempts to lose weight. I always used my health as an excuse, but I actually just wanted to look thinner. This wish was confirmed by my environment, because every time I had lost weight, my friends and family would tell me how amazing I looked! Somehow they did not notice was how I used to starve myself at times and how tired I felt. Losing weight helped me to feel fitter, but it did not help me to love myself more, because it was never enough! I always wanted to lose more, but instead I gained weight again and I felt so horrible about it. I would hate myself for it. I managed to find a weight that was (and is) not my ‘dream weight’ but which I can sustain. However, it is important to realize that when you have obesity (since you were a child), it is almost impossible to reach and sustain a ‘normal weight’. But that should not be a reason to not live a happy life! It doesn't matter what size you are. Besides that, I do believe that a person with a ‘healthy self-esteem’ is more likely to develop a healthy lifestyle and feel physically healthier too.

If someone wants to lose weight, I think that is great and he or she should do so. But I will never design something where people feel pushed by to lose weight. Simply because I cannot decide for someone what's best for him or her.

Though, a bit of self acceptance did never hurt anyone did it?
Design Goal

First of all, the end-goal is to make the stigmatizer reduce his or her stigmatizing behavior. To do so, (s)he needs to become aware of his/her stigmatizing beliefs.

As mentioned in the previous section, the stigmatized is the one that experiences the problem and therefore introduces the design.

So, the stigmatized will help the stigmatizer to become aware of his stigma. But in order to so, the stigmatized needs to be empowered to speak up. By reducing his/her own internalized stigma, he/she will be able to confront the stigmatizer.

Concluding, I want to design something that:
1. Reduces internalized stigma of the stigmatized,
2. Helps the stigmatizer confront the stigmatizer,
3. Enables a discussion between both about stigma and the desired weight-related interactions in their relationship,
In order to reduce stigmatizing behavior (4).

Design Goal:
Reducing stigmatizing behavior in the direct social environment, by designing the tools for the stigmatized to confront the stigmatizer with his/her false beliefs and to talk about the desired weight-related communication.
During my research I found that many people who experience weight stigmas feel insecure and have internalized this stigma. The stigmatization has affected their self-esteem.

Because of this, I want the stigmatized to feel empowered when seeing the design at first. The stigmatized needs to gain confidence in order to start a conversation with the stigmatizer.

The interaction with the design should be experienced as empowering. For the first user, using the design needs to feel like collecting your ammunition to fight a battle.

**Interaction Vision**

**Design Qualities**
- Strong
- Energetic
- Optimistic

**Design Characteristics**
- Big and Bold
- Dynamic
- Colorful
DESIGN EXPLORATIONS

This chapter provides an overview of the ideation, the quick prototypes and the co-creation of the design content.

Chapter Overview:
5.1 Design Process
5.2 First Ideas
5.3 Quick Prototypes
5.4 Co-Creation
DESIGN PROCESS

5.1 Ideation Approach

As mentioned in Chapter 1.2 the ideation phase is the second phase of the design approach that was used for the execution of this project. The aim of the ideation phase is to come up with a solution that meets the design goal, which is:

Reducing stigmatizing behavior in the direct social environment, by designing the tools for the stigmatized to confront the stigmatizer with his/her false beliefs and to talk about the desired weight-related communication.

To come up with the solution several design methods were used. As you can see in the visualization on this page, the ideation phase started with a design question (related to the design goal), and during a brainstorm many ideas were generated. The most potential ideas were used to create the first concept. By making quick prototypes and evaluating them, the concept evolved and finally resulted into the final design: Big Fat Nonsense.

Research-through-Design

All ideas, prototypes and other design elements were evaluated together with the target group and experts. Because of this, a research-through-design way of working was applied during this project.

At first, the idea sketches were discussed with the problem owner ‘Centrum Gezond Gewicht’ in order to decide what solution direction to further explore. The quick prototypes were continuously shown to the target group, during meetings and get-together’s of Dikke Vinger. They shared their opinion and sometimes participated in design interventions too. At times, to speed up the process, it was chosen to evaluate the interactions of the prototypes with users that did not exactly belong to the target group but who tried to step into the shoes of the target group. The researchers and design experts of the Healthy Storytelling lab (Valentijn Visch, Annemiek van Boeijen and Niko Vegt) also continuously gave their feedback on the design explorations and helped to evaluate the prototypes from a designer perspective.

Thus, at the various stages of the design process, the design evaluations led to design improvements and new ideas. The final concept is the result of co-creation with the target group, as they helped to create the texts and images of the design.
5.2
FIRST IDEAS

Design Questions
In the beginning of the process a brainstorm session was done to generate the first design ideas. During the brainstorm two main design questions helped to guide the idea generation sessions:
- How to create awareness of stigmatizing beliefs?
- How to trigger a discussion on weight-related communication (within a relationship)?

Sketches of solution ideas were made (see below) and discussed with the problem owner and with the design experts of Healthy Storytelling.

Most Potential Ideas
The ideas led to potential design interactions that were later on applied into the quick prototypes:
- **Being confronted.** Idea 1 confronts people directly with their stigmatizing beliefs in order to create awareness. Confrontation helps to ‘wake up’: get the attention and make people think.
- **Choosing a side.** Idea 2 uses statements to force people to form an opinion towards a topic. To agree or disagree helps to start a discussion and triggers to think of arguments.
- **To sign.** Idea 3 uses a form to write down the preferred behavior. Writing it down helps to set agreements and to be able to come back to it. It feels like signing a contract.

---

**How to create awareness of stigmatizing beliefs?**

**Idea 1:** Cards which show contra-dictionary thoughts to trigger a conversation.

**Idea 2:** Cards that challenges people to be a judge: who are co-responsible for being fat?

**How to trigger a discussion about the weight-related communication within a relationship?**

**Idea 3:** Forms that help to express the preference for topics to (not) talk about and terms to (not) use.
5.3 QUICK PROTOTYPES

Quick Prototype 1: Card Deck

The first prototype is a card deck. On each card one weight-related fact is written. Multiple facts explain the four most common stigmatizing beliefs that were found in research (Chapter 3.5). Each stigmatizing belief is one category:

- **Do you think I’m lazy** for eating too much and exercising too little?
- **Do you think I’m stupid** for letting it go that far?
- **Do you think I’m weak** for not being able to lose weight?
- **Do you feel sorry for me** because being fat is your biggest fear?

The first aim of this quick prototype was to see whether the idea of the four themes worked to explain the four stigmatizing beliefs and create awareness. It became very clear that it did. The involved parties (Chapter 1.2) gave a lot of feedback on the specific content, but no one questioned the themes and I kept using them ever since.

The prototype did not contain a designed scenario yet. The goal was to explore different scenario’s with the card deck during a design intervention.

![Figure 15: The first prototype](image-url)
A conversation tool

For the intervention with the first prototype two participants were asked to use the card deck in their own way. The main insight of this intervention was that the card deck was missing rules or guidelines. It is important to design a usage scenario with a clear starting point and a clear ending.

At this point, I realized that I had to choose if I wanted to design a game, with rules and playful elements, such as a competition or wanted to design a conversation tool with provoking and personal questions to trigger a conversation. After considering both options, the decision was made to design a conversation tool. A discussion tool seemed like the best fit for an emotional subject like interpersonal stigmatization. I was inspired by other tools that focus on families and loved ones talking about difficult topics, such as ‘Het Familiegesprek’ (MyFutures) and ‘Durf te delen’ (Studio Fij). Both designs have guidelines and contain conversation triggers such as questions.
Quick Prototype 2: Conversation Tool

The second prototype is also a card deck, but one that contains an order and provoking questions to guide the conversation between the two users. The card deck contains three types of cards per theme:

1. **A statement**, with a question to discuss opinions with one another.
2. **Facts on the topic**, with questions to reflect on the topics.
3. **A phrase**, with a question that focuses on the social interaction between both users.

The idea is that each conversation covers one theme and that the conversations can be held at different moments. Each conversation starts with a statement and ends with a social interaction element, so people have to reflect on their own behavior and form an opinion about what is good and what is bad behavior. Feedback showed that the cards needed refinement, but the designed order helped a lot to structure the conversation.

### Send an invitation by WhatsApp

When using the second prototype a conversation was triggered. Discussing statements, personal reflection on the topics and talking about weight-related social interaction seemed promising. But the question that remained was: How to initiate the tool? When thinking of solutions, the only ideas that seemed promising were digital ideas, such as using WhatsApp.

Also, one of the design requirements was to make it easy accessible for many fat people to use the tool. If the barrier of using the tool is too big, the tool is less likely to be used at all. Ordering a card deck is already a big step to take, especially if the stigmatized does not recognize the problem of stigmatization yet (internalized stigma).

This is why the decision was made to create a digital version of the communication tool, one that makes it easy to share and send quick invites with it. The advantage is that the tool becomes freely accessible to all people that have internet!
Quick Prototype 3: Online Conversation Tool

The third prototype was a digitalized version of the card deck (Quick Prototype 2). The home page of the website introduced the four themes and again each theme contained three type of elements: a statement, facts (such as in Figure 18) and a phrase (such as in Figure 19). The idea was that the two users would go digitally through the elements and answer the questions together, by using a phone or iPad. Instead of flipping a card for each turn, you can scroll to the next element of the theme interactively.

The added feature of this prototype is the possibility to send invites. This prototype contained buttons to easily share the tool with someone via WhatsApp or e-mail and send an invite to talk. This feature made the threshold for the primary users a lot lower. Most feedback on the online conversation tool was therefore positive as people liked the idea of a digital platform. But it became clear that the user journey steps were too vague and the prototype needed too much explanation in order to be understood by the users.

During interventions with the third prototype it was noticeable that the transition between individual use and shared use was unclear. In addition, it was very extensive to discuss all questions of the themes with each other, which was not very likely to happen.

The decision was made to let the users reflect on the themes individually by using the website. Next to this, they can download a physical template to have an in-depth conversation with each other while referring to the information they have reflected on before. In this way, both users are prepared for the conversation because they have read the information and reflected on it, but the conversation itself is more efficient.

It also makes sense that you can do the individual preparation by yourself on your smart-phone, so you can have the intimate conversation without the use of electronics on the couch or at the dinner table.

Prepare individually online, discuss together offline

During interventions with the third prototype it was noticeable that the transition between individual use and shared use was unclear. In addition, it was very extensive to discuss all questions of the themes with each other, which was not very likely to happen.

The decision was made to let the users reflect on the themes individually by using the website. Next to this, they can download a physical template to have an in-depth conversation with each other while referring to the information they have reflected on before. In this way, both users are prepared for the conversation because they have read the information and reflected on it, but the conversation itself is more efficient.

It also makes sense that you can do the individual preparation by yourself on your smart-phone, so you can have the intimate conversation without the use of electronics on the couch or at the dinner table.
Final Concept: Online Platform & Print-Out

The final prototype resulted from the three quick prototypes that were created and evaluated in the design phase. The final prototype is therefore a communication tool available through an online platform. The online platform contains four themes on which the stigmatized can reflect and later have a discussion about with someone else by using the conversation template.

So, the final prototype contains a new element which is the print-out. It is a PDF file that people can download, print and use to guide their conversation about the four themes. The questions relate to each of the four themes.

Thus, the social interaction is triggered by the template, while the individual reflection is triggered by the online means. The link between the online platform and the template are the four themes.

The name Dikke Onzin (English: Big Fat Nonsense!) refers to what the design is about: the false beliefs about being fat and calls the attention.

---

Storytelling elements to empathize

When showing this prototype to the women of Dikke Vinger and going through the themes together, they immediately started talking about their own experiences and how the themes were applicable to their own lives. I heard many of these kind of stories already during my research and it had helped me to better understand the stigmatizing beliefs and my own internal bias. The idea came up to record some of these stories and put them on the website. Using storytelling elements helps people to empathize and process the theoretical information. Besides, the stories are also empowering for fat people who are looking for recognition.

It is also possible to record and make the audio files available as a podcast, which someone can listen separately on Spotify or iTunes. In this way, it is possible to discover the design via the podcast.
Content

The content of the four themes was written parallel to the design process and evaluated separately. The text is an important element of the design as it must refute the stigmatizing beliefs. The text needs to be scientifically correct in order to be convincing. But, it also needs to be written in a ‘fat-friendly’ way. The combination of these two requirements is not as easy as it may seem, because fat activists blame the obesity researchers for speaking too negatively about being fat.

To meet the first requirement, the texts were written based on scientific sources from my research, of which the book of Liesbeth van Rossum who was involved with the project (Boon & Van Rossum, 2019). She offered to help with checking the texts on medical information. But, the book of Liesbeth van Rossum is criticized by some activists, because it contains negative expressions on being fat.

Liesbeth van Rossum is a doctor and although she agrees with the fact that diets do not work, she still encourages people who have obesity to lose weight in a healthy way. However, a lot of people who belong to the fat acceptance community, have decided to stop losing weight and want others to respect this decision.

As explained earlier in my personal vision (Chapter 4.2), I believe that these different views do not have to conflict. I respect the decision of people who decide to not lose weight anymore, but I also respect people who still want to lose weight in order to become healthier. However, most publications about the topic chooses ‘one side’, in favor or against losing weight. The aim of the design is to provide a neutral point of view. The texts should not convince someone to lose weight nor to stop losing weight. They should solely help people to identify and challenge their internalized stigmas.

Because my goal is to reach a lot of people that feel stigmatised, the fat activists are very helpful in distributing the design and therefore this design mainly speaks the language of fat acceptance, without turning against obesity research.

Speak the language of fat acceptance

Whether the texts of design are percepted as fat-friendly or not, is not only dependent on the content that is written but certainly also on the tone of voice. Jenny Klijnsmit from Dikke Vinger gave her feedback on the texts and she showed me how important it is to have an eye for detail. In order to speak the language of fat acceptance, you have to make sure you use the right words.

For example, the text contained the phrase: “Have you tried diets without any success?” Jenny told me that by saying the word ‘success’ you implicitly say losing weight is a success and being slim is the norm. According to Jenny, it is better to say: “Have you tried diets without the effect of long-term weight loss?” because it is more neutral. A lot of texts changed according to the feedback of Jenny, without compromising the medical information.

Fat does have a negative impact on physical health, but we have to be careful with our expression of negative associations with fat, as it may strengthen the social stigma.
The first design of the homepage of the online platform (Figure 21) confronted the user directly with the weight-related stigmas, such as: fat people are weak, by stating those are nonsense (in line with the name: Big Fat Nonsense). This design was criticized by Non, a fat activist of Dikke Vinger, who argued that it strengthened the internal stigmas of people and she referred to an article from SocialeVraagstukken.nl (Felten, 2017). This article discusses the possibility to create awareness for stigmatization by confronting people with the stigmas. Apparently, it only works for people who already consider the stigma as a problem. In other words: if people are not motivated yet to challenge their internal bias, it does not work to confront them with the bias and it may even strengthen their bias. Besides that, Non wrote me: “I don’t like seeing it. It confirms the clichés and that hurts me.” This is why I decided to make a redesign of the homepage (Figure 22).
As mentioned before, it is hard to gain trust from fat people. Especially the community of fat activists tend to be skeptical about new initiatives. However, they are also very important for the distribution of the design because they are the heroes of the target group, and they can help to distribute the design.

The podcast offers the opportunity to interview fat people about their personal experience related to the themes of Big Fat Nonsense. By interviewing people for the podcast who are relatively famous, they become ambassadors of the design. As a result, people will be more likely to trust the initiative if their ‘heroes’ support it.

Tatjana Almuli, Jenny Klijnsmit, Mayra Louise and Merel Wildschut are or have been present in the media. Some of them wrote a book on being fat and/or have their own blog.

**Ambassadors**

As mentioned before, it is hard to gain trust from fat people. Especially the community of fat activists tend to be skeptical about new initiatives. However, they are also very important for the distribution of the design because they are the heroes of the target group, and they can help to distribute the design.

The podcast offers the opportunity to interview fat people about their personal experience related to the themes of Big Fat Nonsense. By interviewing people for the podcast who are relatively famous, they become ambassadors of the design. As a result, people will be more likely to trust the initiative if their ‘heroes’ support it.

Tatjana Almuli, Jenny Klijnsmit, Mayra Louise and Merel Wildschut are or have been present in the media. Some of them wrote a book on being fat and/or have their own blog.
This chapter describes the final design: Big Fat Nonsense, which consists of several design elements. It gives an overview of the user journey phases with the steps and touch points.

In this chapter:
6.1 The Concept
6.2 User Journey Phases
6.1 THE CONCEPT

Design Elements
The previous chapters described the design focus and the design explorations. The result is a final design that is aimed to help the stigmatized (primary user, female) to confront her stigmatizer (secondary user, female or male) and to start a nuanced conversation about stigmatizing beliefs.

The design exists of different design elements (as listed below) which the user interacts with during the different phases of the user journey.

• **Name**: People may hear about the design without having seen or used it yet. When talking about the design, people will use the name: ‘Dikke Onzin’ (English: Big Fat Nonsense) to refer to it. The name will trigger curiosity.

• **Social media**: A Facebook and Instagram account will be used to reach a bigger audience. Social media posts are easier for the ambassadors and users to share on their own profile and ‘tag’.

• **Website**: The website is the main element of the design. It contains the four themes about the stigmatizing beliefs (Appendix 1.1 to 1.4). Within one theme, the theoretical information explains the reasons why the belief is false and provides extra questions to help reflect on the given information. The website links to the podcast episodes and to the discussion template.

• **Podcast**: The podcast consists out of four episodes. Each episode relates to one theme from the website. People can listen to the podcast episodes directly on the website or find them on Spotify or iTunes. It is also possible that people do not know the design yet, but they discover the podcast through Spotify or iTunes and click on the website link.

• **Discussion Template**: The discussion template is available through the website where people can download the PDF file for free. The PDF file consists of two A4 pages which people can easily print out at home. The pages contain guidelines for a conversation about the stigmatizing beliefs and the desired weight-related communication within a close relationship (Figure 27, page 82).

Design Principles
The design reduces weight-related stigmatization in two main steps (A and B). The first phases of the journey are focused on the primary user, the stigmatized, in order to empower him/her to start a conversation with his/her stigmatizer. The following phases of the journey are focused on both users, the stigmatizer and the stigmatized, in order to improve their weight-related social interactions within their close relationship.

A. Reducing internalized stigmas of the stigmatized > To empower the stigmatized to confront stigmatizer

**Discovering** – The primary user hears about Big Fat Nonsense.
**Orientating** – The primary user looks at the website and feels it could be relevant for her and her close relationships.
**Reflecting** – The primary user dives into the stigmatizing beliefs and reflects on her internalized stigmas.
**Inviting** – The primary user decides to start a conversation with someone and send an invite.

B. Reducing stigmatizing beliefs of the stigmatizer > To discuss and agree on the desired weight-related social interactions

**Being invited** – The secondary user receives an invitation.
**Reflecting** – The secondary user dives into the false beliefs and reflects on his/her internal bias.
**Discussing** – The two users have a discussion by filling out the conversation template together.
**Changing behavior** – The two users act on the insights that resulted from their discussion.

The journey ends with the phase: **Sharing**. Ideally the users share their positive experiences, which helps other potential users to discover the design. The journey is further explained in the next sections.
<table>
<thead>
<tr>
<th>Steps</th>
<th>Phases of Stigmatized</th>
<th>Phases of Stigmatizer</th>
<th>Touchpoints</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Discovering</td>
<td></td>
<td>Social Media Name</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Orientating</td>
<td></td>
<td>Website</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Reflecting</td>
<td></td>
<td>Website</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td>Podcast</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Inviting</td>
<td>Being Invited</td>
<td>Website</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td>WhatsApp</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>Reflecting</td>
<td>Website</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td>Podcast</td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
<td>Discussing</td>
<td>Template</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td>Changing Behaviour</td>
<td>Social Media Name</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6.2 USER JOURNEY PHASES

1. Discovering the social media accounts

2. Checking out the website on mobile phone
Big Fat Nonsense is easily accessible for the target group, because it makes use of the available online resources. The social media accounts of Big Fat Nonsense refer people to the website. The social media accounts are discovered (Step 1) through the online community of body positivity and fat activism. For example, if a body-positive woman shares Big Fat Nonsense in her Instagram stories, her followers might get interested and discover Big Fat Nonsense by that.

Vision
The title does not yet explain what the platform exactly is yet. First, they need to be convinced that Big Fat Nonsense is fat-friendly, otherwise the primary user won’t even look at it. Fat women might be wary, because of negative experiences from the past. According to some fat activists, most initiatives say they want to help, but they actually want them to lose weight.

This is why the first impression of the design should be: “I am on your side. I won’t give you advice on losing weight. I won’t tell you what to do. I won’t judge you.” The graphic design of the platform and its social media channels supports this message.

- The photographs, made by Anoesjka Minnaard, show strong and happy women.
- The main message “Stop the nonsense!” makes clear what the vision of the design is.
- The collaboration with Dikke Vinger proves that fat activists support the design.

Name
In the discovering phase, a potential primary user gets the first impression of the platform. The message needs to convince someone to go to the next phase: Orientation. The title makes that first impression: “Dikke Onzin”. Dikke Onzin literally translates into “Fat Bullshit”. Though, the expression means something similar as “Big Fat Nonsense”. The title immediately explains what the design is about: the nonsense about being fat.
After discovering the platform of Big Fat Nonsense and being activated, the primary user takes a look on the website. He/she first sees the homepage (Step 2). In this phase the user starts to get a better understanding of what Dikke Onzin is, what problem it solves and how it works.

What is Dikke Onzin?
The homepage states “Stop nonsense about...” to make clear that Dikke Onzin is a tool that helps to reduce false beliefs about being fat. The user immediately sees there the four main topics:
• Stop nonsense about fat and causes
• Stop nonsense about fat and lifestyle
• Stop nonsense about fat and losing weight
• Stop nonsense about fat and acceptance

Below the homepage, the website explains the tools and how they help to stop this nonsense within the direct social environment of the user. The website uses the word ‘nonsense’ to refer to ‘stigmatizing beliefs’.

How does it work?
When the user understands that they can reduce stigmatizing beliefs within their environment, they need to know how (Step 3). The website shows the user two options:
1. Discover and share the nonsense
2. Start a conversation about the nonsense

Ideally, the users click on both. Before they start a conversation about the stigmatizing beliefs, they discover and share the information. However, it is not a requirement to do the steps in this order. If they first go to the conversation page, they will find out that they need to look into the themes first. If they do not want to have a conversation with someone, they are allowed to just discover and share the themes.

Some users may be triggered to share, but most users will wonder: “What is the nonsense you are talking about? And why is this nonsense?” The design triggers the curiosity of the first user to look into the four themes (Step 4). The
brief introductions on the themes can be read immediately when scrolling down a bit further on the homepage.

**Why would I use it?**
The introduction of the themes on the homepage is explicitly targeted on people who consider themselves as fat. The goal is to make them understand why these stigmatizing beliefs are so important to share and talk about. To achieve this goal, three elements are used: a title, a trigger and an explanation.

**Title:** The user knows what the theme is about.  
(Example Theme 1: Causes)

**Trigger:** The user is triggered by a provocative statement.  
(Example Theme 1: Why being fat has more causes than eating much and exercising little)

**Explanation:** The user discovers whether this topic is relevant for his/her situation, or not.  
(Example Theme 1: Did someone every say to you: “Would you really do that?” when you’re about to eat a treat. Or do you feel the judging glances when taking the escalator instead of the stairs? Not surprising, because most people think: If you’d eat less, you would not be so fat. Bullshit! Your weight is defined by more than what you eat. The causes of being fat are way more complex. Besides nutrition and exercise there are more factors influencing body weight. Are you curious what these are?)

**Call to action:** The user is triggered to read more.  
(Example Theme 1: Read more about causes)

Some users will just scan the titles and the triggers, while others will take the time to read the explanation. Both scenarios are possible. It is not necessary to read the explanations order to dive into the themes, but they help the user to understand whether it is relevant for them to dive into the topic or not. Besides, the short explanations just help to introduce the topic.
After the orientation phase is finished, a user can dive into a theme, one by one (Step 5). The themes contain the facts that contribute to reduction of the internal bias of people. Each theme covers more or less five facts.

1. The theme ‘Causes’ contains causes of becoming fat that are unrelated to lifestyle choices, such as diseases and genetics.
2. The theme ‘Lifestyle’ contains factors that influence an unhealthy lifestyle, but that you cannot really control, such as your cultural background and financial situation.
3. The theme ‘Losing weight’ contains facts on the difficulty of losing weight, such as the biological mechanisms that protect you from starving.
4. The theme ‘Acceptance’ contains the ideas that lead to a world where being fat is not socially accepted, such as the idea that fat people are ugly and the belief that all fat people are unhealthy.

Questions
By reading the concise pieces of text, the user gets a more nuanced understanding on the stigmatizing belief. To provoke a reflection on what someone has just read, each theme contains questions related to the information. The questions are directed to the user, to trigger him/her to think about how the information is relevant in his or her life. For example: “Do you have any experience with binge eating yourself? How come so?”

Podcast
After reading all the information of one theme, the user is able to listen to a story (Step 6). In each story someone who is fat explains how the information of the theme is relevant in his/her life. For example, for the theme about underlying causes, this is a story about someone who has dealt with an eating disorder for most of her life, which caused her to become fatter. In this way the user is able to create a better understanding of the theoretical information.
Recognizing stigma in direct social environment

Listening to the podcast episode
After the primary user has dived into the themes, she is more likely to have reduced her internal bias on the topic. The website now triggers the primary user to reflect on her direct social environment (Step 7). Does she think her family or partner is unaware of this information and therefore still biased?

Do you know someone who asks you: “Are you sure you’d eat that?” Well, there is a big chance he still believes “you are what you eat”. Share this information with this person and start a discussion!

**How to start a Discussion**

By clicking on the button, the primary user goes to the “Start a discussion” web page where she can invite another person to read the themes of Big Fat Nonsense and to have a discussion with him/her in real life. A lot of questions will arise: What kind of discussion? What do I talk about? And how do I do this? This is why there is a discussion template: “De Gespreksstarter”. The user can open the discussion template to see what it contains (Step 8). The template is a very simple form with questions that can be discussed together.

(Step 9) When the user decides he/she wants to use the discussion template, he/she has two options: invite someone in real life, or send an invitation link via the website (Step 10). The invitation link can be easily sent via WhatsApp or e-mail. The invitation link automatically contains an attached text: “Hey, do you want to talk about this?”

**Download and Print**

When the primary user has decided to use the conversation starter with someone, she is most likely to download the conversation starter and to print it in advance. Because of the sensitivity of the topic, the primary user might read the questions in advance and think about the things she would like to say during the conversation. More explanation about the design of the conversation starter is given in ‘Discussion’.
9 Deciding to invite someone

10 Sending an invitation link through WhatsApp
When the primary user invites another person for Dikke Onzin, the first thing the receiver will see is the invitation (Step 10) saying “Hey, do you want to talk about this?” and a link to the platform of Big Fat Nonsense. When opening the link, the invited person sees a pop-up (Step 11) explaining that he/she is invited to read the four themes.

The difficulty of the website is that it targets two user groups: the people who are fat and their loved ones, family members and friends who might be fat, thin or anything in between. This means that the information of Big Fat Nonsense should be understandable for both. Since fat people are the primary users, I decided to address them in when writing the texts. However, it is still possible to understand the texts when reading them as a not-fat person. The pop-up the receivers get when they are invited clarifies that the receiver is welcome to read the texts.

The secondary user, who was invited by the primary user, now learns and reflects like the primary user did already (Step 12). Instead of reducing internalized stigma, someone reduces his/her stigmatizing beliefs towards fat people. And instead of feeling recognition with the audio stories, someone is able to empathize with the story of the fat person and gain a deeper understanding.
11 Taking a looking at the website link

12 Reflecting on the themes
When both users have prepared themselves for the conversation and they have found the right moment for it, the conversation can start. The platform provides a discussion template that guides the discussion per theme (Step 13). The idea is that the learnings of the themes from the website will help the users to explain their thoughts and opinions. During the discussion, they can refer to the information they have read or look it up on their phones.

The design principle of the discussion template is that it provides a neutral starting point for the discussion. It is assumed that the users of the discussion template are in a close relationship, so they empathize with one another. They may have different opinions, but the conversation starter is designed in such a way that there is room for both parties to express their thoughts and openly talk about the topics. The idea of the template is that there are no right or wrong answers.

The conversation starter exists of four parts, each part is related to a theme. There is one extra question, the last one, that focuses on terminology. The four main parts each contain three similar types of questions, referring to a theme.

The question types per theme:

1. **The first question refers to the information that is provided in the themes.** The users are able to select the pieces of information that they found most interesting. It is the task to explain your choices to each other. The desired effect of this question is that they discuss the subjects that are most relevant to their personal situations and share their stories with each other.

2. **The second question is a statement with a scale from ‘disagree’ to ‘agree’.** The statements are chosen in a way that it is very hard to entirely agree or entirely disagree with. It provokes a discussion and both parties can use arguments referring to the subjects above. The desired effect is that they share their opinions with each other.
After the in-depth conversation with the discussion template, the users have gained new insights on each other’s perspective on weight-related topics. They are now able to put their learnings into practice. “De Gespreksstarter” now functions as a contract. Their agreements are written on paper and whenever someone makes a communication mistake, the other one can point this out by referring to their discussion.

Ideally, the primary user is happy with the usage of the design and recommends it to others by talking about Big Fat Nonsense or sharing it on his/her social media accounts.

3. The third question is focused on the desired communication about weight-related topics. For each individual this desired communication may differ, so the questions are individually answered and discussed. The desired result of this question is that the users have a better understanding of how to treat each other, without hurting one another.

The last question of the conversation starter is focused on terminology. The users can select which words they do not use within their close relationship. The template shows several options to select, but there is also the possibility to add your own.

which results in an agreement. If they do not agree on a shared answer after discussing, they can agree to disagree.

Improving weight-related communication
1. OVER DIK EN OORZAKEN

Omcirkel allebei de onderwerpen van Dikke Onzin die jullie het meest interessant vinden en bespreek:

AANLEG ZELDZAME AANDOENING HORMONEN MEDICATIE MENTALE FACTOREN LEEFSTIJL

Bespreek de stelling en probeer samen tot een conclusie te komen (indien mogelijk):

ELK PONDJE GAAT DOOR HET MONDJE
Oneens ___________________________ Eens

Geef ieder antwoord op de vraag en leg aan elkaar uit waarom:

JE MAG MIJ VRAGEN HOEVEEL IK WEEG:
- Nee, nooit
- Ja, geen probleem
- Anders:

JE MAG MIJ VRAGEN HOEVEEL IK WEEG:
- Nee, nooit
- Ja, geen probleem
- Anders:

2. OVER DIK EN LEEFSTIJL

Omcirkel allebei de onderwerpen van Dikke Onzin die jullie het meest interessant vinden en bespreek:

OPVOEDING SOCIALE OMGEVING FINANCIËN TOEGANG TOT KENNIS TRAUMA EN STIGMA

Bespreek de stelling en probeer samen tot een conclusie te komen (indien mogelijk):

JE BENT VERANTWOORDELIJK VOOR JE EIGEN GEWICHT
Oneens ___________________________ Eens

Geef elk individueel antwoord op de vraag en leg aan elkaar uit waarom:

JE MAG MIJ KRITIEK GEVEN OP WAT IK EET:
- Nee, nooit
- Ja, geen probleem
- Anders:

JE MAG MIJ KRITIEK GEVEN OP WAT IK EET:
- Nee, nooit
- Ja, geen probleem
- Anders:
3. OVER DIK EN AFVallen

Omcirbel allebei de onderwerpen van Dikke Onzin die jullie het meest interessant vinden en bespreek:

VALSE HOOP   GROTERE HONGER   VERTRAAGDE STOFWISSELING   SPORTEN   MAAGOPERATIE   ACCEPTATIE

Bespreek de stelling en probeer samen tot een conclusie te komen (indien mogelijk):

AFVallen is een kwestie van zelfdiscipline
Oneens ________________________ Eens______________________

Geef elk individueel antwoord op de vraag en leg aan elkaar uit waarom:

JE MAG MIJ TIPS GEVEN OM AF TE VALLEN:
○ Nee, nooit
○ Ja, geen probleem
○ Anders: ________________________

JE MAG MIJ TIPS GEVEN OM AF TE VALLEN:
○ Nee, nooit
○ Ja, geen probleem
○ Anders: ________________________

https://dikkeonzin.org/acceptatie

4. OVER DIK EN ACCEPTATIE

Omcirbel allebei de onderwerpen van Dikke Onzin die jullie het meest interessant vinden en bespreek:

MOOI ZIJN   GEZOND ZIJN   NORMAAL ZIJN   GELIEFD ZIJN   KANS HEBBEN

Bespreek de stelling en probeer samen tot een conclusie te komen (indien mogelijk):

SLANK ZIJN MAAKT GELUKKIG
Oneens ________________________ Eens______________________

Geef elk individueel antwoord op de vraag en leg aan elkaar uit waarom:

IK MAG VAN MIJN LICHAAAM HOUDEN:
○ Nee, ik moet eerst afvallen/aankomen
○ Ja, mijn lichaam is goed zoals het is
○ Anders: ________________________

IK MAG VAN MIJN LICHAAAM HOUDEN:
○ Nee, ik moet eerst afvallen/aankomen
○ Ja, mijn lichaam is goed zoals het is
○ Anders: ________________________

5. WOORDEN

Spreek samen af en vink aan:

WIJ GEBRUIKEN DE VOLGENDE TERMEN NIET:
○ Dik
○ Te dik
○ Overgewicht
○ Mollig
○ Stevig
○ Obees
○ Obesitas
○ Fors
○ Zwaar
○ Te zwaar
○ Vol slank
This chapter describes the final test as an evaluation of the final design. The chapter provides recommendations for improving the functionality of the design and for future research and design projects.

In this chapter:
7.1 Research Approach
7.2 Final Test Results
7.3 Recommendations
7.1 EVALUATION APPROACH

Design Elements
The research goal of the final test was to see how the first users experienced the use of the prototype of the final design: Big Fat Nonsense. The goal was to test if the design helped them to talk about weight-related topics with their direct social environment and if this had a positive effect on their relationship.

Research method 1
The design aims to trigger an intimate conversation about personal issues. Because of this, it was decided to let the participants test the prototype in their personal environment without the presence of the researcher. The participants of the final test were asked to introduce the prototype and to use it with his or her family member, friend or partner by choice. They could choose themselves when and where they wanted to have the conversation. After the participants tested the prototype, they were being interviewed by the researcher to evaluate the design.

Participants
The participants were stigmatized women between the age of 25 and 35, because the design was targeted at them. It was highly important the participants were ‘followers’ and not ‘influencers’ as described in Chapter 3.5. In the end, five participants were found via personal connections and connections of the involved parties.

Procedure
Each participant was shortly briefed and received little instructions for the test, as the design should speak for itself and the usability was tested too. The researcher interviewed the participants one day after the test by phone.

Data Analysis
The data was analyzed qualitatively. The interviews were transcribed and translated into English. The results are themes related to the research questions.

Research Questions
The interviews were semi-structured, but the researcher used the following research questions as a guideline for the phone conversation:

RQ 1: Does the design empower the stigmatized to confront the stigmatizer?
• What was your first impression of the website? To what extend was the information new to you? Did you recognize yourself in the information?
• Would you have liked to share the themes with someone if you weren't asked to, do you think? Can you explain why? And to whom?
• When reading at first about the conversation starter, did it appeal to you? Looking at your own situation, did you think it could be helpful for your relationships to talk about the topics and why?

RQ2: Does the design enable the stigmatized and stigmatizer to have a nuanced conversation about the stigmatizing beliefs?
• How did you introduce the Conversation Starter? Can you explain why? What was the first response of the stigmatizer?
• How did the conversation go? What questions led to the most interesting discussions?

RQ3: Does the design reduce weight-related stigmatization? (Design Goal)
• Do you think the conversation had a positive effect for your relationship? Do you think something has changed within your communication about weight?
• To what extend do you think you will use the template again? Would you recommend using the template to someone else? Why/why not?

RQ4: Does the design reach the target group?
The design was also evaluated by showing the design to the ambassadors who were interviewed for the podcast and by analyzing the first interest on social media.
• Are the ambassadors willing to share the design?
• What is the first response on Instagram?
7.2 EVALUATION RESULTS

Introduction
Most of the participants tested the design with their lover. Some of them live together and some of them live apart.
• (pilot test) A. (28), municipality worker, together with her partner who she lives together with.
• H. (25), strategic designer, together with her boyfriend.
• L. (30), photographer, together with her stepfather.
• M. (25), student, together with her boyfriend.
• D. (35), Secretary, together with her husband who she lives together and has a child with.

The Website
Orientating
During the interviews, all participants were positive about the visual lay-out of the website. One participant said she thought it had a body positive look, and it reminded her of her role models. They thought the overview of the themes was very clear and it was easy for them to understand what the website was about.

M: “Everything on the website looks neat. The subdivision of the themes is fine. The color coded too.”

D: “My first impression was that it looked happy. You immediately see the title and pictures of big women. It has a body positive look. It makes me think of people I follow on YouTube..”

Reflecting
The participants were overall enthusiastic about the content of the themes. The questions helped them to reflect and they showed curiosity into the audio stories which were not available yet.

L: “The themes with the questions in between were very nice. It worked very reflective. If I saw a ‘question’ I clicked on it!”

H: “I would share the information with people because it provides insight into which factors are involved and the website bundles this nicely and clearly.”

M: “I would only share it with someone who is close to me. Someone you have a good relationship with. Otherwise, it might lead to a fight.”

M: “I would never share it without references. Good resources are really important if you start a conversation with someone who is skeptical.”

L: “The more reliable the website is as a source, the more useful it becomes to me.”

When they were asked if they would share the information of the website with others, all participants eventually said they would. However, they did expect the website to include references and links to scientific research. The prototype they used did not include working links yet. During the test it was stressed how important it is for the website to be reliable as a source in order to be of value during a weight-related discussion.

D (35): “The website has a happy and body positive look! It makes me think of people I follow on YouTube!”

L (30): “In terms of content, it was very strong. I enjoyed reading it. Very nuanced. And I found those four themes to be very clear.”

M (25): “The more reliable the website is as a source, the more useful it becomes to me!”
Reflecting
It was harder to evaluate the experience of the secondary users who were invited by the participants, because they were not interviewed for this evaluation approach. Most of the secondary users did read the texts on the website, but I got the impression that they did not read it as thoroughly as the participants who initiated the conversation. The attitudes of the secondary users towards the design was very different for each test. The boyfriend of participant H. said he thought the website was a list of excuses, and he was still convinced that it was cowardly to accept being fat after seeing the website and having the discussion. All the other secondary users had a more nuanced view towards it.

L: “The other person did not feel included when looking at the website, because the texts do not address slim people.”

M: “The questionnaire refers to the information on the website. It is indeed better to read the website first, in order to have an idea of what the conversation will be about. If you see the discussion template on its own, you have no clue what some of the things mean.”

Inviting
During the final test, none of the participants used the ‘Invite button’ on the website to share the link. They all copied and pasted the link themselves and explained what the website was about (Figure 28). The secondary users said to the participants that they did not know what to expect. None of the secondary users was really enthusiastic about having the conversation but they went a long with the primary users.

L: “When I invited him, he did not really know what to expect.”

H: “The first response of my boyfriend was him saying he didn’t really want to. But I just started reading the questions and that is how we began.”

RQ1: Does the design empower the stigmatized to confront the stigmatizer?
All of the participants particularly said they would recommend it to other fat people, because the website provides tools to better explain your situation and your opinion. In order to feel empowered by the website, it is very important that there are sufficient references. They want to be able to use it during arguments with skeptical stigmatizers, and therefore the website needs to be reliable.

L: “I felt ‘speak-ready’, supported by what I knew myself and what I now read back on this website, from an organization. And not just from another fat person. That is less convincing. If I read a personal story of someone, it is nice for me, but it does not contribute to a societal change. It has more power if I refer it to someone and it is from an organization.”

M: “The themes on the website are tools for a conversation. A better understanding of the topics. Suppose you invite someone who is fairly skeptical, then it’s nice to have this background information.”

L: “Suppose someone says: “Being fat is your own fault!” This website can really help you to have better arguments in such situations. You can have the information available quickly.”

The Discussion Template
Reflecting
It was harder to evaluate the experience of the secondary users who were invited by the participants, because they were not interviewed for this evaluation approach. Most of the secondary users did read the texts on the website, but I got the impression that they did not read it as thoroughly as the participants who initiated the conversation. The attitudes of the secondary users towards the design was very different for each test. The boyfriend of participant H. said he thought the website was a list of excuses, and he was still convinced that it was cowardly to accept being fat after seeing the website and having the discussion. All the other secondary users had a more nuanced view towards it.

L: “The other person did not feel included when looking at the website, because the texts do not address slim people.”

M: “The questionnaire refers to the information on the website. It is indeed better to read the website first, in order to have an idea of what the conversation will be about. If you see the discussion template on its own, you have no clue what some of the things mean.”

Figure 28: Screenshot of the WhatsApp conversation between participant L. and her stepfather. She copy pasted the text of the website into WhatsApp.
M(25): “We have talked about these topics before. But this time I brought in more perspectives that he hadn’t thought of before. I have been able to give more arguments to explain my opinion better, which was partly due to the information on the website.”

H: “It was a bit of a sharp discussion. He thinks that people who are fat should do something about it and that it is lazy and cowardly to accept. I did not agree with that, because [...] My boyfriend thought the website was a list of excuses to do nothing about it.”

Discussing
Only one of the five participants printed the discussion template, even though they were specifically asked to do so and it is in the instructions on the website and on the discussion template. The participants who did not print the template said they did not have a printer at home, which is why they did not do it. Two participants recommended to create an interactive version, such as an interactive PDF or an online form.

M: “We did it on my phone, because we do not have a printer at home.

L: “I thought the template looked very good in terms of layout, it was very clear. It really invites you to dive into it. The structure of the questions was also fine.”

RQ2: Does the discussion template enable the stigmatized and stigmatizer to have a nuanced conversation about the stigmatizing beliefs?
Most of the conversations were nuanced due to the participants. However, two of the conversations did lead to more heated discussions. M and H experienced this with their boyfriends.

A (pilot): “I liked that the template contained neutral statements and questions to discuss. Often a discussion starts because of something negative. It was nice to start from a neutral point now!”

L: “It was a good and nuanced conversation. Very respectful.”

H (25): “It was a bit of a heated discussion actually. My boyfriend thinks that people who are fat should do something about it and it is lazy and cowardly to accept it. I did not agree with him. But my boyfriend thinks the website was a list of excuses to do nothing about it.”

M: “I think that if your relationship is not so strong, it can lead to a fight. During our conversation, I sometimes got angry at him! But we are used to solving this. I would only do this with someone who has a nuanced way of thinking.”

M: “We did not always agree, but sometimes we agreed to disagree. We have made concessions.”

M: “We have talked about these topics before. But this time I brought in more perspectives that he hadn’t thought of before. I have been able to give more arguments to explain my opinion better, which was partly due to the information on the website.”

M: “We started with the questionnaire while driving in the car. But when we arrived, we stayed seated in the car for 45 minutes longer to finish it!”

RQ3: Does the design reduce weight-related stigmatization?
The participants were not sure whether the use of the design had a positive effect on their relationship. However, they all mentioned there was some kind of impact. One participant (M) explained to me that she did not think the attitude of her boyfriend would change, but that she would experience his attitude less negatively, because now she knows why he does it. This made me realize that during this project ‘reduction of stigmatization’ was often referred to as: reducing stigmatizing behavior, while it might also mean: reducing the experience of stigmatization.

M: “I don’t think his behavior will change. I think he will still ask things like ‘Do you want to go running with me?’ But I think I would interpret it differently now, because I know his motivation. I understand better now why he says what he says”
H: “In the short term, it didn’t get any nicer, because of the heated discussion. But in the long term perhaps. We now know better about each other what we think about it.”

To the question if they would use the discussion template again, three of the five participants had idea’s who to do it with again. The other two did say they would recommend it to people who struggle with stigmatization more than they do. For example, participant D mentioned that she just didn’t have any negative experiences within her direct social environment related to weight, but that she has a friend who might need it more.

M: “I would really like to do it again with my mom too. She is fat as well, but she does not talk about the underlying causes of it. I think it can be a way for her to start thinking: Hey, it’s okay!”

L: “I would definitely do it again. Sometimes it helps to have an external element to guide the conversation. So that a different social dynamic is created. During the conversation I could refer to the template very, which created structure. It offered guidance.”

L(30): “I would definitely do it again. Sometimes it helps to have an external element to guide the conversation. So that a different social dynamic is created. During the conversation I could refer to the template very, which created structure. It offered guidance.”

M(25): “We started the questionnaire while driving in the car. But when we arrived one hour later, we stayed seated in the car for 45 minutes longer to finish it. I think we discussed for more than one and a half hour!”

Figure 32: A picture of Merel Wildschut and Kitty Munnichs while recording episode 4 of the podcast.

Figure 33: A picture of Kitty Munnichs and Tatjana Almuli while recording episode 1 of the podcast.
Social Media & Podcast

Next to the interviews with the participants, the prototype was also evaluated with two of the ambassadors and by making a social media account.

Discovering & Sharing

The ambassadors Tatjana and Merel, were very enthusiastic about the design and especially about the discussion template. Merel (Figure 32) said: “Big Fat Nonsense is perfect for fat women who want to start accept themselves but realize that they need their environment in order to help them.” Both of them said they would share a link of the design when launched. Tatjana (Figure 33) already shared a ‘story’ on Instagram with a tag of Big Fat Nonsense (@dikke.onzin). Dikke Vinger also shared pictures of me while pitching the project at a feminist meeting with tags. Right now the Instagram account already has 100 followers.

RQ4: Does the design reach the target group?

Based on the positive reactions of the ambassadors and the interest of followers on Instagram, it is possible to conclude that the design is very likely to reach the target group. However, it is not possible to say how many people will be reached. Besides this, it is not proven yet if the people who discover Big Fat Nonsense will also open the website link and use the template.

Figure 29 & 30: Meike Schipper and Sam van Eijk during a pitch of Dikke Vinger and Dikke Onzin.
Possible Improvements of the Design

Based on the evaluation of the final design in the previous chapter, recommendations are given. This section contains recommendations to improve the functionality of Big Fat Nonsense.

Add more scientific sources
The most complex part of the final design was the content of the websites: the four themes with information (Appendix 1). The name of the design (Big Fat Nonsense) promises to reveal the truth about being fat. It is therefore highly important that the content is reliable and based on true facts. It would be a disaster if the design brought other false beliefs into the world while there is already so much confusion about this topic.

Although the content of the design is revised by obesity specialist Prof. dr. E.F.C. (Liesbeth) van Rossum and journalist Asha ten Broeke, it is important to remain critical and to keep reviewing the texts. The results of the final evaluation again showed the importance of the liability. The participants of the test wanted to see more links to scientific sources and facts with specific numbers. Moreover, people also relayed to me that they thought it was fun to click on links provided on the page, as it makes the usage more interactive and less ‘boring’. The renewed website which will be launched contains some links, but I recommend to keep looking for interesting sources where people can dive into.

Add illustrations to the themes on the website
The website contains a lot of text. However, visualization is also a powerful tool to convey a message. In the original concept I had imagined each fact of a theme being accompanied by an illustration. For example, the fact on heredity was supposed to be supported by an illustration of a DNA strain, through which the reader would immediately understand what the fact was about. Because the writing of the content was more difficult than expected and highly important, as mentioned in the previous paragraph, it was decided to not further develop the idea of the illustrations for the final design of this project, as they were proven to be of lower priority at this point in time. However, in the future I would recommend adding the illustrations as they might enrich the information.

Digitalize the discussion template
The discussion template is a PDF file that the users have to print, and they can mark their answers and discuss them. However, not everyone has a printer at home and the participants wondered whether it was also possible to use the discussion template on your phone, iPad or laptop. This is possible, except at this stage, you would lose the functionality of interaction. I would recommend making an interactive PDF, a mobile application or an interactive online form (such as Google Form). Even though this is a digital solution, it is important that in the digital design the functionality is still aimed towards real life social interactions.

Create two versions of the website, one for the stigmatizer and one for the stigmatized
It was decided to target the texts of the website on the stigmatized (people who consider themselves as fat), because they were the primary users of the design. The intent of the design is that the primary user invites the secondary user to take a look at the texts on the website as well, before having a discussion. The secondary user who may not be fat him/herself is not directly addressed in the texts. This felt distant to some people, which is a shame, because the texts are also relevant for them. Ideally, there would be two versions of the website. One that addresses the primary user and one that addresses the secondary user. I imagine this as a website that is available in “two languages”. It would be very convenient if you can switch between a ‘thin and fat mode’. Interventions need to be done in order to know whether this is a good idea or not.
General Recommendations

The result of the project was a final design which aimed to reduce stigmatization, but the project had limitations. This section gives recommendations for future research and design projects on weight stigma reduction.

Validate by measuring level of stigmatization

The design is based on the hypothesis that having a nuanced and in-depth conversation after reading and reflecting on theoretical information helps to reduce stigma. If this hypothesis is correct, this design idea can also be applied to reduce other forms of stigmatization, such as race, gender and mental health stigmatization. For this reason, I would like to recommend conducting a study to validate this hypothesis scientifically. The evaluation test results give a general impression of how the users experienced the usage of the prototype. However, in order to prove that the designed tools contribute to a reduced stigmatization within the direct social environment, the stigmatization needs to be measured before and after the use of the design. This project did not measure the levels of stigma.

Conduct interviews with the stigmatizers

The research phase of this design project focused on the stigmatized since they experienced the problem of stigmatization and they were easiest to reach. The research also aimed to gain a better understanding of the needs and concerns of the stigmatizers by interviewing the stigmatized about this, but a more in-depth qualitative research with the stigmatizers as participants is highly recommended in order to come up with more solutions. It would also be interesting to validate what stories have most impact on the stigmatizers and their stigmatizing beliefs.

Take the strength of stigmatizing beliefs into account when designing for stigmatizers

The final test results show that in some situations the design may lead to a fight instead of a nuanced discussion. It seemed like there was a relation between the positive effect of the discussion tool and the level of stigma from the stigmatizer. When someone’s beliefs are very strong, someone may not be willing to listen to the arguments of people with other beliefs. They tend to filter the information that matches their beliefs. Of course, it is harder to convince someone who does not want to be convinced. On the other hand, there are a lot of stigmatizers with weaker stigmatizing beliefs. They are more open to new information and for them the discussion tool did lead to new insight. More research needs to be done, but it seems like the design is more suitable for people with weaker beliefs. Therefore, I recommend looking into this. How does the level of stigmatizing beliefs relate to the type of intervention to reduce stigma? And what kind of interventions work best for the different kinds of stigmatizers?

Extend the project by focusing on different gender and cultural background

The project focused on Dutch women who are fat and who show an interest in the body positivity movement. However, men also experience stigmatization within the direct social environment. As well as people with different cultural backgrounds. To extend the project, it is recommended to choose a wider or different scope.

Think of a business model

At the moment, the project resulted into the design of a website, accompanied with a podcast. A website and a podcast are easily accessible as it is free to use for everyone with a smartphone or laptop. However, for the continuation of this project, this is a disadvantage. It would be nice if the project can maintain itself financially. A continuation of this project therefore requires thinking of a business model. For example, by selling card decks or booklets with the information of Big Fat Nonsense. Another possibility is to apply for funds in order to support the initiative as it is a project with a high societal relevance.
This chapter provides the conclusion of the project and a personal reflection of the writer of this thesis.

In this chapter:
8.1 Conclusion
8.2 Reflection
The project’s aim was to design interactive tools that reduce weight-related stigmatization within the direct social environment of fat women. The result of the project is the design of Big Fat Nonsense, which is an interactive platform that deals with four stigmatizing beliefs and provides a discussion template. Although the design needs to be more thoroughly validated in order to prove reduction of stigmatization after usage, the evaluation of the prototype showed that several components of the design helped to start an in-depth and nuanced conversation about stigmatizing beliefs and weight-related communication.

Podcast, ambassadors & social media
The final design aimed to reach a specific target group. The target group of the design project are women, between 25 and 35 years old, who consider themselves fat and show an interest in the body positive and/or fat acceptance movement. They are not actively contributing to the movement, but they read about it and follow the influencers on social media. A number of so-called ‘heroes’ of this subculture are the ambassadors of the design by contributing to the podcast.

Website
The content on the website deals with stigmatizing beliefs by the use of four main themes. Looking at weight stigma, false knowledge contributes to the most common prejudice. For example, people think fat people are lazy because they eat too much, while literature research showed that becoming fat is not just a matter of eating too much. The themes of Big Fat Nonsense were constructed with the intention to give an overview of the truth about becoming fat, being fat and losing weight. The website gives clear overview of the biggest misunderstandings. Until now, such an easily accessible overview did not exist yet, seen that all information about weight and stigmas is spread over articles, books and documentaries. Therefore people have also called the design ‘fat acceptance for dummies’, which I think is a very good description. It enables people to dive into the topics and get interested into fat acceptance. The new version of the website contains a book list to trigger people to read more.

Besides this, the website helps people who are overweight to reflect on their internalized stigmas and people who are not overweight to become more aware of their stigmatizing beliefs. It is important to note that becoming aware of stigmatizing beliefs does not yet reduce stigmatizing behavior. But it is a first step.

Discussion Template
The discussion template helps people to start a conversation and it is therefore called ‘The Conversation Starter’. The discussion template provides a neutral starting point and lets people have an in-depth discussion. The discussion helps to get a better understanding of each other’s motives. The results of the final test showed that most people had long and nuanced conversations, which provided new insights.

**M (25): “We have talked about these topics before. But this time I was able to come up with better arguments to explain my opinion, which was partly due to the information on the website.”**
Figure 34: A screenshot of the website

Continuation

After the evaluation of the prototype, the design was further developed into a minimum viable product which will be launched on November 1st, 2019. The first episode of the podcast will also be broadcasted from on this day. Some of the recommendations (Chapter 7.3) were already applied into the new design, such as additional links and a book list.

Concluding, the project resulted in the design of Big Fat Nonsense which is a valuable contribution to the fight against weight-related stigmas. Big Fat Nonsense will most likely reach hundreds of people within the online community of body positivity and fat acceptance!

L (30): “This website can help people to feel stronger. Suppose someone tells you: “Being fat is your own fault”, this website can really help you to stand up for yourself with arguments. And you can have the information available quickly.”
After finishing this project, it is time to look back and reflect on my graduation project. I will reflect on the topic of the project and my personal motivation, the design process and the final deliverables.

The Topic
First of all, I want to reflect on the topic of the graduation. I wanted to do my graduation project on a social issue, because I expect to do mostly commercial projects after graduation. I considered this as my last opportunity to do a project with solely the intention to ‘do good’ instead of ‘to earn money’. During my studies I have always tried to pick subjects that I was intrinsically motivated about, because it helped me to design passionately and get the most out of myself. For the course ‘Exploring Interactions’ I did a project on teenagers and body image. Body image has played an important role in my life, as I explained in the chapter on my personal vision as a designer (Chapter 4.2). For this reason, I was immediately interested when Annemiek van Boeijen told me about a graduation opportunity on weight stigma. While working on the project, my motivation only grew. First of all, because I was shocked by the stories of the people I interviewed and stories I read on stigmatization. But secondly, because I realized how much impact these weight stigmas have had on me personally. I am very grateful for the fact that this project forced me to challenge my own stigmatizing beliefs and work on my own self-acceptance.

Design Process
Secondly, I want to reflect on my research and design process. It must be said that I have spent more time on the project than I intended to. This was mainly due to personal circumstances. At other times the project was delayed due to difficulties getting into contact with the target group. I wonder if the challenge was too big, because I am not sure if I would have succeeded to complete the project successfully without getting to know the Dikke Vinger group. Because of the collaboration with this group of women, I was able to emerge myself with the target group and to continuously get feedback on my insights and designs. Originally, Centrum Gezond Gewicht promised to take care of the recruitment of people with obesity. They did try to do so, but it was harder than we thought. Although Centrum Gezond Gewicht has helped me a lot by providing the project of relevant information and critical feedback on the content of the design, I had to do the recruitment myself. This took a lot of time and effort. Talking about being overweight is a taboo topic for many people who are overweight. Personally, I have the feeling that it is not socially accepted to approach someone and say: “Hey, is it possible to interview you because I can see you have obesity?” However, with the help of people who are overweight themselves, such as the women of Dikke Vinger, it was easier. However, even they found it hard to trust slim people. For example, I planned to do a brainstorm session with Dikke Vinger. There were only a few women who signed up and in the end none of them showed up! It may sound weird, but the fact that I am not fat myself was sometimes a disadvantage for the project. Nevertheless, I really liked the challenge of emerging myself with the target group and I really feel like I have become a pro-fat acceptance and body positive woman myself!

The Deliverables
Finally, I want to reflect on the outcomes of this project. Since I started studying Industrial Design Engineering, it has been my dream to design something that could actually be released, but most of my projects ended with a final concept. This is why I had set the requirement for the design: it must be feasible. Of course, it is very educational for me as a designer to do research and come up with solutions for a social issue, but I find it useless when the results end up in a drawer. For my graduation project I aimed to make a real impact. I am most proud that I succeeded to design an online platform which will be released on November 1st. It is not possible to say yet whether people will actually discover the platform and
use it, but I am going to try my best to make this happen after my graduation presentation. Looking at the other outcomes of the project, apart from the design of Big Fat Nonsense, I think I could have done a better job at documenting my research and design process in the report. If I would have had more time, I would have further improved my writings and visualizations. I have chosen to focus on the development and release of Big Fat Nonsense, and I do not regret it.

Altogether, I think I have completed a beautiful project where I learned, among other things, to better love my own body. Moreover, I am very proud of the design of Big Fat Nonsense and I cannot wait to share this with everyone!

Sam: “I am very grateful for the fact that this project forced me to challenge my own stigmatizing beliefs and work on my own self-acceptance!”
REFERENCES

Bibliography


Photo Credits

The picture on the cover page and the pictures introducing each chapter are taken by Anoesjka Minaard.

Figure 1: Picture Of AllGo. Retrieved from: https://www.canweallgo.com/plus-size-stock-photos

Figure 2: Photo of ErasmusMC. Retrieved from: https://www6.erasmusmc.nl/corp_home/corp_news-center/2014/2014-02/centrum.gezond.gewicht.geopend/?reason=404

Figure 3: Pictures by Anoesjka Minnaard

Figure 7: Unknown photographer. Retrieved from: https://thewayoftheriver.com/wp-content/uploads/2016/04/headlessfattie.jpg

Figure 8/9: Pictures retrieved from the private Facebook group: https://www.facebook.com/groups/623676611301946/

Figure 23: Photo by Nikki Schuurman

Figure 24: Photo by Jan de Groen. Retrieved from: https://www.ad.nl/rotterdam/wie-dik-is-is-niet-per-se-ongezond~a0963717/

Figure 25: Photo by Brenda de Vries. Retrieved from: https://www.parool.nl/nieuws/mayra-louise-de-wilde-over-fat-shaming-de-maat-is-vol~b92f031a/

Figure 26: Photo by Aline Bouma. Retrieved from: https://www.mijnkeukentuintje.nl/inspiratie/gesprek-merel-wildschut/

Figure 29: Pictures by Maaike Kooijman
1. Themes (Dutch only)
   1.1 Stop onzin over dik en oorzaken
   1.2 Stop onzin over dik en leefstijl
   1.3 Stop onzin over dik en afvallen
   1.4 Stop onzin over dik en acceptatie

In a separate document:
2. Design Brief
3. User Research Documents
4. Design Requirements
Thema 1: Oorzaken

WAAROM DIK ZIJN MEER OORZAKEN HEEFT DAN WEINIG ETEN EN VEEL BEWEGEN.


Onzin, want niet elk pondje gaat door het mondje! De oorzaak van dik zijn is veel complexer dan dat. Naast voeding en beweging zijn er nog meer factoren die van invloed zijn op jouw gewicht. Ben je benieuwd welke dit zijn?

1. GENETISCHE AANLEG

Veertig tot zeventig procent van ons gewicht kan worden verklaard door ons DNA en ieders gewicht is dus voor een groot deel erfelijk bepaald (bron). Een genetische aanleg om dik te worden kan grote individuele verschillen verklaren bij mensen met dezelfde leefstijl en achtergrond. Onze voorouders met aanleg voor het opslaan van vet en een zuinige verbranding, hadden veel geluk, want hierdoor konden zij in tijden van honger langer teren op hun lichaamsvet en hadden dus een grotere overlevingskans (Vet Belangrijk, Hoofdstuk 1).

VRAAG:
Ken jij mensen die veel eten maar toch slank blijven? En ken je ook mensen die dik zijn maar niet meer dan normaal eten? En hoe zit dat bij jou denk je?

2. HORMONAAL

Hormonen zijn van grote invloed op ons lichaamsgewicht. Het hebben van een hormonale afwijking is een veelvoorkomende oorzaak van dikker worden. Bij vrouwen komt bijvoorbeeld het Polycysteus Ovarium Syndroom PCOS vrij vaak voor. Door te veel mannelijk hormoon uit de eierstokken krijgen deze vrouwen een combinatie van onregelmatige menstruatie, overbeharing, acné en vaak gewichtstoename. Andere voorbeelden zijn een traag werkende schildklier, het (zeldzame) syndroom van Cushing of een tekort aan groeihormoon of (bij mannen) het geslachtshormoon testosteron. Het komt ook vaak voor dat mensen na een zwangerschap of menopauze aankomen door een verandering in hun hormoonspiegels.

3. ZELDZAME AANDOENING

In sommige gevallen is er sprake van een zeldzame lichamelijke afwijking die dik zijn (mede-) veroorzaakt. Denk hierbij aan: een afwijking in het DNA bij zo’n 4% van de mensen met obesitas (zoals een MC4R-deficiëntie, POMC-deficiëntie of leptine-deficiëntie), schade aan de hypothalamus (door bestraling, operatie of een zeer harde klap op het hoofd), een hersentumor of andere syndromen (zoals het Prader-Willi-syndroom en het Bardet-Biedl-syndroom). Het kan soms lang duren voordat iemand erachter komt dat hij of zij dik is door een dergelijke afwijking, omdat er veelal van uit wordt gegaan dat gewicht enkel door leefstijl veroorzaakt wordt.

VRAAG:
Heb je wel eens aan iemand gevraagd waarom zij of hij dik was? En wat is de reden dat je dit juist wel of niet hebt gevraagd?

4. MEDICATIE

Diverse medicijnen kunnen ervoor zorgen dat het lichaam meer vet opslaat, zoals middelen tegen hoge bloeddruk, antidepressiva, anti-epileptica, insuline en medicijnen die corticosteroïden
bevatten (zoals bepaalde neussprays, huidcrèmes, inhalatiepuffers, oog- en oordruppels) en nog veel meer (Vet Belangrijk, Hoofdstuk 9). Als men erachter komt dat iemand heftig reageert op de medicatie, kan soms het type medicatie of de dosering worden aangepast. Maar dit is niet altijd mogelijk, aangezien de medicatie juist bijdraagt aan een over het algemeen verbeterde gezondheid als het gegeven wordt voor een specifieke aandoening.

5. MENTALE FACTOREN
Mentale factoren, zoals stress, trauma, depressie en eetstoornissen (o.a. boulimia nervosa en eetbuienstoornis) kunnen leiden tot gewichtstoename. Depressieve gevoelens kunnen versterkt worden door pesterijen, stigmatisering en fat-shaming (Thema 4), waardoor iemand in een vicieuze cirkel terecht kan komen. Het wordt mensen met een mentale stoornis aangeraden om hiervoor in overleg met de huisarts specifieke psychische hulp te zoeken.

VRAAG:
Heb jij wel eens een eetbui gehad? Waardoor werd dat getriggerd en hoe voelde jij je daarna?

6. LEEFSTIJLFACTOREN

VRAAG:
Leefstijl wordt ook veroorzaakt door iemands opvoeding en omgeving. Denk eens na: Wat zijn factoren die jouw leefstijl hebben beïnvloed? (Thema 2)

Zegt iemand wel eens tegen jou:
“ZOU JE DAT NOU WEL DOEN?”

Dan is de kans groot dat hij of zij denkt: “Elk pondje gaat door het mondje”. Deel daarom deze Dikke Onzin thema’s, praat eroever en begin er een gesprek over met De Gespreksstarter!
Thema 2. Omstandigheden

WAAROM LEEFSTIJL NIET IETS IS WAAR JE VOLLEDIGE CONTROLE OVER HEBT.

Heb je het gevoel dat mensen denken: “Hoe heb je het zo ver kunnen laten komen?” Of heb je wel eens last van afkeurende blikken op straat of in het openbaar vervoer? Het is net alsof jij je ergens voor moet verontschuldigen.

Onzin, want dik zijn is geen misdrijf! Ten eerste is het jouw leven. En ten tweede: Je hebt je gewicht niet volledig zelf in de hand. Dik worden is meer dan alleen veel eten (zie ook thema 1). Maar ook ben al ben je (deels) dik geworden door een te hoge calorie inname en te weinig verbranding, leefstijl wordt ook beïnvloed door omstandigheden, zoals: opvoeding, sociale omgeving, financiën, toegang tot kennis, trauma en stigmatisering.

1. OPVOEDING
Ouders en voogden bepalen voor kinderen op jonge leeftijd wanneer er gegeten wordt, wat er op tafel staat en hoe groot de porties zijn. Dit is van grote invloed op de eetgewoonten die een kind ontwikkelt. Maar ook de opvoedstijl, zoals het belonen met snoep of het verplichten om het bord leeg te eten, beïnvloedt het gedrag van een kind en daarmee zijn of haar gewicht. Veel gewoontes worden er letterlijk ‘met de paplepel worden ingegoten’.

VRAAG:
Ouders en voogden doen vaak wat zij denken dat het beste is voor hun kinderen. Hoe zou jij jouw kinderen opvoeden in relatie tot eten? Of hoe heb jij dat gedaan?

2. SOCIALE OMGEVING
In elke sociaal-culturele omgeving heeft men een andere eetcultuur. Dat zie je terug in het gemiddelde lichaamsgewicht wat significant verschilt per regio en nationaliteit. Maar ook op kleine schaal kunnen er verschillen zijn: een team provoetballers die dagelijks trainen hebben minder kans om dik te worden dan een groep voetbalsupporters die alle wedstrijden samen kijken onder het genot van bier en bitterballen.

VRAAG:
Ben je wel eens aangekomen of afgevallen tijdens een lange vakantie of een reis naar een ander land? En hoe komt dit denk je?

3. FINANCIËN
Het is voor mensen met minder financiële middelen lastiger om zichzelf (en hun gezin) te voorzien van alles wat zij nodig hebben en tegelijkertijd gezond te leven. Het kopen van hoogcalorisch voedsel is het voordeligst voor de portemonnee. Chips, pindakaas, pinda’s, aardappelen, brood en bier kosten gemiddeld drie euro per 2000 kilocalorieën. Terwijl laagcalorische producten zoals sla, spinazie en volkoren producten kosten gemiddeld zo’n zes euro kosten voor hetzelfde aantal calorieën (Eet mij, Hoofdstuk 3). Met ongezond eten kun je dus een hoop geld besparen.

VRAAG:
Wat vind jij ervan dat gezond eten vaak duurder is dan ongezond eten? Ben jij van mening dat de politiek hier iets aan kan doen?

4. TOEGANG TOT KENNIS
Gezond eten is behoorlijk ingewikkeld. En voedselfabrikanten proberen ons ervan te overtuigen dat cola je gelukkig maakt, je van pindakaas sterk wordt en appelsap drinken heel gezond is. Wetenschappelijk onderbouwde educatie over voeding is daarom heel belangrijk, maar niet voor iedereen even vanzelfsprekend en
daarom van invloed op gewicht (Eet mij, Hoofdstuk 3). Sociaaleconomische factoren dragen bij aan iemands toegang tot deze kennis.

*Let wel: Toegang tot kennis staat niet gelijk aan intelligentie. En daarnaast is kennis één van de vele factoren die kan bijdragen aan leefstijl.

**VRAAG:**
Is er iets wat jij vroeger geleerd hebt over voeding waarvan je nu weet dat het niet waar is? En welke partijen zijn er volgens jou verantwoordelijk voor deze educatie?

**5. TRAUMA/STIGMA**
Traumatische ervaringen (zoals de scheiding van je ouders of seksueel misbruik) of stigmatiserende ervaring (zoals uitgescholden worden op straat of niet geaccepteerd worden door familie) hebben een impact op hoe je je voelt en hoe je je gedraagt. Vervelende gebeurtenissen in iemands verleden kunnen ervoor zorgen dat iemand zich heel somber voelt. Veel mensen met sombere gevoelens hebben meer zin om te eten, om deze sombere gevoelens 'weg te eten' bij wijze van spreken. Dit wordt ook wel eens emotie-eten genoemd. Dit is logisch, want het ruiken, proeven en zien van lekker eten activeert het beloningssysteem in onze hersenen. We maken het stofje dopamine wat zorgt voor een heerlijk gevoel van genot en blijdschap (Vet Belangrijk, Hoofdstuk 5).

**VRAAG:**
Heb jij wel eens behoefte gehad aan troost-eten? Of zijn er andere dingen die jij jezelf 'gunt' wanneer je je somber voelt, zoals een glas wijn of een sigaret?

**Zegt iemand wel eens tegen jou:**
“HOE HEB JE HET ZO VER KUNNEN LATEN KOMEN?”

Dan is de kans groot dat hij of zij ook denkt: “Je bent geheel zelf verantwoordelijk voor je eigen gewicht”. Deel daarom deze Dikke Onzin thema’s, praat erover en begin er een gesprek over met De Gespreksstarter!
Thema 3. Dieetcultuur

WAAROM AFVallen NIET ZO MAKKELIJK IS ALS HET LIJKT.

Zijn er mensen in jouw omgeving die je populaire dieetprogramma’s blijven aanbevelen: “Geen koolhydraten eten, dat werkt echt!” of continu vragen of je mee gaat hardlopen: “Je moet gewoon even doorzetten!” Maar ben jij, ondanks de vele afvalpogingen, nog steeds niet ‘slank’? Ze zullen wel denken dat je niet genoeg je best doet...

Onzin, afvallen is namelijk niet alleen een kwestie van discipline! Als dat zo was, dan was de dieetindustrie nu allang failliet gegaan. Ons lichaam is een prachtig mechanisme dat ons voor een hongersnood beschermt, om gewichtsverlies te voorkomen. Ontdek in dit thema alles wat je nog niet wist over aankomen en afvallen.

1. VALSE HOOP

VRAAG:
Heb jij wel eens een ‘streefgewicht’ bereikt met een dieet? En is het je gelukt om op dit gewicht te blijven?

2. GROTERE HONGER
In de eerste fase van een zeer laagcalorisch dieet val je vaak snel en veel af. Dit is dan nog voornamelijk vocht en spiermassa, omdat je lichaam niet graag je reserves (vetcellen) aanbreekt. Maar in de tweede fase gaat het een stuk langzamer en krijg je steeds meer honger. De biologische en psychologische mechanismes die je beschermen tegen verhongering, treden in werking om je in leven te houden. Als mensen veel zijn afgevallen hebben ze meer hongerhormonen (zoals ghreline) en minder verzadigingshormonen (zoals leptine) in hun bloed (Vet Belangrijk, Hoofdstuk 6). Iemand die veel is afgevallen heeft daardoor een grotere eetlust. Dit fenomeen is niet van korte duur, want uit onderzoek blijkt dat zelfs een jaar na het crashdieet het hongergevoel nog altijd versterkt aanwezig is. Het is nog niet duidelijk of het überhaupt ooit nog herstelt.

VRAAG:
Hoe kijk jij aan tegen ‘honger’? Zijn hongergevoelens iets wat je moet tegengaan en uitstellen of is het iets waar je juist naar moet luisteren?

3. VERTRAAGDE STOFWISSELING
Als gevolg van de dieet-hongersnood gaat het lichaam als het ware in ‘spaarstand’ om de schade te beperken. Je gaat hierdoor bijvoorbeeld automatisch minder bewegen (Eet mij, Hoofdstuk 4). En de stofwisseling vertraagt, je lichaam verbruikt minder energie om te blijven draaien. Deze spaarstand van je lichaam heeft als gevolg dat je na een dieet nooit meer zoveel zult kunnen eten als daarvoor (Vet Belangrijk, Hoofdstuk 6). Om op gewicht te blijven zal je de rest van je leven het desbetreffende dieet moeten volhouden, maar dat is zelden een reële optie.
5. BEWEGEN
Sommige mensen proberen veel gewicht te verliezen door intensief te gaan sporten. Mensen die van het ene op het andere moment veel meer calorieën verbranden, zijn echter geneigd deze calorieën er onbewust weer bij te eten. Nadat ze stoppen met sporten, blijven ze die extra calorieën nog wel eten omdat ze het ondertussen gewend zijn geraakt, waardoor ze gemakkelijk weer aankomen. Het is, net als bij het aanpassen van voeding, beter om iets meer te bewegen en dit vol te houden. Ondanks dat beweging over het algemeen goed is voor het lichaam, is het belangrijk om rekening te houden met het feit dat bewegen niet voor iedereen even hetzelfde is. Het kan voor iemand met veel gewicht bijvoorbeeld erg pijnlijk (en slecht) zijn om trap te lopen vanwege de explosieve belasting op de knieën. Maar beseff dat ook wandelen, of kleine beweginkjes (zoals continu tikken met je pen of voet), en het langdurig stilzitten doorbreken door even op te staan, allemaal kunnen bijdragen aan een gezonde leefstijl.

6. MAAGVERKLEINING
Een maagoperatie kan een effectieve oplossing zijn voor mensen die last ondervinden van hun gewicht, doordat zij hierdoor bijvoorbeeld medische problemen ondervinden, en wanneer het aanmeten van een gezonde leefstijl of obesitasmedicijnen onvoldoende helpt om het gewicht te verlagen. De impact van een maagoperatie wordt vaak onderschat - het is geen ‘quick fix’. Het herstel van een maagoperatie kan lang duren en het lichaam heeft levenslang aanvullingen van bepaalde vitaminen en mineralen nodig. Na een maagoperatie kan men plotsklaps nog maar kleine beetjes eten en deze verandering in leefstijl valt mensen vaak erg zwaar (Eet mij, Hoofdstuk 4). En daarnaast is er, net zoals bij elke buikoperatie, het operatierisico zelf.

VRAAG:
Heb jij het gevoel dat jouw omgeving graag wilt dat jij gewicht verliest? Waar merk je dit aan? En hoe word jij hierdoor beïnvloed in jouw keuze om wel of niet af te vallen?

7. GEHEUGEN VAN VETCELLEN

Zegt iemand wel eens tegen jou:
“GEWOON EVEN DOORZETTEN!”

Dan is de kans groot dat hij of zij ook denkt: “Afvallen is een kwestie van zelfdiscipline”. Deel daarom deze Dikke Onzin thema’s, praat erover en begin er een gesprek over met De Gespreksstarter!
Thema 4. Acceptatie

WAAROM DIKKE MENSEN OOK NOG LANG EN GELEUKKIG KUNNEN LEVEN.

Geven mensen jou wel eens goedbedoelde complimentjes, zoals: “Dat jurkje staat je mooi, het kleedt je erg af!” Of raden ze je aan om af te vallen zodat je de liefde van je leven kunt vinden? En misschien droom je er zelf ook nog steeds van om ooit wakker te worden als slanke den.

Onzin, want slank zijn is niet per se beter. Het beeld dat dunne mensen normaler, mooier, gezonder, geliefder of populairder zijn overheerst in onze maatschappij en kan zelfs leiden tot discriminatie. Dit beeld wordt met name veroorzaakt door vooroordelen en stereotypes. In dit thema lees je waarom dik zijn niet ‘het einde van de wereld is’ en waarom je dik zijn ook gewoon mag accepteren.

1. MOOI ZIJN
Slanke mensen worden vaak mooier gevonden dan dikke mensen, wat komt door onze schoonheidsidealen. Veel mensen die niet voldoen aan het ‘ideaalbeeld’, kunnen zich daardoor heel onzeker voelen. Onze schoonheidsidealen worden beïnvloed door de media en de mode-industrie, waar we veel (erg) slanke modellen zien. De body positivity beweging zet zich in voor meer acceptatie van alle soorten lichamen, van dik tot dun, door meer diversiteit te omarmen.

VRAAG
Hoe ziet jouw ideale schoonheidsideaal eruit? Welke body types zou jij graag meer willen zien in modetijdschriften en social media?

2. GEZOND ZIJN
Gewicht staat niet gelijk aan gezondheid. Iemand die dik is heeft een verhoogd risico op gezondheidsproblemen, maar hoeft hier (nog) geen last van te hebben. Er zijn veel dikke mensen die zich heel fit voelen. Daarnaast zijn er mensen die wel dik zijn en gezondheidsproblemen hebben, maar alsnog heel lang en gelukkig leven. Een gezond gewicht betekent namelijk voor iedereen iets anders.

VRAAG
Hoe voel je je als iemand zich zorgen maakt over jouw ‘gezondheid’? En wat vind je ervan als iemand zich zorgen maakt over jouw ‘geluk’? Zit daar voor jou verschil in en waarom?

3. NORMAAL ZIJN
Ondanks dat de helft van de volwassenen overgewicht heeft en 15% van de Nederlanders erg dik is, is slank de norm die veelal wordt uitgedragen. Restaurants waar je niet kunt eten omdat de stoelen te klein zijn, poortjes waar je nauwelijks doorheen past of kledingwinkels waar jouw maten niet te verkrijgen zijn. Dit geeft het beeld af dat dikke mensen ‘er niet mogen zijn’. Gewicht zou echter geen rol moeten spelen – dikke mensen hebben evenveel recht op een plek in de samenleving.

VRAAG
Wat vind jij: Moeten dik-onvriendelijke plekken zich aanpassen? Of moeten er meer plekken bijkomen gericht op dikke mensen?

4. GELIEFD ZIJN
Op tv en in boeken zijn het vaak de slanke mensen die de rol hebben van de populaire kids, gerespecteerde helden, verleidelijke vrouwen of beroemde popsterren. Dikke mensen worden veelal afgebeeld als: ‘de vriend van…’, de eenzame loser of de klunzige nerd. Hierdoor ontstaan veel vooroordelen en stereotypes. Maar dikke mensen kunnen natuurlijk net zo goed getalenteerd, succesvol en geliefd zijn. Dik zijn is geen reden om
niet op een podium te staan, een groot bedrijf te leiden of niet op de foto te gaan. Gelukkig laten steeds meer dikke idolen dit zien, zoals Lizzo.

**VRAAG**

Hoe denk jij dat we de reputatie van dikke mensen kunnen verbeteren? En wie zijn hier eigenlijk verantwoordelijk voor?

**5. KANS HEBBEN**

Er wordt hard gelachen om grappen over dikke mensen die worden afgebeeld als de domme, klunzige en onverzorgde mensen. Gewicht-gerelateerde discriminatie is één van de meest sociaal-geaccepteerde vormen van discriminatie (Vet Belangrijk, Hoofdstuk 11). Dit heeft serieuze gevolgen, zoals ongelijke kansen op een vacature. Helaas wordt er ook gediscrimineerd in de gezondheidszorg waardoor dikke mensen minder geneigd zijn de benodigde medische zorg te zoeken.

**VRAAG**

Vind jij dat het strafbaar zou moeten zijn om iemand te discrimineren op gewicht? Waarom wel/niet?

**Zegt iemand wel eens tegen jou:**

**“DAT JURKJE KLEEDT JE ERG AF!”**

Dan is de kans groot dat hij of zij ook denkt: “Slank zijn is beter voor je”. Deel daarom deze Dikke Onzin thema’s, praat erover en begin er een gesprek over met De Gespreksstarter!