

Studying Attraction of Personality Types in Social Networks: An Analysis Using Tinder Profile

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How to cite this paper: Wang, Z. (2026)
Studying Attraction of Personality Types in
Social Networks: An Analysis Using Tinder
Profile. *Social Networking*, 15, 109-119.
<https://doi.org/10.4236/sn.2026.154005>

Received: July 1, 2026

Accepted: August 23, 2026

Published: August 26, 2026

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Abstract

This study examined the perceived attractiveness of four different personality types via Tinder on a university campus at a large Southwestern university. This study used Don Lowry's True Colors personality test as a framework. Participants were randomly assigned to view one of four different versions of a mock-up Tinder profile including a message reflecting one of the four different personality types: Blue, Green, Gold, and Orange. Results showed participants perceived the Gold color personality of the profile as the most attractive and subsequently more likely to engage in behavioral response to this personality type.

Keywords

Attraction, Tinder, True Colors, Personality

1. Introduction

Personality tests are designed as systems of measurement to assess human characteristics and categorize them into different personality constructs. There are several different personality test designs that exist and several different personality type constructs. Typically, personality test results can offer a general insight into an individual's personality through items designed to measure key characteristics based on a scale of some sort. Occasionally, personality tests can be lengthy and sometimes lead to participant confusion or impatience. To offer a simpler test design within the existing complicated personality test realm, Don Lowry in 1978 created the True Colors personality test which categorized four major personality types into four different colors: Blue, Orange, Green, and Gold. The design of Lowry's test is simple and easy to follow, thus making test taking a more enjoyable

and engaging process. Rather than a lengthy, redundant series of questions, True Colors asks individuals to assign a number to word clusters measuring the amount to which each word cluster applies to them [1].

Interpersonal communication studies the way in which personality types are communicated through a variety of channels. In face-to-face interactions, it is typically easy to gain insight into an individual's personality through both nonverbal and verbal communication. In interactions that occur online, it is significantly more difficult to determine an individual's personality due to the lack of visibility that would otherwise provide insight via nonverbal and verbal communication. Individuals typically communicate their most favorable aspects of their personality online, but it is still more difficult to perceive than face-to-face communication due to the anonymity associated with computer mediated communication.

By studying personality types within the context of social media, individuals are inclined to display the aspects of their personality that they perceive to be most attractive. Using attractiveness as a measure, this study examined perceived attractiveness of different personality types displayed on social media as categorized by Lowry [1]. The researchers studied perceived attractiveness on Tinder because it is the most used online dating website among our target demographics. The purpose of this research was to examine the perceived attractiveness of the four personality types as outlined by Lowry's personality test in Tinder biographies [1].

2. Literature Review

2.1. Personality Test & Temperaments

Don Lowry created the True Colors Personality test in 1978 to examine the facet ways of basic learning styles attributed to the human brain, categorizing each style in four different colors; Blue, Green, Gold, and Orange. Upon greater research, Lowry discovered that the basic learning styles could also identify strengths and challenges to an individual's personality types [1]. Originally, the concept of Lowry's personality test originated from undeveloped ancient and medieval medicine theories regarding body fluids, known as humor. Hippocrates declared that humors consisted of four bodily fluids (black bile, yellow bile, blood, and phlegm) that provided physical and mental health balance to the human body, which later, Hippocrates coined as the four temperaments [2]. Hippocrates and early European medicine philosophers believed each bodily fluid created an effect within an individual's personality. For example, blood, also characterized as sanguine, once believed to be produced by the liver, could result in an individual being less social, inactive, and unenthused. Black bile, also characterized as melancholic, was believed to be the reason an individual might be experiencing feelings of depression. Phlegm, also characterized as phlegmatic, was believed to be produced by the brain, controlling an individual's feelings and emotion resulting in a calming effect. Lastly, yellow bile, also characterized as choleric, was believed to be produced by the gallbladder. Philosophers believe that an excess of yellow bile within the body could result in an increase of anger and aggression. Modern science derailed

the theories produced by Hippocrates, however, Hippocrates's medical theories deemed to have great influence upon pedagogues, philosophy, psychology, and anthroposophy as well as theorists who study typology like Carl Jung, Katherine Myers, and Don Lowry.

In 1971, Jung sought to expand the framework of typology to comprehend various personality patterns by categorizing basic psychological functions into four dichotomies. Carl Jung described personality and temperament differences as an integral and fundamental basis for understanding the self and other [3]. Jung's framework in typology aimed to examine how the human mind preferences general attitudes, perceptions, and judgment. Today, Jung's characteristics are known as Extraverted (E), Introverted (I), Sensing (S), Intuition (N), Thinking (T), and Feeling (F), and current Jungian theorists heavily focus on E vs. I. Jung defined Extraversion (E) as human preference that is focused on an object, information that reaches the subject from the object [3]. The object of study can be a physical object, idea, and or concept. A person who is considered an extrovert perceives solely the object, separate from the subject. Extroverts orient personal ideas depending on objective data. Introversion (N) human preference is focused on the subject, and the effect that the object will have on the subject [3]. Introverts will internally process the object regarding the subject's relation and experience with the object. Introverts will focus on coming up with theories or ideas to explain the patterns the subject is experiencing. Thus, Extroversion reacts to outside stimuli, while introversion reacts to inward stimuli [3]. Jung proposed that out of the six typologies, the human brain preferences one characteristic as dominant to the others' depending on the person [3].

In 1980, Isabel Briggs Myers, a practitioner of Jung's research, suggested adding a fourth dichotomy. Myers did not only wish to observe preferences in how human expresses energy, perceive information, and process information, but Myers sought to understand how humans apply processed information. Myers created and added the dichotomy of Judging (J) vs. Perceiving (P) [4]. Jung's extensive research on typology and psychological functions inspired one of the largest and most popular personality assessments in America, the Myers-Briggs Type Indicator (MBTI). MBTI is an assessment used for personality inventory, created by Katherine Brook Briggs and daughter, Isabel Briggs Myers. Myers & Briggs proposed that by making MBTI publicly accessible to corporations, educational institutions, and individuals grants insight of understanding that individuals differ systemically regarding perceptions, motivations, skills, and values [5].

One of the biggest critiques of the MBTI is that eight different preferences of general attitudes, four dichotomies, and sixteen personality types deemed too complex. Don Lowry's approach with the True Colors assessment simplified the understanding of an individual's personality temperament using four basic colors: Blue, Green, Gold, and Orange. Today, True Colors is used by businesses, educational institutions, churches, organizations, and family as a tool to understand an individual's communicative and behavioral styles in hopes of forming cohesive-

ness [6] [7]. Notably, although True Colors framework has been widely used, little support was found for True Colors convergent validity with measures such as the Strong Interest Inventory and Campbell Interest and Skill Survey, which showed its limitation as a personality test [8].

In the True Color personality test, the colors are explained below:

Orange is a color often used to promote action, motivation, and excitement. Orange urges you to PAY ATTENTION—wake up and seize the moment, make quick decisions...take advantage of the immediate opportunity available right now! Orange encourages a playful atmosphere of activity and movement. Gold is a color with numerous metaphors associated with it. It represents value, stability, and strength. The expression “Solid Gold work ethic” conjures up an image of someone who is very responsible... on time, organized, fulfills their obligations with stellar dependability, efficiency, and thoroughness. The classic expression “sets the Gold standard” is also a suitable fit. Green is an expression of the logic—the system of existence and the abundance of this color in nature. Greens are concerned with the world’s challenges, such as preserving the wisdom of mother earth for the future. Psychological research has shown Green has a calming effect and many Greens demonstrate a composed demeanor using mind over emotion to orchestrate and solve the mysteries of life. Blue is a color that has been shown to soothe the central nervous system. It fosters psychological contentment and physical tranquility. It can be said that when a person is feeling BLUE, they are experiencing emotional intensity and sensitivity to the dramas of life. The figure of speech referring to “True Blues” takes on the meaning of friendship, helpers, “there when you need them” individuals that will go the extra mile for others [9].

2.2. Tinder

In the digital age, the Tinder app has been one of the most favored Android and iPhone apps among adults ranging in age from 18 - 35 years old, estimating approximately 10 million active users daily [10]-[12]. The Tinder app is accessible to smartphone users and is free, making the app accessible and affordable. In former studies, researchers examined that online dating apps encouraged hookup culture among young adults on college campuses. Bogle defined hookup culture as the replacement for traditional dating to heterosexual immediate intimacy without commitment. [13] Recent studies examined online dating apps, such as Tinder, and found that individuals expressed multi-faceted motivations for having a Tinder account [12] [14]. Sumter *et al.* utilized an exploratory factor analysis, while implementing a parallel analysis approach, to reveal six motivations as to why people use the Tinder app. The six motivations included self-worth, casual sex, trendiness, love, ease of communication, and thrill of excitement [12]. The current study seeks to measure perceived attractiveness of each personality type using the Attraction Theory as a theoretical framework while considering the motivations that online dating app users experience daily.

2.3. Attraction Theory

Attraction is a desire to be close to someone based on his/her physical appearance (e.g., physical attraction) and/or perceived social/friendship abilities (e.g., social attraction). Attraction has revealed that individuals who are perceived to be attractive are evaluated positively [15]. The attraction research centers on social interaction processes. J. McCroskey and McCain's initial study presented and tested a scale of physical, social, and task attractiveness [16]. This scale remained the common measure of attractiveness and scholars utilized these scales to study attractiveness in several contexts including instructional, organizational, and interpersonal settings [15].

As attraction is an emotion expressed to regulate interpersonal relationships, it is worthwhile exploring its interaction with Lowry's True Colors personality. The current study sought to explore relational outcomes amongst the various colors of personality types. When analyzing the results of the current study, two relational outcomes deemed prominent, social attraction and physical attraction. Social attraction is often perceived by individuals who are interested in a non-sexual and/or a non-romantic relationship, where friendship is valued [16]-[18]. Physical attraction is attributed to an individual viewed as beautiful or handsome, not undesirable or unpleasant to the eye [16] [17]. Now, of course both relational outcomes can cancel the other out, for example, an individual who is seen as physically attractive can lose perception of being attractive after being offensive, abusive, or mean [19]. Reversely, Albada *et al.* conducted a study that interviewed long term romantic relationships in which one partner did not perceive the other partner physically attractive, but rather, perceived physical attraction increased after the partner evaluated the other partners' communicative behaviors [19]. Although the participants in the current study do not know one another, each survey contained a short bio, thus providing some sense of communicative behavior.

Based on Lowry's True Colors personality test [1] and Attraction measure [16], we hypothesized there would most likely be one color generally perceived as more attractive than the others. Given the target demographic of a college campus, we believed that the "Orange" personality type would be perceived as most attractive for the fun, carefree, spontaneous, and independent nature of the personality construct, consistent with typical college student behavior. Based on this rationale, we developed the following two hypotheses.

H1: Participants will perceive Tinder profile of Orange color personality as more attractive than other color personality types.

H2: Participants will be more likely to engage in behavioral response to Tinder profile of Orange color personality than other color personality types.

3. Method

A single-factor four-group (personality type: blue, orange, green, gold) between-subjects design was conducted to measure perceived attractiveness of each personality type through Tinder biographies. In this quantitative study, we opted for

a pen-to-paper survey method. Each survey was 9 pages long, including one instructional page at the beginning and one page of stimuli. To effectively answer our research questions and test our hypotheses, we felt that the use of a pen-to-paper survey rather than an online survey would allow us to better ensure that participants were more engaged with the study.

3.1. Participants

Participants ($N = 200$) were selected through convenience sampling at a large Southwestern university from various undergraduate communication courses with the help of faculty. In exchange for participating, students received extra credit from the communication course they enrolled in. The researchers administered the four different versions of the survey to 50 participants each. Participants ranged in age from 18 - 49 years old ($M = 21.72$, $SD = 3.13$). 56.5% of participants were Caucasian, 16% were African American, 17% were Hispanic/Latino, 5% were Pacific Islander, 2.5% were Asian, and 3% of participants identified as Others. Regarding gender, 56% of participants were female, 41.5% were male, and 2.5% of participants identified as Others. Of the 200 participants, 5 survey responses were deemed unusable, totaling the number of surveys analyzed at 195.

3.2. Procedure

After signing informed consent form in the classroom, the participants were informed that they would be viewing a printout of a Tinder profile. The participants were randomly assigned to receive one of the four versions of profile mockups. As the participants viewed the mock-up, they were instructed to develop an overall impression of the Tinder profile owner they viewed. After assessing the mock-up profiles, participants completed a questionnaire about interpersonal attraction, their familiarity with the Tinder app and other online dating websites, as well as their behavioral and attitude response toward the Tinder profile owner. Participants were also given a blank version of Lowry's True Colors personality test [1] and asked to complete it to determine their own personality type color. Finally, they were asked to provide demographic information at the end of the survey.

3.3. Stimuli

Four different mock Tinder profiles were developed, consisting of a profile photo and a biography to represent each of the four different personality type colors as outlined by Lowry's True Colors personality test [1]. Each mock Tinder profile had the exact same image of both a female and a male avatar for all four versions, while each individual version showed the exact same biography according to the color which they represented. For the avatars, we opted to use Bitmoji's rather than a typical ghost avatar for the socially attractive aspect and more welcoming nature of Bitmoji. The Bitmoji's were extremely generic looking and were not intended to sway the participant in either way when perceiving the attractiveness of the profile. The only difference on each profile was the message, or biography,

which is how we measured perceived attractiveness of the four different personality types. After extensive research on Lowry's True Colors personality test, we developed four different biographies that we felt adequately depicted the general sense of each personality type. Key words used on Lowry's True Colors personality test itself were incorporated.

Prior to the data collection period, a pilot test was administered to 50 undergraduate students. The pilot test was a matching activity in which students were asked to read a message and match it to a series of descriptive adjectives. About 80% of respondents were able to effectively match the message to the corresponding word bank. We were able to use the results to adjust the messages based on common errors among respondents to make each message more distinct and in line with the personality type which they represented. Eventually, we were able to confidently design four messages that accurately reflected each personality type that we used as the mock biographies in our stimuli.

3.4. Measures

Social Attraction. Tinder user social attraction was measured using 5 items of interpersonal attraction 5- point Likert scale [16]. The scale ranged from (1) strongly disagree to (5) strongly disagree. The 5 items included: I think this person could be a friend of mine; It would be difficult to meet and talk with this person; This person just wouldn't fit into my circle of friends; This person and I could never establish a personal friendship with each other; and I would like to have a friendly chat with this person.

Physical Attraction. Tinder user physical attraction was measured using four items of interpersonal attraction 5- point Likert scale [16]. The scale ranged from (1) strongly disagree to (5) strongly disagree. The four items included: I think this person is quite handsome/pretty; This person is very sexy looking; I find this person very attractive physically; I don't like the way this person looks.

Behavioral Response. The behavioral response was measured using a 5- point Likert scale. The scale ranged from (1) strongly disagree to (5) strongly disagree. The items included: How likely are you to swipe right (towards a match) on this person? How likely are you to swipe left (avoiding a match) on this person? How likely are you to message this person first if you are matched with this person? How likely are you to respond to this person if this person messages you first? I would prefer to have a strictly sexual relationship with this person; and I would block this person from my profile.

Attitudinal Response. The attitudinal response was assessed based on the profile that the participants viewed. The attitudinal response was measured using a 5-point Likert scale. The scale ranged from (1) strongly disagree to (5) strongly disagree. The items included: Based on this person's biography, I would be interested in pursuing a serious relationship with this person; Based on this person's biography, I would be interested in a casual relationship with this person; and I would consider going on a date with this person.

Other Measures. We assessed the participants familiarity with the Tinder app and other online dating websites. Answers were reported on a 5-point Likert scale ranging from (1) strongly disagree to (5) strongly agree. Participants also responded to questions that assessed if they currently used their Tinder account, if they were satisfied with their online dating experience, and if they would recommend online dating sites to others.

4. Results

We first tested if there was a significant difference in the attractiveness rating among the four variations of Tinder mock-up profile. A one-way ANOVA analysis was conducted using the different versions of the mock Tinder profiles that the participants received as the independent variable and perceived social attraction as the dependent variable. A significant difference was noted among the four different variations, $F(3, 191) = 9.74, p < 0.001$. The Tukey HSD post hoc analysis indicated that the personality type color “Gold” was perceived as more socially attractive ($M = 3.44, SD = 1.16$) than the other three color types (Blue ($M = 2.66, SD = 1.03$), Orange ($M = 1.93, SD = 1.27$), Green ($M = 2.36, SD = 1.17$)).

The same one-way ANOVA was repeated using perceived physical attraction as the dependent variable. Similarly, we found a significant difference among the four different variations, $F(3, 191) = 8.75, p < 0.001$. The Tukey HSD post hoc analysis indicated that the personality type color “Gold” was perceived as more physically attractive ($M = 3.15, SD = 1.12$) than the other three color types (Blue ($M = 2.21, SD = 1.18$), Orange ($M = 1.92, SD = 1.04$), Green ($M = 2.03, SD = 1.16$)).

These results showed H1 wasn’t supported. Instead, we found Tinder mock-up profile with Gold color personality, rather than Orange, was perceived more attractive overall.

To test H2, another one-way ANOVA analysis was conducted using the different versions of the profiles that the participants received as the independent variable and their behavioral response as the dependent variable. A significant difference was noted among the four different versions, $F(3, 191) = 9.84, p < 0.001$. The Tukey HSD post hoc analysis indicated that participants were more likely to swipe right (towards a match) when they saw Gold color personality Tinder mock-up profile ($M = 3.29, SD = 1.26$) than the other three color personality profiles (Blue ($M = 2.75, SD = 1.15$), Orange ($M = 1.84, SD = 1.36$), Green ($M = 2.18, SD = 1.27$)). This result didn’t support H2, but it was consistent with the previous findings when testing H1.

5. Discussion

The focus of this study was to examine perceived attractiveness of four major different personality types through Tinder biographies. Results from this study showed that H1 was supported. There was one personality type out of the four that was generally perceived as more attractive than the rest. To our surprise, that personality type was “Gold”. Those with a “Gold” personality are loyal, dependable,

prepared, sensible, organized, stable, and thorough. While thinking about a big picture, this finding makes a lot of sense. However, we were inclined to believe that the personality type “Orange” may be perceived as more attractive due to the majority demographic makeup of our participant sample with 96% of participants being in their 20’s. Typically, individuals in their early 20’s are interested in pursuing a relationship along the lines of someone who demonstrates “Orange” characteristics such as witty, charming, spontaneous, impulsive, optimistic, eager, and bold. It is common that as individuals grow older, their “Gold” score will likely rise for their mature, responsible, and parental connotations.

The goal of this study was to measure the perceived attractiveness of the four personality types as outlined by Lowry’s True Colors personality test in Tinder biographies. Displaying personality traits online can be difficult but often subconscious. Several significances emerged showing that participants generally favored certain personality types over others and that “Gold” was generally perceived as more attractive than the others. The results suggested that Tinder biographies serve as an adequate framework when analyzing the personality types of individuals who use similar dating sites. Additionally, using Tinder as our context allowed us to measure perceived attractiveness and likeability of the four personality types as outlined by Lowry’s True Colors personality test within the realm of online dating where measuring attractiveness is more cognizant.

6. Limitation and Future Research

There were quite a few limitations present in this study. First, participants were selected based on a convenience sample and attended the same university as the researchers. A few of the participants knew the researchers well, which ultimately may have encouraged them to respond more positively to the questions. Second, quite a few participants had a difficult time measuring perceived physical attractiveness due to the use of Bitmojis. The researchers wanted to use Bitmojis because using real profile photos would detract from the focus of the study, personality type, which could not be adequately and appropriately measured through appearance. A third limitation is that some participants did not fully understand how to complete the True Colors assessment at the end of the survey. While most participants completed the assessment correctly, there were quite a few participants who either did not complete it or completed it incorrectly. If every participant had fully completed the assessment and done so correctly, our results may have been more conclusive and given additional insight into self-personality type influence. This may have been a result of placing the True Colors assessment at the end of the survey and participants reached fatigue point.

Future research should continue to study Don Lowry’s True Colors personality test [1]. Lowry’s personality test provides an excellent framework that is much easier to dissect and analyze in comparison to other personality tests that currently exist. Future research would benefit by studying Lowry’s True Colors personality test and the development over time of an individual’s personality in accordance

with the four different personality types for the notion that an individual's personality type will likely change temporally because of growth and new life experience.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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