

Discussion on the Influence Mechanism of First Impressions

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Abstract. First impressions, pivotal in interpersonal dynamics, have been a focal point of research, with significant strides made in understanding their formation and impact. However, the rapid formation and potential biases in these judgments highlight a gap in the literature regarding their accuracy and malleability. This study aims to address this by exploring the interaction between first impression formation factors such as personal factors (such as appearance and non-verbal cues) and external influences (such as cultural background and situational context), and to analyze it in the Internet age. Through a comprehensive literature review, this paper delves into the mechanisms underlying first impression formation and their susceptibility to adjustment, as well as its performance in the Internet era. The findings reveal that while first impressions are often formed rapidly and can be predictive of social outcomes, they are not infallible. There is a notable influence of situational factors and a significant potential for bias, particularly in online environments where controlled self-presentation can skew perceptions. The study concludes with a discussion on the implications of these findings, suggesting that first impressions, though robust, can be influenced by a variety of factors, and strategies for managing these impressions are crucial for effective social interactions. This research contributes to a more nuanced understanding of first impressions, offering insights into their management and the potential for mitigating biases in social judgments.

Keywords: First impression, formation, internet, social interaction, bias.

1. Introduction

In the intricate tapestry of human interactions, first impressions hold a pivotal role, often dictating the trajectory of relationships and social judgments. This study delves into the mechanisms that underpin the formation of first impressions, aiming to bridge existing gaps in the literature and provide a comprehensive understanding of their influence on interpersonal dynamics.

First impressions are formed rapidly, often within milliseconds, and are influenced by a myriad of factors including facial expressions, body language, and vocal cues. Despite their fleeting formation, these impressions can significantly predict social and clinical outcomes. The accuracy of these snap judgments, even when formed under time constraints, suggests a deep-rooted psychological process that merits further exploration. Yet, the literature on first impressions is replete with contradictions and gaps. While some studies indicate a high degree of accuracy in these judgments, others reveal biases and inaccuracies, pointing to a need for a nuanced understanding of the factors that contribute to their formation and the potential for adjustment.

The significance of this research lies in its potential to illuminate the complexities of first impression formation and to offer insights into mitigating the biases that often accompany them. By examining the interplay of personal factors such as appearance and non-verbal behavior, and external factors like situational context and cultural background, this study aims to contribute to the existing body of knowledge and inform practical applications in social interactions and clinical assessments.

The research topic focuses on the influence mechanism of first impressions, exploring how they are formed, their accuracy, and the potential for adjustment. The methodology encompasses a critical review of existing literature, supported by empirical studies that investigate the role of various behavioral and situational factors in shaping first impressions. The study will also consider the impact of social media and online interactions on the formation of these impressions, acknowledging the digital age's influence on social cognition.

The primary objective of this research is to provide a detailed analysis of the factors that influence the formation of first impressions and to evaluate their accuracy and potential for adjustment. By

understanding the mechanisms at play, the study seeks to offer strategies for managing first impressions, particularly in the context of online communication where they can significantly differ from offline interactions. This research will contribute to the development of evidence-based practices for impression management and interpersonal communication, enhancing people's ability to navigate the social landscape effectively.

In conclusion, this study stands at the intersection of social psychology and interpersonal communication, offering a timely exploration of first impressions in the digital era. Through a rigorous examination of the literature and empirical evidence, it aims to shed light on the complexities of this phenomenon, its implications for social interactions, and the strategies for navigating its challenges.

2. Principles of First Impression and Factors that Influence People's Judgement about Others Based on First Impression

2.1. The Formation of First Impressions and its Impact on Interpersonal Relationships

First impressions are often formed from very brief observations of an individual's expressive behavior, which includes facial expressions, body language, and tone of voice. The formation of first impressions is a low-effort, high-speed cognitive activity. According to dual-process theories, first impressions are associated with System 1 thinking, which is fast, intuitive, and operates without much cognitive load; they are also formed online, in real-time, as new information is encountered, without the need for extensive reflection or analysis, thus they might happen below the level of conscious awareness [1].

Though the formation of first impressions is a quick and automatic process that occurs before individuals are fully aware, surprisingly, these quick judgments can be quite accurate in predicting various objective outcomes related to social and clinical psychology, and experiment conducted by Willis, J., & Todorov, A. also found that the length of the observation period does not significantly affect the accuracy of the predictions [2].

Time is a factor that in impression formation. Research on first impression from faces found out that people can form first impressions from others' faces in 100 milliseconds [1]. With more exposure time, individuals are able to make more nuanced distinctions among different personality traits, reducing the correlation between trait judgments. When exposure time increased from 100 to 500 milliseconds, judgments became more negative, response times decreased, and confidence in judgments increased. Further increasing exposure time from 500 to 1000 milliseconds did not significantly change the trait judgments or response times, except for a slight increase in confidence for some judgments. In conclusion, judgments made under time constraints are highly correlated with those made without time limits, suggesting that initial exposure is sufficient for forming impressions [2].

The type of behavioral channel (face, body, speech, etc.) used for forming impressions does not significantly affect the accuracy of predictions. This suggests that first impressions are not reliant on a single mode of expression. Those nonverbal cues play a significant role in forming first impressions, as they can convey interpersonal expectations and biases that are subtle yet effectively decoded at an unconscious level [2].

2.2. Personal Factors Like Verbal and Non Verbal Behavior, Appearance and Dressing

Willis, J., & Todorov, A. carried out five experiments, each focusing on a specific trait judgment of attractiveness, likeability, trustworthiness, competence, aggressiveness to explore how quickly people make inferences about others from their facial appearance [2].

Zebrowitz, L. A. also did research on impression based on facial appearances, building on initial studies that utilized trait adjectives to identify warmth/trustworthiness and power/dominance as the basic aspects that shape the perceptions of traits, research involving facial expressions has similarly

recognized these two dimensions. It found out that warmth/trustworthiness and power/dominance are the two fundamental dimensions contribute to the formation of first impressions, which are influenced by facial overgeneralization effects. That is, people often automatically use babyface features, facial familiarity, facial unfitness, and emotional face similarity to form impressions. They tend to form consensus first impressions based on them, even if these impressions might be incorrect: Firstly, people may have protective or aggressive inhibition responses to faces with infant features, even if the actual age is not the same; secondly, due to the adaptive value of distinguishing friends from enemies, people over-generalize familiar faces, which in turn affects the impression of strangers; thirdly, people tend to identify unhealthy individuals, leading to over-generalization of faces with low healthiness, even if these individuals are actually healthy; fourthly, people's adaptive responses to emotional expressions might also lead to over-generalization of faces with specific emotional expressions [3].

Hester, N., & Hehman, E. conducted research on the impact of dressing on first impressions. Dressing can serve as a signal of an individual's social identity, mental states, social status and aesthetic preferences. It's complexity due to it is a combination where multiple independent elements interacting with the wearer's body, facial features, environmental factors, to produce different perceptual effects. In first impressions, dressing can significantly influence others' preliminary judgments and perceptions of an individual's social categories (such as gender, age, occupation), cognitive states (such as emotions, intentions), social status, and aesthetic taste. For example, while affluent individuals often display their fashion choices at red carpet events and through luxury brands, those with less power rely more on dress as a form of self-expression due to limited resources [4].

2.3. External Factors Like Situation, Cultural Background

Ambady, N., & Rosenthal, R. found that there had no significant difference in predictive accuracy between behaviors that are manipulated in a laboratory setting and those that occur naturally. This suggests that the accuracy of first impressions is not contingent upon the environment in which the behavior takes place [1].

The significant consensus among individuals from different ages and cultural backgrounds when forming first impressions based on facial features. This consensus may be attributed to the evolutionary adaptiveness of making quick judgments from facial cues, the universality of certain facial characteristics, and the shared social and biological significance of these features.

3. Analysis of the Influences and Measures

3.1. False First Impression

Although first impressions play such a crucial role in social relationship, however they do not often seem to be accurate.

The bias caused by first impression often reflect in many aspects, such as overreliance on appearance, quick judgment, stereotypical judgments, emotional influences, trustworthiness judgments, Halo Effect, Self-confirmation bias and so on. Research by Olivola, C. Y., & Todorov, A. found that there are so many factors that can lead to biases in judgments based on first impressions, such as an over-reliance on appearance information, the rapid formation of spontaneous judgments, excessive confidence in one's own judgment abilities, neglect of base rate information, probability matching behavior, and the combined effects of environmental and situational factors can lead to biases in judgments based on first impressions [2].

Another experiment by Kurdi, B., Mann, T. C., & Ferguson, M. J. on people's evaluation on Corey Knowlton's killing an endangered black rhinoceros in Namibia in payment of \$350,000 also illustrates the reasons of the inaccuracy. For instance, people often form first impressions based on preliminary information interpretation, which may lead to extreme negative evaluations of certain behaviors or individuals. In Kurdi's experiment, based on the widespread negative perception of hunting activities,

people would form a negative emotional response towards Knowlton and also form a stereotyped impression of him [6].

Besides, societal attitudes and beliefs can also influence the formation of first impressions, and exposure to only one-sided information without the opportunity to understand the background or context, and the lack of comprehensive or multi-angle information can also lead to biases. The specific manifestations of first impression bias are that they may be quickly and automatically activated based on stereotypes or preconceived notions; besides, when an individual's behavior contradicts societal norms, first impressions may lead to extreme negative evaluations of the individual; moreover, due to previous attitudes and beliefs, first impressions may make individuals resistant to new or contrary information; in addition, first impressions may lead to inconsistencies between explicit and implicit evaluations, with implicit evaluations being more difficult to change.

3.2. Malleability of First Impression

Although first impressions are considered implicit evaluations that are difficult to adjust and change, there is still a possibility to alter them. According to the study by Kurdi, B., Mann, T. C., & Ferguson, M. J., the reasons for this possibility include the following points: First, even extremely negative first impressions can be changed through reinterpretation of previously encountered evidence; second, implicit evaluations are malleable and can be updated through new information and reflection; third, using credible, realistic scenarios that include mixed emotional value information can prompt individuals to reconsider their first impressions; and finally, an individual's cognitive openness and willingness to accept new information are also key factors in adjusting first impressions [6].

3.3. Strategies to Adjust First Impressions' Bias

Regarding how to adjust an individual's first impression, although Olivola, C. Y., & Todorov, A. did not directly provide specific measures in their study, the paper suggested some research directions in the discussion section that can indirectly help understand how to deal with the biases caused by first impressions. Firstly, the paper suggests that future research should identify the specific visual cues people use when making inferences based on appearance, such as face shape, posture and body shape, dressing style, body language and eye contact, vocal features like pitch and speed; secondly, they should determine which visual cues promote accurate social judgments and which may lead to errors; thirdly, they can consider the impact of different contexts or specific features on the use of visual cues and analyze how the judgment target and context affect the way people use visual cues, as well as how these factors regulate the accuracy of judgments [5].

There are also some measures that, although not directly mentioned in the article, can still help address the biases of first impressions, such as raising awareness of the potential biases of first impressions, encouraging the use of evidence-based judgment methods rather than relying solely on rapidly formed first impressions, and obtaining feedback in a timely manner during the judgment and decision-making process and revising previous judgments based on new information.

4. Impact of Social Media and Online Chatting on People's First Impression

4.1. Online Environment Influences the Construction of People's First Impression

In today's internet era, the factors influencing first impressions have become more diverse. For instance, Elena Tsankova's article points out that first impressions, whether online or offline, may be formed around the two universal dimensions of social cognition: warmth and competence. However, the accuracy of first impressions in the online environment may vary due to the selectivity and processing methods of information [7].

In the online environment, targets can control their presentation more effectively. For example, on social media, users can deliberately create a personal image. This means that social media users may carefully select the information they display to others, thereby influencing the formation of others'

first impressions of them. On social media, due to the richness and diversity of information, perceivers may selectively focus on certain information based on their preferences and expectations, which may affect their first impressions of the target [7].

The article emphasizes that the quality and quantity of information in the online environment may affect the formation of first impressions. Information on social media may be carefully planned, while the quality of online communication may be limited by technical issues. For example, during an online interview, online noise and room temperature offline may affect the interviewer's first impression of the candidate [7].

The article discusses the impact of automatic and intentional cognitive engagement on the formation of first impressions, that specific factors in the online environment, such as distracted attention and multitasking, may affect the conscious updating of impressions [7].

The article concludes the potential impact of the online environment on the influence of first impressions that the internet offers methods to connect with a broader audience more swiftly than personal encounters. However, this is also accompanied by a vigilance against "fake news", which may reduce the impact of certain first impressions [7].

4.2. People's Adjustment to the Inconsistency between Online and Offline

Although first impressions are considered implicit evaluations that are difficult to adjust and change, there is still a possibility to alter them. In the research by Olivola, C. Y., & Todorov, A., although the authors did not provide specific measures directly, the article suggests some research directions in the discussion section, which can indirectly help understand how to deal with the biases caused by first impressions. First, the article suggests that future research should identify the specific visual cues people use when making inferences based on appearance; determine which visual cues promote accurate social judgments and which may lead to errors; consider the impact of different contexts or specific features on the use of visual cues; analyze how the target of judgment and the situation affect the way people use visual cues, and how these factors regulate the accuracy of judgments [5].

There are also measures that can help address the biases of first impressions, which are not directly mentioned in the article but are still beneficial, such as raising awareness of the potential biases that first impressions may produce, encouraging the use of evidence-based judgment methods rather than relying solely on quickly formed first impressions, and obtaining feedback in a timely manner during the judgment and decision-making process and revising previous judgments based on new information.

4.3. The Ways People Substitute their First Impression when Facing Contradiction

However, when there is a discrepancy between an individual's behavior online and offline, people often adjust their first impression formation process to adapt to this inconsistency. This phenomenon is known in psychology and communication studies as "Impression Management", where individuals intentionally or unintentionally influence others' perceptions of them by adjusting their behavior. Based on correlative theory, the lack of nonverbal cues may affect the impression formation process. Research indicates that despite the absence of certain nonverbal cues in face-to-face communication, people can still perceive emotions in the online environment, which influences their first impressions of others. Impressions can be formed through virtual encounters, which are highly rich [8].

Ellison, N., Heino, R., & Gibbs, J. point out that in the online environment, due to the lack of nonverbal cues, people pay more attention to small cues, such as spelling errors or the timeliness of information, which play an important role in forming first impressions. For example, the article states that subtle cues, such as spelling errors in the online environment, are important identity clues for computer-mediated communication participants [9].

The article points out that people are motivated to manage others' impressions of them in the online environment, which may be more important due to the permanence and editability of online communication. The article proposes a framework that divides virtual impression management

behaviors into three categories: verbal behavior, nonverbal behavior, and meta behavior. For example, the use of emoticons can increase warmth but may have a negative impact on the impression of competence [9].

The article also discusses the moderating factors that affect the effectiveness of virtual impression management behaviors, including situation-based moderating factors (such as the tone and norms of communication) and individual-based moderating factors (such as gender, cultural background, and personality traits). When people present themselves on social media, they use a variety of strategies to manage their impressions and are influenced by a variety of situational and individual differences. These strategies and regulatory factors work together to form the complex and changeable self-presentation behavior of individuals in the virtual environment [9].

On social media, individuals may shape others' perceptions of them by selectively sharing information and images, even if these are inconsistent with their real-life experiences. When there is an inconsistency between online performance and offline behavior, people adjust their first impressions through various strategies, which may include changing communication methods, adjusting the content of information shared, and leveraging the characteristics of the online environment to optimize the impressions they give to others.

4.4. Interpretation of Inconsistent First Impressions

When the image presented on social media is inconsistent with the image in real life, people adjust their first impressions of the person based on the observed inconsistencies. According to the research by Kailuo Liu, Observers' implicit theories about personal attributes also affect their views on inconsistencies. Some observers may view inconsistencies as a sign of identity flexibility, while others may see it as inauthenticity [10].

However, this study did not find that these traits significantly moderated the effect of inconsistencies on the favorability of impressions. For example, if a book lover who goes to night clubs frequently, observers may form negative impressions based on a greater perceived inauthenticity, but they may also have positive reactions, indicating a greater perceived versatility [10].

The paper also explores how the closeness of relationships affects the response to the inconsistency of personal attributes on social media. Research shows that it may intensify the negative effects of attribute inconsistencies, with observers tending to have stronger negative reactions to the inconsistencies of those they are close to, compared to strangers [10].

5. Conclusion

This study has uncovered significant insights into the formation and accuracy of first impressions, shedding light on the complexities of this psychological phenomenon. Through an in-depth analysis of the literature and empirical evidence, it was found that first impressions, while rapid and influential, are subject to biases and inaccuracies. The influence of personal factors such as appearance and non-verbal cues, as well as external factors like cultural background and situational context, plays a crucial role in shaping these initial judgments. The findings suggest that despite the potential for first impressions to be predictive of social outcomes, they are not infallible and can be influenced by a variety of situational factors, particularly in the controlled environment of online interactions.

The implications of these findings are profound, offering a more nuanced understanding of first impressions and their management. This research fills a gap in the literature by providing a comprehensive analysis of the factors that contribute to the formation of first impressions and by evaluating their accuracy and potential for adjustment. It contributes to the field by offering evidence-based strategies for managing these impressions, which can be particularly beneficial for social interactions and clinical assessments.

Looking ahead, this study paves the way for future research to explore the dynamics of first impressions in the context of the internet and across various backgrounds and cultures. The limitations

of the current study, such as the focus on Western cultural perspectives and the reliance on self-report data, suggest avenues for improvement. Future research should aim to incorporate cross-cultural comparisons and utilize more objective measures to validate the findings. Additionally, the exploration of the neural mechanisms underlying the formation of first impressions could provide a deeper understanding of this cognitive process. By building on the foundation laid by this study, future research can continue to unravel the intricacies of first impressions, offering valuable insights for both theoretical and practical applications.

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