

# The impact factors for first impression

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**Abstract.** Research on first impressions is crucial because of the widespread use of temperament judgments because of a lack of knowledge and their societal consequences. Until recently, however, first impressions were of dubious value, and factors affecting the formation of first impressions are being meticulously studied. This review discusses the aspects that affect first impressions and how first impressions could be subsequently altered. People have a tendency to evaluate others' personalities merely based on their facial appearance. Subsequent experiences with an individual could only be used to support initial, rashly formed first impressions of that individual. Overgeneralization theories may explain this natural tendency. Further, stereotypes affect people's first impressions by leading to preconceptions: people may directly refer to qualities that fit the stereotype even though the judged person does not fit the stereotype. First impressions can be revised with extra information that is highly diagnostic, reliable, or experience-reframing, and this revision can last for weeks or even months. This review also offers realistic future directions for research, including testing the generalizability of recent findings and examining how updating can reverse the impact of first impressions.

## 1 Introduction

By definition, people's first impressions of strangers are based on sparse information and, until recently, were of dubious value [1]. First impressions are a vital research area because they are frequently made based on little information and have deleterious consequences [1]. Since Solomon Asch's 1946 study of "Forming Impressions of Personality," research on first impressions has advanced significantly [2,3]. Asch's study also introduced the primacy effect: the order of presentation of personality adjectives strongly influenced people's impressions of the target person, although this primacy effect decreased over trials [3]. Additionally, the characteristics of an early presentation of a recurring stimulus are easier to learn than those of subsequent presentations, and the initial representation made for a stimulus would be likely to have an impact on how subsequent repeats are encoded [4].

Numerous stimuli of first impression formation have been studied. Conner et al, for example, looked at how the attire of the stimulus person influenced the formation of first impressions, and Christopher and Schlenker examined how first impressions of interpersonal attributions are impacted by wealth cues and perceiver's concerns about their social image [5,6]. More studies focused on facial cues in forming first impressions.

First impressions are especially important in interpersonal relationships, and leaving a good first impression on others can significantly boost one's credibility in others' perceptions. By learning about the basis of first impression formation and the updating process of first impressions, people can try to avoid, to

some extent, the impact of first impressions on their thoughts and decisions.

## 2 First impression and its impact

### 2.1 First impression

First impression is termed as the initial notion, emotion, or viewpoint that people have about someone or something, or that others impart on them [1]. Implicit first impressions are less easily updated than explicit first impressions, and while explicit impressions can be measured directly by inquiring subjects about their thoughts, feelings, or opinions, implicit impressions are measured indirectly by drawing conclusions from how the perception of the stimulus influences subsequent actions in a seemingly unintentional way [7]. First impression research, by definition, focuses on how individuals judge strangers [8].

First impression bias is a natural limitation in how humans process information, where people have preconceived notions about subsequent information and are highly affected by the first snippet of information they encounter [9].

### 2.2 The impact of first impression

First impressions shape how people perceive others thereafter and influence people's actions toward a new acquaintance or a humanoid agent [7,10]. First impression bias can have detrimental effects on

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corporate decision-making [9]. Decision-makers will adjust the information they later acquire to meet their initial impressions if they have a positive first impression [9]. This problem is particularly evident for tasks that lack structure or clearly defined procedures because a lot of the information that is pertinent in these circumstances is ambiguous and could be interpreted in a variety of ways [9]. On the other hand, in general, accurate first impressions have a favorable effect on the development of relationships that seems to get stronger over time [11].

First impression bias has been demonstrated to occur consistently in a variety of circumstances [9]. Accurate first impressions are enduring, and a negative first impression is harder to change than a positive one [11].

### **3 Facial appearance and first impression**

#### **3.1 The relation between facial appearance and first impression**

People establish first impressions of others' faces at a young age, and these impressions are common across cultures [2]. People can quickly make characteristic judgments based merely on facial appearances, and rapidly formed first impressions can help people survive and interact with the environment [2,12,13]. Though first impressions made merely from faces are not always accurate, people still have the natural tendency to "judge a book by its cover" [2]. The characteristic judgments have practical implications in the fields of employment, law, and politics [2]. For example, Ballew and Todorov's experiment demonstrates how quick evaluations of a person's competency predicated only on their facial features could predict the outcomes of gubernatorial polls, and the results imply that voting decisions may be influenced by snap judgments made unreflectively about a person's face's level of competence [14].

Studies have focused on measuring the minimal time for people to have a first impression of others and the specific traits on which people form impressions. Bar et al conducted four experiments to measure how quickly first impressions about a person's intellectual abilities and personality could be made after looking at a photo of a particular person and how awareness plays a part in these judgments [12]. Results indicate that first impressions of a threatening personality can be reliably made based on the information available within the first 39 milliseconds of exposure because these impressions are generally important for surviving [12]. Willis and Todorov's experiment (2006), similarly, shows that just a short presentation of 100 ms is sufficient for individuals to extrapolate a specific property from a stranger's face [13]. For all five traits measured (attractiveness, likeability, trustworthiness, competence, and aggressiveness), there was a strong correlation between decisions made under no time constraints and decisions made after 100 ms of face exposure [13].

Importantly, different traits have different time thresholds: people extract the features necessary for threat and trustworthiness impressions faster than they do other impressions such as intelligence and attractiveness, presumably because the perception of threat and trustworthiness has a more direct impact on people's chances of survival [12,13]. Findings also imply that prolonged exposure time only serves to increase people's confidence in these impressions; in other words, subsequent interactions with a person might only be used to support initial, hasty instant judgments [13]. Furthermore, additional exposure to a face can aid in the establishment of differentiated person impressions to the extent that people form such impressions based on facial appearance [13]. Trait judgments became less associated with longer exposure times, indicating a finer-grained distinction [13].

Disparities in impressions were perceived as emanating in stable morphometric distinctions in nearly all of the previous studies, which used a single-face image—a frontal photo—for each target individual [8,12,13]. In Todorov and Porter's paper (2014), researchers investigated whether slight, random variations in photographs of the same person might influence observers' perceptions, filling one of the blanks of previous studies on this topic [8]. According to the results, variability in impressions of the same person across social judgments (attractiveness, competence, creativity, etc.) was equivalent to variation in impressions of different people; thus, the photographs chosen for comparison determined how two people are compared on a certain dimension [8]. Furthermore, people consistently prefer particular photos of a particular person, and these preferences change depending on the specific situation (e.g., a national election versus dating online) [8]. Additionally, the method used to select the images that were evaluated expectedly impacts people's assessments; when images are picked at random, people's opinions are less favorable than when they are chosen to best suit the decision context [8]. Finally, despite the photos' brief presentation (40 ms), these biases could still be evident [8]. In brief, people's first impressions are affected by different photos of the same person, the context of judgment, the method of image-choosing, and even a very short presentation time [8].

#### **3.2 Overgeneralization theories**

Overgeneralization theories may explain why people first judge others by their faces [2].

These theories contend that first impressions are frequently overgeneralizations fitness level an adaptive response, and individuals whose face structure resembles newborns, a distinct sentiment, a individuality, or a certain fitness level are frequently overgeneralized to possess psychological traits which are accurately communicated by the functionally important facial characteristics which distinguish newborns, sentiment, a acquainted individuality, or lack of fitness [2]. For example, traits including high warmth and low power are

attributed to people with faces that look more childlike than usual [2]. Facial cues — babyfacedness, familiarity, etc. — influence people’s impressions of others, while studies have shown that people frequently are oblivious to these cues [2]. Moreover, prior perceptual experiences and the perceiver’s objectives affect individual differences in first impressions [2]. Even in cases where the individual being judged does not actually fall within the category but merely superficially resembles those who do, first impressions can be affected by facial characteristics that typically distinguish these categories of people [2].

#### **4 Stereotype and first impression**

Stereotype affects people’s first impression by directly causing inferences of traits that fit the stereotype, leading people to think in a particular way, regardless of whether others actually fit the stereotype or not [15]. Studies have tested the effect of various stereotypes on people’s establishment of first impressions: the African American stereotype, homosexual stereotype, and physical attractiveness stereotype [16-18].

Abreu tested the African American stereotype’s influence on therapists’ formation of first impressions [16]. In the experiment, either neutral words or African American stereotypes were primed using 80-ms flash phrases on a computer screen for sixty therapists who were assigned at random to one of the two priming settings [16]. Respondents were then asked to score the patient on a range of dimensions after being exposed to a vignette introducing the patient [16]. The findings show that when participants were primed with stereotype terms, they rated Mr. X substantially less favorably on traits associated with hostility and much more favorably on attributes unrelated to hostility than when they were primed with neutral words [16]. The results imply that, depending on the type of attribute that is appraised, African American stereotypes may have a good or negative impact on therapists’ first impressions [16].

Gurwitz and Marcus measured the effect of homosexual stereotypes on first impressions [17]. Researchers varied the amount of data of about target individuals given to different participants during experiment to examine the impacts of multiple of sorts of knowledge people have on their establishment of impressions [17]. Participants then filled out the impression questionnaire anonymously [17]. Results indicate that the normal impact of expected interaction leading to increased liking was discovered when men and women appraised either a gay or a non-homosexual male [17]. However, men assessed homosexual men less favorably when they expected to interact with them than when they did not know they would [17]. Additionally, it was discovered that when the stimulus person was homosexual as opposed to not, both genders, especially males, liked him less and associated him with more stereotypical characteristics [17].

Lorenzo et al’s study examined the “beautiful is good” stereotype on first impressions, with results showing that people who are more physically appealing

were perceived more favorably and more accurately in first impressions [18]. Participants had a three-minute individual meeting with another participant and then evaluated one another using the Big Five Inventory [18]. Participants evaluated the other person’s intelligence and physical attractiveness as well [18]. According to the findings, more attractive people were perceived with more normative correctness, which is indicative of being thought to exhibit more positive attributes, in accordance with the physical attractiveness stereotype [18]. The perception of more attractive people was also more accurate because perceivers had a better understanding of the particular qualities of more attractive people; being physically appealing may improve distinctive accuracy because perceivers are more attentive to and driven to understand physically attractive targets than less attractive ones [18]. On the other hand, less attractive people might not always suffer from being perceived incorrectly in first impressions [18]. However, the stereotype of physical appearance still skews perceptions and judgments involving comparisons of individuals with varying levels of attractiveness [18]. The accuracy and positivity of personality impressions are also associated with perceiver-specific perceptions of the target’s attractiveness, suggesting that both the application and validity of the physical-attractiveness stereotype depend in part on the observer [18].

To conclude, since stereotypes provide people with pieces of information about the particular groups they are judging, first impressions can be directly shaped by stereotypes.

#### **5 Updating first impressions**

Since first impressions influence future behaviors toward others, it is critical to update first impressions timely [10]. While explicit first impressions may be easier to update, implicit first impressions are less easily changed in light of new information, but they could still be adjusted and could be durable for weeks or even months [7,19].

Implicit first impressions can be altered by highly diagnostic, credible, or experience-reframing information [7]. First, information that is revealing is diagnostic, and strongly negative behaviors can undermine even well-established, positive implicit first impressions [7]. Second, it also requires believability for highly diagnostic information to alter implicit attitudes [7]. People’s convictions about the accuracy of the additional information moderates the impact of the additional information on updating independently of their opinions about the information’s diagnosticity [7]. Third, when given a plausible justification for why the first information was incorrect, people can quickly change their implicit attitudes from negative to positive [7]. Additionally, updating occurred even when new information was obtained after it had already been received and without significant rehearsal of the new validity information [7]. These findings have crucial real-life applications. For instance, nowadays disinformation spreads fast through the Internet, and

labeling information as having poor credibility may lessen its implicit impact; this updating of implicit first impression may impact critical political behaviors and judgments [7].

## 6 Discussion and suggestion

### 6.1 Overall findings

First impressions are formed based on sparse information and are largely affected by the primacy effect [1,3]. First impressions shape how people perceive others thereafter and influence people's future actions and may have a detrimental effect on decision-making [7,9,10]. On the other hand, accurate first impressions have a favorable effect on the development of relationships that seems to get stronger over time [11]. Accurate first impressions are lasting, and a negative one is more difficult to change than a positive one [11].

People establish first impressions of others' faces since an early age, and these impressions are universal throughout cultures [2]. The characteristic judgments made according to faces have practical implications in several fields [2]. Importantly, people can deduce a specific trait from a stranger's face with very limited exposure time [12,13]. Moreover, later contact with a person could only be used to support first, quick conclusions drawn instantly; however, more exposure to a face can help people form more distinct impressions of that person [13]. The formation of first impression is also affected by the shooting angle of the picture; distinct impressions of the same person could be made when different pictures of that person is shown [8].

Overgeneralization theories, which state that first impressions are frequently overgeneralizations of an adaptive response, may explain why people first judge others by their faces [2]. First impressions can be influenced by facial features that normally separate particular kinds of people, even when the person being rated does not genuinely fit but only superficially resembles those who do [2].

Stereotype affects people's first impression as well, directly causing inferences of traits that fit the stereotype and leading people to think in a particular way, regardless of whether others actually fit the stereotype or not [15]. Various stereotypes guide the formation of first impressions [16-18].

Information that is highly diagnostic, reliable, or experience-reframing can change implicit first impressions, and this change can occur even when new information is acquired after it has already been received and without much careful consideration of the new validity information [7].

### 6.2 Weaknesses of current studies

The results of many current papers may have regional limitations and could not be generalized worldwide. For instance, Gurwitz and Marcus's study, which examined the impact of homophobic stereotypes on first

impressions, only included individuals from Northwestern University; Willis and Todorov's experiment, which measured the effect of facial appearance and short exposure time on first impressions, selected all participants from Princeton University [15,17]. Findings generated from these experiments may be limited to the U.S.A. and could not be applied generally to other regions.

Experiment procedures also affect the validity of the experiments. The social context of different measures may cause a difference between implicit and explicit cognition [7]. Explicit measurements of first impressions require participants to report directly their opinions, as in Gurwitz and Marcus's study, Abreu's study, etc.; participants could be influenced by experimenters in the explicit measure context and change their minds [7, 16, 17]. Implicit measurements, on the other hand, do not require participants to directly express their ideas; participants are less affected by the context [7].

Future studies could test whether the results could be generalized globally and whether social context significantly alters measured impressions. Furthermore, whether the updating of impressions could completely reverse the effect of first impressions could also be studied.

## 7 Conclusion

First impressions are generated based on scant information, and can influence individuals' future behaviors and how they later perceive other people. Everyone has a tendency to judge others by their face images. The study of first impressions has developed exponentially since Solomon Asch's study (1946), and numerous first impression-forming stimuli have been researched. People are fast to form opinions about other people's personalities based solely on how they appear, and these judgments have practical implications in several fields. Importantly, later interactions with a person could only be used to confirm first, hastily conceived first impressions of that person. However, the context of judgment and the picture-taking method affects people's first impressions. In agreement with overgeneralization theories, first impressions can still be influenced by visual traits that typically distinguish different types of people even when the person being judged does not actually fit but simply superficially resembles those who do. Additionally, stereotypes have an impact on people's first impressions by directly inducing traits that meet the stereotype and influencing people's thoughts, whether or not others truly fit the description. The establishment of first impressions can be influenced by several stereotypes. First impressions can be updated in light of highly diagnostic, credible, or experience-reframing new information, and this updating can be maintained for weeks or even months. Finally, testing the generalizability of latest findings and investigating how updating can undo the effects of first impressions are two viable directions for future research.

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