

# **Instagram's effect on self-objectification and body image issues among young women**

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By

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On my honor as a University student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments.

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## **Abstract**

Although social media allows users to express themselves and stay connected to their peers, this new social media era leads to constant internal comparison to other peoples' lives and appearances. This research addresses how a popular social media platform, Instagram, is creating self-objectification and body image issues among young women. Instagram, launched in 2012, is a free social media platform that allows users to post photos and videos for their followers to see. However, many Instagram posts are edited and filtered to create an unrealistic representation of the user's appearance. With Instagram being so prevalent among people under the age of 35, it is crucial to consider the social dimensions associated with this photo-based software. Young women in this age group are especially susceptible to the detrimental effects of comparing their physical appearance to the girls in the posts they see on Instagram. Considering many users check Instagram every day, in many cases multiple times a day, it is important to consider how this significant exposure is affecting the mental health of women in an impressionable time of their lives. Instagram is a relatively new technology that has been adapted by social groups differently. Although all users are susceptible to body image issues from comparison to others, diverse groups of people from various social classes and social classes use and are affected by Instagram in the different ways which will be analyzed through the lens of Social Construction of Technology (SCOT). This study uses a survey, consisting of females between the ages of 18 and 22, to examine how their self confidence in their face and body changes after exposure to Instagram and then exposure to "Body Positive" images. Body Positive images relate to a new Instagram trend that aims to challenge the societal beauty ideals by displaying a wide range of body types. The survey asks the subjects to rate their confidence before any exposure and then again after. Results are expected to show a significant decrease in confidence for the women in

both their face and body after Instagram exposure, but an increase in confidence after the body positive exposure. This research aims to bring awareness to the body image issues caused by Instagram in hope that users may limit their time spent on the app and evaluate the effects a potential answer with the body positive images. The creator of SCOT, Bijker, stated the importance of evolving the sociology of technology to better equip future generations to handle upcoming challenges. The sociology of Instagram must be evolved to prevent the continuation of self-objectification and body image issues in young women from this very popular social media platform.

## **Introduction**

This study examines the effect Instagram, a popular social media platform, has on self-objectification and body image issues in young women. Instagram is a photo-based software that allows users to upload, edit with an abundance of filters, and share photos and videos with followers. Other features of Instagram include direct messaging and “stories” that stay on the user’s profile for 24 hours. A user’s home feed consists of posts from those they follow, and users can “like” and comment on other users’ posts. Founded by two men, Kevin Systrom and Mike Krieger, Instagram became available on the iPhone app store in 2010. As of June 2018, Instagram reached one billion active users, with more than 500 million daily users. The focus of this study is on the young adult age group since 71% of Instagram users are under the age of 35 (Moshin, 2019). Women, in particular, are more susceptible to the negative effects of self-objectification and experience a higher likelihood of mental health consequences associated with body dissatisfaction than men (Vuković et al., 2018). Other social media platforms, such as Facebook, Snapchat, and Twitter, may have similar effects but this prospectus focuses on Instagram with its growing popularity and heavily photo-based content. Considering Instagram’s

primary use is posting and sharing images, researchers have suggested that Instagram may be more detrimental to women's appearance concerns than other social media platforms that contain more varied content (Fardouly et al., 2018). With Instagram being so prevalent in this generation, it is crucial to consider the negative effects this software has on girls in an impressionable time period of their lives. Self-objectification in young women is explored through the various societal impacts of using the popular social media platform, Instagram.

### **Case Context**

After Instagram launched in 2010, it gained rapid popularity with one million users registered within the first two months. Facebook bought Instagram in April of 2012 in a one-billion-dollar acquisition when Instagram had only six engineers. Now Instagram, a company estimated to be worth over \$100 million (if it were a stand-alone company) constructing a product with over 1 billion users, only has about 100 engineers (McCormick, 2018., McCracken, 2015). This project investigates how the "programming" of these 100 engineers has affected the lives of young women users with regards to self-objectification and body image issues.

Instagram users can upload photos or short videos to their profile. These uploads come up on the feeds of people who follow them. The follower can choose to "like" the picture or comment on the picture if they would like. Other features of Instagram include direct messaging and "stories" that stay on the user's profile for 24 hours. Users can set their profile as public, meaning anyone with an Instagram account could see their profile with all of their uploads, or private, meaning only the people they allow to follow them can see their profile. Many Instagram users follow their favorite celebrities or news profiles to stay up to date on what is happening in the world. In June of 2012, Instagram added an "Explore" tab which include curated photos and videos based on your scrolling history.

Discussing the technical dimensions of Instagram is crucial to understanding how this technology is gaining popularity. In a study of 613 participants, respondents were asked to rate the gratifications and attributes of Instagram and Facebook that led to increased time spent using each app on their smart phones. Respondents indicated the openness, defined as the extent to which personal contents are open to other users, and browsing aspect of Instagram has led to an uptake in use over Facebook (Kim & Kim, 2019). At launch, Instagram utilized a chronologically based algorithm to develop the user's feed which placed the users' followers' post in a chronological order. In July of 2016, Instagram launched a relevancy-based algorithm which relies on machine learning based on past behavior to create a unique feed for every user determined on three factors – interest, recency and relationship. This new algorithm may be increasing the detrimental effects of Instagram due to machine learning prioritizing posts that are harmful to young women's self-image.

### **STS Theory**

Although Instagram allows users to keep in touch with their friends and stay up to date with the news, society as a whole must consider the negative effects this social media platform has on its users, especially young women. Previous research suggests media may lead to greater body dissatisfaction in women through two pathways – the tendency to compare appearance to others and internalization of societal beauty ideals (Van den Berg et al., 2002). Instagram significantly increase the amount of exposure to pictures of other people, thus amplifying the tendency to compare appearances. Images posted on Instagram are often carefully selected, edited and enhanced, which portrays a heightened society beauty ideal. This heightened beauty ideal makes many users feel inadequate about their appearance when comparing themselves to the perfectly filtered photographs they see on Instagram. This idea is especially alarming for

adolescent women with low self-esteem, since they are more likely to focus on their appearance and are more sensitive to the comparisons (Brajdić et al., 2018). Those with smaller offline peer networks may also be more susceptible to the body ideals portrayed on social networks compared to those already acculturated to the norms through larger offline social networks (Brajdić et al., 2018).

The objectification theory argues that women are acculturated to internalize an observer's perspective on their physical self (Fredrickson & Roberts, 1997). Self-objectification and body-surveillance can negatively affect the quality of life for young women through withdrawing from life-sustaining activities due to low self-esteem, self-harm and decreased sexual enjoyment (Brajdić et al., 2018). Saunders and Eaton (2018) studied social-networking platforms – Facebook, Instagram, and Snapchat – to understand which were most related to body dissatisfaction in young women. From their 637 female respondents with a mean age of 21.3, they concluded that the strongest relationship between body dissatisfaction and excessive use were found on Instagram and Facebook. Interestingly, participants were more likely to use Instagram and Snapchat for passive social-networking purposes, which is linked to destruction in a user's well-being by social comparison (Saunders & Eaton, 2018). Feltman and Szymanski (2017) conducted an online survey with 492 college-aged women respondents to examine the relationship between both self-objectification and body surveillance and Instagram, specifically. They concluded that 'upward comparison,' which is comparing yourself to someone you perceive as "better" than you, through Instagram links to self-objectification and body surveillance, but downward comparison does not (Feltman & Szymanski, 2017). Downward comparison is comparing yourself to someone you perceive as "lower" than you. One recent Instagram phenomenon is the rise of Instagram influencers, which are typically

people who align with society's beauty ideal, selling products for a company. These influencers may lead to more upward comparison. The different user groups, such as influencers and non-influencers, using Instagram for different purposes leads to the societal framework of Social Construction of Technology (SCOT).

SCOT relates to how Instagram has been adapted and used by different social groups. Pinch and Bijker (2008) define SCOT as the variation and selection of the development process of a technological artifact. They discuss how the different social groups and the meanings these social groups give the artifact all must be considered in the societal development of the artifact. Using a bicycle as an example, they argue considering some social groups, like "anti-cyclists," may be less obvious but necessary and power and economic strength must be considered, when relevant (Pinch & Bijker, 2008). A variety of different social groups, such as young users, celebrities, influencers, companies, and nonusers, must be considered when examining the influence of Instagram. In a later journal, Bijker argues the importance of constructing a world for the next generations that can handle upcoming challenges by investing in societal institutions and how the sociology of technology must evolve as new technology is introduced (Bijker, 2017). It is important to study the rise of Instagram through the lens of SCOT to understand how different social groups are constructing Instagram's role in society and better equip future generations in preventing body dissatisfaction.

Lastly, this study examines the effect of a body positive campaign on Instagram, "#BoPo", and whether this effort is effective in preventing body image issues. This body positive content aims to challenge the societal beauty ideals by displaying a diverse array of body with different shapes, sizes, abilities, colors and features. The goal of body positive content is to increase body appreciation, defined as appreciating the features, functionality, and health of the body rather

than focusing solely on appearance. In a recent study, women were asked to rate their mood and body satisfaction from 0 to 100 before and after exposure to a body positive image and after exposure to body-thin images. The average overall body satisfaction rose 8 points after the body positive images and decreased 6 points after the body-thin images (Cohen et. al, 2019). This study shows that there is significant hope in the body positive campaign, but more research is required to help generate the most body appreciation.

### **Research Question and Methods**

How has the rise of Instagram in today's society caused an increase in self-objectification and body image issues in young women? Specifically, this study will focus on Instagram's relationship with body surveillance in regard to what components of appearance are dominant in the comparison process due to Instagram. Previous research has been conducted on this topic with respect to Facebook, but not Instagram. A study, consisting of 112 women between the ages of 17 and 25, used visual analog scales in a survey where participants would rate their mood on a scale from 0 to 100, in regard to different appearance components, after being exposed to Facebook. Results found an increase in Facebook usage led to a significant desire in the young women to change their face, hair, and skin-related features (Fardouly et al., 2015). Surprisingly, Facebook exposure did not have an overwhelming effect on the desire for them to change their body. Two possible predictions for this result were presented: the wide range of body types and the abundance of self-portraits on Facebook (Fardouly et al., 2015). With the plethora of fitness Instagram accounts, showing off idealistic body types, this study investigate how Instagram differs from Facebook in what appearance traits are most susceptible to body surveillance.

This study uses a similar survey with visual analogous scales from 0 to 10 that serves as the primary source of evidence collection. This study consisted of 28 females between the ages



of 18 to 25, living in the U.S., and was conducted online using Google Forms. The survey asks participants to rate their mood with respect to different traits both prior to and after Instagram exposure. One scale is to rate their confidence in their hair, skin and face while the other one is to rate their confidence in their body. The Instagram exposure consists of scrolling on their home feed, as well as their discovery page, for ten minutes. Average scores from before and after Instagram exposure are compared to examine Instagram's effect. Survey participants will also be asked to look at three body positive images and then asked to rate their moods with respect to different physical traits. These results indicate how effective body positive images are in challenging the societal beauty ideals and promoting self-confidence. This method was chosen based on the reliable results and conclusions that were able to be drawn from the study focusing solely on Facebook. These results from 28 survey participants will offer comparative results to compare the two forms of social media, as well as evidence on the effect Instagram has on young women.

Different groups have adapted Instagram differently which can be evaluated through the lens of Social Constructivism of Technology (SCOT). Pinch and Bijker (2006) define SCOT as the variation and selection of the development process of a technological artifact, which relates to Instagram in the way a variety of groups have adapted this platform. Due to restrictions on access to certain groups, this study will use case studies to illustrate how the adaptation of Instagram by two groups, celebrities and fitness influencers, have increased the effect of Instagram exposure on body image issues among young women.

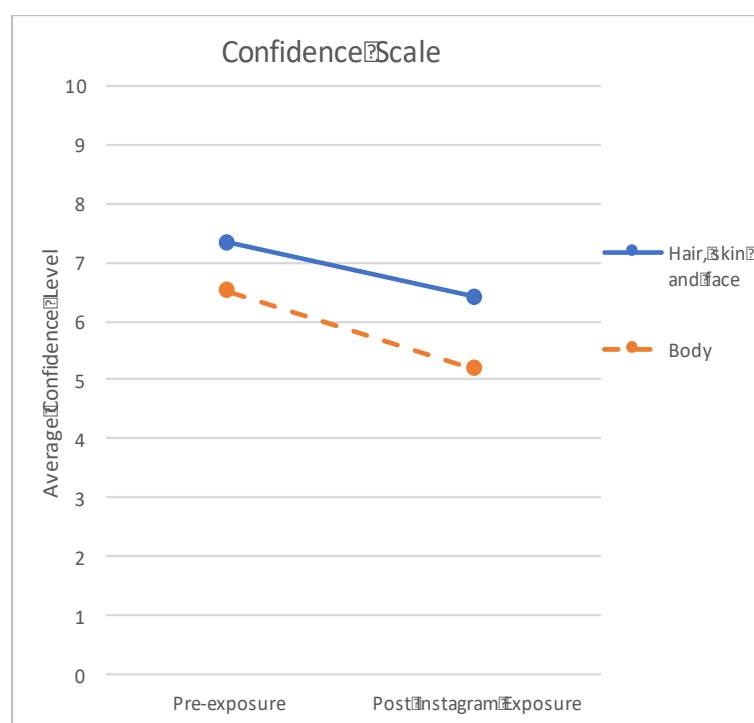
## **Results**

Overall, the survey results showed a decrease in confidence on both the hair, face, and skin spectrum as well as the body spectrum after exposure to Instagram. The decrease is more

substantial for the body confidence, suggesting Instagram is more detrimental to body confidence than hair, skin and face confidence. Exposure to body positive images resulted in a slight increase in confidence for hair, skin, and face and body. These results suggest body positive images may help increase appreciation for diversity and challenge the societal beauty norms, but these body positive campaigns will not prevent body image issues, caused by Instagram, alone.

Each survey participant was asked to clarify how often they check Instagram to ensure every participant was an active Instagram user. Out of the 28 participants, 60.7% indicated they check Instagram every three hours, 25% for once or twice a day, 14.3% for every hour and 0% for not checking Instagram daily. These results illustrate how all participants are active Instagram users and qualify as acceptable participants for this study.

The survey participants were asked to rate their confidence in two categories (face, skin and hair and body) on a scale of 1 to 10 prior to any Instagram exposure and immediately following 10 minutes of Instagram exposure. As seen in *Figure 1*, the average confidence level decreased by 12.7% for the face, skin and hair category and 20.3% for the body category. This proves that Instagram exposure leads to higher body insecurities than those pertaining to face skin and hair for women in this age group. This study also



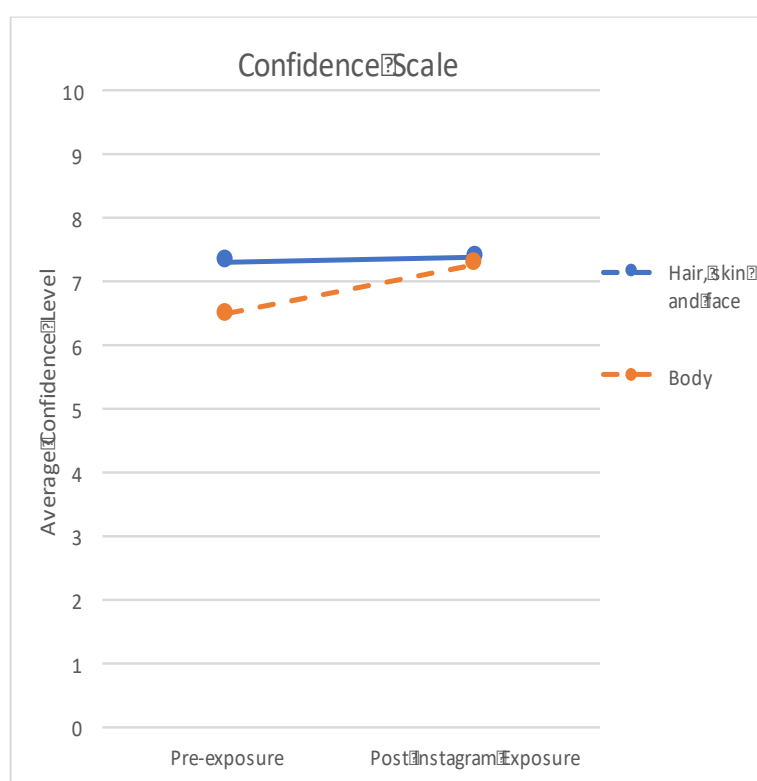
*Figure 1: Average confidence pre- and post- Instagram exposure*

suggests women between the ages of 18 to 25 are often more confident in their facial features, rather than their body. Societal beauty norms often consider a wide range of facial features to be considered beautiful with models and Instagram influencers coming from different backgrounds with unique facial features. However, societal beauty norms revolving around body features often relate to specific body types. These features society deems as “beautiful” are portrayed all over social media, specifically Instagram. Therefore, the significant decrease in confidence relating to body features is not surprising.

Survey participants were also asked to rate their confidence after exposure to “Body Positive” images which portrayed an extensive range of body types and facial features. Average scores, displayed in *Figure 2*, indicated these “Body Positive” images did not change confidence in facial feature but increased body confidence by 12.1%. The difference in body confidence solidifies the effect, both negatively and positively, that Instagram can have on body image in young women.

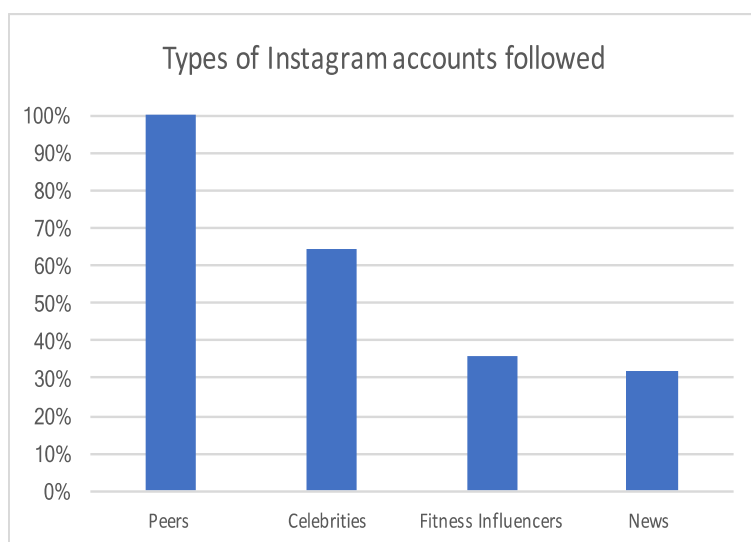
The algorithms behind Instagram

“Discover” page was explored in this survey to discover whether this technology was increasing user exposure to images that may decrease their self-confidence. Prior to asking the survey participants about their confidence in their physical image, survey participants were asked to indicate what types of Instagram accounts they choose to follow. The results of this question can

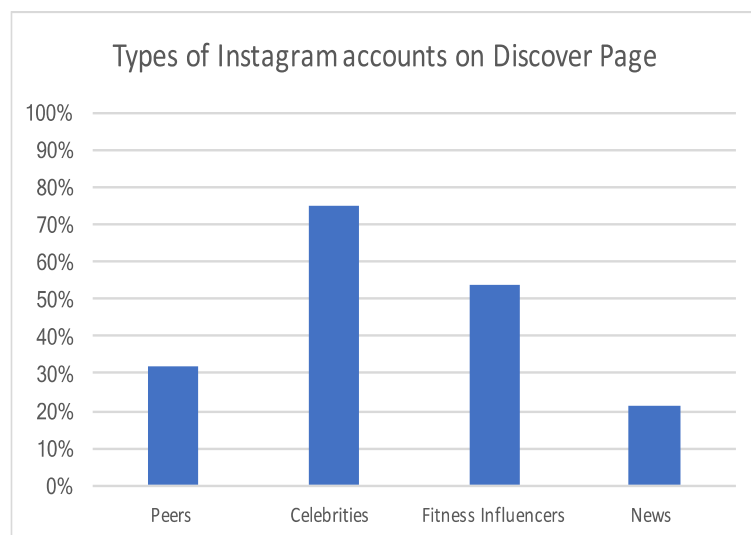


*Figure 2: Average confidence pre- and post- ‘body positive’ exposure*

be seen in *Figure 3*. All of the participants follow their peers, 64.3% of participants follow celebrities, 35.7% of participants follow fitness influencers, and 32.1% of participants follow news related Instagram accounts. Following Instagram exposure, the survey participants were asked the same question about their discover pages. Displayed in *Figure 4*, results showed that the types of Instagram accounts found on the Discover pages differed. The difference in responses, with an increase in celebrity and fitness influencer pages, shows how Instagram's discover page algorithm is leading to an increase in exposure to accounts that heavily portray the societal beauty norms.



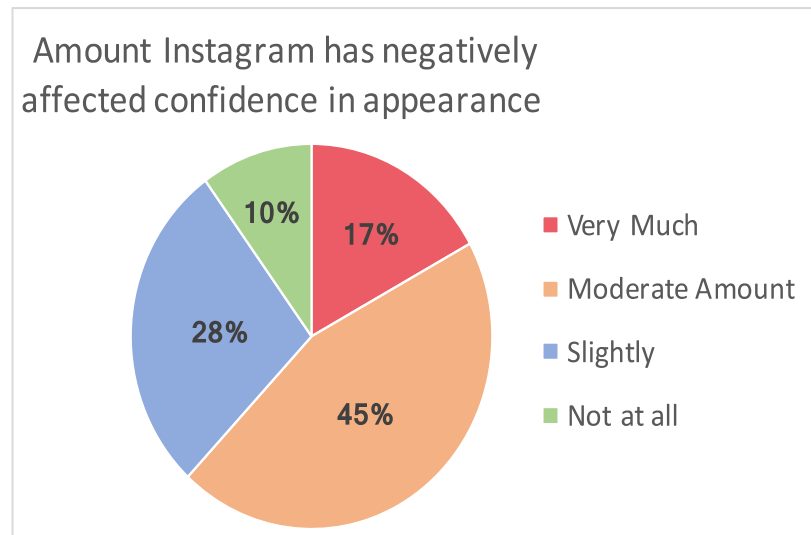
*Figure 3: Percent of Survey Participants who followed these type of accounts*



*Figure 4: Percent of Survey Participants who indicated these type of accounts were on their Discover Page*

There are a substantial number of articles and studies on the effect social media can have on self-objectification and body image issues, specifically among young woman. This study matches previous research on how social media platforms can have detrimental effects on a woman's self-confidence. To better understand the general consensus of this age group, survey participants were asked to rate how much they personally believe Instagram has negatively affected their confidence in their appearance. Results, shown in *Figure 5*, show that 62% of

survey participants believe Instagram has had a moderate or strong negative effect on their self-confidence in appearance.



*Figure 5: Percent of Survey Participants who indicated belief in each level of negative confidence in appearance from*

Since Instagram became available on the App store in 2012, different social groups have adapted to Instagram in different ways, which can be evaluated with SCOT. Celebrities tend to have a significant number of followers and post pictures depicting their daily lives, often showing the riches of their lives. Unsurprisingly, a 2016 study, consisting of 46 participants rating their body dissatisfaction pre and post exposure, showed that acute exposure to thin and attractive female celebrity images has an immediate negative effect on women's mood and body image (Brown & Tiggemann, 2016). Specifically, women that had higher level of “celebrity worship” felt more dissatisfied after viewing celebrity Instagram post than those with lower levels of celebrity worship (Brown & Tiggemann, 2016). Celebrity worship was found to be significantly more related to increased body dissatisfaction among young women, than in young men (Maltby et al., 2010).

Another increasingly popular social group on Instagram is fitness influencers, who use Instagram as a platform to share exercises, diets and, often, gain sponsorships to sell merchandise for fitness apparel companies. These accounts are intended to motivate viewers to live a healthier lifestyle, but they may be resulting in greater body dissatisfaction. A study consisting of 108 females in between the ages 17 to 24 used visual analogous surveys, much like those used in this study, to indicate that exposure these “fitspiration” accounts significantly increases body dissatisfaction (Prichard et al., 2020).

The focus of this study (young non-celebrity, non-influencer women) primarily use Instagram to see what their friends (or favorite celebrities/influencers) are up to, share their own experiences and create a blog of their lives. As discussed, Instagram is especially popular among the young generation, and this social group serves as a strong force for Instagram’s increasing influence in society.

## **Discussion**

This study further demonstrates the negative effect that social media has on self-objectification and body image issues while focusing solely on Instagram due to Instagram’s highly photo-based software. Self-confidence in both facial features and body features decreased with Instagram exposure among young women. In comparison to a similar study with Facebook, Instagram decreased the body confidence significantly more. One attribute to this could be the openness (ability to follow those who do not follow you) of Instagram. Many users report two of the gratifications for using Instagram over Facebook are the browsing aspect and openness, which is leading to greater exposure of the societal beauty norms (Kim & Kim, 2019). Another attribute of Instagram leading to body dissatisfaction is many peoples’ inability to detect the retouching of a photo and idealizing unrealistic beauty (Kleemans et al., 2016).

The “body positive’ images in this survey increased body confidence slightly which match a previous study surveying 198 young women surveying their confidence pre and post exposure to “body exposure” images. That survey was the first to provide evidence on how ‘body positive’ content on Instagram increases young women’s body confidence (Cohen et al., 2019). Body positive content on Instagram has been gaining popularity and some celebrities, such as Demi Lovato, have started posting body positive content.

One limitation in this study was the limited number, 28, survey participants. Another limitation was the demographics of this survey, only consisting of females from similar ethnic and socioeconomic backgrounds. Future studies on this topic should gather more survey participants from different ethnic and socioeconomic backgrounds. This study asked each participant to look at their own Instagram feed instead of providing a uniform Instagram feed for them to look at. Because different participants were exposed to different types of posts, there was no way in definitely determining what posts cause the most harms. For future surveys, there should be stricter monitoring to ensure all survey participants are scrolling on Instagram for the asked amount of time and each participant should be given the same Instagram feed to scroll. There were only three body positive images for the survey participants to look at after the ten minutes of Instagram exposure. Future studies should provide more body positive image for more evenly distributed exposure. This study would also benefit from discussing with fitness influencers and, if possible, celebrities to examine how they view Instagram and see if their confidence changes from Instagram exposure.

Although I will probably not use these specific results in my engineering practice, I learned how to conduct an informative survey and how to gather information to make inferences on how a technology is affecting society. This study allowed me to dig deep into unintended

consequences of a technology and how important it is for engineers to consider how their technology could affect different social groups.

## **Conclusion**

This research illustrates the unintended consequences of a technology that is so prevalent in this generation and only becoming more popular. This research proves how Instagram causes a decrease in self-confidence in facial features and especially body image. Body image issues can lead to habitual surveillance. This habitual surveillance often leads to mental health issues, such as eating disorders, as well as cause women to withdraw from life-engaging activities (Brajdić et al., 2018). The positive correlation with 'body positive' content and self-confidence in this research serves as a possible solution to limit the negative effects of Instagram. Future research should study which accounts lead to the highest body dissatisfaction to allow users to monitor their feeds. Other research should focus on alternative possible solutions besides flooding Instagram with 'body positive' content. It is our responsibility to evolve the sociology of a technology to better equip future generations (Bijker, 2017). Without promoting body positivity and breaking societal beauty ideals, Instagram will continue to cause self-objectification and body image issues among young woman.



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