

**Instagram and Self-esteem:
Does a Relationship Exist?**

By

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Abstract

Instagram and Self-esteem: Does a Relationship Exist?

A survey was conducted at two different Midwestern schools: Carthage High School and Missouri Southern State University. The survey sought to determine if a relationship exists between a social-networking application, Instagram, and self-esteem. After data analysis both between and within the two groups occurred, the majority of participants did feel that Instagram does have an effect on how they feel about themselves. Though some users had a negative relationship with Instagram, the significant majority experienced a positive relationship.

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Introduction

We are a generation experiencing a communication revolution. Our society is using social media and the internet more than ever. Smartphones have become an extension of our bodies, and our virtual communication continues to increase. A significant amount of social media users are adolescents who are hypersensitive to influences on their self-esteem.

With applications like Facebook, Instagram, Snapchat, and Twitter, we can communicate and share our lives with others in a way that has never been experienced. However, there are always advantages and disadvantages when it comes to technological advancements. While it is true that we are able to communicate like never before, we have also vulnerably placed ourselves upon a digital platform that is subject to public scrutiny. Even though our posts and pictures often draw support or positivity from our “friends,” it is nearly impossible to avoid some form of criticism or negativity on our personal social media. A website and application that is continuing to grow in popularity is the social-networking juggernaut, Instagram. On Instagram, profiles are made up of photos and videos. I seek to discover if there is a relationship between Instagram and self-esteem.

Instagram stands apart from other social networking sites because the majority of its content is visual. Instagram users communicate with an emphasis on photographs and short videos where other social networking sites (i.e. Twitter and Facebook) communicate with an emphasis on text. There is a direct correlation between physical appearance and popularity as well as popularity and overall self-esteem (Popkins, 1998). Users can directly see their number of “followers” and “hearts” (comparable to a Facebook “like” or Twitter “favorite”) compared to other individual users. Users could potentially draw the conclusion that they aren’t as popular as other users because people are not attracted to their physical appearance or life depicted through their digital

photographs. “Lack of popularity may undermine self-esteem and self-confidence” (Zuckerman, 1991). Instagram may have significant influence over an increase or decrease in self-esteem due to a user’s perceived popularity.

In 2015, I signed a modeling contract with an agency based in Norman, Oklahoma. The models were greatly encouraged to use Instagram as a way to self-promote. I built up a dependence on the attention, and Instagram started taking over my daily thoughts. I would feel self-conscious when a photo didn’t receive the accolades I had anticipated. Around the same time, my little brother talked to me about how people had been commenting hurtful things on one of his Instagram photos. I could tell what they said had truly hurt his feelings. I knew we couldn’t be the only two people having self-esteem-related issues stemming from Instagram. When I lessened my use of the application, my frequency of self-doubt diminished. I knew I wanted to conduct research to discover if there was a measurable relationship between Instagram and self-esteem.

Instagram currently has over 300 million monthly users worldwide and 77.6 million users in the United States alone (Smith, 2015). Additionally, 90% of Instagram users are under the age of thirty-five (Smith, 2015). The majority of Instagram users are much more impressionable and easily affected because of their younger age. Due to Instagram’s vast popularity and relatively young users, it is a prime candidate for self-esteem research.

I conducted a survey to discover the potential relationship between Instagram and self-esteem so that users can understand its influence and learn how to combat it. Since very little research has been done linking Instagram to self-esteem, I did something relatively new. This is a very timely topic because of Instagram’s current popularity in our society, and how far-reaching its impact is. In order to confront an issue, one first has to understand it.

Methodology

In order to measure whether or not a relationship exists between Instagram and self-esteem, I first had to define 'self-esteem.' The majority of the term's definitions are very similar, but for the sake of my project, "self-esteem" will be defined as "the way we feel about ourselves." I constructed a survey (see Appendix A) that includes demographic information as well as multiple-choice, Likert-scale, and short answer questions. A survey was the most efficient way to collect the type of data necessary for me to find statistically significant correlations, and it also allowed me to get a wide range of information in a timely manner. The survey was one page in length and offered a section at the bottom for participants who did not have an Instagram account.

A former professor of mine, Lee Pound, is on the board of Carthage High School. She connected me with the superintendent of schools, Dr. Sean Smith, who then connected me with the CHS building principal, Matt Huntley. I scheduled a meeting with Mr. Huntley where we discussed the timeliness of this project and the potential positive impact it could have. We discussed how students could not be promised incentives for participation and that their participation was completely voluntary. I emailed him copies of the survey and the parental release form (see Appendix B). He decided the channel that would have the most diversity would be the English department because it was required for each grade level. He emailed out 466 surveys along with their release forms to students.

I knew early on that I wanted a comparison of data. I thought that comparing the results of a self-esteem survey between a public high school and a public university would be very interesting and illuminating. We chose to conduct the MSSU portion of my survey through an entry-level Communications class because of the ease of access I would have being a Public Relations major. The survey was given to Professor Natalie Grecu's Communication 100 class of

approximately 250 people. All of the surveys given were collected within the hour upon completion that same day.

Once I collected all the surveys and release forms from Carthage High School, it was time to begin data analysis. In order to best interpret the data, I manually coded all of my statistical information and put it in the Predictive Analytics Software (PASW). For the Likert-scale questions, I measured the standard deviations to determine which of my findings were statistically significant. I ran Pearson product correlations between my questions and my demographic information to determine what items were had statistically significant correlations and therefore had the potential to influence each other. After separately performing data analysis on the surveys given at CHS and MSSU, I compared and contrasted the data.

It was quickly clear that there was a noticeable and measureable difference between the two schools. My research question was “Is there a relationship between Instagram and self-esteem?” After careful data analysis I can confidently say that a relationship does exist.

Results and Discussion

In order to most easily interpret the statistical data from the conducted surveys, I will analyze one question at a time (starting with question #3 on my survey) and examine the results from each source. I will first look at the data from Carthage High School (CHS), then Missouri Southern State University (MSSU), then the data from both CHS and MSSU combined (Combo). After the results have been recorded, I will discuss the significance and what the results mean. After the quantitative data has been measured and discussed, I will look at the qualitative data garnered from my short answer questions at the end of my survey. (see Appendix A). Next, I will examine an analysis of variance (ANOVA) between two isolated factors at a time in the same order as the question analysis: CHS, MSSU, Combo. After the ANOVAs have been examined, I will look at correlations between two isolated factors at a time to try and determine which factors have the potential to influence each other. Because of the large quantity of correlational information, I will only be examining the correlations that exist when the data from CHS and MSSU are combined. I will answer my research question and provide my final thoughts.

Measurements

Likert-scale question: A question measured on a 1-5 scale.

Mean (x): The averaged response of a Likert-scale question. (For example, if $x = 3.7$, that means that when I examined all the responses on a scale of 1-5, the averaged answer for that question was 3.7).

Standard deviation (s.d.): The measurement from the mean that illustrates the dispersion around the mean. (The smaller the s.d., the more consistent the responses. For example, if $x = 3$ and the s.d. = 1, the majority of responses fall within the range of 2-4).

Sample

At Carthage High School (CHS), out of the 94 code-able surveys, 35 belonged to males and 59 belonged to females. There were 33 freshman, 3 sophomores, 36 juniors, and 22 seniors that participated. There were 85 students who have an Instagram account, and 9 that do not. Students who do not have an Instagram account were asked to give one reason why they do not have one.

At Missouri Southern State University (MSSU), out of the 83 code-able surveys, 39 belonged to males, 42 belonged to females, and one did not identify gender. Over 75% were in the “18-19” age category. There were 65 students who have an Instagram account, and 18 that do not. Students who do not have Instagram account were asked to give one reason why they do not have one. (One survey was coded without demographic information).

Survey Question #3: I feel good about myself when I get Instagram likes.

Figure 1.1

Unit	x	s.d.	Agreed	Disagreed	Neutral
CHS	3.8	.97	72%	9%	19%
MSSU	3.7	.89	65%	6%	29%
Combo	3.8	.93	69%	8%	23%

(Note: Scores from the categories “Agree” and “Strongly Agree” on the survey were combined to create the “Agreed” category. Scores from the categories “Disagree” and “Strongly Disagree” on the survey were combined to create the “Disagreed” category.)

It is very interesting to see how similar these results are even though they examine two very different institutions. This question really plays to our human nature of simply enjoying recognition and attention. “People need to be loved and socially accepted; this phenomenon is referred to as ‘need to belong’” (Baumeister and Leary, 1995; Leary, Kelly, and Schreindorfer, 2001; Gangadharbatla, 2008). If we use my operational definition for self-esteem that states, “Self-esteem is the way we feel about ourselves,” then, based on the responses to this question, we can quickly draw the conclusion that Instagram has the ability to make people feel better about themselves. This is close to the same as saying Instagram has the ability to boost self-esteem. This knowledge is crucial in understanding the addictive nature of social media usage. If we aren’t careful, we can become reliant on the affirmation Instagram likes bring. For some, Instagram may be an easier way to boost self-confidence than waiting around for someone to say something positive or affirming in his non-digital life. Out of almost all of my questions, the results to this specific question surprise me the least. I anticipated there being a more consistent response to positive Instagram encounters than negative Instagram encounters because I believed the frequency of positive encounters would be greater.

Survey Question #4: I often compare my profile with other profiles on Instagram.

Figure 1.2

Unit	x	s.d.	Agreed	Disagreed	Neutral
CHS	2.7	1.28	33%	47%	20%
MSSU	2.3	1.16	18%	60%	22%
Combo	2.6	1.24	27%	53%	21%

This question was designed to illuminate the percentage of people who spend time comparing what they do on Instagram to what other people are doing. I hypothesized that people who spent more time comparing their profile to other users’ profiles would be more susceptible to having their self-esteem influenced in some way. It is easy to highlight the best parts of your life for the internet. This can often lead to misperceptions of reality. People might not be having as much fun as it looks like they are. Constantly being bombarded by everyone else’s good looks, creativity, or perceived happiness can greatly filter the way we perceive our own. One study coined this “selective self-presentation” and found that the more that Facebook users examined profiles other than their own, the more their self-esteem decreased (Gonzales and Hancock, 2011). I find it interesting that fewer people are comparing their Instagram profiles to other profiles at the collegiate level. Speaking from a personal standpoint, I feel much more confident in who I am today than when I was in high school. The same can’t be said for everyone, but according to this survey there is significant improvement in students comparing themselves to others (at least on Instagram) by the time they reach the collegiate level. Though it often is, comparison is not necessarily a bad thing in all circumstances.

Survey Question #5: I have gotten comments that weren't nice on Instagram.

Figure 1.3

Unit	x	s.d.	Agreed	Disagreed	Neutral
CHS	2.2	1.24	17%	69%	14%
MSSU	1.9	1.04	12%	80%	8%
Combo	2.0	1.16	15%	74%	11%

I specifically avoided the terms “cyber bullying” and “mean” because I didn’t want the strong, negative connotations of the terms to influence the results. The responses to this question surprised me. One of the things that first inspired me to do research on this topic was seeing the effect that receiving mean comments on Instagram had on my brother. We can see that there is little discrepancy between CHS and MSSU; however, a larger percentage of the students surveyed at MSSU did not think they had received mean comments on Instagram as compared to CHS. I’m postulating that maturity levels play a big part in the number of hurtful comments that are published online. College-age students have a better hold on their tongues (or in this case, thumbs); they are also not quite so focused on petty drama because a number of them probably experienced it in high school and are tired of it. This statistic may shock some of the social media naysayers who seem to think social media is responsible for the demise of our society. I thought the percentage of students who agreed would have been significantly higher (at least for CHS). Purely based off of the results of this particular question, concerned parents may be able to breathe a little easier knowing that hurtful comments on Instagram might not be occurring as frequently as they had perceived. However, we shouldn’t grow tolerant of any number of hurtful comments, and we should raise awareness so that the percentage may decline.

Survey Question #6: I have gotten compliments that made me feel good on Instagram.

Figure 1.4

Unit	x	s.d.	Agreed	Disagreed	Neutral
CHS	4.1	.96	84%	17%	0%
MSSU	4.1	.77	85%	15%	0%
Combo	4.1	.88	84%	16%	0%

This question has the most uniform data between CHS and MSSU in the whole survey. The information is crucial to my research because it shows that Instagram has a significant positive effect on people by making them feel good. If we return to my operational definition of self-esteem which states, “Self-esteem is the way we feel about ourselves,” than we can determine that these Instagram comments are making them feel good, therefore, it boosts their self-esteem. That means that Instagram has, at some point, boosted the self-esteem of 84% of the people who took my survey. These results align with the findings of another study of online behaviors that determined, “Positive feedback enhanced adolescents’ self-esteem” (Valkenburg, Peter, and Schouten, 2006). People may be more willing to give compliments or say nice things online instead of in person because they don’t have to muster up the courage or energy that a face-to-face interaction takes. Instagram may be one of the things people rely on to boost their self-esteem. I experienced that when my followers began to grow. I became overly concerned with Instagram accolades until I realized how dependent on it I was. Feeling good from a compliment on Instagram can be a very positive thing as long as the user doesn’t build up a reliance on it and fortify his self-worth by it.

Survey Question #7: Instagram helps me feel better about myself.

Figure 1.5

Unit	x	s.d.	Agreed	Disagreed	Neutral
CHS	2.7	1.10	21%	35%	44%
MSSU	2.4	1.06	12%	46%	42%
Combo	2.6	1.09	17%	40%	43%

It is interesting how simply rewording a question can spark such a different response. In Question #6, 84% of participants agreed that they “have gotten compliments that made me feel good on Instagram,” yet only 17% agree “Instagram helps me feel better about myself.” Maybe the argument would be that even though the compliment makes them feel good, the general use of Instagram doesn’t have the same effect as that isolated compliment. In other words, Instagram isn’t making them feel better about themselves, but the compliments are. To me, they are one in the same. The users would have never received the compliment had Instagram not been there. It is important to take note of how many people felt neutral toward this question. This question had the highest percentage of neutral responses from the entire survey. This would seem to indicate that the survey participants didn’t feel that Instagram had any effect on how they felt about themselves. There is a large margin between the students who agreed with Survey Question #7 at CHS and MSSU. Almost a quarter of the CHS students believe that Instagram helps them to feel better about themselves. It is important to ask, “By disagreeing with this question are we agreeing with the inverse?” If they disagree, does that mean they agree that Instagram makes them feel worse about themselves? I will examine this further on Survey Question #9.

Survey Question #8: Sometimes I care too much what other people think about me on Instagram.

Figure 1.6

Unit	x	s.d.	Agreed	Disagreed	Neutral
CHS	2.4	1.32	21%	54%	25%
MSSU	2.2	1.25	22%	63%	15%
Combo	2.3	1.29	21%	58%	21%

Attempts to please others can have an effect on our self-esteem, "...young respondents base their self-esteem not on their own personal values - which seem to have little or no influence on their self-regard - but on the fulfillment of the value priorities of other individuals in their cultural environments" (CNRS, 2014). It is important to know that the majority of these students don't put too much stock into the opinions of other people. Hopefully this is the same approach these students have for their self-esteem. It is my desire that they establish their self-esteem internally, and that they don't let others influence the way they feel about themselves in a negative way. Though the percentage of students who disagreed is significantly higher, it still appears that about 1 in every 5 students admits that he occasionally cares too much what other people think about him on his Instagram account. In order to deal with an issue, one first has to admit that an issue exists. Luckily, these students recognize that they may be giving other people too much power over how they feel about themselves. This is a necessary step one has to take in establishing a strategy to overcome these occasional insecurities. The standard deviations on this question were pretty large, meaning that the majority of responses existed within a pretty large margin along the Likert-scale.

Survey Question #9: Sometimes Instagram makes me feel bad about myself.

Figure 1.7

Unit	x	s.d.	Agreed	Disagreed	Neutral
CHS	1.8	.92	5%	78%	18%
MSSU	1.7	.97	6%	82%	12%
Combo	1.8	.94	5%	79%	15%

My goal is to determine whether or not a relationship exists between Instagram and self-esteem (either good or bad). We can conclude that the majority of users are not receiving negative feedback on Instagram because negative online feedback can cause a decrease in self-esteem (Valkenburg, Peter, and Schouten, 2006). The majority of people are not constantly subjecting themselves to Instagram if it is having a negative effect on them. I specifically used the word “Sometimes” in this question to eliminate skewed results. Similar to Survey Question #7 we have to ask, “By disagreeing with this question are we agreeing with the inverse?” Looking at these results can we safely say that 82% of participants agreed that sometimes Instagram makes them feel good about themselves? According to Survey Question #7, that is not the case because only 17% agreed that Instagram makes them feel better about themselves. It is important to note that Survey Question #7 did not use the word “Sometimes” and used the words “feel better” instead of “good,” which could have had an impact on the dramatically differing results. Survey Question #7 also had a significantly higher percentage of neutral responses (Question #9’s 15% compared to Question #7’s 43%).

Survey Question #10: Have you seen a mean comment on a friends' Instagram? Yes / No

Figure 1.8

Unit	Yes	No
CHS	69%	31%
MSSU	65%	35%
Combo	67%	33%

It is upsetting to see that approximately 7 out of every 10 people have seen a mean comment on a friend's Instagram. To further analyze these results, I would like to return to my findings from Survey Question #5. Only 15% of participants agreed "I have gotten comments that weren't nice on Instagram." However, 67% claimed to have seen them on someone else's profile. I am surprised to see that these percentages aren't more closely matched. Perhaps the various definitions of "mean" skew these results. Users may also be more protective of a friend than themselves. It could even be possible that there are so many negative stigmas attached to social media usage that people simply assume they have seen a mean comment because society has told them that cyber bullying is so prevalent (To clarify, I'm not stating cyber bullying isn't prevalent. I'm only postulating that we may expect it to affect more people than it actually does). Still, when we come across mean comments, it is our duty to call people out on their inappropriate language. If we work together, we can lower this percentage and eradicate unnecessary negativity online.

Survey Question #11: Do you think Instagram has an effect (good or bad) on how you feel about yourself? Yes / No

Figure 1.9

Unit	Yes	No
CHS	55%	45%
MSSU	52%	48%
Combo	53%	46%

This may be the most important piece of information from my entire survey because the whole goal of my survey is to determine whether or not a relationship between Instagram and self-esteem exists. My operational definition of “self-esteem” states, “Self-esteem is the way we feel about ourselves.” According to the results, 53% of users believe that Instagram does have an effect on the way they feel about themselves. This is vital information because 1 out of every 2 people acknowledge that Instagram has a genuine effect on his self-esteem and the way he perceives himself. It is important to keep in mind that just because some of the participants don’t think Instagram is affecting their self-esteem, it doesn’t mean that it isn’t. By examining the results we must take proactive steps moving forward to ensure that Instagram is being used as a positive self-esteem tool and not a negative one. We have to inform users about respect and online etiquette. Now that we know that Instagram has the potential to influence a user’s self-esteem, we have to assume responsibility and adapt our online practices accordingly. It is important not to belittle any of the feelings users experience from social media usage. Even though it is a digital platform, the feelings associated with it are very real and have an impact on people.

Survey Question #12: Including Instagram, what is your most used social networking application?

Figure 1.10

Social Media	CHS (111 Responses)	MSSU (96 Responses)
Snapchat	40%	23%
Facebook	26%	29%
Instagram	13%	7%
Twitter	11%	21%
No Answer	9%	17%
Pinterest, Tumblr	2%	0%
Imgur, Whatsapp, YouTube	0%	3%

These are currently the social networking applications that have the biggest influence in the daily lives of the survey participants. The two most used social networking applications are Snapchat and Facebook. Snapchat is currently three times more popular than Instagram at CHS. Snapchat caters to shorter attention spans and requires less thoughtful posting than other social media sites. It does not surprise me that Snapchat is number one at the high school level. Snapchat is also a newer form of social media than Facebook; therefore, a lot of parents do not have a way to examine their students’ interactions on Snapchat. The majority of posts made on Snapchat dissolve within a matter of seconds. This promotes users to share things with other users that they might not normally post on their other social media profiles. Recognizing its rising popularity, a study that focuses on determining a relationship between Snapchat and self-esteem could be beneficial. (By saying “Including Instagram” I may have hindered people from choosing Instagram because, at a glance, it looks as if it could read “Besides Instagram”).

Survey Question *: One reason I do not have an Instagram:

Figure 1.11 - CHS

Reasons	Number of Responses
“Not useful”	3
“Too much drama”	2
“Not a fan”	1
“Use other forms of social media”	1
“Too busy”	1
“Don’t know how to use it”	1
“Rude”	1
“Fake”	1

(Note: Some users gave more than one reason. Each reason was coded separately.)

Figure 1.12 - MSSU

Reasons	Number of Responses
“Unnecessary”	4
“Waste of time”	3
“Use other forms of social media”	2
“Not into pictures”	2
“Don’t like social media”	2
“Don’t like Instagram”	2
“Can’t handle it”	1
“Not my thing”	1
“No privacy	1

CHS had 9 total users who do not have an Instagram out of 94 total participants. In other words, approximately 90% of users have an Instagram. MSSU had 18 total users who do not have an Instagram out of 83 total participants. In other words, approximately 78% of participants have an Instagram account.

I am not surprised to see that MSSU has more students who do not have an Instagram than CHS because technological understanding is often easier to grasp for the younger generation. These users are referred to as “Digital Natives” because they grew up immersed in the technology, as opposed to the “Digital Immigrants” who had to learn the technology as they got older (Prensky, 2001). I didn’t get my Instagram account until I was a high school senior in 2013. Today’s high school students come into high school with Instagram already an established, popular form of social networking. High school age students are also seeking more validation from others because they are trying to discover the individuals that they want to be. Today’s teens often turn to the internet and social networking to receive that validation. A lot of college-age students have grown to better understand who they are as individuals and require less validation from outside sources because they have had more life experience. College students also have a wider age range because of non-traditional students who don’t start college directly after high school. For many non-traditional students, Instagram isn’t as popular among other people in their age group outside of school simply because they are older.

The responses that participants gave for not having an Instagram account were very negative and specific to Instagram. CHS had 8 out of 11 responses that were both very negative and directed toward Instagram specifically. MSSU had 12 out of 18 responses that were both very negative and directed toward Instagram specifically. Other responses dealt with non Instagram-specific reasons such as not being a fan of social media in general or having a lack of free time.

Tests of Difference

An analysis of variance (ANOVA) can be defined as, “Measuring the differences between two isolated variables.” An analysis of variance (F) seeks to find a probability (p) less than or equal to .05. If the ANOVA is successful in finding a $p = <.05$, it means there is a 95% chance that the two isolated factors being measured have a statistically significant, real difference, and there is less than a 5% probability that the significant difference measured is by chance. While correlational data shows us what two factors are related, and have the potential to affect each other, data garnered from ANOVAs shows us what two factors have statistical difference between and within variables.

To make analyzing the ANOVAs easier, each survey question (see Appendix A) was renamed according to its question’s content for simpler comparisons:

Figure 1.13

Survey Question Number	Abbreviation
3	Feel good
4	Compare
5	Not nice
6	Compliments
7	Feel better
8	Care too much
9	Feel bad
10	Saw mean
11	Effects

The four factors I used to determine the ANOVAs come from data gathered from the demographic information and include the following: class, gender, number of followers (followers), and number of people followed (follows). I will first examine the ANOVAs from CHS, then MSSU, then Combo (For Combo, ANOVAs were only run for the factors of gender and school). At CHS, the “Age” category was named “Class” and had four options for participants to circle: freshman, sophomore, junior, and senior. At MSSU, the “Class” category was named “Age” and had four options for participants to circle: 18-19, 20-21, 22-23, and 24+.

CHS

Figure 1.14

Variables	Level	Sig. < .05
Class & Saw mean	3.123	p < .05

(Note: Refer to page 19 and the survey in Appendix A to interpret abbreviations.)

This means there is a significant difference in responses within each grade, but not a significant difference in responses between each grade. Therefore, the grade they are in doesn’t necessarily affect whether or not they have seen mean comments on Instagram.

Figure 1.15

Variables	Level	Sig. < .05
Gender & Compare	4.014	p < .05
Gender & Compliments	8.656	p < .05
Gender & Care too much	6.090	p < .05
Gender & Feel bad	6.183	p < .05
Gender & Effects	5.691	p < .05
Gender & Followers	8.360	p < .05

These statistics surprised me. I assumed there would be a greater difference in the results between genders, but the majority of difference existed within genders. The results state that gender has no significant effect on if users compare their profiles to others', if users receive compliments that make them feel good, if users care too much what others think about them on Instagram, if Instagram makes users feel bad about themselves, if users think Instagram affects their self-esteem, or the number of followers users have.

Figure 1.16

Variables	Level	Sig. < .05
Follows & Compliments	3.194	p < .05
Follows & Followers	9.797	p < .05

According to the results, the number of people that users followed does not significantly affect whether or not users have received compliments that made them feel good on Instagram. Following more people doesn't equate to receiving more compliments. We also see that following a lot of people is not significantly related to having a lot of followers, and vice versa.

MSSU

Figure 1.17

Variables	Level	Sig. < .05
Class & Followers	2.923	p < .05

There is no significant difference between age group and the number of followers that users have because the majority of difference exists within each individual age group and not necessarily between each age group.

Figure 1.18

Variables	Level	Sig. < .05
Followers & Follows	23.296	p < .05
Followers & Compare	3.243	p < .05

There is a significant difference between the number of followers and the number of people followed. Just because you follow a lot of people, it doesn't mean you will be followed by a lot of people. Having a lot of followers does not influence whether or not users compare their profiles to others .

Combo

Figure 1.19

Variables	Level	Sig. < .05
Gender & Compliments	6.963	p < .05
Gender & Effects	3.429	p < .05

There are discrepancies amongst the male responses and amongst the female responses but there is not a significant difference in responses between the two. Both genders experienced a significant amount of variation within their own responses to whether or not they have received compliments and whether or not they feel Instagram affects the way they feel about themselves.

Figure 1.20

Variables	Level	Sig. < .05
School & Followers	15.257	p < .05
School & Follows	9.890	p < .05

Going to CHS or MSSU doesn't significantly affect the number of followers that users have or the number of people that users follow. Instagram popularity is not based on physical location in this circumstance. There is a significant difference in the number of followers that users have and the number of people that users follow within CHS and within MSSU, but not a significant difference between the two groups.

Associations

Correlations measure whether or not a relationship exists between two bivariate factors. The correlation reporting formula will use factor r (a Pearson product correlation) to determine statistical significance (s.s.) at either the .05 or .01 level (this means there is either a 95% or 99% chance that there is an active relationship between the two isolated factors), which are the standard measurements to determine statistical significance within the social science discipline. Because of the large quantity of information that the correlations found, I will not be looking at CHS and MSSU individually for this section; I will only be looking at the correlations that have relevance to my topic of research when combining their respective data. The survey questions have been renamed in the same way they were for the ANOVA analysis (pg. 21). As I discuss the results for each section of correlations it is important to remember that I am not discussing a direct causal relationship, but a correlational relationship between bivariate factors.

Combo

Figure 1.21

Variables	r	s.s.
Gender & Compliments	.283	.01
Gender & Care too much	.182	.05
Gender & Effects	-.209	.05

According to the results, females are more likely to have gotten compliments that made them feel good on Instagram, and more females admit to caring too much about what other people think about them on Instagram. There is also a correlation that states that more females think Instagram has an effect on their self-esteem than males (this does not mean that males do not

think Instagram has an effect on their self-esteem, but merely the correlation is much stronger for females). There were also 27% more females surveyed than males, which could influence results.

Figure 1.22

Variables	r	s.s.
Followers & Follows	.647	.01
Followers & Saw Mean	-.191	.01

These statistics state that the more followers users have, the more people they follow. Users are more likely to see mean comments on a friend’s Instagram profile if they have a greater number of followers.

Figure 1.23

Variables	r	s.s.
Feel good & Compare	.358	.01
Feel good & Compliments	.404	.01
Feel good & Feel better	.386	.01
Feel good & Care too much	.292	.01
Feel good & Feel bad	.213	.01

These correlations state that if users feel good when they get Instagram likes, users are more likely to compare their profile to others’, users are more likely to receive compliments that make them feel good, Instagram has the ability to make users feel better about themselves and bad about themselves, and users are more likely to care too much about what others think about them on Instagram.

Figure 1.24

Variables	r	s.s.
Compare & Feel better	.375	.01
Compare & Care too much	.440	.01
Compare & Feel bad	.340	.01
Compare & Effects	-.197	.05

When users compare their profile to others’ on Instagram, the correlations state that Instagram has the ability to make users feel good and bad about themselves, users are more likely to care too much about what others think about them on Instagram. The more users compare their profile to others’, the more they think Instagram has an effect on their self-esteem.

Figure 1.25

Variables	r	s.s.
Not nice & Feel bad	.247	.01
Not nice & Saw mean	-.281	.01

These correlations aren’t very surprising, but it is important to back up what we assume to be general knowledge with actual, statistical data. The more users have received comments that weren’t nice on Instagram, the more Instagram makes them feel bad about themselves. As the number of users who received not nice comments increases, so does the number of users who saw mean comments on a friend’s Instagram. When users receive not nice comments on their own accounts, they are more likely to notice them on a friend’s Instagram account.

Figure 1.26

Variables	r	S.S.
Compliments & Feel better	.232	.01
Compliments & Care too much	.254	.01
Compliments & Effects	-.170	.05

The more users receive compliments that make them feel good on Instagram, the more likely it is that Instagram makes them feel better about themselves and more users also think they care too much about what other people think of them on Instagram. As the number of users who received compliments increases, so does the number of users who believe that Instagram has an effect on their self-esteem.

Figure 1.27

Variables	r	S.S.
Feel better & Care too much	.414	.01
Feel better & Feel bad	.379	.01
Feel better & Effects	-.307	.01

If Instagram has the power to make users feel better about themselves, it is more likely to have the power to make users feel bad about themselves. As the number of users who thought that Instagram makes them feel better increases, so does the number of users who believe that Instagram has an effect on their self-esteem.

Figure 1.28

Variables	r	s.s.
Care too much & Feel bad	.450	.01
Care too much & Saw mean	-.266	.01
Care too much & Effects	-.342	.01

According to the correlation statistics, the more that users care too much about what other people think about them on Instagram, the more likely it is that they've seen mean comments on a friend's Instagram. As the number of users who care too much about what other people think on Instagram increases, so does the number of users who think that Instagram has an effect on their self-esteem.

Figure 1.29

Variables	r	s.s.
Feel bad & Effects	-.282	.01
Saw mean & Effects	.161	.05

The number of users who think Instagram has an effect on their self-esteem increases when the number of users who think Instagram makes them feel bad about themselves and the number of users who saw mean comments on a friend's Instagram, increases.

Conclusion and Final Thoughts

My research question asks, “Is there a relationship between Instagram and self-esteem?” with my operational definition of self-esteem that states, “Self-esteem is the way we feel about ourselves,” the answer is yes. Not only did the majority of participants admit that they thought Instagram has an effect on the way they feel about themselves, but the majority also admitted that they feel good about themselves when they get Instagram likes, and they have received compliments that made them feel good about themselves as well. There was a very small percentage of people who felt that Instagram made them feel bad about themselves; however, after analyzing the correlational data it appears as though Instagram either greatly influences users, or it barely influences users. If Instagram does have a relationship with a user’s self-esteem, the impact appears to be far-reaching. For the participants who put a lot of stock into Instagram, they are more at risk of experiencing great highs and lows from the application. We must be mindful of the people who are influenced by Instagram because, for them, even if Instagram is a digital platform, the way it makes them feel is very real. When over 50% of people think that Instagram affects the way they feel about themselves, one must proceed with mindfulness and empathy. It appears as though Instagram has more of a positive relationship with self-esteem. If we can expand on that, Instagram could potentially be used as a positive force for today’s social networking audience. It is our responsibility to promote proper online etiquette, respect, mindfulness, and human decency.

If this project were to be replicated, I would love to have a bigger sample from a wider variety of schools and locations. This project helped me learn so much about conducting research. I will go forward with more mindfulness concerning my social networking activity and the affirmed knowledge that what I do and say online has the potential to greatly influence other people.

What can we do? If you are a consistent Instagram user or a concerned parent, a good place to start is by recognizing that social networking use is a reality for today's generation. Have discussions about where self-worth comes from. Do not belittle the way Instagram or other social networking applications make people feel, but encourage users and allow conversations to take place. Don't forget to provide people with affirmation outside of online platforms too. To all the social media naysayers out there: with hard work, we can make social media a self-esteem booster. We can make our online platforms serve our communities in a positive way. We can use the knowledge garnered from this survey to benefit those around us and work together to be a stronger, unified force.

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Appendix A

Hello! My name is Lauden Baker. I am a senior Public Relations student at Missouri Southern State University. I am researching social media’s effect on identity. ALL answers are confidential and voluntary.

Supervisor_____

(Please circle the most accurate response to each question.)

(At MSSU) **Age:** 18-19 20-21 22-23 24+ (At CHS) **Class:** Freshman Sophomore Junior Senior

Gender: Male / Female

Ethnicity: Caucasian Hispanic African American Asian Native American Other _____

*(If you do not have an Instagram account, skip down to the question with * at the bottom of the page.)*

1. About how many Instagram followers do you have? 0-200 201-400 401-600 601-800 801+

2. About how many people do you follow on Instagram? 0-100 101-200 201-300 301-400 401+

(Please circle the most accurate response to each question.)

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
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3. I feel good about myself when I get Instagram likes.

1	2	3	4	5
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4. I often compare my profile with other profiles on Instagram.

1	2	3	4	5
---	---	---	---	---

5. I have gotten comments that weren’t nice on Instagram.

1	2	3	4	5
---	---	---	---	---

6. I have gotten compliments that made me feel good on Instagram.

1	2	3	4	5
---	---	---	---	---

7. Instagram helps me feel better about myself.

1	2	3	4	5
---	---	---	---	---

8. Sometimes I care too much what other people think about me on Instagram.

1	2	3	4	5
---	---	---	---	---

9. Sometimes Instagram makes me feel bad about myself.

1	2	3	4	5
---	---	---	---	---

10. Have you seen a mean comment on a friends’ Instagram? YES / NO

11. Do you think Instagram has an effect (good or bad) on how you feel about yourself? YES / NO

12. Including Instagram, what is your most used social networking application? _____

*One reason I do not have an Instagram: _____

Appendix B

[Instagram & Self-esteem] Consent Form for Parents/Guardians

[Lauden Baker]

[Supervised by Professor Kelly Larson]

[Missouri Southern State University Department of Communication]

[BakerL004@mymail.mssu.edu]

Your child is invited to take part in a research study of [Instagram & Self-esteem].

What the study is about: [Determining whether or not a correlation exists between Instagram & Self-esteem]

What your child will be asked to do: [Students are asked to complete a survey taking approximately less than 10 minutes].

Risks and benefits: There are no anticipated risks to your child if he or she participates in this study, beyond those encountered in everyday life.

[Benefits may include prevention of cyberbullying or general social networking awareness].

Taking part is voluntary: Your consent and your child’s participation in this study are completely voluntary. Your child can withdraw from the study at any time without consequences of any kind, and you can withdraw your consent at any time without consequences of any kind. [Participants can choose to skip any question, participate in only some tasks, etc.] Participating in this study does not mean that you are or your child is giving up any legal rights.

Your child’s answers will be kept confidential: The records of this study will be kept private, and individual data will only be accessible by the researcher(s). Any report of this research that is made available to the public will not include your child’s name or any other individual information by which your child could be identified.

If you have questions or want a copy or summary of the study results: Contact the researcher at the email address or phone number above. You will be given a copy of this form to keep for your records. If you have any questions about whether your child has been treated in an illegal or unethical way, contact the Missouri Southern State University Institutional Review Board chair, Loreen Huffman in the School of Education.

Statement of Consent: I have read the above information, and have received answers to any questions. I consent to allow my child to take part in the research study of [topic of research]

Parent’s/Guardian’s Signature Child’s Name (Please Print) Date