

# The Big Five Personality Traits on Rinstagram and Finstagram

Tierra Pugh-Carter

Mr. Jason Scott

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## **Abstract**

The purpose of this study was to investigate how people's big five personality traits are connected to their public Instagram account (Rinsta) and private Instagram account (Finsta). Previous research has found that there may be some differences in how people present themselves on their public and private accounts. We hypothesize that there is a relationship between the big five personality traits in real life, Rinsta and Finsta profiles, and also that there is a relationship between the personality expressed on both accounts. Thirty-nine TNA students took a personality test, and two researchers rated their personality based on the Big Five personality traits as displayed on the participants' social media accounts. We found that there was no connection between the real-life big personality traits and the two accounts, Rinsta and Finsta. We also found that Rinsta and Finsta accounts had a relationship with each other when it came to three specific personalities: extraversion, neuroticism, and openness. Our data suggest that people shouldn't judge people based on their accounts and that posters should watch what they post.

## Introduction

We use social media every day to express how we feel, but does the profile connect to how you really are? This is important because some people can have two accounts, one public and one private. In the United States, 59% of teens use Instagram almost every day (1). Since teens use social media often, they may want to know if it connects to their true selves. To investigate this topic, we looked at research on the Big Five personality traits and how these personalities are expressed on Facebook and on Instagram between two accounts: Rinsta (Real Account) and Finsta (Private Account). Our study is important because we are not just looking at one social media profile; we are looking at two that may have very different audiences. We gave students at TNA a survey to measure their personality and then rated their personality on their Finsta and Rinsta accounts to look for how their personalities, as expressed on different accounts, connect to each other and themselves in real life.

Personality is a combination of traits and behaviors that make you who you are. It's a way to show how you think, feel, and act in different situations (2). The big five personality traits are openness, conscientiousness, extraversion, agreeableness, and neuroticism, which, when combined, make up a personality. These help us understand the differences between personalities. Openness means being curious, imaginative, and creative and embracing new experiences, while conscientiousness means organizing and spending time preparing. Extraverts are individuals who are outgoing, energetic, and often seeking the spotlight. Agreeableness reflects a person's tendency to be trusting, kind, and cooperative, prioritizing care for others. Finally, Neuroticism is people who are emotionally unstable and prone to anxiety; they often experience mood swings and worry easily. Personality can be based on these five traits, they define who we are and how we interact with the world. They help us understand each other and could help our personal growth (2).

Researchers examined how Instagram features can be used to predict and analyze personality traits based on the Big Five (3). They hypothesize that different personality (the Big Five) traits would correlate with specific color preferences and photo attributes. The researchers analyzed the Instagram profiles of 86 users from Germany, 62 active and 24 inactive participants. They collected data by crawling through a total of 17,795 images and 18,163 posts, while participants completed a survey regarding their personality traits. The findings supported the researchers' hypothesis that showing different features such as colors in photos, may connect to personality traits. Extraverted people tended to have more orange and warm colors and less cyan. Agreeable people tend to have vivid colors and have more people in photos. Neurotic people often have bleak colors. They also found that people with openness, neuroticism, and agreeableness are most likely not active on Instagram and typically don't get shares and or likes, while people with extraversion and conscientiousness do. Lastly, they figured out the words used and the way they engaged with the app helps us understand people's personality traits even more. Open people tended to write about news, research and information. Conscientious people focus on fashion and style. Extraverted focused on art and music and agreeable people focused on products (3). This can connect to my research on personality in real life vs Rinsta and Finsta accounts because this paper talks about how things like filters can help show who we are, which can later be used in my research in order to

determine how their posts may match their personality in real life. When reviewing accounts, we should focus on things like the colors of photos, followers, and the information they share.

Researchers Aminchi and Vintizky hypothesized that different personality traits (the Big Five) would influence how individuals are on social media, specifically Facebook. They took 101 males and 136 females with an average age of 22. After they measured the traits, they checked their Facebook accounts (like personal info and basic info) and compared both what they posted on their Facebook and how they answered the survey. One thing they found was that more extroverted people had more Facebook friends and that they also joined more Facebook groups. Another thing found was that anxious people shared more photos, organized people had more friends but uploaded fewer pictures, and open-minded people used more Facebook features. Overall, their hypothesis was supported, although gender played a role in the relations. Females who score higher in agreeableness tend to upload more pictures than those with lower agreeableness (4). Whereas with males, the number of pictures uploaded did not differ based on agreeableness. This source is important to our study because Yair and Giden helped me understand how to compare and contrast social media profiles based on the big five and different ways to go about my research. In our project, we are not using Facebook, but we used Instagram, which is still useful because many of the findings in this source are about photos posted, and Instagram is a photo-centric app.

On Instagram, people often have more than one account. A “Rinsta” account is a person’s public page. A “Finsta” account is a private page, sometimes called “spam” or “fake” account. Both may show your personality in different ways (6). Huang and Vitak investigated the personality differences in Finsta and Rinsta accounts. They surveyed 128 college students, particularly females, who were around the age of 18 to 25, to explore their posts and audiences on both accounts. In the first, survey participants shared the accounts with the host, and depending on if they had a private account (Finsta), they would be asked to do a second survey based on the post on the account. This resulted in the authors finding three things. Finsta and Rinsta show different aspects of themselves; the Finsta account shows an unpolished self and is often negative, while the Rinsta shows a person’s best self and is often positive. Both are used differently; Finsta accounts are often private, and photos are not edited or filtered, while they are often edited on Rinsta. Finally, Finsta and Rinsta accounts are used for different audiences. Finsta accounts have a very select audience, while Rinsta accounts have people from many parts of a person’s life (6). This is important because Huanh and Vitak told us that the accounts are used differently, so we want to know which one can actually show a person’s real personality or if they both do.

This next source also talks about how personality differs between different accounts on Instagram: Finsta and Rinsta (5). Taber and Whittaker hypothesized that people present different aspects of their personality on both these two types of accounts. They took 88 participants, 65 women and 22 men, and asked demographic questions about their personalities. They checked to see if the participants had one Rinsta and one Finsta account; no one had multiple “main” accounts, so they then explored reasons for making multiple accounts by asking them about the main purpose of their second account (Finsta). Their

hypothesis was supported. People do present different versions of themselves on both their Rinsta and Finsta accounts, but both accounts describe some of their real personalities.

They found that on Finsta, they have a more free personality and that the audience within that account are typically people they trust. On Finsta, people are more extroverted, less conscientious, and less agreeable but just as neurotic. This version of themselves is more negative. While on a Rinsta, they have a more polished and perfected personality because it's a bigger audience. People tended to be more conscientious and more agreeable. To them, it showed that personality can change depending on who's watching. In other words, Finsta accounts are more authentic than Rinsta accounts because on a Finsta, it's showing the real person. This study can help with my study because in our study we compared how they are in real life versus a "Rinsta" and "Finsta", we can take this information that's given to me to help me understand how and why people create these Rinsta and Finsta accounts in the first place and see how their personalities change based on their audience.

Overall, people's personalities may differ from how they act on social media and in real life (5). This is especially true when a person has more than one account (5). This study contributes to an understanding of using two different Instagram accounts, one private and one public, can either differentiate or be similar to how a small population of teenagers specifically act in person. In our study, we took different groups of teenagers and gave a personality test based on the Big Five personality traits. Students' Rinsta and Finsta profiles were then viewed by a panel of researchers to rate their personalities to see if they matched how they act on social media on both their private or public accounts.

We hypothesize there is a relationship between the Big Five personality traits in real life and the Big Five traits as expressed on a person's Rinsta Instagram. We believe this is true because research suggests that only certain parts of people's personality are reflected on their Rinsta, perhaps not others (6). Second, we hypothesize there is a relationship between the Big Five personality traits in real life and the Big Five on a person's Finsta Instagram. This is true because research suggests that only some parts of your personality are reflected on Finsta (5). Lastly, we hypothesize that there is a relationship between personality traits expressed on a person's Finsta and Rinsta accounts. We think this is true because research suggests that Rinsta and finsta show different parts of the relationship so there may or may not be a relationship (5,6).

## **Method**

A total of 39 high school students from The Neighborhood Academy participated in our study. Most participants were African American, composed of males (49%) and females (51%) from a variety of grades between the ages of 16 and 18. All students from a variety of grades 9th-12th.

The participants were given a survey called the Big Five Inventory-10 (2). It was scored with 1 being the least and 5 being the greatest so that we could see what the participants thought about themselves. For example, the survey would ask a person how "outgoing and

sociable” they are in order to measure their extraversion. Each of the five personality traits had two questions, we got a score out of ten for each personality trait.

To carry out the project, the primary researcher and another student did a test-run where we rated the personalities of people not in the project to make sure we agreed on how we were interpreting the personalities. Then, we handed out the actual personality survey to students and had them write down their profile names. We followed the profiles of people with a fake account of our own. Each researcher viewed the person’s real and private Instagram accounts and rated their personalities based on their pictures and highlights. Afterwards, we scored their surveys.

Relationships between the big 5 personality traits in real life and on their real and fake Instagrams were calculated using a correlation coefficient r-test. All tests were calculated using vassarstats.net with a 0.05 significant threshold.

**Results**

The purpose of the study was to see if people's real-life personalities match how they are on their Finsta and Rinsta. We had 39 people take a personality test for the big five personality traits. Then, two researchers rated their personality based on their Rinsta (public) and Finsta (private or spam) profiles.

Our first hypothesis was that people’s real-life personalities would be related to how they present themselves on their Rinsta profile. R-tests found no significant relationships between their personality scores in real life and their personalities as shown on their Rinsta. R-values and p-values are shown below in Table 1 and Figure 1.

Openness	Conscientiousness	Extraversion	Agreeableness	Neuroticism
r=0.1 p= 0.53	r= -0.09 p= 0.61	r=0.24 p=0.15	r= -0.24 p= 0.16	r= 0.24 p=0.16

**Table 1. No relationships between real-life personalities and personalities on Rinsta profiles.**

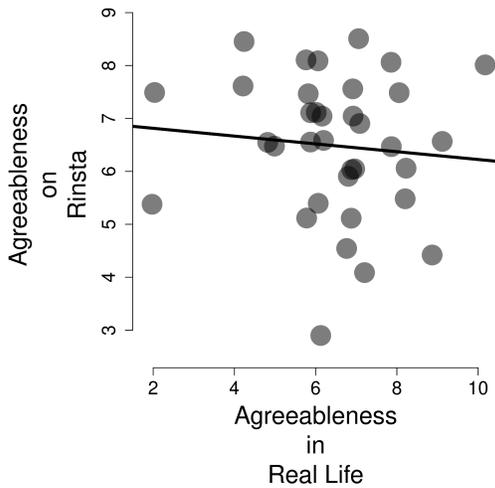
Our second hypothesis was that people’s real-life personalities will be related to how they present themselves on their Finsta profile. R-tests found no significant relationships between their personality scores in real life and their personalities as shown on their Rinsta. R-values and p-values are shown below in Table 2 and Figure 5.

Openness	Conscientiousness	Extraversion	Agreeableness	Neuroticism
r=-0.31 p= 0.21	r= -0.19 p= 0.45	r=0.30 p=0.23	r= -0.15 p= 0.54	r= 0.31 p=0.21

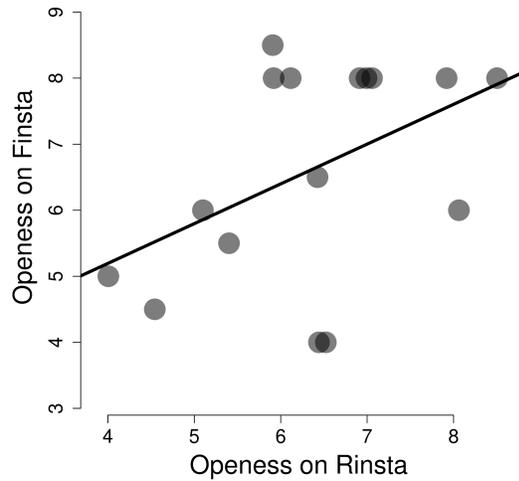
**Table 2. No relationships between real-life personalities and personalities on Rinsta profiles.**

Our third hypothesis was that how people present themselves on their Rinsta will be related to how they present themselves on their Finsta profile. An r-test did not find a relationship for agreeableness or conscientiousness. For openness, an r-test did find a significant relationship between how you are on rinsta and how you are on finsta ( $r=0.46$ ,  $p=0.04$ ). The more open you appear on Rinsta is how you may appear on Finsta (Figure 2). For extraversion, an r-test did find a significant relationship between how you are on Rinsta and how you are on Finsta ( $r=0.51$ ,  $p=0.04$ ). The more extraverted you appear on Rinsta is how you will appear on finsta (Figure 3). For neuroticism, an r-test did find a significant relationship between how you are on rinsta and how you are on finsta ( $r=0.54$ ,  $p=0.03$ ). The more neurotic you appear on Rinsta is how you may appear on Finsta (Figure 4).

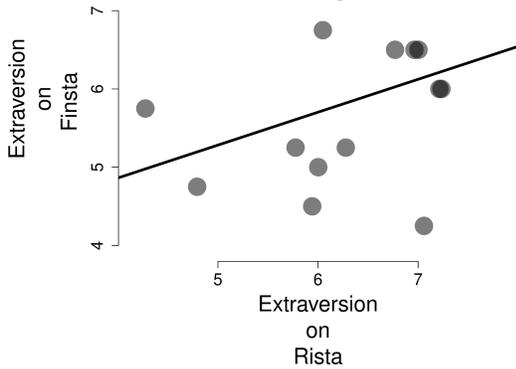
Openness	Extraversion	Neuroticism
r= 0.46 p= 0.04	r=0.51 p= 0.04	r=0.54 p=0.03



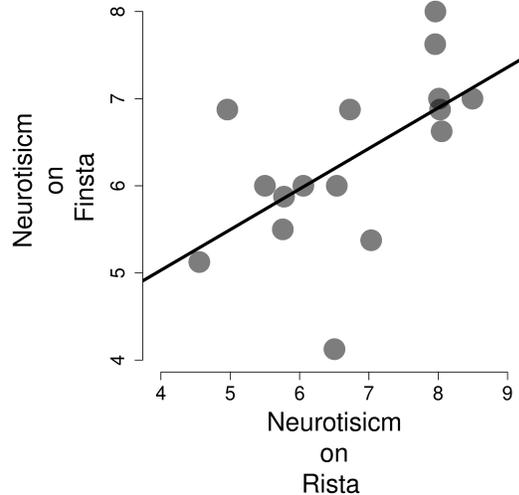
**Figure 1. No relationship between agreeableness in real life and on Rinstagram.** Thirty-five high school students rated their own personalities, and two researchers rated their Rinsta (real) Instagram profiles for agreeableness. An r-test found no relationship between the two agreeableness levels ( $r = -0.24$ ,  $p = 0.16$ )



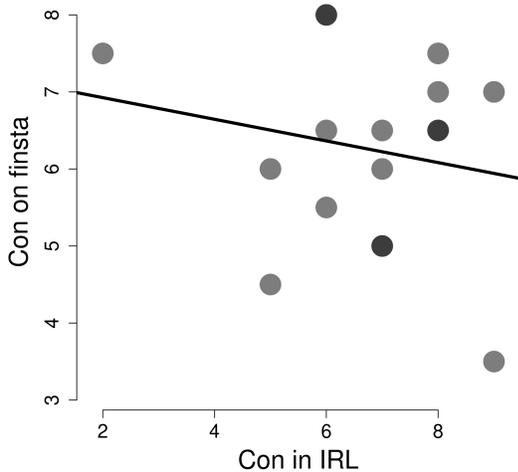
**Figure 2. Relationship between openness on Rinsta and Finsta** Thirty-five high school students rated their own personalities, and two researchers rated their Rinsta (real) Instagram profiles for openness. An r-test found a relationship between the two openness levels ( $r = 0.46$ ,  $p = 0.04$ ).



**Figure 3. Relationship between Extraversion on Rinsta and Finsta** Thirty-five high school students rated their own personalities, and two researchers rated their Rinsta (real) Instagram profiles for extraversion. An r-test found a relationship between the two extraversion levels ( $r = 0.51$ ,  $p = 0.04$ )



**Figure 4. Relationship between Neuroticism on Rinsta and Finsta** Thirty-five high school students rated their own personalities, and two researchers rated their Rinsta (real) Instagram profiles for neuroticism. An r-test found a relationship between the two neurotic levels ( $r = 0.54$ ,  $p = 0.03$ )



**Figure 5. No Relationship between conscientiousness in real life and on Finsta**  
 Thirty-five high school students rated their own personalities, and two researchers rated their Rinsta (real) Instagram profiles for neuroticism. An r-test found no relationship between the two conscientiousness levels ( $r= 0.31, p=0.21$ )

## Discussion

In the study, we determined if the big five personalities on public and private social media accounts match a person's personality in real life. Our first hypothesis was that there is a relationship between the big five personality traits in real life and the big five traits as expressed on a person's Rinsta (real or public) Instagram. This was not supported because there was no significant relationship between the big five personality traits and Rinsta (Figure 1, Table 1). Our second hypothesis was that people's real-life personalities would be related to how they present themselves on their Finsta (fake or private) profile (Figure 2, Table 2). This wasn't supported because there was no relationship between real-life personality traits and Finsta. Our third hypothesis was that people's Rinsta will be related to how they present themselves on their Finsta profile (Figure 3, Table 3). This was partially supported because we only found positive relationships between openness, neuroticism, and extraversion; the more open, neurotic, and how extraverted you are on Rinstagram, the more you are on Finstagram.

Our results are inconsistent with other studies by Subramani (3). Subramani found that people with different personalities tend to do different, unique things on social media. We found that there was no connection between your real-life personality and how you express yourself on Instagram. These studies don't support the same claim because they don't have any type of connection to each other. These results took us by surprise because we thought that people's personalities reflect who they really are, but it also makes sense because people put on an act on their public accounts, and we thought that people on their Finsta would act like who they are, but this was not the case.

Our results are also inconsistent with another study by Huang and Vitak(6). Vitak found that both Finsta and Rinsta are used for different audiences and that the two very different accounts can show off a person's personality in two different ways. We found that between Rinsta and Finsta accounts, only these certain personality types openness, extraversion and neuroticism have a connection between both accounts. This doesn't support our claim because they don't have a connection. These results were disappointing to us because we thought that there would be a connection between people's real personalities with Finsta and Rinsta but instead there is no connection with people's personalities just with Finsta and Rinsta. We didn't think this would happen because we thought the two different accounts would be used to post different sides of people. In the end, people expressed themselves similarly on both platforms, but this was different than how the personality test said they were.

Our study had multiple limitations. Our first limitation was the number of people: it was hard to prove that there was a connection between a person's real personality with Finsta and Rinsta because we didn't have a large number of participants (39 students). While 39 is a large number, not all of the participants had both account types and regularly posted on these accounts. Our suggestion for other researchers would be to get as many people as possible.. Another limitation was our participants; a lot of them didn't have either a Finsta or Rinsta account so it was harder for us to compare and contrast the two for that person. Our suggestion is to make sure participants have both a Finsta and Rinsta account to get more accurate results. For our last suggestion, we suggest that two different people view both the Rinsta and Finsta accounts so that the one viewing is not biased to the social media posters.

A future improvement could be making sure that people have both a Rinsta and Finsta account as well, as well as trying out different age groups of people. This may help improve the results between real-life personalities Rinsta and Finsta because researchers are able to test a variety of people for more accurate answers. Also, making sure researchers give out the survey to people who care to do the research is very important because if participants don't and researchers use them within the study it can throw off the research. Not answering the questions to the best of their ability isn't good. Finally, one thing that would make things better would be having a panel of people to rate other people's personalities. For example, having a group of teens rate other people's personalities would be better than having two like we did.

According to our research, social media and personality have little to no connection. Social media posters should be cautious of what they post because other consumers may think of them as something they're not. Also, social media consumers should be aware of how they view others' content because their judgment could possibly be wrong; people aren't always what they seem like on social media.

## Works Cited

1. Teens and social media: Key findings from Pew Research Center surveys. 4/24/23  
Accessed April 8, 2025.  
<https://www.pewresearch.org/short-reads/2023/04/24/teens-and-social-media-key-findings-from-pew-research-center-surveys/>
2. Cherry, Kendra. "The Big Five Personality Traits." *Very Well*. March 11, 2023.  
<https://www.verywellmind.com/the-big-five-personality-dimensions-2795422> Accessed  
Nov. 19, 2024.
3. *Subramani, Balaji. "Predicting And Analyzing Personality Traits From Instagram Features." Social Media and Business Analytics. 2019.*  
[https://www.researchgate.net/publication/333666145\\_PREDICTING\\_AND\\_ANALYSING\\_PERSONALITY\\_TRAITS\\_FROM\\_INSTAGRAM\\_FEATURES](https://www.researchgate.net/publication/333666145_PREDICTING_AND_ANALYSING_PERSONALITY_TRAITS_FROM_INSTAGRAM_FEATURES)
4. *Amichai-Hamburger, Yair, and Gideon Vinitzky. "Social Network Use and Personality." Computers in human behavior 26, No. Vol. 6 Nov. 2010.*  
<https://doi.org/10.1016/j.chb.2010.03.018>
5. Taber, Lee, and Steve Whittaker. "On Finsta, I can say 'Hail Satan': Being Authentic but Disagreeable on Instagram." *Proceedings of the 2020 CHI Conference On Human Factors In Computing Systems*. No. , Vol 4, Apr. 2020.  
<https://doi.org/10.1145/3313831.337618>
6. Huang, Xiaoyun, and Jessica Vitak. "Finsta gets all my bad pictures": Instagram Users' Self-Presentation Across Finsta and Rinsta Accounts." *Proceedings of the ACM on Human-Computer Interaction*. Vol 6, No. 4, Apr. 2022. <https://doi.org/10.1145/3512916>