Physical attractiveness far outweighs other traits in online dating success

by Eric W. Dolan

A new study published in *Computers in Human Behavior Reports* has found that when it comes to online dating, physical appearance overwhelmingly determines who gets matched. Analyzing over 5,000 "swiping" decisions made by real dating app users, researchers discovered that improving a person's attractiveness significantly increases their chances of being selected, far more than any other trait like intelligence, height, or occupation. Notably, men and women valued these traits in nearly identical ways, challenging long-held beliefs about gender differences in mate preferences. The researchers wanted to address a long-standing challenge in dating research: how to measure what actually influences real-world dating success. Past studies often relied on self-report surveys, which ask people to list what they look for in a partner. But these answers don't always match up with behavior. For example, while people might say they value intelligence or a good job, when it comes time to swipe, their choices may follow a different pattern. Adding to this problem, prior field studies that looked at real-world dating patterns were mostly correlational, making it hard to say whether certain traits caused more matches or were just associated with them.

"I've always been fascinated by how people decide whom they want to date and whom they don't. The dating world has changed significantly in recent years, and I felt that much of the existing research no longer accurately reflects modern dating life and decision-making," said study author Jessika Witmer of the University of Amsterdam.

To overcome these issues, the researchers used a method called conjoint analysis. This approach, commonly used in marketing, allows researchers to study how people make complex choices when multiple factors are at play. In this case, participants were shown realistic dating profiles that varied systematically in traits like physical attractiveness, intelligence, job, height, biography text, and how similar the person was to the viewer in terms of height, intelligence, and attractiveness. By observing which profiles were selected over others, the researchers could estimate how much each trait mattered, independently of the others.

The study included 445 heterosexual and bisexual dating app users in Germany, aged 18 to 35, evenly split between men and women. Participants were recruited through a

mobile survey platform called Appinio. After answering some background questions about themselves, participants were shown 12 different swiping scenarios. Each scenario presented them with three dating profiles at once, and they could choose to match with one or skip them all. The profiles showed a face-and-torso photo, height, job, an IQ score, and a short biography. All these features were randomly mixed across profiles, allowing the researchers to disentangle their effects on selection decisions. In total, the team analyzed 5,340 decisions. The clearest result was that physical attractiveness had a massive effect on whether someone got selected. Improving a person's attractiveness rating by one standard deviation (roughly moving from average to noticeably above average) increased the odds of being chosen by about 20 percent.

In contrast, the same improvement in intelligence raised selection odds by just 2 percent. Biography attractiveness had a similarly small impact, and height and job had even smaller effects. While these traits did matter statistically, their influence was seven to twenty times smaller than that of physical appearance.

Surprisingly, men and women did not differ in how much weight they gave these traits. While some theories suggest that men prioritize looks more and women care more about intelligence or occupation, this study found that both genders showed nearly identical patterns in their matching decisions. Even height, which is often believed to affect men and women differently, had a small but positive effect for both groups. The researchers had expected some differences—such as women placing more value on job status—but found no support for those assumptions.

"Previous research has consistently found gender differences that align with evolutionary theory – for example, that men prioritize physical attractiveness, while women place more importance on a partner's ability to provide, such as having a good job," Witmer told PsyPost. "However, these findings were largely based on self-reports. When we created a more realistic dating scenario where people had to make actual choices, we found that gender differences almost disappeared and both men and women prioritized physical attractiveness over other attributes. This is not only interesting from an informational standpoint but also highlights the importance of using the right research methods."

The researchers also examined how similarity between the viewer and the profile (known as homophily) affected match decisions. People were more likely to choose someone whose height, intelligence, or attractiveness was similar to their own selfreported traits. But even these similarity effects were minor, especially compared to the sheer power of visual appeal. The researchers noted that this form of similarity was based on people's own ratings of themselves, which may not be entirely accurate but still captured the general tendency to prefer familiar traits.

These findings suggest that the earliest stages of online dating are dominated by physical appearance. This might not come as a surprise to anyone who has used a dating app, but the study offers a rare, precise quantification of how much more it matters than everything else. The results also provide a reality check for assumptions based on self-reports or evolutionary theories that emphasize major gender differences. When it comes to actual behavior—who people choose to match with—the patterns are much more alike than expected.

"People using online dating apps should take the time to choose high-quality pictures of themselves," Witmer advised. "It might be helpful to ask friends which of your photos they find most attractive. However, it's important to remember that (physical) attractiveness is highly subjective."

Still, the study has some limitations. The profile photos used were created with AI tools and rated in a pretest, but they may not reflect the full range of human attractiveness or cultural variation. Also, the homophily measures were based on self-estimates, which could introduce some bias. And because each participant only viewed 12 sets of profiles, future research could expand this to more interactions or a longer time frame to observe whether patterns remain consistent.

"It's important to note that our study was conducted on a quantitative level, meaning we cannot draw conclusions about, for example, what makes a good and attractive profile picture," Witmer said. "Additionally, we focused on a limited set of attributes that influence matching decisions, but many other factors likely play a role and should be considered in future research."

The study, "The relative importance of looks, height, job, bio, intelligence, and homophily in online dating: A conjoint analysis," was authored by Jessika Witmer, Hannes Rosenbusch, and Erdem O. Meral.