

# The influence of the Instagram trend 'Fitspiration' on sexual health of college-aged women



Christa Ooms

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Christa Ooms 950322622080

Supervisor: dr. Chizu Sato

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Wageningen University, Wageningen

## Abstract

The so called 'Fitspiration' trend on Instagram is very popular among young adults of 18-25 years old. This trend promotes a fit and healthy lifestyle where most of the photos focus on diet and exercise. Mass media like Instagram show us that the 'ideal' women should be thin and fit. Fitspiration objectifies women by focussing on the appearance markers of fitness instead of the health markers of fitness. The influence of Fitspiration was already studied in relation to depression and eating disorder but not in relation to sexual function. Therefore, the present study examines if exposures to the Instagram trend 'Fitspiration' and sexual functioning in college-aged women are related. The main question was divided in four sub-questions focussing on self-perceived exposure to Fitspiration, sexual functioning, other variables influencing sexual functioning and interpreting the quantitative data by means of interviews. A online survey, filled in by 193 college-aged women, was used as primary data collection method to investigate this relation. Four semi-structured interviews were held with college-aged women to help interpret the hard data from the questionnaires. The data showed that the majority of the respondents has an Instagram account and more than half of the respondents agreed to see Fitspiration often. Respondents and interviewees thought that self-esteem/body image was the biggest factor influencing the relation between Fitspiration and sexual health. A multiple regression analysis indeed showed a positive correlation between *body image* and *sexual function*. In line with this, the analysis showed a negative correlation between *influence social media* and *sexual function*. On the other side, the analysis showed a positive correlation between *frequency Fitspiration* and *sexual function*. It was expected that exposure would have a negative correlation with sexual function, but the positive correlation could have appeared because of the homogeneous BMI of the sample. When women match the ideal body of fit girls this can have a positive influence on sexual function. Lastly, *frequency sexual activity* had a significantly positive correlation with *sexual function*.

Keywords: Fitspiration, Objectification theory, sexual function, Instagram, sexual health

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## 1. Introduction

'Excuses don't burn calories', a slogan placed on a photo of a so-called 'fit girl' (see cover page of this thesis). The image accompanying the slogan is a picture of a young woman who wears nothing more than a sports bra and a tight pair of shorts (Sugarpop, n.d.). The lack of clothes makes her abs and muscled clearly visible. A body many women desire when looking at fit girls' accounts on Instagram. Nowadays, with these accounts women are not only motivated to look thin but they also have to look fit. This trend is called 'Fitspiration'. Many people are posting and following photos that promote a fit and healthy lifestyle whereby most of the photos focus on diet and exercise (Easton, Morton, Tappy, Francis & Dennison, 2018). A 'fit girl' can be defined as a woman expressing this fit and healthy lifestyle on social media. When inserting '#Fitspiration' into the search engine of Instagram in January 2019, it showed over 17 million posts with this name tag.

Really popular fit girls can reach high numbers of followers, even up to 10 million. Not a surprise when knowing that in June 2018 Instagram reached one billion active users (The Statistics Portal, n.d.). This enormous number of people form a network together where they can share photos and videos with each other. In a few years Instagram has become one of the most popular social networks next to Facebook and Twitter. More than half of the active users log in every day and 60% of the users are between the age of 18 and 24 (Smith, 2018). Nowadays many young people cannot imagine their lives without social media networks like Instagram. They feel the urge to be available for their network all day long and are dependent on their phone (Thomé, Härenstam, & Hagberg, 2011). Most have their phone with them all the time and get a notification when a new photo or video is uploaded by one of the people they are 'following'. In Western society, Instagram can be seen as a new mass medium where people get exposed to many images of all sort of things.

A great number of these Instagram images consist of selfies and other photos of users themselves. Images of men and women are already used often in mass media like advertisements, music clips, movies etc. Social and cultural ideas about masculinity and femininity are expressed through these media. Images show us how to be masculine or feminine and which commodities make us masculine or feminine (Kellner, 2011). In advertisements the focus lies on women's beauty, clothes, make-up and jewelry. This way marketers attach specific meanings of gender to commodity (Willis, 1991). Even little girls learn through media and commodities how to dress up, look like and be like a woman. According to Bartky (1990) the dominant image of women in mass media then (before the 1990s) is characterised by being thin, tall, youthful and sexy. Freitas, Jordan and Hughes (2017) showed in their study that not much is changed since the 1990s. The study looked at more than 1500 images of models in magazines and concluded that 74% was underweight and only 1% was slightly overweight. This study shows how the ideal of women being thin still is dominant in the media. This dominant image

has influence on how women experience their own appearance. How people see their bodies and how they feel about their bodies can be called a body image (Cash, Fleming, Alindogan, Steadman & Whitehead, 2002). A disturbed body image occurs more often in women than in men (Bearman, Presnell, Martinez & Stice, 2006). The dominant ideal for women to be thin is part of the reason this difference between men and women exists. Furthermore, there is not much diversity in the images of women's bodies shown in media. When women are not able to look like this dominant image there can be significant consequences on the mental health of woman.

## 1.2. State of the art

When looking at the current available literature only a few studies do yet explore the influence of the Fitspiration Instagram trend. The studies that have been executed on Instagram show a similar dominant body image as in other mass media. The dominant characteristics like being thin, youthful and sexy are also present in Instagram posts belonging to the Fitspiration trend (Tiggemann and Zaccardo, 2018; Carrotte, Prichard & Lim, 2017). Tiggemann and Zaccardo (2018) analysed 600 Instagram posts with the hashtag 'fitspiration'. The findings showed that more than 60.0% of these posts were images of people. These images of people consist of 67.3% of women, of which 75.2% looked thin and 56.2% looked toned. This results in over 30% of pictures confirming the dominant characteristics. Affirmatively, Carrotte, et al. (2017) also found in a similar study that women were also typically looking thin and toned and were often under the age of 25.

The incentive of being fit does look harmless at first. People get motivated and committed to working out and feel a sense of community and social support by doing so (Easton et al, 2018). On the other hand, research also shows multiple negative side effects that tend to emerge from the fitspiration trend. Exposure to idealized body images can lead to an increased negative mood and body dissatisfaction when one does not match the image (Tiggemann & Zaccardo, 2015; Benton & Karazsia, 2015). The main factor for dissatisfaction about one's body by women is weight (Jones, 2001). Looking at images of women with thin, muscular bodies can have influence on women's self-esteem and therefore make them feel unhappy about their own looks. Furthermore, not only exposure but also engagement in Fitspiration like posting, commenting and following Fitspiration influences women. Holland and Tiggemann (2017) found that posting Fitspiration, has also negative effects on women. According to them, the trend can lead to increased risk of eating disorder and excessive exercise behaviours. The drive to become as fit and thin as the women on Instagram can stimulate compulsive exercising. In summary, existing studies show that high exposure to the Fitspiration trend can lead to mental health problems like negative mood, body dissatisfaction, eating disorders, and compulsive exercising.

The mental health problems occurring in women who are engaged in the Fitspiration trend on Instagram can be explained through objectification (Fredrickson & Roberts, 1997). According to

Fredrickson and Roberts (1997) objectification can be explained as seeing the appearance of a body independently from a person's character. The body is seen as an object more than a person. This theory explains that through sexual objectification women can have the feeling that "their bodies are looked at, evaluated and always potentially objectified" (Fredrickson & Roberts, 1997, p. 177). Tiggemann and Zaccardo (2018) looked at the presence of objectification in Instagram posts. They coded objectification when one of the following three aspects was visible: "A specific body part is the main focus of the image, posing in a sexy manner (e.g. alluring/sultry gaze, winking or arching back) or the individual's head and/or face absent or not clearly visible" (Tiggemann and Zaccardo, 2018, p. 106). Viewing these aspects, objectification was present in more than half of the images and 25.0% of the time women would have a sexy pose when they were in an image. Moreover, the study showed that buttocks were more frequently emphasized in images of women than in images of men and that images of men more often focussed on the face while images of women focussed on the body (Carrotte, et al. 2017). The objectification theory states that (sexual) objectification like this can have possible consequences on the mental health of women (Fredrickson & Roberts, 1997). The research of Fredrickson and Roberts (1997) describes that sexual objectification of women takes place through the male gaze and media images. This results in women being observed all the time, which makes them adopt this observer's perspective as they look at themselves. Women surveying themselves from a men's perspective, can be called the feminine gaze (Berger, 2006). They start to habitually monitor their bodies, just like society does, and focus on their visual appearance more and more. This can lead to four experiences; "surpluses of shame and anxiety, a shortage of peak motivational states, and scant diminish awareness of internal bodily states" (Frederickson and Roberts, 1997, p. 186). These experiences can contribute in increased mental health risks for depression, sexual dysfunction and eating disorders (Frederickson and Roberts, 1997).

### 1.3. Present study

Two of the three mental health risks mentioned in the objectification theory are already found in studies that looked at the consequences of the Fitspiration trend on Instagram. The studies concluded that the Fitspiration trend increase signs of depression and eating disorder. A knowledge gap emerges as sexual dysfunction is one of the consequences mentioned in the objectification theory that has not been studied yet in connection with the Fitspiration trend. When wanting to understand the full consequences of the Fitspiration trend it is important to study the consequences on sexual health as well. The World Health Organisation (WHO) defines sexual health as "a state of physical, emotional, mental and social well-being in relation to sexuality" (WHO, 2006). Sexual health is a broad topic, because of time limitation the present study focusses on sexual function. Woertman and van den Brink (2012) did a literature review of studies about sexual functioning and body image. They viewed 57 studies and found that sexual functioning is related to body image, body esteem, bodily acceptance, body image self-consciousness and body satisfaction. Looking at these 57 studies they came up with



the following domains that define sexual functioning: “sexual desire, subjective arousal, lubrication, orgasm, satisfaction and pain” (p. 202). Therefore, in this study the same definition is used for sexual (dys)functioning. As Instagram is very popular under young women and the girls in the Instagram Fitspiration post are often young women, the present study was conducted within college-aged women. College-aged women defined as women between 18 and 25 years old.

The aim of this study is to investigate if the Fitspiration trend has consequences on women’s sexual health. Therefore, the main research question is: *‘How are exposures to the Instagram trend ‘Fitspiration’ and sexual functioning in college-aged women related?’* The main research question is divided into four sub-questions:

1. What is the self-perceived exposure to Fitspiration on Instagram experienced by college-aged women?
2. How do college-aged women experience their sexual functioning and how is their sexual functioning related to Fitspiration?
3. Are there other variables of influence in the relation between exposure to Fitspiration and sexual functioning, and how are they related?
4. When looking at the quantitative data collected in the present study, how do women understand these results?

The main research question focusses on the relation between the frequent exposure and sexual function. Therefore, the main question could be answered through the first three research questions. However, to make it more personal and nuance the hard data collected for the first three sub-questions the fourth sub-question was formed. This fourth sub-question helps with the interpretation of the hard data through a small quantitative study under college-aged women.

The transformation from Thinspiration to Fitspiration has influence on mental wellbeing of women (Tiggemann & Zaccardo, 2015). Social media networks, like Instagram turn young women into actors of objectifying women’s bodies. However, whether this phenomenon affects sexual functioning of women is still unclear. Understanding this phenomenon is therefore of scientific relevance and also of societal relevance. Getting more insight into the relationship between Fitspiration and women’s sexual functioning can help to empower women and better understand sexual health problems.

Following chapter one, a theoretical framework is presented in chapter two. The chapter explains the objectification theory and the influence of objectification on body image and sexual function. The research methods for both the quantitative and qualitative study are presented in chapter three. Then, in chapter four the results from both studies are presented and analysed. In chapter five the main research question is answered. The chapter contains a discussion about various aspects of the study in connection with the theoretical framework and literature outside the framework. Furthermore, the

chapter elaborates on the methodological issues, scientific and societal relevance, and options for future research.

## 2. Theoretical framework

Fredrickson and Roberts (1997) explain with the objectification theory the possible consequences of objectification on mental health. They explain that objectification can be explained as separating the person from the body. The body exists for the pleasure and consumption of others. The theory states that women are objectified through gazing and media. Looking from a sociocultural perspective women are more the subjects of gazing, being looked at intently, than men. It is not only men who gaze at women, media also displays women as passive objects to be gazed at. Often, men look more directly into the camera as women look away and look more absent. Furthermore the theory explains, that body parts of women get more emphasized than body parts of men. For example, pictures of men focus more often on the face and pictures of women focus more often on body parts. This encourages a sexualized perspective when looking at pictures of women in media. Women are constantly looked at and their looks get constantly evaluated. This means that when women get gazed at, they are constantly potential subjects of objectification.

The objectification theory states that being constantly looked at influences how women look at themselves. They internalize a gaze of others as their own gaze. They start to adopt the observer's perspective when looking at themselves, which is called self-objectification. Furthermore, the theory explains that looking beautiful can create benefits for women on social and economic level. It can be useful for women to pay attention to their appearance and create an expectation for themselves of how others will treat them. So, as visualised in Figure 2.1, objectification can result in an observer's perspective on the self, and this perspective can lead to habitual monitoring of the body.

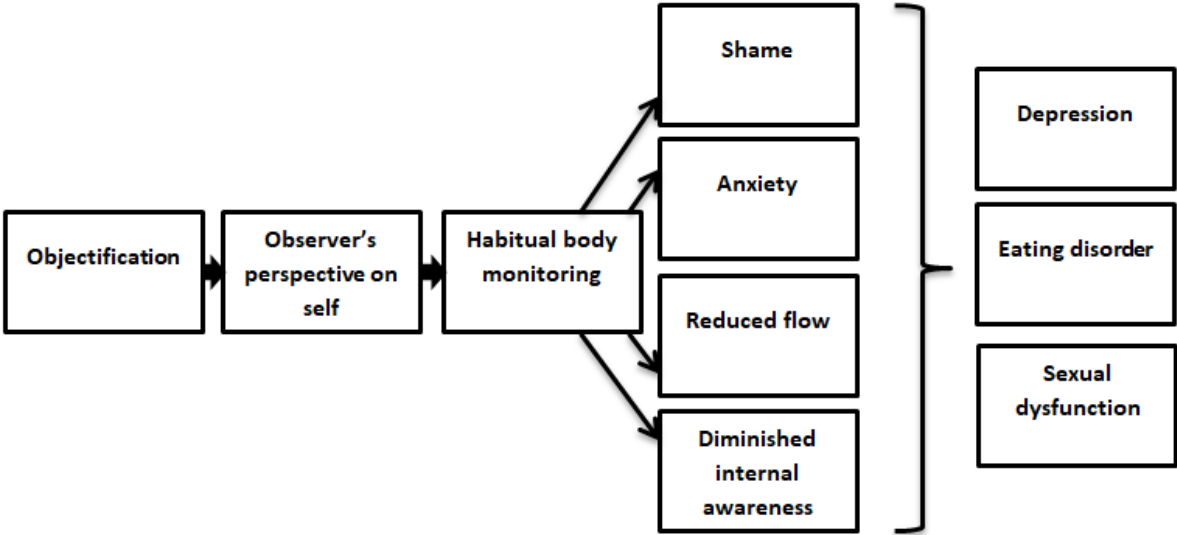


Figure 2.1. Objectification theory and possible mental health consequences

## 2.1. Consequences of objectification

The consequences of habitual monitoring of the body can be increased feelings of shame, increased anxiety, reduced flow and diminished internal awareness (Figure 2.1). These four consequences mentioned in the objectification theory of Fredrickson and Roberts (1997), are explained in the following paragraph.

First of all, the theory describes that shame can occur when one compares one's appearance with the appearance of others. These others can be peers, celebrities and also fit girls on Instagram. When people do not match with the one they compare themselves with, this can create negative feelings about their body like feelings of shame. It can be hard for women to be constantly exposed to images of perfect women that not match their own body shape. It is difficult for them to change their body into this perfect image that is presented. Feelings of shame and wanting to get away from the gazing can emerge.

Secondly, the theory explains that there are two types of anxiety that can be the consequence of habitual monitoring. The first type of anxiety is anxiety for physical appearance. Women are looked at all the time, but they do not know when they will be looked at. They have to make sure that they look good all the time and that their clothes are in the right place. Some fashion items are hard to wear and make sure women have to constantly monitor if their clothes are still in the right place. This kind of clothing stimulates habitual monitoring even more. The second form of anxiety is anxiety for physical safety. When you look a certain way or wear certain clothes it is sometimes said that a woman was 'asking for it' when sexual violence has happened to her. Women have certain behaviour to protect themselves from sexual violence, like extra locks on the door or staying in after dark. They take precautions because sexual objectification makes them anxious about their physical safety.

A third consequence the theory mentions, is reduced peak motivational states. A peak motivational state can be explained as 'being in the zone'. It is a working state flow in which one is not aware of one's surroundings and are fully concentrated on your task. It can stimulate creativity and can be important for quality of life. Women are more often interrupted when doing an activity than men. For example a sports activity can make women more self-conscious, as the movement draws attention to the body. This movement can make others gaze at women's bodies. Being in the flow is harder to achieve when one is self-conscious, and therefore harder for women who are constantly looked at and evaluated for their appearance.

The last consequence of habitual monitoring is diminished awareness of internal bodily states. Research showed that women are less aware of their internal bodily states than men. There are two possible explanations for these findings. It is possible that women focus on being thin and this starts already from a young age. They learn to suppress feelings of hunger but maybe it is not possible to

only suppress this feeling separately. So, suppressing hunger makes them suppress more internal feelings at the same time. On the other hand it is possible that because women focus so much on their outer bodily appearance, that they are not able to focus on their inner bodily experiences at the same time. Being less aware of internal bodily states can for example result in not sensing the physical changes coherent to sexual arousal.

In conclusion, the theory of objectification states that objectification has influences on a person's perspective on the self and that this perspective can lead to increased anxiety and shame, reduced flow and diminished internal awareness (Figure 2.1).

Subsequently, according to the theory these four consequences can possibly lead to mental health problems. These mental health problems include depression, eating disorder and sexual dysfunction (Figure 2.1.). Mental health areas like mood and eating behavior are already studied in comparison to body image, objectification and the Fitspiration trend on Instagram. Therefore, sexual function is the mental health area that is studied in the present study.

## 2.2. Objectification of fit girls

Why is Fitspiration (fit and inspiration) seen as objectifying by multiple researchers? First, Fitspiration was seen as the good alternative for the trend of Thinspiration. Thinspiration (thin and inspiration) are images and text promoting losing weight and a thin body ideal. Thinspiration was seen as a risky and unhealthy trend because it is associated with eating disorders (Ghaznavi & Taylor, 2015) Therefore, Instagram banned Thinspiration from their search engine. After this, Fitspiration sounded positive, as the focus was not on being skinny anymore, but on being fit. It was even seen as a trend leaning towards women's empowerment. The term 'fitness' was first associated with a healthy medical state. People were engaging in physical activity to improve their health. Now, physical activity is presented as a way to become physically attractive instead of healthy (Aubrey, 2010; Willis & Knobloch-Westerwick, 2014). Fitspiration does not show medical markers but appearance markers of fitness. This creates pressure to not only watch your weight but to also exercise to develop a sculpted body. Therefore, Fitspiration has created markers of feminine beauty and a new beauty ideal that are even harder to achieve.

Next to that, the focus on appearance instead of medical health is seen as objectifying. According to the objectification theory some media encourage adopting the objectifying perspective on the self (Fredrickson & Roberts, 1997). It is known that exposure to sexually objectifying images by a variety of media forms leads to an increase of self-objectification. (Harper & Tiggemann, 2008). Through Instagram women themselves are the producers of these media. They make the photos, re-take them, edit them, so they 'best' version of themselves is shown to the others. Tiggemann and Zaccardo (2016) found that most of the photos showed people and there were more photos of women than men. In most

photos people were posing, of which a quarter had a sexy pose. Additionally, they only found one body type; all the women were skinny and toned. Additionally, the study of Deighton-Smith and Bell (2018) sees Fitspiration as objectifying because: “Individuals were often featured with a large proportion of their body in shot (and yet often faceless), their flesh exposed, and were involved in inactive poses (such as selfies)” (p. 478). Fitspiration is objectifying, because it is about bodies and not about people.

Lastly, De Vries and Peter (2013) found out that presenting the self to a big audience increases self-objectification. Social media networks like Instagram make it possible to present yourself to a large number of people. Because of these findings, Fitspiration is seen as objectifying.

### 2.3. Body image

According to the theory, objectification leads to an observers perspective on self, but that is not the only variable that has influence on sexual function. According the literature review by Woertman and van den Brink (2012) sexual function is also related to body image: body appreciation, body image self-consciousness, body satisfaction, and body esteem are part of one’s body image. When looking at the literature, objectification is next to perspective on self also related to all those four variables (Figure 2.2).

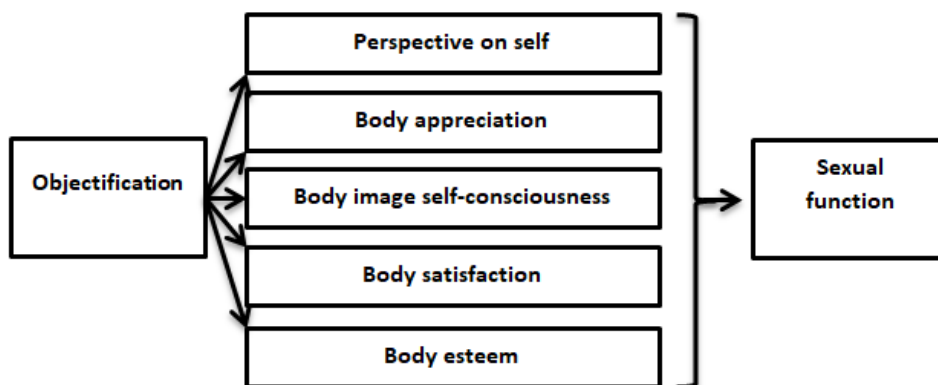


Figure 2.2. The influence of objectification on the different components of body image.

The study of Fredrickson and Roberts (1997) looks at the influence of objectification on the perspective on self, however there are also other studies that look at the influence of objectification on the other four variables that are related to sexual functioning. The research of McKinley (1998) measured both objectification and body esteem in a group of young men and women. They found out that objectification had a negative correlation with body esteem. So, when objectification increased, body esteem decreased. Objectification has also had an influence on body satisfaction, as shown in the study of Frederick, Forbes, Grigorian and Jarcho (2007). They found that women are more likely to be dissatisfied with their body than men and that deviating from the dominant image of being thin was related to a decrease in body satisfaction. Next, in the study of Wiederman (2000) they looked at body

image self-consciousness during sexual intimacy. They see self-consciousness as something following from objectification and measured in the study that this had a negative influence on sexual functioning. Lastly, objectification also has influence on body acceptance. Robbins and Reissing (2018) see bodily acceptance as a hallmark of body appreciation. Body appreciation according to their study, is a predictor for sexual function and sexual satisfaction. To summarize, objectification clearly has an influence on people's body image. It has a negative relation with, body esteem, body appreciation and body satisfaction and a positive relation with body image self-consciousness and perspective on self. All these five factors can be placed under body image (Figure 2.2).

## 2.4. Sexual function

The five components of body image found in literature can have influence on women's sexual functioning. According to the literature review by Woertman and van den Brink (2012) sexual function can be divided in six domains; sexual desire, arousal, lubrication, orgasm, satisfaction and pain (Figure 2.3). These six domains are also used in the Female Sexual Function Index (FSFI). The index measures these six domains of sexual function using 19 items. The order of the items in the index is two about sexual desire, four about sexual arousal, four about lubrication, three about orgasm, three about satisfaction and lastly three about pain.

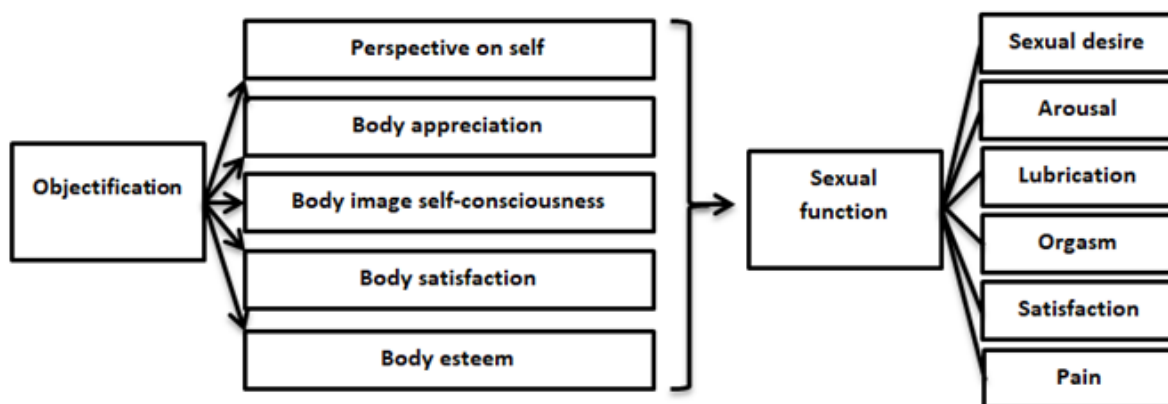


Figure 2.3. *The influence of objectification and body image on sexual functioning domains.*

To summarize, according to the theory it is hypothesized that frequent exposure to Fitspiration and engagement in Fitspiration leads to objectification of self and fit girls. Objectification is expected to have influence on body image due to increased anxiety and shame, reduced flow and diminished internal awareness. Looking at previous studies, it is foreseen that body image and sexual functioning are positively correlated. Therefore, hypothetically, an increase in exposure to Fitspiration would lead to a decrease in sexual functioning of women (Figure 2.4.).

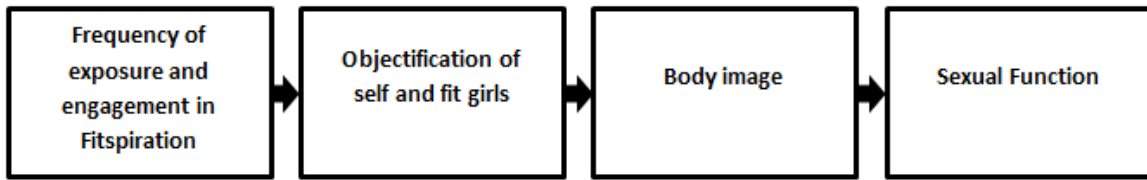


Figure 2.4. *Model of the expected relation between Fitspiration and sexual function.*



## **3. Methods**

A cross-sectional design was used to measure the correlation between frequent exposure to the Instagram trend Fitspiration and female sexual functioning. Both quantitative and qualitative measurements were used.

### **3.1. Quantitative study – questionnaire**

A questionnaire was used as the main data collection method. Due to the sensitivity of the subject a questionnaire seemed most fitting to ask college-aged women about their sexual function. An anonymous online survey gave respondents the chance to answer honestly without feeling embarrassed and to avoid socially desirable answers as much as possible.

The questionnaire had items about all the components of the theoretical framework; exposure to Fitspiration, objectification, body image and sexual function. The questionnaire can be found in Appendix A. How the questions were formed is described in the following paragraphs.

#### **3.1.1. Exposure to Fitspiration**

To measure the exposure to Fitspiration three things were measured. The questionnaire started out with asking if respondents were familiar with Fitspiration. When they answered that they were not, they were presented with the definition of Fitspiration used in this study. After this, they were asked if they have seen Fitspiration before and if they have an Instagram account. When they answered they had an Instagram account, they were presented with questions about their frequency of exposure and engagement in Fitspiration. The questions to measure frequency were about seeing and looking up Fitspiration and the questions about engagement asked about posting, commenting and following of Fitspiration. For this question about frequency and engagement a 5-point Likert scale was used. Looking at the different kind of popular Instagram accounts the question was raised if there is a difference in the nature of Fitspiration images or accounts. To understand more about what respondents see as Fitspiration the questionnaire asked them ‘What is Fitspiration for you?’. The question was asked twice with two kinds of answering methods; one by ranking words and one by ranking images. Lastly, there was an open question where people could fill in if and where they saw Fitspiration/fit girls outside of social media.

#### **3.1.2. Objectification**

To measure objectification an existing questionnaire from the same authors of the Objectification Theory was used. The Self-Objectification Questionnaire (Fredrickson, Roberts, Noll, Quinn & Twenge, 1998) distinguishes between objectification of the self and objectification of other women. The questionnaire uses 10 attributes, five attributes are appearance-based and therefore seen as objectifying and another five attributes are competence-based and therefore seen as non-objectifying. To measure self-objectification respondents had to rank the 10 attributes from that which has the

greatest impact on their physical self-concept to that which has the least impact on their physical self-concept. To measure objectification of fit girls, respondents had to rank the 10 attributes from most important to least important when they thought or looked at fit girls.

### **3.1.3. Body image**

Body image and the influence of social media on body image were measured by a question with 10 statements whereby a 5-point Likert scale was used. For every component of body image an item was formed and body esteem was divided into two questions where one was about body size and the other about body shape. This gave six statements about body image in total. Examples of these statements are 'When I am around others I am constantly aware of how I look' (body image self-consciousness) and 'I feel comfortable with the size of my body' (body esteem).

To see if respondents are aware of the influence of social media on their body image another four items were formed and placed together with the six items about body image in question 10.

Respondents may already know that they are influenced by social media. It is possible that they are aware of comparing themselves with fit girls or the influence of fit girls on their body image. To see if they are aware of this process four items were formed, for example 'Social media influences the way I feel about myself'. In conclusion, 10 items were made to measure respondents' body image and their perspective on the influence of social media on their body image.

### **3.1.4. Sexual Function**

The part about sexual function started with two questions about sexual orientation and frequency of sexual activity (question 12 and 13). Questions 14-34 asked respondents about their sexual function (see Appendix A). The items were sorted into six domains; questions 14-16 about sexual desire, questions 17-20 about sexual arousal, questions 21-24 about lubrication, questions 25-28 about orgasm, questions 29-31 about satisfaction and questions 32-34 about pain. There exist already multiple questionnaires to measure sexual (dys)function. The Female Sexual Function Index (FSFI) (Rosen et al., 2000) was used for the present study to measure sexual function (questions 14-34). In their book, Costantini, Villari and Filocamo (2017) explain and criticise 13 questionnaires about sexual function which were developed in recent years, among others the FSFI. A couple of these questionnaires were encountered to be not suitable for this study as they are used for women in menopausal transition, women with urinary incontinence and women with hypoactive sexual desire disorder. Furthermore, the Sexual Quality of Life-Female (SQOL-F) and the Sexual Satisfaction Scale for Women (SSS-W) were not suitable as they focus on the relation with quality of life. It is possible that the Sexual Function questionnaire (SFQ) was suitable but I could not gain access to this questionnaire. Moreover, this questionnaire was only used in one study.

The questionnaires that were suitable and accessible were Brief Index of Sexual Functioning for Women (BISF-W), DeRogatis Interview for Sexual Functioning – Self Report (DISF-SR), Female

Sexual Function Index (FSFI), Female Sexual Distress Scale-Revised (FSDS-R) and Sexual Health Outcomes in Women Questionnaire (SHOW-Q). Of these five options, FSFI had a thorough evaluation of six domains as others had less domains or less items per domain. In addition, the FSFI was tested multiple times and had an excellent score on both validity and reliability (Wiegel, Meston & Rosen, 2005; Ter Kuile, Brauer & Laan, 2006). The other four suitable questionnaires were used to critically assess the FSFI and judge if items were missing for the present study. The FSFI is originally a self-report questionnaire with 19 questions about all the six domains of sexual function. Based on the other questionnaires two items were added to the version of the FSFI used in the present study. The two items were added with care and it was made sure that the style of the new items matched the style of the original items.

In the FSFI 'sexual desire' is a domain with only two items, focussing on frequency and level of desire. The other four questionnaires looked more thorough at this domain as the BISF-W for example also focussed on initiation of sexual activity because of sexual desire (Taylor, Rosen, & Leiblum, 1994). How feelings resulted into actions seemed as an important measurement. Therefore, the following item was added to the domain of sexual desire: 'Over the past 3 months, how often do you initiate sexual activity because of sexual desire?'

In the domain 'orgasm' in the FSFI, there is no item about the strength or intensity of the orgasm. Both DISF-SR and SHOW-Q measured if women were satisfied about how strong and intense their orgasms are (DeRogatis, 1997; Learman, Huang, Nakagawa, Gregorich & Kuppermann, 2008). To not only measure the quantity but also the quality, the following item was included in the domain of orgasm: 'Over the past 3 months, how satisfied were you generally with the strength and intenseness of your orgasms?'

No new statements about sexual arousal, lubrication, satisfaction or pain were found in the other questionnaires. So, no new items were added to these domains in the FSFI. The domain scores have to be multiplied with a factor so the maximum score of all the domain scores is six. For the domain of sexual desire and orgasm the factors were changed to remain the maximum score of six. The sum of the domain scores is the sexual function score. Resulting in a maximum score of 36.

Furthermore, another mentionable change was made in the original version of the FSFI. The index focusses in every question on the last four weeks, probably because of people's ability to memorize events. Despite of this, I found it too narrowing to focus only on the past four weeks. The relationships of college-aged women can be fluid and a many women would be excluded from filling in their sexual functioning when only the last four weeks counted. I am interested in the sexual functioning of women who are not in an exclusive relationship as well, and therefore extended the time frame to the past three months. Longer than three months would be tricky as the chance for life changing events happening in that period of time, like break-ups, would increase. Women who had never had sexual

intercourse with a partner were excluded from the sample. It was expected that their answers would differ from the respondents that did have sexual intercourse. Moreover, the study measures sexual function according to six domains. The six domains focus on sexual intercourse with a partner and not only on sexual activity by one self.

The questionnaire ended with an open question whether or not respondents thought there is a relation between exposure to Fitspiration/fit girls on Instagram and sexual function/sexual health of women.

### 3.1.5. Demographic characteristics

At the end of the questionnaire there were some questions about demographic characteristics of the respondents (36-41). This were questions about gender, age and education but also questions about perceived fitness and BMI as weight seems to be related to sexual function in other studies (Larsen, Wagner & Heitmann, 2007).

### 3.1.6. Respondents

When looking at the review of Woertman and van den Brink (2012) the sample sizes used in studies about sexual function differed greatly. For example studies claimed to have a sample size of 1200, 400, 200 or 85 female students. Therefore, I calculated what the sample size should be based on the total population. The total population of this study are all the women between the age of 18 and 25 with predominantly a Dutch nationality. On January 2018 there were 841.881 women in the Netherlands in this age range (Centraal Bureau voor Statistiek, 2018). Based on this total population size there was strived for 200 respondents. The questionnaire was spread out through social media and through snowballing, as I am part of the population myself. I reached the population through my own network. Furthermore, I asked sport associations in Wageningen if they would share my questionnaire among their members and a few of them did.

### 3.1.7. Data analysis quantitative research

The data was analysed by using IBM SPSS Statistics 23. A multiple linear regression was carried out to see if there is a relation between exposure, objectification, body image and sexual function (Figure 3.1).

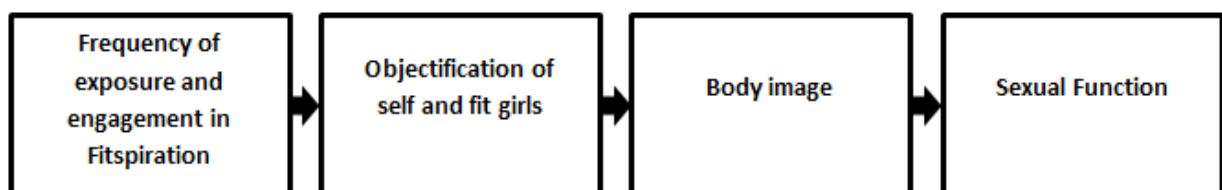


Figure 3.1. *The hypothetical relation between exposure to Fitspiration and sexual function.*

A null hypothesis and alternative hypothesis were formed:

- Null hypothesis: Fitspiration, objectification and body image do not affect sexual function.
- Alternative hypothesis: Fitspiration, objectification and body image do affect sexual function.

A 95% confidence interval was used as boundary for rejecting the null hypothesis and accepting the alternative hypothesis. A confidence interval of 95% is used most often in statistical testing (Fields, 2013). This means that there is 95% chance that the calculated interval contains the population mean (Fields, 2013). So, there is 95% chance that the null hypothesis is correctly accepted or rejected. The confidence level plus alpha should equal one. Therefore, an alpha level of 0.05 is used to determine significance. A sample size of 200 respondents gives the study, at a confidence level of 95%, a margin of error of 7%. A margin of error of 7% means that the results from the sample can differ seven percentage points from the real population value. So, the results have a radius of seven points (Fields, 2013).

Exposure to Fitspiration was measured by three components; frequency, engagement and nature. Objectification was measured as objectification of the self and objectification of fit girls. Furthermore, a few other components were taken into account when analysing the data that are not present in the main theoretical framework. These components were BMI, feeling of fitness, awareness of social media influence on body image, age, education and sexual frequency.

## **3.2. Qualitative study – interviews**

The fourth sub-question was answered by collecting data through in-depth interviews. The interviews were semi-structured (Appendix B – interview guideline) and the questions for these interviews were constructed after analysing the results of the quantitative research. How the interview guide was developed is described in chapter four. After analysing the results of the quantitative research I asked a couple women who had filled in the questionnaire to discuss and interpret the findings with me during an interview. When hearing no new results after three interviews, I did a fourth interview to make sure there was no new information. After this interview I stopped looking for new participants. A total of four women were interviewed.

### **3.2.1. Data analysis qualitative research**

The collected audio data from the interviews was first transcribed. Then the data was coded so patterns and themes could be found. The theoretical framework was used to create codes and capture the main ideas. The following codes from the framework were used: frequency Fitspiration, engagement Fitspiration, objectification, body image and sexual function. I printed all the transcribed data and with colour markers I coded the particular ideas or points the participants had. While coding I found one codes outside of the theoretical framework: sociocultural influence.

## **3.3. Ethical considerations**

Sexual function is a private and sometimes taboo subject, therefore some ethical values were taken into consideration. The results of both qualitative and quantitative research were handled with care and were only used in this particular study. Participation in the questionnaire and interviews was

completely voluntary and respondents could withdraw from the study at any moment. Furthermore, the questionnaire was anonymous, no participant was identified and the data was analysed on group level. To ensure this anonymity there were limited demographic questions in the questionnaire. The data from the interviews was collected confidentially. Audio recordings of the interview were deleted after transcribing the interviews. Lastly, the participants were not identified and letters instead of names were used when talking about the data.

## 4. Results

The results are presented by means of the four research sub-questions. Firstly, the demographic characteristics of the sample are presented. Secondly, the results of the quantitative research are described according to sub-questions one, two and three. Thirdly, an analysis of the quantitative research is shown. The questions that came up during the interpretation of the quantitative research formed the foundation of the interview guideline for the qualitative research. Thereafter, the results of the qualitative research are presented, which answers the fourth sub-question. All the results are discussed and connected to the theoretical framework or other theories in chapter five.

### 4.1. Results quantitative research

Before carrying out the linear regressions the data was scanned to see if the assumptions were met. To check for normality Q-Q plots and histograms were executed. Then, to check for linearity and homoscedasticity scatterplots were executed as well. There were no outliers found and no further abnormalities present. Moreover, a linear regression is a stable test that often would not show significance or relations when something is wrong with the data.

After checking the assumptions, the internal reliability between items was checked. The internal reliability was measured with Cronbach's Alpha. Cronbach's Alpha was used to see if the items could be taken together to form one concept like *body image* or *sexual function*. A Cronbach's Alpha around 0.8 was seen as desirable because then the items would all contribute something new but still measure the same concept. The six items that formed *body image* had a Cronbach's Alpha of 0.846. Due to the ranking format for the questions about *objectification* the reliability statistics gave low numbers, which was to be expected as the items were supposed to differ. The three items that formed *frequency Fitspiration* had a Cronbach's Alpha of 0.848. The three items that formed *engagement Fitspiration* had a low Cronbach's Alpha of 0.365, therefore they were not used as one variable when performing statistical tests. Next, the four items of *social media influence* had a Cronbach's Alpha of 0.791. Lastly, the Cronbach's Alpha of the 21 items that formed *sexual function* was 0.886. To conclude, the Cronbach's Alpha was good for *body image*, *frequency Fitspiration*, *social media influence* and *sexual function*. Therefore, the items could be combined as one variable in the multiple regression tests that followed.

#### 4.1.1. Demographic characteristics

Only the complete questionnaires were used for analysing the data. From the 241 completely filled in questionnaires four had filled in not to be a woman (gender) and one respondent filled in an age of 26. These five respondents were excluded from the sample. The 43 respondents that had filled in that they never had sex or had had no sexual activity in the last three months were also excluded from the sample. This led to a sample of 193 respondents in total.

All the age categories were represented in the sample (Table 4.1). Age was normally distributed among the sample.

Table 4.1. Age groups of the research sample.

Age	Frequency	Percentage
18	10	5.2%
19	21	10.9%
20	33	17.1%
21	24	12.4%
22	37	19.2%
23	34	17.6%
24	21	10.9%
25	13	6.7%

Looking at education, one person (0.5%) was in Higher General Secondary Education, two people (1.0%) were in pre-university education and three people (1.6%) were in intermediate vocational education. The other 187 respondents (96.9%) were in higher vocational or university education. University education was overall the most common form of education in the sample.

To look into the objective and subjective fitness of the respondents, there were questions about BMI and feeling of fitness. The mean BMI was 21.9, the highest BMI was 33.3 and the lowest BMI was 16.96 (Figure 4.1). A BMI between 18.5 and 24.9 is seen as a healthy, a BMI above 25 is seen as overweight and a BMI above 30 is seen as obese (Hartstichting, n.d.). Measuring health with BMI is difficult because BMI does not take body composition or muscle weight into account.

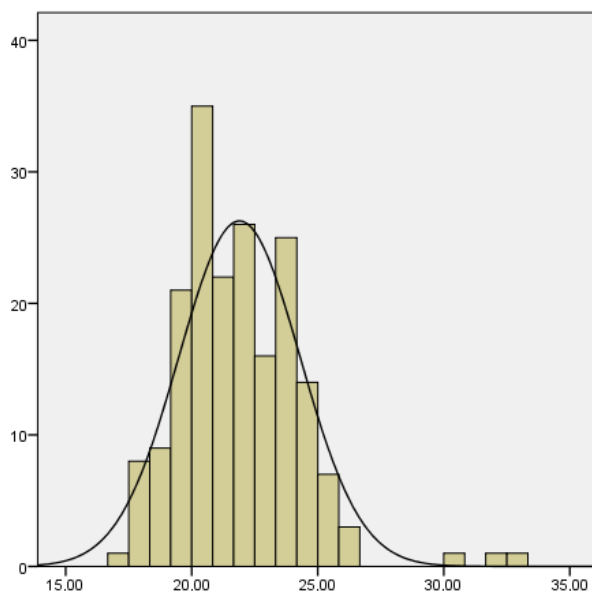


Figure 4.1: Overview of BMI in the sample.

Furthermore, 4.7% (n=9) of the respondents felt like they were doing too much to be fit, 58.0% (n=112) was feeling fit and 37.3% (n=72) felt like they were doing too little to be fit. Lastly, in the



sample 86.0% (n=166) of the respondents is heterosexual, 5.2% (n=10) is homosexual, 8.3% (n= 16) is bisexual and 0.5% (n=1) had another sexual orientation.

#### 4.1.2. Self-perceived exposure

The first sub-question provided data on the exposure to Fitspiration. The first sub-question is: ‘*What is the self-perceived exposure to Fitspiration on Instagram experienced by college-aged women?*’

#### Frequency

Of the 193 respondents, 90.2% (n=174) is familiar with Fitspiration/fit girls and 78.2% (n=151) said that they see Fitspiration/fit girls on Instagram. Only 13.5% (n=26) respondents do not have an Instagram account, these 26 respondents did not fill in the questions about frequency and engagement. The frequency of exposure to Fitspiration differed among the sample, more than half of the sample (62.1%) agreed (n=49) or somewhat agreed (n=54) to see Fitspiration often. Spending a lot of time looking up Fitspiration and looking up Fitspiration multiple times a day was less common (Table 4.2).

Table 4.2. *Self-perceived Fitspiration Frequency and Engagement.*

Item	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	disagree
I often see Fitspiration	57 (29.5%)	63 (32.6%)	8 (4.1%)	26 (13.5%)	13 (6.7%)
I spend a lot of time looking up Fitspiration	5 (2.6%)	25 (13.0%)	16 (8.3%)	49 (25.4%)	72 (37.3%)
I look multiple times a day at Fitspiration	10 (5.2%)	22 (11.4%)	18 (9.8%)	35 (18.1%)	81 (42.0%)
I follow many Fitspiration	8 (4.1%)	17 (8.8%)	15 (7.8%)	28 (14.5%)	99 (51.3%)
I often comment on Fitspiration	1 (0.5%)	0 (0.0%)	2 (1.0%)	6 (3.1%)	158 (81.9%)
I often post Fitspiration	0 (0.0%)	7 (3.6%)	2 (1.0%)	13 (6.7%)	145 (75.1%)

#### Engagement

The engagement (comment, post, follow) of respondents in Fitspiration was lower than the frequency of exposure (Table 4.2). Of the respondents, 51.3% (n=99) disagreed that they followed many Fitspiration, 81.9% (n=158) disagreed that they commented on Fitspiration and 75.1% (n=145) disagreed that they posted Fitspiration themselves. Only 0.5% (n=1) agreed to often comment on Fitspiration and 0.0% said that they often post Fitspiration. When asking the respondents who post Fitspiration what kind of images they post people could check multiple options. The options ‘healthy food’, ‘myself in exercise clothes’ and ‘high intensity exercise’ got filled in the most (Table 4.3).

Table 4.3. *Nature of Instagram posts of respondents.*

<b>I post photos of...</b>	<b>Frequency</b>
healthy food	16
low intensity exercise	9
high intensity exercise	14
myself in exercise clothing	15
exercise equipment	6
my fit body	2
before and after a period of working out	1

## Nature

To measure the nature of Fitspiration two ranking questions were used. Respondents had to rank ten words and six images to explain what Fitspiration is for them. When a respondent ranked a word or an image as most important it got respectively ten or six points, the word/image ranked as second most important got nine or five points and so on. All the scores were summed up and the outcome of these scores is presented in Table 4.4.

Table 4.4. *Ranking of words and pictures by the question 'What is Fitspiration to you?'*

<b>Ranking words</b>	<b>Total score</b>	<b>Ranking images</b>	<b>Total score</b>
1. Being fit	559	1. Fit body, no head	730
2. Feeling healthy	514	2. Before and after	716
3. Exercising to look good	443	3. High intensity exercise - running	707
4. Eating healthy food	409	4. Healthy food	668
5. The ideal body	340	5. Low intensity exercise - yoga	619
6. Being balanced	225	6. Bikini	613
7. Exercising for fun	124		
8. Having perfect proportions	111		
9. Looking hot	90		
10. Restrictive eating	80		

When looking at the images, people ranked the images that were most objectifying first: the body without the head and a transformation of a body (see Appendix B for images). The picture of high intense exercise, a woman running, was ranked third. Looking at the words, being fit and being healthy scored the highest. These words are non-objectifying attributes, in contrast with the objectifying images that were ranked first and second. There is an opposition between the ranking of the words and the ranking of the images when considering objectification.

The image of the women in bikini was ranked last place, this was surprising as images like this were seen often in popular Instagram accounts when orienting on the subject. However, a bikini is not associated with fitness, therefore this could have been ranked last. Although Fitspiration post seem to be about appearance, the words 'having perfect proportions' and 'looking hot' are ranked in the

bottom half. However, ‘exercising to look good’ and ‘the ideal body’ are ranked in the top five. Furthermore, according to the theory, eating disorder is linked with objectification but restrictive eating is ranked the lowest (Holland & Tiggemann, 2017). Contradictory, eating healthy food and the image of healthy food are both ranked fourth, suggesting it might still influence eating behaviour. But the influence of Fitspiration on healthy eating could be seen as a positive influence and therefore ranked high. Restrictive eating is possibly associated with eating disorders, which is seen as a negative influence.

### **Fitspiration outside social media**

After the questions about frequency, engagement and nature, there was an open-ended question about the other places, aside from social media, where people saw Fitspiration/fit girls. Respondents could fill in multiple answers. Advertisements and commercials were mentioned the most, 52 times. The second mostly listed place where Fitspiration was seen were magazines (n=47). Furthermore, television programs and series were mentioned 41 times. Also, gyms and advertisements for gyms were written down multiple times (n=29). Smaller categories that were named were websites of shops for underwear and sportswear (n=12) and billboards (n=13). Some people mentioned things that could fall into the category ‘real life’ (n=8); like on the street, friends of them and on the beach. One respondent even said that Fitspiration/fit girls are everywhere.

Table 4.5. Overview of frequency of answered listed in open question about Fitspiration outside social media.

<b>Place where Fitspiration is seen</b>	<b>Frequency</b>
Advertisements	52
Magazines	47
Gym	29
Billboards	13
Websites/shops	12
Real life (on the street, friends, beach etc.)	8
Movies	5
Books (like book of Rens Kroes)	4
YouTube	4
Everywhere	1

### **4.1.3. Sexual function and Fitspiration**

The second sub-question provided data on sexual function. The second sub-question is: ‘How do college-aged women experience their sexual functioning and how is their sexual functioning related to Fitspiration?’ In the following paragraph, the sexual function scores of the respondents are discussed. Furthermore, the variables of influence on sexual function are represented.

To calculate the sexual function scores of the respondents, the answers to the six domains of the adjusted FSFI were all taken together and multiplied with the right factor. The maximum score of the index is 36. An overview of the frequency of scores inside the sample group is presented in Figure 4.2.

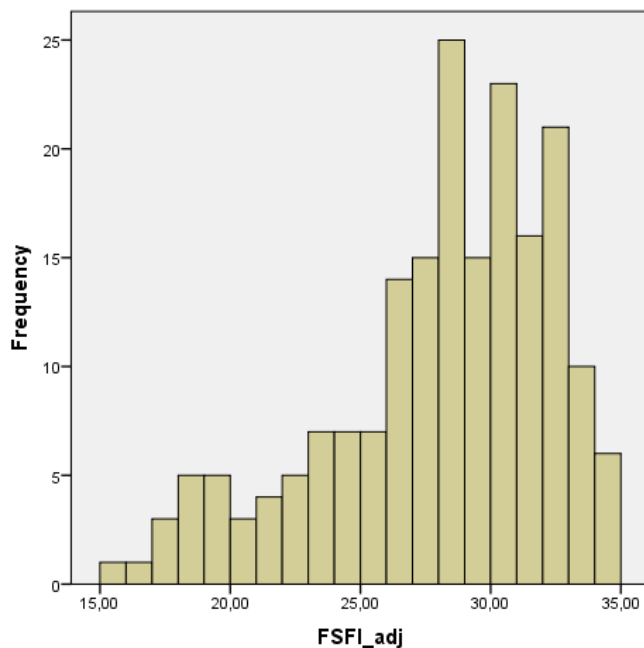


Figure 4.2. Frequency of sexual function according to an adjusted version of the Female Sexual Function Index.

The mean score of *sexual function* is 28.04 with a standard deviation of 4.308. Most respondents had a sexual function between 25-35 (Table 4.6). There were 15 respondents (7.8%) with a sexual function below 19.9.

Table 4.6. Sexual function calculated from the FSFI categorized into groups.

Sexual function	Frequency	Percentage
15 -19.9	15	7.8%
20 – 24.9	26	13.5%
25 – 29.9	79	40.1%
30 – 35	73	37.8%

To test the influence of *Fitspiration* on sexual function a multiple regression was carried out. Before the model was tested the influence of the items of *engagement Fitspiration* were checked. This was done together with *frequency Fitspiration* and *influence social media* as these all together are the exposure variables. Due to the low internal reliability of *Fitspiration engagement* it was not used as one variable in the statistical test. The adjusted  $R^2$  was used to see if *comment*, *follow* and *post* as single variables improved the model. The  $R^2$  always increases when a new variable is added to the model. The adjusted  $R^2$  increases only when the new variable improves the model more than is expected by chance. The adjusted  $R^2$  without *comment*, *follow* and *post* was 0.051. When adding *post* the adjusted  $R^2$  did not improve, but it declined to 0.045. When adding *comment* and *follow* to the

multiple regression the adjusted R<sup>2</sup> increased to 0.062. Therefore, *comment* and *follow* were taken up into the multiple regression.

A multiple regression was carried out to see if the hypothetical correlations mentioned in the theoretical framework were also present in the collected data (Table 4.6). According to the theory *Fitspiration frequency*, *engagement comment*, *engagement follow*, *objectification other*, *objectification self* and *body image* would predict *sexual function*. The variable *body image* turned out to have a significant correlation with *sexual function* ( $t = 3.703, p = 0.000$ ). This was a positive correlation, so a higher *body image* predicts a higher *sexual function*. *frequency Fitspiration*, *engagement comment*, *engagement follow*, *objectification other* and *objectification self*, were not statistically significant.

Table 4.6. Multiple regression results for predicting *sexual function* according to theory ( $n=193$ ).

Variable	B	Std. Error	Beta	t	Sig
(constant)	25.584	2.487		10.285	0.000
Frequency Fitspiration	0.226	0.141	0.170	1.597	0.112
Engagement comment	-1.364	0.817	-0.130	-1.669	0.970
Engagement follow	-0.245	0.387	-0.069	-0.632	0.528
Objectification other	-0.02	0.045	-0.035	-0.433	0.666
Objectification self	-0.05	0.055	-0.073	-0.903	0.368
Body image	0.228	0.061	0.284	3.703	0.000 *
F	3.342 *				
R <sup>2</sup>	0.115				
Adjusted R <sup>2</sup>	0.081				

Remark: \* = significant at a p-value of < 0.05

### Relation between Fitspiration and sexual health

At the end of the questionnaire was an open ended question were people could fill in if they suspected a link between Fitspiration and sexual health and how they interpreted this relationship. The respondents were not bound to a limited amount of words and could expand as much as they liked (Table 4.7). From the 193 respondents 24 filled in that they did not think that there was a relationship or that they thought that it did not influence them. Another 11 respondents filled in that they had no idea if there was a relationship or that they had not thought about this relationship. Most of the time, it was mentioned 107 times, respondents talked about the influence of Fitspiration on confidence or self-image. Eighteen respondents elaborated that this would influence the enjoyment of sex. Of all the answers, it was mentioned 24 times that Fitspiration has impact on the ideal body for women. A small group of respondents looked at the relation in a more biological way. They thought that working out too much could lead to less energy for sex ( $n=4$ ) or that malnutrition could lead to a lower libido ( $n=3$ ). Lastly, seven respondents mentioned that this relation could change when having a longer relationship.

Table 4.7. Overview of frequency of answered listed in open question about relation between Fitspiration and sexual function.

Answer	Frequency
No relationship/I am not influenced	24
Confidence/self-esteem/self-image	107
Impact on ideal for women's bodies	24
Influence on enjoyment of sex	18
No idea/never thought about it	11
When you are fit you have better sex	11
Not of influence in long relationship	7
High expectations of partner	6
Less energy because of working out too much	4
Malnourished causing lower libido	3
When you are fit you have sex sooner	1
Stress causes dryness of vagina	1
Looking at hot girls makes you want to have sex	1

### Objectification

Objectification is seen as an important factor in the theory, so more information about objectification was gathered. Objectification of fit girls and objectification of self were measured with a ranking system. When a respondent ranked an attribute as most important it got ten points, the attribute ranked as second most important got nine point and so on. All the scores were summed up and an overview of these scores is presented in Table 4.8.

Table 4.8. Ranking of attributes from most important to least important.

Objectification other	Total score	Objectification self	Total score
1. Physical fitness level	1144	1. Physical attractiveness	1237
2. Health	1141	2. Health	1198
3. Physical attractiveness	1137	3. Energy level	1117
4. Strength	1112	4. Weight	1106
5. Energy level	1090	5. Physical fitness level	1064
6. Firm/sculpted muscles	1047	6. Sex appeal	1026
7. Weight	1009	7. Firm/sculpted muscles	1011
8. Physical coordination	1007	8. Strength	1001
9. Measurements	970	9. Measurements	933
10. Sex appeal	958	10. Physical coordination	922

When comparing both ranking lists, fit girls only got one objectifying attribute in the top five attributes. The five attributes ranked as most important for respondents themselves were almost similar, only strength was replaced by weight. Weight is an objectifying attribute, so respondents ranked two objectifying attributes as most important in the top five of self.

The attribute that scored high in both ranking questions was health. Respondents found the non-objectifying attribute health important for themselves as well as for fit girls. What they found most important for themselves is physical attractiveness (objectifying) and they found physical fitness level (non-objectifying) most important for fit girls. This was a surprising result, as Fitspiration and fit girls are seen as objectifying by the theory. Therefore, it was expected that fit girls would be objectified more than the women themselves. Furthermore, fit girls use sex appeal (objectifying) in their pictures by emphasizing their buttocks and breasts but sex appeal was ranked the lowest for fit girls.

Additionally, sex appeal was ranked sixth most important, four places higher, for women themselves.

Strength and energy level (non-objectifying) were also seen as important attributes for fit girls. This may suggest that the appearance of fit girls is associated with these attributes.

#### 4.1.5. Other important variables

Aside from the main theory there were also other variables measured that were suspected to influence or were influenced by sexual function. The third sub-question covering this was: *‘Are there other variables of influence in the relation between exposure to Fitspiration and sexual functioning, and how are they related?’*

##### Frequency of sexual activity

Before answering the questions of the FSFI, respondents were asked to fill in their frequency of sexual activity during the last three months. Table 4.9 gives an overview of the frequency of sexual activity in the sample. Most of the women had sexual activity one or two times per week (n=71). The second largest group had sexual activity 1-2 times per month (n=43). Sexual activity less than once a month and 3-4 times per week had the same frequency (n=31). Only a small group (n=17) answered to have sexual activity more than four times per week.

Table 4.9. *Frequency of sexual activity over the past 3 months in research sample.*

Frequency sexual activity	Frequency	Percentage
Less than once a month	31	16.1%
1-2 per month	43	22.3%
1-2 per week	71	36.8%
3-4 per week	31	16.1%
More than 4 times a week	17	8.8%

A linear regression was performed to see if frequency of sexual activity predicts sexual function. *Frequency sexual activity* significantly predicted *sexual function*,  $F(1.191) = 65.069$ ,  $p < 0.05$ . It turned out that *frequency sexual activity* has a positive correlation with *sexual function* ( $t = 8.067$ ,  $p = 0.000$ ).

##### Influence of social media

The amount of influence of social media respondents experience is presented per item in Table 4.10.

Table 4.10. Frequency and percentage of influence social media per item.

Item	Agree	Somewhat agree	Neither agree nor disagree	somewhat disagree	disagree
Social media influences the way i feel about myself.	27 (14.0%)	77 (39.9%)	36 (18.7%)	33 (17.1%)	20 (10.4%)
I feel pressured to fit into an 'ideal' look.	19 (9.8%)	74 (38.3%)	31 (16.1%)	44 (22.8%)	25 (13.0%)
My idea of the 'perfect body' is influenced by social media.	32 (16.6%)	90 (46.6%)	32 (16.6%)	27 (14.0%)	12 (6.2%)
I compare myself with fit girls on social media	21 (10.9%)	51 (26.4%)	31 (16.1%)	45 (23.3%)	45 (23.3%)

'Somewhat agree' had the highest score for all the four items, so women feel influence of social media. Of the 193 respondents, 90 respondents somewhat agreed that their idea of the 'perfect body' is influenced by social media (46.6%). About half of the respondents agreed or somewhat agreed that social media influences the way they feel about themselves (n=104, 53.9%) and they feel pressured to fit into the 'ideal' look (n=93, 48.1%). A smaller percentage of the respondents agreed or somewhat agreed that they compare themselves with fit girls (n=72, 37.3%). When combining the scores of the four items, *agree* got five points, *somewhat agree* four points, and so on.

The combined influence of social media is presented in Figure 4.3. The mean score of influence social media was 12.71, with a standard deviation of 3.855.

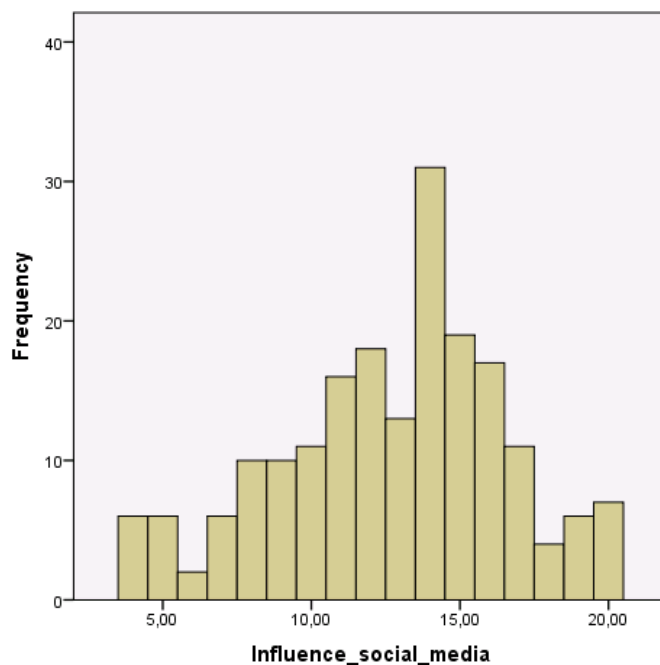


Figure 4.3. Frequency of influence social media.



Another linear regression was carried out to predict *sexual function* by *influence social media*. The linear regression had a significant F value which means that *influence social media* predicts *sexual function* more than expected by chance,  $F(1, 191) = 10.227$ ,  $p < 0.05$ . The correlation between *influence social media* and *sexual function* was negative ( $t = -3.198$ ,  $p = 0.002$ ).

After seeing that *frequency sexual activity* and *influence social media* had a significant influence they were taken into the model together with the variables from the theory (Table 4.11). In addition, the adjusted  $R^2$  increased from 0.081 to 0.335 when *influence social media* and *frequency sexual activity* were added to the model. This means that both variables influence the model more than expected by chance.

Table 4.11. Multiple regression results for predicting *sexual function* with all important independent variables ( $n=193$ ).

Variable	B	Std. Error	Beta	t	Sig
(constant)	24.065	2.589		9.295	0.000
Frequency Fitspiration	0.243	0.123	0.183	1.974	0.049 *
Engagement comment	-0.779	0.700	-0.074	-1.113	0.267
Engagement follow	-0.305	0.330	-0.086	-0.926	0.56
Objectification other	-0.016	0.039	-0.029	-0.421	0.675
Objectification self	-0.057	0.047	-0.084	-1.214	0.227
Body image	0.136	0.058	0.170	2.366	0.019 *
Frequency sexual activity	1.864	0.244	0.489	7.634	0.000 *
Influence social media	-0.193	0.085	-0.166	-2.267	0.025
F	11.466 *				
R <sup>2</sup>	0.367				
Adjusted R <sup>2</sup>	0.335				

Remark: \* = significant at a p-value of  $< 0.05$ .

When looking at the output of this multiple regression, *frequency Fitspiration*, *body image*, *frequency sexual activity* and *influence social media* all have a significant correlation with *sexual function*.

*Frequency fitspiration* has a positive correlation with *sexual function* ( $t = 1.974$ ,  $p = 0.049$ ). This was not expected. According to the theoretical framework frequency of exposure to Fitspiration would lead to a lower *sexual function*. Instead this outcome suggests a positive relationship, that higher frequency of exposure to Fitspiration leads to higher *sexual function*. In contrast, *influence social media* shows a negative correlation with *sexual function* ( $t = -2.267$ ,  $p = 0.025$ ). Feeling influenced by social media, comparing yourself with fit girls, feeling pressured to fit into an ‘ideal’ look and having the idea that the perfect body is influenced by social media, all has a negative influence on *sexual function*.

Furthermore, as was expected by the theoretical framework, *body image* has a positive correlation with *sexual function* ( $t = 2.366$ ,  $p = 0.019$ ). A better *body image* has a correlation with a better *sexual function* and the other way around. Lastly, a positive correlation between *frequency sexual activity* and *sexual function* was found ( $t = 7.634$ ,  $p = 0.000$ ). It is imaginable that a better *sexual function*, like

feeling confident about lubrication, high desire, high arousal, good orgasm, no pain and feeling of satisfaction can result in a higher frequency of sexual activity. Vice versa, more frequent sexual activity can increase for example satisfaction and orgasm because one gets more experienced in what one likes and how to fulfil this. All the correlations that were found, are discussed in chapter five.

## 4.2 Analysis quantitative research

The following paragraphs contain a simplistic analysis of key findings, and interview topics that were formed based on this analysis. The quantitative research was analysed as preparation for the qualitative research. The results were analysed by means of the theoretical framework, which was formed in the present study. When ambiguous results were found or results were not yet fully comprehensive, they were further researched during the interviews. The interviewees were asked to interpret the results during semi-structured interviews to create a better understanding of the results. Appendix B shows the guideline that was used during the interviews. A more in-depth analysis takes place after having both the quantitative and qualitative results.

### 4.2.1. Self-perceived exposure

The first sub-question: *'What is the self-perceived exposure to Fitspiration on Instagram experienced by college-aged women?'* focussed on understanding the presence of Fitspiration better. The majority of the collage-aged women is familiar with Fitspiration/fit girls and almost 80% has seen it on Instagram. Only 26 respondents did not have an Instagram account. This is not surprising, as Instagram has over one billion active users and 60% of that users is between the age of 18 and 24 (The Statistics Portal, n.d.; Smith, 2018). Women do not only see Fitspiration/fit girls on Instagram but also outside of social media, like in advertisements, in magazines and on television. As the results show, women are easily exposed to Fitspiration on Instagram but also outside social media. Why women seek the exposure to Fitspiration is discussed with the interviewees who follow Fitspiration.

In comparison to the frequency of exposure, the engagement in Fitspiration is lower. Some respondents do follow Fitspiration, but commenting on and posting of Fitspiration is rare in the research sample. According to research of Holland and Tiggemann (2017) engagement in Fitspiration like posting photos has a negative effect on women's body image. That the majority of the respondents is not engaged in Fitspiration could therefore lead to lesser negative effects on body image and sexual function. This could partly explain the unexpected positive relation between *frequency Fitspiration* and *sexual function*. Looking at the theoretical framework, a negative relationship was expected, as more exposure and engagement in Fitspiration would lead to lower sexual function (Frederickson & Roberts, 1997) . Other interpretations for this unexpected outcome are further researched during the interviews.

The quantitative research also gained insight in the nature of Fitspiration. According to the respondents, Fitspiration expressed in words is *being fit, feeling healthy, exercising to look good and eating healthy food*. Expressed in images, Fitspiration is associated with *fit bodies, body transformation due to Fitspiration, high intensity exercise and healthy food*. When looking at the images associated with Fitspiration the more positive images like yoga poses and healthy food are ranked at the bottom. The more objectifying images are ranked at the top. This contradiction between the ranking of the words and the images formed a discussion topic for the interviews.

#### 4.2.2. Sexual function and Fitspiration

According to the theoretical framework, it was expected that sexual function was influenced by Fitspiration. To look further into this relationship the second sub-question was: *'How do college-aged women experience their sexual functioning and how is their sexual functioning related to Fitspiration?'* A score of 36 was the highest possible score for sexual function. The mean of all the sexual function scores was 28.04. Most of the women (77.9%) had a sexual function score between 25.0 and 35.0. In the research of Isidori et al. (2010) they used a cut-off value of 19 to determine sexual dysfunction. Another study found a cut-off value of 26,55 (Wiegel, Meston, & Rosen, 2005). This seems high when looking at the study of Rosen et al. (2000) where the mean FSFI score was 19,2 (standard deviation 6,6) for women diagnosed with a sexual dysfunction. Looking at the present study we can say that the 15 (7.8%) respondents with a sexual function below 19,9 experience sexual dysfunction. The group with a sexual function score below 25 may potentially experience sexual difficulties with sexual activity. Sexual dysfunction includes sexual problems with desire, arousal, orgasm and lubrication. Women can experience pain and not feel satisfied with their sex life (Woertman & van den Brink, 2012). The group that possibly experiences sexual dysfunction is just a small percentage of the sample group. Measuring sexual function according to six domains was discussed during the interviews. Interviewees were asked about how they thought the domains were working together and if they could be taken together as one variable.

To see if the variables of the theoretical framework influenced sexual function a multiple regression was carried out. The multiple regression showed a significant positive correlation between *body image* and *sexual function* ( $t = 3.703$ ,  $p = 0.000$ ). Next to the objectification theory of Frederickson and Roberts (1997) a significant number of other studies had expected the positive correlation between body image and sexual function (McKinley, 1998; Frederick, et al. 2007; Wiederman, 2000; Robbins & Reissing, 2018). *Fitspiration frequency, engagement comment, engagement follow, objectification other* and *objectification self*, were not statistically significant. Most respondents thought that the relation between sexual function and Fitspiration was influenced by self-esteem. They explained in their answers that the lack of self-esteem could influence the enjoyment of sex. Furthermore, some biological reactions connected to intense exercise and restrictive eating were mentioned. The interviewees were also asked to interpret this relationship. In addition, there were factors mentioned

by respondents that could possibly influence this relation like a long lasting relationship or the time someone is already sexual active. Therefore, this was discussed as well during the interviews.

Looking further into objectification, the results showed differences between objectification of the other (fit girls) and objectification of the self. For fit girls the following attributes were ranked most important: 1) Physical fitness level; 2) Health; 3) Physical attractiveness (objectifying); 4) Strength; 5) Energy level. The attributes that were ranked most important for the self were: 1) Physical attractiveness (objectifying); 2) Health; 3) Energy level; 4) Weight (objectifying); 5) Physical fitness level. There were two objectifying attributes in the top five for the self and the first attribute was objectifying. In the literature, Fitspiration is seen as objectifying (Tiggemann and Zaccardo, 2016; Deighton-Smith & Bell, 2018). However, the results show more objectification for respondents themselves than for fit girls. The unexpected differences between objectification of the self and objectification of fit girls was further discussed during the interviews.

#### **4.2.3. Other important variables**

The multiple regression analysis showed that next to the variables of the theoretical framework two other variables influenced sexual function. These findings form the answer to the third sub-question: *'Are there other variables of influence in the relation between exposure to Fitspiration and sexual functioning, and how are they related?'* First, influence of social media had a negative correlation with sexual function. Influence of social media measured if social media influences the way respondents feel about themselves and their idea of the perfect body. Furthermore, it measured if respondents feel pressured to fit the 'ideal' and if they compare themselves with fit girls. The negative correlation that was found suggests that when influence of social media increases sexual function decreases. A first interpretation is that when women compare themselves more often or feel pressured this negatively influences their body image.

Second, the frequency of sexual activity had a positive correlation with sexual function. This suggests that an increase in sexual function leads to an increase in sexual activity. A first interpretation is that when someone has more desire and arousal, it is possible one acts on this. When a woman has good lubrication and orgasms and no pain, it is possible she enjoys sexual activity more and want to have sexual activity more often.

Both of these variables have in a linear regression a significant correlation with sexual function, but also in the combined model they have significant influence on sexual function. Therefore, both topics were discussed during the interviews. Furthermore, to better understand these correlations a closer look was taken at theories outside the theoretical framework. This happened during the in-depth analysis in chapter five.

### 4.3. Results qualitative research

Based on four interviews with women college-aged women the fourth sub-question was answered:

*'When looking at the quantitative data collected in the present study, how do women understand these results?'* The findings are presented in the same order as the interview questions were asked. In this chapter the answers of the four interviewees are brought together and interpreted. The results of the quantitative and qualitative study are further discussed in chapter five.

The four women were coupled to a letter to assure anonymity. Interviewee A was a woman of 21 years old, in an exclusive relationship, working and not following Fitspiration. Interviewee B was a woman of 25 years old, in an exclusive relationship, studying at university and following Fitspiration accounts. Interviewee C was a woman of 24 years old, single, studying and following Fitspiration accounts focussed on yoga and ballet. Lastly, interviewee D was a woman of 23 year old, single, doing an internship, and following one Fitspiration account.

#### **Nature of Fitspiration**

When scanning the popular Instagram profiles it was expected that there would be a difference in nature between the popular Fitspiration posts. All the interviewees confirmed a difference in nature. They mentioned the difference between realistic and non-realistic profiles, sport vs bikini photos, yoga vs muscle photos and healthy food vs six-pack photos. They had the idea that more realistic profiles, where people admit that they sometimes eat ice cream, would be more realistic and therefore have less of a negative influence. The photos of sport, yoga and healthy foods were seen as more positive forms of Fitspiration. But interviewee A emphasized; "I think that it is more a combination of photos and not one kind of photo that makes it positive or negative". Furthermore, the interviewees were asked to explain the differences between the words and photos that were ranked as Fitspiration. They found it hard to explain the differences, but they mentioned multiple interpretations. Interpretations like: "The words are more achievable than the images". With this explanation interviewee A pointed out that it is easier to feel healthy and fit but that it is hard to get the body of a fit girl. Another interpretation was: "You hope that it is about feeling fit, rather than about looking good". Interviewee C pointed out that it is possible that respondents answered in a more social desirable way. That it is more correct to say that Fitspiration is about health and fitness instead of looking hot. Moreover, interviewee D emphasised that it is often not accepted when a woman says that she is working out and eating healthy to get a hot body. But that it is socially accepted to say that one does all those things to become fit and healthy. Another explanation of interviewee B for the differences between the words and images was: "People see the photos as being fit and not only as looking good. They link the fit girl bodies to feeling fit and being healthy". This quote says something about the associations women have with images of Fitspiration. That they have learned to link the images to words like healthy and fit. Consistent with this, interviewee D thought that the ranking of words represented 'fitness' and the ranking of images

represented 'Fitspiration'. She had many associations that came in the form of images but not in words when she heard about Fitspiration. This could be the case because Fitspiration on Instagram consist mostly of photos and the focus is on images.

### **Frequency**

Of the four interviewees three of them, interviewees B, C and D, followed Fitspiration. They followed different kinds of profiles; interviewee B followed high intensity exercise profiles, interviewee C yoga profiles and interviewee D a profile that focused on transformation. None of them saw this as a negative influence, but they all experienced it as motivation. They explained that they found it interesting to follow the accounts and did not feel pressure from looking at the profile but felt motivated to exercise more by seeing the images. Interviewee B described it as follow: "It creates awareness, you become aware of your exercising and eating behaviours." This quote confirms that they feel an influence of the Fitspiration images but they did not see it as a large factor of influence. Like Scanlon (2000) describes in her research, it is possible that women are not critical looking at what surrounds them. Media understands how to influence women but women do not always understand or critically look at what media is doing. They could therefore, underestimate the impact of seeing Fitspiration. For example, interviewee D said: "I have to say that it never happened that I looked at a Fitspiration photo and immediately put on my running shoes". This shows that they have the idea that seeing the images does not result directly into behaviour like exercising. However, all four of the interviewees thought that Fitspiration could influence your mood or could increase feelings of insecurity about one's body, which is discussed in further detail in the next paragraphs .

### **Body image and sexual function**

The data retrieved from the questionnaire showed that many respondents thought that insecurity was an important factor in the relation of body image and sexual function. All the four interviewees affirmed that insecurity is not conducive for one's sexual functioning. They thought that seeing Fitspiration and comparing yourself with fit girls could result in negative feelings. Interviewee A, who did not follow Fitspiration, even stated that comparing oneself with fit girls could give a feeling of failing about one's own exercising and eating behaviours. She explained; "When you are insecure than you think, o shit, those girls all have a flat stomach and big breasts and buttocks, and I do not have both of these things. Then you do not meet the ideal picture in twofold!" With this she meant that with looking at Fitspiration, she sees not only one thing but multiple things that she would change about her own body. Not only being thinner, but also being more sexually attractive by being toned and having fuller breasts and buttocks.

These concerns about one's body image would distract women from enjoying sex or make them focus more on the pleasure of their partner instead of their own pleasure. Interviewee B stated: "When people are happy with their body, they feel more secure about their appearance, and I think that when

that is the case you dare to let go during sexual activity”. With ‘let go’ the interviewee means that one does not think about your body or behaviour but just enjoy the moment and follow what feels good. Furthermore, she explained that when you feel insecure you might hold back, do not want to be touched everywhere or want the lights out during sexual activity. She expected that when you think about all these things, you are less able to enjoy the sexual activity. The interviewees also talk about the pressure of your partner liking how your body looks. Interviewee D said: “When you do not feel good about yourself you start to think that he probably won’t find you attractive, and then you do not feel like having sex or it all is a bit more difficult.” This insecurity for your partner could therefore have influence on sexual functioning. Furthermore, interviewee C thought that when women feel insecure they would focus more on pleasuring their partner instead of thinking about their own pleasure.

Some interviewees said that being in a committed relationship could decrease insecurity. Interviewee D explained that there is more certainty that your partner loves you and does not care about a few pounds more or less. Interviewee C stated that one night stands are more about physical attraction and looks. On the other hand, interviewee D stated that insecurity is not only caused by your romantic partner alone. Her explanation was: “There are also a lot of other people in the world, you want them to find you attractive or nice”. It was interesting that this interviewee used the word ‘nice’ (Dutch: leuk) instead of ‘attractive’ when talking about this subject. Calling herself nice could feel more socially accepted to her than calling herself attractive. She confirmed to the question that appearance had something to do with other people liking you. She found it important that other people would appreciate her looks and not talk bad about her physical appearance. Kilbourne (2013) describes that women learn to suppress our anger or power and just be ‘nice’. It is possible that the respondent used this word because of that process.

Furthermore, the interviewees thought that insecurity could be decreased when one is sexually active longer. But that this decrease was mostly a decrease in insecurity about sexual performing and not a decrease of insecurity about your body.

When asking the interviews about the six domains of sexual function, all the interviewees agreed that the domains could be researched as a whole. They all looked at the six domains and talked about the connections between the domains. All the domains were connected with satisfaction. Pain and lubrication were connected. Arousal and desire were connected with pain and lubrication. Orgasm was connected with desire, and so on. Many different connections between all the domains were made. Interviewee A stated: “I see actually that they all cohere.” The interviewees thought that the domains could not be separated from each other but that they set each other in motion. Furthermore, they could not think about a domain that was missing.

## Objectification

Fitspiration was seen as objectifying by all the interviewees. They stated that Fitspiration is mainly about appearance. Interviewee C even said: “I think women are always getting somewhat objectified. This is just the next thing”. With the next thing she meant a new form of media that is objectifying women. Furthermore, they said that photos say nothing about someone’s personality or their physical/medical state of fitness. This is shown in the following statement of interviewee A: “You can’t see in a photo of someone is healthy or fit. It is about having a belly that is flat enough or having buttocks that are round enough.” The interviewee did not see a flat stomach or big buttocks as indicators of fitness or good health. There was a contrast between two interviewees about the text placed with the Fitspiration posts. Interviewee B liked the text and thought it made Fitspiration less objectifying this way. But interviewee D stated that most people do not care about the ‘journey’ and do not read the text. With ‘journey’ she meant the personal stories posted under Fitspiration images about the process and work resulting in a fit body. She thought that people would not look at Fitspiration for the stories but just for the images. Furthermore, the interviewees tried to interpret the differences between objectification of fit girls and objectification of women themselves. They found it hard to interpret the data and were confused that *sculpted muscles* was not ranked higher for fit girls and they found it unexpected that *sex appeal* was ranked the lowest for fit girls. Furthermore, they were surprised that *energy level* was ranked high for fit girls despite the fact that this is not visible in a photo.

Interviewee D gave an explanation for the differences, that physical fitness had become an objectifying attribute. That non-objectifying fitness is shown by objectifying attributes like having muscles, being thin, wearing thigh sportswear and being in the gym and therefore becomes an objectifying attribute. Another interpretation of Interviewee B was: “Fit girls are there to be fit, so you first notice fitness and not attractiveness.” This is again about the associations people have with Fitspiration and associations with words. The interviewee did not think about the word ‘girl’ that is part of ‘fit girl’. This could indicate that the femininity of fit girls is obvious and that women do not consciously think about this part of Fitspiration. Furthermore, interviewees A and C found it possible that women hope that fit girls represent health instead of attractiveness and as a consequence rank attributes as health and fitness first. An interpretation of interviewee B related to this was that after seeing fit girls, women want to look more attractive themselves. That women still link fit girls to health and fitness but want to look more attractive themselves after seeing these ideal bodies. That the focus for fit girls is more on fitness but the focus for themselves is more on appearance. Also, that the images of fit girls make women aware of their own bodies.

When asking further about the fact that physical attractiveness was ranked number one, the first response of interviewee A was; “It is a bit sad that physical attraction is number one for women themselves”. She meant that it was regrettable that the respondents find attractiveness the most



important attribute of themselves even though we learn not to judge a book by its cover. We are told that it is more important to be kind or smart and that appearance is not everything, but still women rank it as their most important attribute.

To explain the differences in ranking of fit girls and women themselves, it was suggested that women are more critical on themselves than on others. In addition, interviewee A and D stated that appearance is really important in our society. They want other people to find them attractive and do not want people saying bad stuff about their appearance of body. Besides, they thought that being more attractive could result in more opportunities in life or more positive reactions from others. For example interviewee A said: "Attractive people turn out to have better opportunities on jobs and all that".

### **Frequency Fitspiration and sexual function**

The positive correlation between frequency of Fitspiration and sexual function is contradictory with the negative correlation between influence of social media and frequency of Fitspiration. This contradiction was discussed during the interviews. A possible interpretation of this outcome was that there are two kind of groups. The first group is the group of women that is already fit and follows Fitspiration because they are engaged in fit behaviours. An example story from an interviewee was about a woman who often exercises, shared the questionnaire of this study with the gym where she works and exercises and has become friends with women that also go to this gym. She is already fit, follows Fitspiration and posts Fitspiration herself. It is possible that Fitspiration does not influences her body image and that she is confident with her body. Her body matches the bodies she sees in Fitspiration. This could be positive for her body image and therefore positive for her sexual function. The other group consists of women who are not fit and not engaged in Fitspiration. They do not post, do not befriend women who are focused on fitness and do not see Fitspiration that often. Even though they do not see Fitspiration daily, they can still be insecure about their bodies. When they see women on social media, when they see the 'ideal' body on social media and experience influence of social media this can have a negative impact on their body image. Next, the negative body image influences the sexual function of this women. In conclusion, when one is influenced by social media, as a result feel pressured and compare yourself with fit girls, this has a negative correlation with sexual function. But when one is and feels fit, already are engaged in fitness behaviours, and do not feel influence of social media, this can have a positive effect on your sexual function. This can result in that women who feel better by watching Fitspiration see it more often and are more engaged than women who do not feel better by watching it.

## 5. Discussion and conclusion

The results of both the quantitative and qualitative study are assembled and discussed in this chapter. The results are discussed by means of the theoretical framework or new theories that were found outside the framework. First, the results are discussed. Second, the methodological issues are described. Third, the main question is answered by the conclusion. Lastly, the scientific and societal relevance is analysed and opportunities for future research are pointed out.

### 5.1 Discussion results

The results formed an overview of all the data collected in this study. The data of the four sub-questions was used to answer the main research question: *'How are exposures to the Instagram trend 'Fitspiration' and sexual functioning in college-aged women related?'* The results from the four sub-questions are discussed under integrated headings and are not discussed one by one. The first intergraded heading covers frequency and nature of Fitspiration. The second heading covers the influence of objectification, body image, and social media on sexual function. The last heading discusses sexualisation and sexual health.

#### 5.1.1. Frequency and nature

Fitspiration is a popular trend and fit girls use Instagram as a medium to sell the fitness lifestyle. Instagram is the most popular among women between 16 and 24 years old (Goldstraw & Keekgan, 2016). This matches the data from the present study, as most of the women are familiar with Fitspiration. Moreover, as expected, a large amount (62.1%) of the sample is often exposed to Fitspiration. The need to belong and self-presentation are reasons for people to use social media networks like Instagram (Nadkarni & Hofmann, 2012). Young adults are sensitive to peer pressure and want to fit in with their peers. Presenting yourself on social media is one way of showing where you belong. However, the interviewees said to follow Fitspiration out of interest or for getting motivation. One of the interviewees said that Fitspiration made her become aware of her own eating and exercising behaviour. She felt motivated to perform the healthy behaviours she strived for when seeing fit girls. Research has found that young adults use social media to get information about health behaviours (McKinley & Wright, 2014). Social media trends like Fitspiration, give information about the norms of eating and exercising behaviour. Fit girls show their followers their exercise routines and the meals they eat. The feeling of motivation can also be explained through the social norms presented in the photos. Fitspiration accounts can both increase intrinsic and extrinsic motivation. Intrinsic motivation could increase because it becomes women's own goal to look like fit girls. Media shows women the ideal look and women internalize this look as their own goal (Thompson, et al., 1999). Next, extrinsic motivation could increase because women want to impress others by looking fit and attractive or want to belong to this group of fit people (Buckworth, Lee, Regan, Schneider & DiClemente, 2007). Their need to belong creates extrinsic motivation. When motivation becomes

actual behaviour, people are able to control how they present their commitment to healthy behaviours on Instagram (Zhao, Grasmuck, & Martin, 2008). They can idealise their way of self-presentation and show their network that they belong. Through Instagram women can even become producers of media themselves. However, the majority of the respondents does not produce media themselves.

Engagement in Fitspiration like posting, commenting and following was low in the sample. Holland and Tiggemann (2017) found that posting, and so producing, Fitspiration had negative influence on women's mental health. That the majority of the sample in this study does not post Fitspiration could be part of the explanation of the positive, instead of negative, relation between exposure to Fitspiration and sexual function.

### **Nature**

During the interviews the women agreed that Instagram photos differ in nature. They emphasised the difference between realistic and non-realistic profiles as they found some profiles too extreme. Moreover, they saw a difference between bikini and sport photos and also between photos of food and photos of six-packs. They expected that the unrealistic bikini photos had a more negative influence on women's body image than a photo of a healthy meal. Even though it is possible that the photos differ in influence, women are not exposed to one kind of image but to all kinds of images at the same time. This was also highlighted by one of the interviewees. Looking at the popular fit girl profiles, all these profiles mix the different kind of photos together. None of the profiles only show bikini photos or only show exercise photos. Photos of healthy food, exercising, posing in bikini, and even photos of an exotic vacation destination are combined. When following fit girls one is exposed to a Fitspiration lifestyle. Media does not only tell us about material goods but they connect goods to 'the good life' (Jhally, 2003; Scanlon, 2000). Because social life has more value to people than material life, advertisements connect products to social values like happiness, family relations, love, etc. It mirrors what people are dreaming of and that they can get what they desire through consumption. Fitspiration shows that through the Fitspiration lifestyle people can achieve social values like health, attractiveness, happiness, fitness, and sensuality. Moreover, it shows that women can get empowerment through the Fitspiration lifestyle. The women in Fitspiration look powerful and feminine at the same time (Kilbourne, 2013). Fit girls on Instagram promote that through certain fashion, products and behaviours their followers can get the same power and femininity. However, it is not possible for products to give you real power. Nevertheless, Fitspiration makes you believe that with exercising and eating healthy one can create an identity as a fit girl. It promotes self-improvement through clothes, a sexy body and thinness instead of real change (Kilbourne, 2013). Even if one is not on Instagram, the data showed that one can be exposed to Fitspiration on other places as well, like advertisements, magazines and the gym. Our world is dominated by media telling women how to be feminine. Showing us women can be successful as long as we stay feminine.

## **Associations**

According to the data of the questionnaire, there was a difference found between what Fitspiration is in words and in images. Respondents saw the more objectifying, body focussed images as Fitspiration. However, at the same time they saw non-objectifying words like being fit and feeling healthy as Fitspiration. To explain this, it is possible that respondents have other associations with words than with images. The information on the internet often lacks credibility, there is a great number of fake news and people do not always know who wrote the information. There is a large amount of information available to people through the internet and it is not possible to thoroughly judge all this information on credibility. Therefore, people use heuristics to judge credibility of information (Sundar, 2008). For example, we are more likely to trust information presented by an expert or information texts that are long. Furthermore, research showed that our brain trust images more than words (Sundar, 2008). People trust the things they can see for themselves. An image is really specific and is more likely to give the one who sees the image the same feeling as the one who took the photo. A text gives more room for interpretation, than an image does. When looking at images, there is little room for interpretation (Sundar, 2008). So, the images that were ranked the highest by respondents are the images they see the most on Instagram. As the research of Tiggemann and Zaccardo (2016) shows, most Fitspiration post are of people, with a focus on the body/body parts. In most of the posts people were posing, often wearing exercise clothing. This could explain why respondents ranked the photos of the thin and toned bodies, posing in exercise clothing the highest. By ranking words, there is more room for interpretation. People can imagine sensory attributes with words. It is possible that being fit and feeling healthy are ranked the highest because this is what people hope/want to imagine with the word 'Fitspiration'. It is also possible that these words could be ranked high because of a learned relationship between signs and associations. Slobin (2005) calls this a relation between signifier and signified. In his research Slobin explains this as an automatic, learned analogy between a sign (signifier) and a concept in our world (signified). 'What is Fitspiration for you?' could be seen as a signifier, which has learned relationships with words like health and fitness (signified). So, with words there is more room left for interpretation and for learned associations. This could explain the gap between the two rankings of words and images.

### **5.1.2. Objectification, body image and social media**

In this research objectification, body image and social media were expected to be factors between Fitspiration and sexual function. The objectification theory explains that shame can occur when women compare themselves with other women like fit girls (Fredrickson & Roberts, 1997). This matches the social comparison theory of Festinger (1954) which states that women evaluate themselves by comparing themselves to others who express cultural ideals of beauty. The percentage of respondents that agreed or somewhat agreed that they compare themselves with fit girls was 37.3% (n=72). Social media networks make social comparison easy. It connects people not only to celebrities

who are fit girls but also to one's peers who can express fit girl ideals. Social media promotes the ideals of beauty and in social media networks one's peers give feedback on these ideals. The sociocultural theory of Thompson, Heinberg, Altabe and Tantleff-Dunn (1999) explains that people internalise the societal standards of beauty that are expressed by media. Through internalisation women feel like the norms in media are their own norms as well. This internalisation of ideals becomes stronger when one's peers give feedback on the ideals. Through Instagram one cannot only compare oneself with the beauty standards but also feel like the beauty ideals are one's own. Moreover, the images that fit girls and peers post on Instagram are often idealised. People can improve the images with filters and only show their network the exiting and positive side of their life.

When ones self-image does not match the image of women in social media, this can cause negative feelings (Harper & Tiggemann, 2008). Research showed that girls who have a higher tendency to compare themselves with others are more prone to the negative effects of 'perfect' pictures on social media (Fardouly & Vartanian, 2015). The negative correlation found between *influence social media* and *sexual function* affirms this. One of the four questions forming the variable *influence social media* measured if women compared themselves with fit girls. Moreover, the interviewees explained this result in the same way as the theory does. They said that one can experience negative feelings and feelings of failing when one compares one's body with the bodies of fit girls. It can be concluded that women who have a high tendency of comparing themselves with fit girls, experience more of the negative effects.

### **Body image**

These negative effects from social media can affect the body image of women. The significant correlation between body image and sexual function confirms this. In both the questionnaire and interviews, the main explanation for the relation between body image and sexual function was self-esteem. This was also confirmed by the theoretical framework (Tiggemann & Zaccardo, 2015; Benton & Karazsia, 2015). All the interviewees thought that feelings of insecurity could distract women from enjoying sexual activity. When experiencing negative feelings and thoughts, this would influence the domains of sexual function. Women learn that for them it is more important to be desired than to experience the desire themselves (Kilbourne, 2013). This could explain that an interviewee stated that women possibly focus more on the pleasure of their sexual partner than on their own pleasure when they feel insecure about their body. Some interviewees thought that this feeling of insecurity could decrease when one is in a long-term relationship, but they emphasised that women do not only want to look good for their sexual partner but also for others around them. Physical appearance is still evaluated as important for women. Women learn that their body and their beauty are their most important features and this correlates with the outcome of this research that physical attractiveness was ranked as the most important attribute for the self. The desire to be desired, seen as attractive and to be liked by others can be explained through the research of Kellner (2011). The research states that media

shapes what we see as male and female. Media is a form of cultural pedagogy and teaches us how to perform as male or female. It teaches us how to consume and how to be popular and successful. Media gives us information through advertising about how to perform our gender roles in relation to the consumer culture. Women learn how to be feminine already at a young age. Media influences how boys and girls play by advertisements of toys (Jhally, 2003). Boys get the toys that express strength, power and adventure while girls get the toys that express softness, caring and beauty. At an older age media shows us how women should look feminine and the products one needs to accomplish this look. It shows us that being attractive is an important feature of women. This could explain the desire from interviewees to be liked and that respondents saw physical attractiveness as the most important attribute for themselves. As Kilbourne explains, women are taught how to be 'nice'.

### **Positive influence of Fitspiration**

Research often talks about the negative aspects of Fitspiration, but the present study shows that exposure to Fitspiration could also have a positive influence on sexual function. From the women in the sample almost everyone had a BMI between 18.5 and 25, which is considered healthy (Hartstichting, n.d.). Looking at the statistics for Dutch women between 18-34 years old, 29.4% has a BMI above 25, and 7.5% has a BMI above 30. The prevalence of a BMI above 25 is twice as high for women with a low education in comparison to women with a high education (CBS, 2018). The sample was homogenous in BMI and education. For this specific group a positive relation between exposure to Fitspiration and sexual function was found. It is possible that the effect of Fitspiration is positive when women's bodies do match the 'ideal' body type of Fitspiration. Jones (2001) states that weight is the main factor for dissatisfaction about one's body. If women are not overweight and their body shape comes close to that of fit girls it is possible that it does not negatively affect sexual function. Of the respondents, 24 said that there is no relation between Fitspiration and sexual health or that they felt not influenced by this. It is even possible that if women match with the appearance of fit girls, this increases their body image and therefore also increase their sexual function. This could explain the positive relationship that was found between *frequency Fitspiration* and *sexual function*. The women who are frequently exposed to Fitspiration on Instagram in the research sample, have matching body types with fit girls and therefore only experience positive influence on sexual function. This interpretation was also mentioned by the interviewees. The research of Smeesters, Mussweiler and Mandel (2009) confirms this idea. In their research they found that women with a low BMI who recognised themselves in thin models, experienced an increase in self-esteem when seeing pictures of thin women. Whereas, women with a high BMI who recognised themselves in above weight models, experienced decrease in self-esteem when seeing pictures of thin women. In other studies the relation between self-esteem and body images was confirmed but not yet in relation with sexual function. The present study adds new information because it shows a relation between matching the cultural ideals and sexual function.

Furthermore, the level of self-objectification also influences the effect Fitspiration has on body image. A high level of self-objectification results in lower body satisfaction when seeing Fitspiration, but a low level of self-objectification did not (Prichard, McLachlan, Lavis & Tiggemann, 2018). The data of this research shows that the objectifying attributes were ranked lower for fit girls than for women themselves. As explained in the theory and suggested by an interviewee, it is possible that physical fitness level has become an objectifying attribute because of the focus on appearance markers instead of health markers of fitness. Physical fitness level was ranked the highest for fit girls, this could be interpreted as all the appearance markers of fit girls like fitness clothes, six-pack, round buttocks, thin and sculpted bodies etc. Physical attractiveness was ranked the highest for the girls themselves. On the other hand, health and energy level were ranked second and third. These are non-objectifying attributes. That these were ranked high could indicate a smaller effect of Fitspiration on women's mental health. Lastly, the interviewees thought that women would judge fit girls more on the markers of fitness and judge themselves more on all the aspects of their appearance. Since they learned this through media as cultural pedagogy (Kellner, 2011). Fit girls are there to express fitness and respondents could have learned to associate fit girls with physical fitness level. Looking at themselves fitness could be seen as less important as girls and women lean to focus on physical appearance when looking at themselves.

### **5.1.3. Sexualisation and sexual health**

Media presents women in both an objectifying and sexualized way. Our culture is not only changed to a consumption culture but also to a sexualized culture. Nowadays, sexualisation is more accepted and there are no negative social consequences when people enjoy being sexually active (McNair, 2002). There are many sexualized images in the media and sexual looks are permitted and even encouraged (McNair, 2002). On one side, this is seen as empowerment, women can choose for themselves to engage in the sexualized culture (Gill, 2012). Women have power over their own sex life and it can feel empowering to express one's self as a sexual being. On the other side, researchers think that this feeling of power is marketed and that sexual objectification is repackaged as empowerment (Levy, 2005). This marketing of empowerment is visible in the new way women are presented in media. They are presented as beings with sexual power and not as submissive anymore. Gill (2009) calls these women 'midriffs' and she describes them as "a young, attractive, heterosexual woman who knowingly and deliberately plays with her sexual power and is always 'up for' sex" (p.148). This description has similarities with how fit girls are presented. Fit girls are also young and attractive and displayed sexual power. They are women who are active, sexual and presenting themselves in an objectifying way because it suits them. They are fit and hot because they want to look this way for themselves and are aware of male attention they get by looking this way. Fitspiration quotes found on fit girl profiles confirm this, for example 'you need to do this for yourself' or 'three months from now, you will thank yourself'. The quotes focus on engaging in Fitspiration for yourself and not for others. Furthermore, a

quote like ‘make their jaws drop’, confirms the awareness of getting (male) attention when looking like a fit girl. One interviewee explained that others around her would accept it when she committed to a Fitspiration lifestyle for herself but not when she would do this for men. Fitspiration can be seen as both empowering and objectifying. It shows that women are in control over how they want to be seen but at the same time it is only about their appearance and not about other qualities. That women should be sexual, desirable and nice at the same time might be difficult for women (Kilbourne, 2013). How should we be both powerful and feminine? How should women express that they are nice girls and in for casual sex at the same time? This could create pressure and confusion for young women. It could give women the feeling that they should be two versions of themselves in one body.

### Frequency of sexual activity and sexual function

Even though the media is sexualized, there is still little information on the frequency of sexual activity of women. Dutch organisations that gather statistical information about sexual health do not report frequency of sexual activity. They only broadly report that 73.8% of men and women between the age of 20-24 are sexually active (Rutgers & Soa Aids Nederland, 2017). One website wrote about the data of the National Survey of Health and Health Related Behaviors (Mintz, 2018). This website gave an overview of the frequency of sexual activity of women between 18-24 years old. The National Survey only focussed on young adults in Indiana and had used other frequency indicators, so it was hard to compare the data of the National Survey with the present study. Other good quality research about frequency of sexual activity in the same age group was not found. The studies that looked at sexual function according to the six domains often had sample groups of older women and focussed on women with sexual dysfunction. In the study of Rosen, et al. (2000) the control group without sexual dysfunction had a mean age of 39.7. The results of this group were compared with the results of the present study (Table 5.1). Looking at the numbers, overall the results do not differ much. It is possible that the group of women who has sexual activity less than once a month is bigger in the present study because one-night stands are more expected nowadays.

Table 5.1. Comparison frequency of sexual activity present study and research of Rosen, et al. (2000).

Frequency sexual activity	Present study		Rosen, et al.	
	Frequency	Percentage	Frequency	Percentage
Less than once a month	31	16.1%	9	6.9%
1-2 per month	43	22.3%	24	18.3%
1-2 per week	71	36.8%	56	42.8%
3-4 per week	31	16.1%	31	23.7%
more than 4 times a week	17	8.8%	11	8.4%

It was also hard to find literature on the sexual function of college-aged women. In the present study the mean score of sexual function was 28.04 with a standard deviation of 4.308. The respondents in



the research of Rosen, et al. (2000) had a mean sexual function of 30.5 with a standard deviation of 5.29. Furthermore, the sample group in the study of Ter Kuile, et al. (2006) had for sexual function a mean of 25.56 with a standard deviation of 5.3. There were no studies found about sexual function in a similar age group, so the comparison is not ideal, but looking at the three different studies the results do not differ much.

The present study gives new insights on frequency of sexual activity and sexual function of women in a younger age group. Even though it is hard to say if the results of the sample match the population it is possible to look at the founded correlation. The positive correlation between frequency of sexual activity and sexual function found in the present study matches the theoretical framework. Rosen et al. (2000) showed that frequency of sexual activity differed between the group of women with sexual dysfunction and the group without sexual dysfunction. Women who experienced sexual dysfunction had a lower frequency of sexual activity. A better sexual function predicted a higher frequency of sexual function just like the present study. More research should focus on the sexual activity of college-aged women to compare the results of the present study with other theories.

## 5.2. Methodological issues

First, the methodological issues of the quantitative research are discussed. An adjusted version of the Female Sexual Function Index was used in this research. Despite of the carefully considered changes, it is possible that it influenced the flow of the questionnaire. The two questions that were added were made into the same style to minimalize the impact on the flow, but any potential impact might not be avoided. Unfortunately, was not possible to gain access to the Sexual Function questionnaire (SFQ). This questionnaire was also mentioned in the book of Costantini, et al. (2017) and could also have contributed to improving the questionnaire. Furthermore, the recall time was changed from four weeks into three months. This increased the chance that a life changing event happened during this time. A life changing event, like for example a break-up, could change the way women would fill in the questionnaire. Furthermore, extending the recall time could cause a recall bias, so the memories could become less detailed. Additionally, the accuracy of the data could have been influenced through social behaviour. Weight is something women might not have filled in truthfully. Women who find themselves too light could have rounded up their number and women who find themselves too heavy could have rounded their number down. This could have resulted in a more homogenous BMI of the sample group. Furthermore, sexual activity remains a sensitive topic and is often still taboo. Even in my master Health and Society, sexual health was barely discussed. Therefore, it is possible that respondents filled in socially desirable answers. It is possible that people are not always conscious of their own behaviour (Aarts, Steuten, & Van Woerkum, 2014) The Objectification theory (Fredrickson & Roberts, 1997) explains that women are not always aware of their inner bodily feelings because

they focus on their outer appearance. Sexual desire and arousal can be seen as inner bodily feelings. It is therefore possible that women are not always consciously experiencing these feelings and underreported them in the questionnaire. Similar, women could have underreported their exposure to Fitspiration. We do not always consciously see everything around us (Aarts, Steuten, & Van Woerkum, 2014). So, it is possible respondents underestimated their exposure to Fitspiration because seeing fitspiration has become a normal part of life.

### **Sampling**

The respondents were collected through the snowball method: I asked women from my personal network to send the questionnaire to their friends. It is possible that friends filled the questionnaire in together or discussed some of the question. There was no researcher present, so it is possible that respondents were not fully concentrated on filling in the questionnaire. Even though the questionnaire was also spread through the network of sport associations of Wageningen, it cannot be considered as random sampling. Convenient sampling instead of random sampling lowered the external validity. The sample was homogeneous in BMI and in level of education. The majority of the sample followed higher vocational education (HBO) or university education (WO) and most women had a healthy BMI between 18.5 and 25. Therefore, the sample group did not represent all the women in the age category of 18-24.

Another factor that could have influenced the external validity was sexual activity. The 43 respondents who filled in that they had no sexual activity in the last three months or never had sex before in their life were excluded from the sample. Even though they did not have sex with a partner, it is possible that they were sexually active by themselves. However, when looking at a Q-Q plot of sexual function the few outliers represented women who had not engaged in sexual activity with a partner. In the study of Rosen et al. (2000) the scores of women who had filled in 'no sexual activity in the last month' were quite similar to the other respondents. However, 13 of the 16 subject who had not had sexual activity in the last month were from the group with sexual dysfunction. It is possible that these scores are similar to the scores of other women with sexual dysfunction and that the timeframe of one month made it more similar. In the present study I did not compare women with sexual dysfunction to women without and the timeframe was three months. This could explain why women who were not sexual active with a partner in the last three months became outliers. These 43 respondents were deleted from the sample, so the outliers would not influence the multiple regression. However, by deleting these respondents it is possible that one group was not taken into account. This could have lowered the external validity as well, as 73.8% of Dutch men and women between the age of 20-24 are sexually active (Rutgers & Soa Aids Nederland, 2017).

### **Interviews**

A methodological issue regarding the interviews was that the interviewees were friends of the

interviewer. The questions were overall not personal but about the results and how the interviewees interpreted this. The sensitive questions about sexual function were already covered in the questionnaire and interviewees seemed glad that the questions were not about their sexual behaviours. Talking about sex can still be experienced as awkward even though you are talking with friends. The six domains look into private details of sexual behaviour and it can feel taboo to talk about one's lubrication or orgasm. However, there were questions about insecurities when seeing Fitspiration. It is possible that interviewees found it hard to talk about their insecurities. I do not know to which extent the friendship influenced their openness in answering questions truthfully. It is possible that they found it hard to talk openly with me about their feelings. It is always more easy to say that one feels no influence of Fitspiration than to talk about insecurities and difficulties. Most of the interviewees said that they did not experience insecurity because of Fitspiration but this could have been a social desirable answer.

### 5.3. Conclusion

This study has been executed to get more insight into the relationship between exposure to Fitspiration and sexual functioning of college-aged women. Therefore, the main research question was: *'How are exposures to the Instagram trend 'Fitspiration' and sexual functioning in college-aged women related?'* An online survey and four semi-structured interviews were executed to collect and interpret data. Based on the data, the discussion and the methodological issues, the following conclusions can be drawn from this research.

For college-aged women exposure to the Fitspiration trend is almost inevitable. Most of the respondents have Instagram (167 out of 193) and even if you do not follow or look for Fitspiration, it can appear on your Instagram timeline. Moreover, also outside social media women get exposed to Fitspiration in magazines, advertisements and gyms. The nature of different Fitspiration posts was seen as diverse, but together the images form the Fitspiration lifestyle. There is a difference in associations with Fitspiration in words and in images. Media teaches young women to associate Fitspiration with a photo of fit body without a head, a transformation photo of a body from before and after a period of working out and, a high intensity exercise photo. Being fit and feeling healthy were the words associated with Fitspiration, as words are more open to interpretation than images. This could represent what respondents want Fitspiration to be about or what they again learn to associate with Fitspiration.

Even though the sample was limiting (homogeneous BMI and education), the present study showed that exposure to Fitspiration has a positive correlation with sexual function ( $t = 2.038$ ,  $p = 0.043$ ). It is possible that the positive effect occurs when women do match the ideal body that Fitspiration presents. Furthermore, the sample showed little engagement in Fitspiration. This could have reduced the impact of Fitspiration on sexual function.

However, also a negative correlation between social media and sexual function was found ( $p = -2.172$ ,  $p = 0.031$ ). When women feel more pressured to fit the ideal or when they compare themselves more often with fit girls this has a negative influence on their sexual function. It is possible that body image is the intermediate factor between influence of social media and sexual function. A positive correlation was found between body image and sexual function ( $t = 2.366$ ,  $p = 0.019$ ). This could suggest that when you feel influenced by social media this has impact on your body image and therefore lowers your sexual function.

Lastly, frequency of sexual activity turned out to have a positive correlation with sexual function ( $t = 2.038$ ,  $p = 0.043$ ). There is little to no other research about sexual activity in college-aged women, so this cannot be interpreted with theories at the moment. Frequency of sexual activity and influence of social media are important factors to consider when studying the influence of Fitspiration on sexual function.

#### 5.4. Scientific/societal relevance and future research

The Objectification theory states that objectification could influence mental health and increase the risks for depression, sexual dysfunction and eating disorders (Fredrickson & Roberts, 1997).

Fitspiration as objectifying media was already studied in relation with depression and eating disorder but not sexual dysfunction. The present study made a contribution to this existing gap in knowledge.

The model representing the hypothesis that was formed according to the theory was adjusted based on the results of the present study (Figure 5.1).

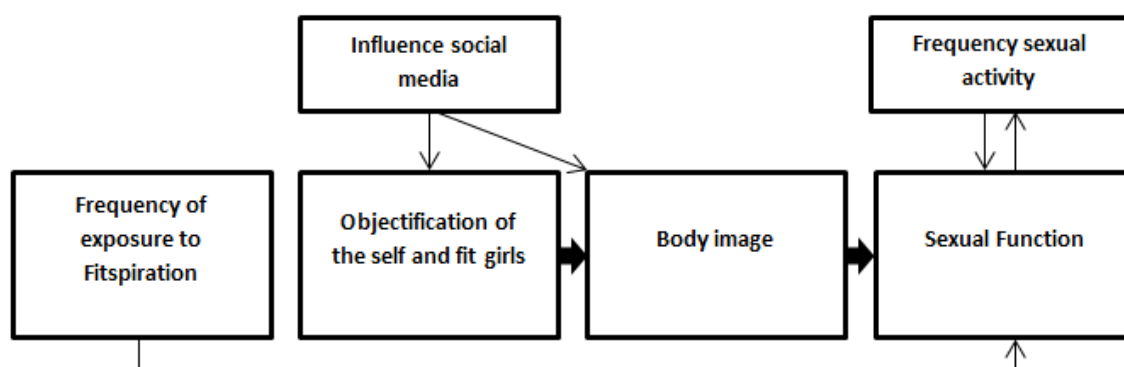


Figure 5.1. Adjusted theoretical framework according to present study

#### Sexual activity

According to the present study *frequency sexual activity* was of influence on sexual function and therefore added to the theoretical model (Figure 5.1). Frequency of sexual activity is probably a factor that is directly influenced by sexual function, apart from the other variables in the model. As literature shows, a better sexual function results in a higher frequency of sexual activity (Rosen, et al. 2000). A higher frequency of sexual activity could also positively influences sexual function. Research done on

frequency of sexual activity is still rare. To create more understanding on the relationship, the relation between frequency of sexual activity and sexual function could be studied in future research.

Conducting future research is important because sexual health is an important part of life, humans are sexual beings. A good sexual health has positive influence on quality of life. The literature review of Brody (2010) showed both psychological and physiological benefits of sexual intercourse. Frequency of sexual intercourse was associated with a better mental health, an increase in relationship qualities like trust and intimacy and an improvement of mood. Furthermore, it was associated with improvement of physical wellbeing like maintenance of vaginal and pelvic function. This shows the importance of studying sexual function in connection to health and wellbeing.

### **Influence social media**

The presents study showed that *influence social media* was correlated to sexual function. Therefore, this variable was also added to the theoretical model (Figure 5.1.). This relation shows that the perceived pressure from social media to match the ‘ideal’ body might be an important factor. The variable also measured the extent to which women compare themselves with fit girls and the influence of social media on the way they feel about themselves. It is possible that the perceived influence of social media is more important than the time of exposure to Fitspiration. This could influence an objective perspective on the self and an objective perspective on others. Furthermore, perceived influence of social media could also have a direct influence on body image. Therefore, *influence social media* is connected with both *objectification* and *body image* in the model (Figure 5.1).

Nowadays, not only the female body but also the male body is objectified by media. The male body is idealized and sexualised in media images (Gill, 2009). Does social media have the same influence on women as on men? Research showed that men’s mental health is also influenced by objectification in media. Objectification of men was associated with increase in eating disorder and decrease of self-esteem (Grogan, 1999; Wykes & Gunter, 2005). However, there is a difference in the presentation of men in comparison to the presentation of women. Men are presented with a combination of masculinity and softness (Edwards, 1997; Gill, 2009). The men in media are young, have muscles and six-packs and are not smiling most of the time. This could be interpreted as a representation that displays power instead of sexiness. For women it is more about the sexiness. Therefore, Fitspiration could have a different influence on men than on women. The influence of Fitspiration on men’s mental health and sexual health could be topic to further investigated in future research.

### **Effect Fitspiration**

Based on the results the relations between objectification, body image and sexual function stayed the same. Even though limited by the sample, a positive relation was found between frequency of Fitspiration and sexual function. When looking at the literature, a negative relation was expected. It is possible that when one identifies more with fit girls the theoretical model changes. Frequency of

exposure to Fitspiration according to this study has a relation with sexual function, but the form of the relation could be different. Therefore the arrow between the variables was adjusted in the theoretical model (Figure 5.1.).

On a large scale research has looked into the negative effects of Fitspiration on women and not the possible positive effects. Social media is popular among young adults and it is not going to disappear soon. People enjoy communicating through social networks and they are an important part of communication. It would be interesting to see what features of social media are possibly positive for mental and sexual health. Nowadays, because of the critique on Fitspiration accounts, body positive fitness accounts are rising. Body positivity is a countermovement, accepting and loving all bodies as they are. These accounts show more realistic photos of women with inspirational quotes to love one's own body (Elite daily, 2018). When these accounts have positive influence on mental and sexual health and they promote healthy behaviours, research should look into how these accounts can be promoted.

Thinspiration has been banned from the search engine of Instagram because of all the negative effects that were found in research. It is doubtful if banning Fitspiration would be the solution to the possible negative effects. New forms of media and advertising arise constantly. When Fitspiration would be banned, the market will find another way to promote the desired life connected to products. A society where men and women are not judged on their looks and everybody accepts their body would probably be idealistic. However, it might be possible to give young people a more critical view on the images and information they get thrown at them. The study of Yamamiya, Cash, Melnyk, Posavac and Posavac (2005) already showed that media literacy prior to exposure to media of thin and beautiful women, lowered the influence of this media on women's body image. Finally, long-term multiple sessions showed the most promising results to decrease body dissatisfaction (Watson & Vaughn, 2006). Future research could look into if the possibility of media literacy reducing the effects of Fitspiration. Hopefully, this could change fitness to again be about health instead of appearance.

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## Appendix

### Appendix A. Questionnaire quantitative research

#### Introduction

Thank you for being part of my study! My name is Christa and I am doing my master thesis for a study programme of Wageningen University. My study is about exposure to the Fitspiration/fit girl trend on Instagram and sexual function in young women (age 18-25).

Your participation is completely voluntary and you can withdraw from the study at any moment. Furthermore, the study is anonymous, no participant will be identified and the data will be analysed on group level.

It will take you about 10 minutes to complete the questionnaire. To start the questionnaire press the button with the arrow-sign below.

#### Exposure to Fitspiration

1. Are you familiar with Fitspiration/fit girls?

- Yes
- No

*Condition: Yes is selected, skip to Have you seen Fitspiration/fit girls...*

Definition Fitspiration: images that promote a fit and healthy lifestyle whereby most of the images focus on diet (photos of healthy food) and exercise (photos of exercise, equipment, sportswear etc.).

2. Have you seen Fitspiration/fit girls on Instagram?

- I do not have an Instagram account
- Yes
- No

*Condition: I do not have Instagram is selected, skip to What is Fitspiration for you? Pick 5...*

3. Rate your level of agreement on the following statements (5-Likert scale):

- I often see Fitspiration/fit girls on Instagram.
- I spend a lot of time looking up Fitspiration/fit girls on Instagram.
- I look multiple times a day at Fitspiration/fit girls on Instagram.
- I follow many Fitspiration/fit girl accounts on Instagram.
- I often comment on Fitspiration/fit girl posts on Instagram.
- I often post Fitspiration on my own Instagram account.

4. I post photos of... (multiple answers possible)

- I don't post
- healthy food
- high intensity exercising
- low intensity exercising
- myself in exercise clothing
- exercise equipment
- my fit body
- before and after a period of working out
- other

5. What is Fitspiration for you? Pick 5 items and rank them in the box on the right

- Eating healthy foods
- Being balanced
- Feeling fit
- Being healthy
- Exercising to relax
- Restrictive eating
- Having perfect proportions
- Looking hot
- The ideal body
- Exercising to look good

6. What is Fitspiration for you? Rank the pictures from 1 (most) to 6 (less) by giving every picture a score (you can use every number only ones).



7. When you think about, or look at Fitspiration/fit girls, which of these body attributes are most important for you? Rank all the attributes: 1 = most important, 10 = least important.

- Physical coordination
- Health
- Weight
- Strength
- Sex appeal
- Physical attractiveness

- Energy level
- Firm/sculpted muscles
- Physical fitness level
- Measurements (e.g. chest, waist, hips)

8. On which social media platforms other than Instagram do you see Fitspiration/fit girls? (Multiple answers possible)

- Facebook
- YouTube
- Pinterest
- Snapchat
- Twitter
- Tumblr
- Other, specify...
- I do not see Fitspiration/fit girls on other social media platforms

9. Where other than social media do you see images of Fitspiration/fit girls? (You can answer both in Dutch and English)

**Body image and social media** (5 point Likert scale)

10. Rate your level of agreement on the following statements:

- I worry how others perceive my body.
- I am confident about my appearance.
- When I am around others I am constantly aware of how I look.
- If I could change my body I would.
- I feel comfortable with the shape of my body.
- I feel comfortable with the size of my body.
- Social media influences the way I feel about myself.
- I feel pressured to fit into a 'ideal' look.
- My idea of the 'perfect body' is influenced by social media.
- I compare myself with fit girls on social media.

11. Rank these body attributes from that which has the greatest impact on your physical self-concept (lichamelijke zelfbeeld) to that which has the least impact on your physical self-concept.

**Rank all the attributes:** 1 = most impact, 10 = least impact.

- Physical coordination
- Health

- Weight
- Strength
- Sex appeal
- Physical attractiveness
- Energy level
- Firm/sculpted muscles
- Physical fitness level
- Measurements (e.g. chest, waist, hips)

The following questions will be about sexual feelings and responses.

12. What is your sexual orientation?

- Heterosexual
- Homosexual
- Bisexual
- Other

13. What was your frequency of sexual activity over the past 3 months?

- less than once a month
- 1-2 per month
- 1-2 per week
- 3-4 per week
- more than 4 times a week
- I have never had sex

*Condition: I have never had sex is selected, skip to How do you thin being into Fitspirat...*

The following questions ask about your sexual feelings and responses. They will appear to you in 6 different blocks with 3-4 question per block. Please answer the following questions as honestly as possible, it will be completely anonymous!

In answering these questions the following definitions apply:

**Sexual activity** can include caressing (strelen), foreplay, masturbation, vaginal intercourse, non-penetrative sex, oral sex etc.

**Sexual intercourse** is defined as penile penetration (entry) of the vagina.

**Sexual stimulation** includes situations that maintain or enhance sexual arousal like foreplay with a partner, self-stimulation (masturbation), or sexual fantasy.



**Sexual desire** or **interest** is a feeling that includes wanting to have a sexual experience, feeling receptive to a partner's sexual initiation, and thinking or fantasizing about having sex.

14. Over the past 3 months, how **often** did you feel sexual desire or interest?

- Almost always or always
- Most times (more than half the time)
- Sometimes (about half the time)
- A few times (less than half the time)
- Almost never or never

15. Over the past 3 months, how would you rate your **level** (degree) of sexual desire or interest?

- Very high
- High
- Moderate
- Low
- Very low or none at all

16. Over the past 3 months, how **often** do you initiate sexual activity because of sexual desire?

- Almost always or always
- Most times (more than half the time)
- Sometimes (about half the time)
- A few times (less than half the time)
- Almost never or never

**Sexual arousal** is a feeling that includes both physical and mental aspects of sexual excitement. It may include feelings of warmth or tingling in the genitals, lubrication (wetness), or muscle contractions.

17. Over the past 3 months, how **often** did you feel sexually aroused ("turned on") during sexual activity or intercourse?

- No sexual activity with partner or by myself
- Almost always or always
- Most times (more than half the time)
- Sometimes (about half the time)
- A few times (less than half the time)
- Almost never or never

18. Over the past 3 months, how would you rate your **level** of sexual arousal ("turned on") during sexual activity or intercourse?

- No sexual activity with partner or by myself
- Very high
- High
- Moderate
- Low
- Very low

19. Over the past 3 months, how confident were you about becoming sexually aroused during sexual activity or intercourse? (Confident = hoe zeker ben je dat je opgewonden wordt)

- No sexual activity with partner or by myself
- Very high confidence

- High confidence
- Moderate confidence
- Low confidence
- Very low or no confidence

20. Over the past 3 months, how **often** have you been satisfied with your arousal (excitement) during sexual activity or intercourse?

- No sexual activity with partner or by myself
- Almost always or always
- Most times (more than half the time)
- Sometimes (about half the time)
- A few times (less than half the time)
- Almost never or never

Sexual lubrication is also referred to as "getting wet", the vagina produces this lubrication.

21. Over the past 3 months, how **often** did you become lubricated ("wet") during sexual activity or intercourse?

- No sexual activity with partner or by myself
- Almost always or always
- Most times (more than half the time)
- Sometimes (about half the time)
- A few times (less than half the time)
- Almost never or never

22. Over the past 3 months, how **difficult** was it to become lubricated ("wet") during sexual activity or intercourse?

- No sexual activity with partner or by myself
- Extremely difficult or impossible
- Very difficult
- Difficult
- Slightly difficult
- Not difficult

23. Over the past 3 months, how often did you **maintain** your lubrication ("wetness") until completion of sexual activity or intercourse?

- No sexual activity with partner or by myself
- Almost always or always
- Most times (more than half the time)
- Sometimes (about half the time)
- A few times (less than half the time)
- Almost never or never

24. Over the past 3 months, how **difficult** was it to maintain your lubrication ("wetness") until completion of sexual activity or intercourse?

- No sexual activity with partner or by myself
- Extremely difficult or impossible
- Very difficult
- Difficult

- Slightly difficult
- Not difficult

### **Orgasm**

25. Over the past 3 months, when you had sexual stimulation or intercourse, how **often** did you reach an orgasm (climax)?

- No sexual stimulation with partner or by myself
- Almost always or always
- Most times (more than half the time)
- Sometimes (about half the time)
- A few times (less than half the time)
- Almost never or never

26. Over the past 3 months, when you had sexual stimulation or intercourse, how **difficult** was it for you to reach an orgasm (climax)?

- No sexual stimulation with partner or by myself
- Extremely difficult or impossible
- Very difficult
- Difficult
- Slightly difficult
- Not difficult

27. Over the past 3 months, how **satisfied** were you with your ability to reach an orgasm (climax) during sexual activity or intercourse?

- No sexual stimulation with partner or by myself
- Very satisfied
- Moderately satisfied
- About equally satisfied and dissatisfied
- Moderately dissatisfied
- Very dissatisfied

28. Over the past 3 months, how **satisfied** were you generally with the strength and intensity of your orgasms?

- No sexual stimulation with partner or by myself
- Very satisfied
- Moderately satisfied
- About equally satisfied and dissatisfied
- Moderately dissatisfied
- Very dissatisfied
- No orgasm reached

### **Satisfaction**

29. Over the past 3 months, how **satisfied** have you been with the amount of emotional closeness during sexual activity between you and your (former) partner?

- Very satisfied
- Moderately satisfied
- About equally satisfied and dissatisfied

- Moderately dissatisfied
- Very dissatisfied

30. Over the past 3 months, how **satisfied** have you been with your sexual relationship with your (former) partner?

- Very satisfied
- Moderately satisfied
- About equally satisfied and dissatisfied
- Moderately dissatisfied
- Very dissatisfied

31. Over the past 3 months, how **satisfied** were you with your overall sexual life?

- Very satisfied
- Moderately satisfied
- About equally satisfied and dissatisfied
- Moderately dissatisfied
- Very dissatisfied

### **Pain**

32. Over the past 3 months, how **often** did you experience discomfort or pain during vaginal penetration?

- No sexual activity
- Almost always or always
- Most times (more than half the time)
- Sometimes (about half the time)
- A few times (less than half the time)
- Almost never or never

33. Over the past 3 months, how **often** did you experience discomfort or pain following vaginal penetration?

- No sexual activity
- Almost always or always
- Most times (more than half the time)
- Sometimes (about half the time)
- A few times (less than half the time)
- Almost never or never

34. Over the past 3 months, how would you rate your **level** (degree) of discomfort or pain during or following vaginal penetration?

- No sexual activity
- Very high
- High
- Moderate
- Low
- Very low or none at all

35. How do you think being into Fitspiration might be related to sexual function/sexual health as discussed in this survey? You can answer both in Dutch and English

To conclude, there will be 6 general questions.

36. I am...

- Male
- Female
- Other

37. What is your age?

38. Most days I feel I am...

- doing too much to be fit
- fit
- doing too little to be fit

39. Your height in centimetres:

40. Your weight in kilograms:

41. What is your level of education/what level of education are you currently following?

- Primary education (basisschool)
- Lower General Secondary Education (VMBO)
- Higher General Secondary Education (HAVO)
- Pre-university education (VWO)
- Intermediate vocational education (MBO)
- Higher vocational education (HBO)
- University education (WO)

Thank you for your participation!

If you are interested in the findings of my study, click on the link below. This link will take you to a separate survey where you only have to fill in your email address. This way the data that you just filled in can be kept anonymous.

## Appendix B. Interview guideline qualitative research

1. Do you think that there is a difference between the nature of Fitspiration images?
  - a. Are some images more of positive/negative influence on sexual function than others?
  - b. When asking respondents what Fitspiration is for them by ranking pictures and words the outcomes were ambiguous. Can you analyse these differences? Can you explain that people choose the more objectifying pictures and at the same time choose the words that show a more positive intention of Fitspiration?



Order images:

1. being fit
2. feeling healthy
3. exercising to look good
4. eating healthy food
5. the ideal body
6. being balanced
7. exercising for fun
8. having perfect proportions
9. looking hot
10. restrictive eating

Order words:

2. Sexual function
  - a. When analysing the data, I found a relation between body image and sexual function, how do you explain this?
  - b. Do you think this relationship will change when you are in an exclusive relationship?
  - c. Do you think this relationship will change when you are longer sexually active?
  - d. When asking about sexual function I asked questions in 6 domains; sexual arousal, satisfaction, lubrication, orgasm, sexual desire and pain. Do you think these domains are differently influenced or influenced as a whole by fitspiration or body image?
3. Frequency exposure
  - a. When analysing the data, I found a positive relation between exposure frequency and sexual function, how do you explain this?
  - b. Why are your reasons for looking at Fitspiration?
  - c. Do you see the dominant body image shown by Fitspiration as an ideal?
4. Objectification
  - a. Research sees Fitspiration as objectifying for women. Objectification is separating the body from the person. Why do you think that Fitspiration is seen as objectifying?

- b. When looking at the data the body attributes that respondents found important for fit girls differed in comparison to what they found important for themselves. How would you explain these differences?

**Objectification other**

1. Physical fitness level
2. Health
3. Physical attractiveness
4. Strength
5. Energy level
6. Firm/sculpted muscles
7. Weight
8. Physical coordination
9. Measurements
10. Sex appeal

**Objectification self**

1. Physical attractiveness
2. Health
3. Energy level
4. Weight
5. Physical fitness level
6. Sex appeal
7. Firm/sculpted muscles
8. Strength
9. Measurements
10. Physical coordination