

The Association of Culture and Personality with First Impressions

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Abstract. People form inferences about others' appearances to make social decisions, known as first impressions. The relationship between first impressions, culture, and personality has been extensively studied in social psychology. This includes research on specific cultural groups like Chinese and British perceivers, personality disorders such as autism, and personality traits like agreeableness, but there is no comprehensive review of current research developments. Therefore, this paper aims to review recent studies exploring these relationships both separately and systematically. Regarding cultural influence, studies generally acknowledge culture's role in shaping first impressions, but the samples are not sufficiently diverse. Concerning personality, research has mainly focused on personality disorders and specific traits rather than examining the full spectrum of personality traits and facial or body features. This paper also highlights some limitations of previous studies, including issues related to the generalizability of findings and reliance on categorical data, among others. It also suggests future directions, such as prioritizing solutions for individuals with personality disorders and investigating the role of social media to deepen understanding of these relationships.

Keywords: First Impressions, Culture, Personality, Personality Disorder, Social Psychology

1. Introduction

1.1. First impressions

There is an old saying about “not judging a book by its cover,” but this rarely happens in reality. The process of making inferences about others and making social decisions is involved in all social interactions, which influence social outcomes across various domains such as the military, business, politics, and more. First impressions, which form the initial part of this process, affect social attributions for decisions, and these have been argued to have low accuracy in biasing human choices [1].

First impressions have been studied extensively, and one review paper examined several articles to address the “impression formation problem” and analyzed current progress on investigating the three main sources of variance involved in this issue: the characteristics of the target, the characteristics of the perceiver, and the interaction between the two [2]. However, there is limited research on the relationship between first impressions, culture, and personality.

1.2. Impact of culture on first impressions

First impressions, traditionally seen as a “nature” element that is evolutionarily fixed, are now understood to be strongly influenced by culture. Individuals form different stereotypes of others’ characteristics, which have been proven to vary across cultures [3]. These stereotypes further affect the unique first impressions of others. The experimental studies examining the link between first impressions and culture have mainly used specific groups as samples, such as Chinese and British perceivers, or focused on how cultural influences affect first impressions and lead to stereotypes, which are problematic for daily events such as clinical case presentations.

However, current studies on the relationship lack a comprehensive analysis of diverse cultures, including Latin Americans and Africans, who are not represented in the samples. Additionally, there is no report on the current progress of studying cultural effects on first impressions. Gaining a deeper understanding of how culture influences first impressions could lay the groundwork for future research into the mechanisms of cultural learning related to first impressions.

1.3. Impact of personality on first impressions

Personality is a common topic in social psychology because it is an innate trait that influences nearly every social interaction. As individuals form first impressions of others, they make inferences about others’ personalities based on their judgments, which later influences the way they socialize with others. As interest in studying personality and first impressions grows, investigations on personality disorders are prioritized because the challenges faced by those with such disorders have been noticed. Social psychologists are dedicated to exploring solutions to mitigate their negative emotions induced. Additionally, specific traits in perceivers, like anxiety, have been identified in various papers when being related to first impressions.

However, there is currently no review or model that associates personality with the three separate sources of variance in impression formation, which may provide a more reliable knowledge base in the search for solutions for the issues of people with special personality traits facing difficulties in social groups.

1.4. Current study

This paper aims to analyze previous research to provide a comprehensive review of the relationship between first impressions and two factors, namely culture and personality. It also identifies research gaps in current studies and suggests limitations and future directions to explore these relationships better.

2. Culture and first impressions

2.1. Review

In research on first impressions, recent decades have seen growing attention to the influences of culture. Compared to previous studies that merely considered the innate origin of first impressions, several recent studies have challenged this notion, pointing out that cultural influences are increasingly recognized as playing a key role in shaping first impressions [4,5]. One of the studies proposed a cultural learning account for first impressions, the Trait Inference Mapping (TIM) model, which demonstrates that first impressions are culturally learned via the process of associative

learning [4]. In addition, another study also highlighted the culturally-acquired origin of first impressions rather than fixed and innate [5].

Furthermore, A review paper summarized several articles to conclude that previous studies conducted experiments focusing on White, Asian, and Caucasian faces, for which researchers argued for an overestimation of the accuracy and consistency in first impressions [6]. Besides, one study tested the universality of different dimensions for first impressions between Chinese and British perceivers, both evaluating Asian and Caucasian faces on key impression dimensions [7]. This study focused on the cultural backgrounds of the perceivers rather than the facial characteristics of the targets, and found that strong agreement for dimensions of approachability, youthful-attractiveness, and capability was found between Chinese and British perceivers.

For the relationship between culture and first impressions, some studies suggested a certain extent of consistency for social judgements of several dimensions across different cultures for Asian and Caucasian faces [7]. In contrast, others pointed out variability in social judgments of rituals across various cultures, such as lip plates, dental modifications, and tattoos, since people from different cultural contexts hold different views of the rituals.

Other studies emphasized the problems arising from variation in faces for different cultural backgrounds, specifically in American medicine for clinical case presentations. This study demonstrated that mentioning the race or ethnicity of the patient may block some clinically relevant information of this patient, further reinforce the stereotype of racism, and finally result in premature diagnosis and misrepresentation of illness [8].

In addition, some studies suggested a greater extent of influence of individual differences and local environment of perceivers on first impressions compared to their cultural backgrounds [9], indicating different components and contributing factors of local environment and cultural backgrounds for first impressions.

In conclusion, current progress on the association between culture and first impressions has acknowledged the existence of the cultural impact of different individuals, besides innate and universal biological mechanisms of the formation of first impressions. However, limited research on cultural differences suggests that the variations in culture-related factors are not diverse enough.

2.2. Limitations and future directions

Regarding the characteristics of the targets, black faces are commonly ignored in previous experiments, suggesting lower generalizability of culture-related studies to diverse racial populations. Future experiments can include faces from all ethnicities to control the effects of racism. Same-race effects can also be investigated, that is, whether individuals will view people of their same race more positively.

Besides, since the race of targets, the race of perceivers, and rituals seem to have a certain relationship with first impressions, the existence of a three-way interaction among these three factors can further be tested.

Regarding the key dimensions for first impressions that have been studied before, approachability, youthful attractiveness, and capability were found to be similar across different cultures. However, only three dimensions were considered. Other dimensions may show more variation for targets of different ages and in different cultural contexts. For example, judging a target's dominance can vary significantly between Chinese and British perceivers, with Chinese perceivers possibly viewing maturity as the most important factor. In contrast, British perceivers may focus more on wealth and fortune.

The issue of clinical case presentations still needs to be reconsidered. The key features of faces from different races that contribute to this problem and the underlying mechanisms can be identified, helping to explore potential solutions to reduce racism's impact on medicine.

The different findings for investigations on the local environment and cultural backgrounds suggest different origins and influences on first impressions. Future studies can explore the specific components of the local environment contributing to first impressions, as cultural backgrounds have been claimed not to affect first impressions [9].

3. Personality and first impressions

3.1. Review

Personality is a complex construct that can be classified into numerous categories, such as extraversion and conscientiousness, and its contribution to first impressions has been investigated from different aspects, including the personality of perceivers and targets, and inferences of personality for first impressions.

When considering the three sources of variance, both the personality of perceivers and targets have been taken into account. For example, one study found that there was a strong association between agreeableness and aggression with judgments of others' trustworthiness, providing clear evidence for the relationship between the personality of perceivers and the formation of first impressions [10].

It is interesting to note that among all types of personality, the anxiety level of perceivers appeared to be the category most frequently observed to affect first impressions in previous research. A negative relationship was found between trait and state anxiety and approachableness and trustworthiness ratings, while the relationship was found only for approachableness when considering social anxiety [11]. In addition, another study suggested trait anxiety was related to confidence in judgements of first impressions [10].

Nevertheless, the extent of the effects of the personality of perceivers on first impressions has been questioned, compared to the observable traits of the targets. In American culture, affluence cues influenced first impressions to a greater extent than personality variables of perceivers, such as materialism, self-monitoring, and social identity, suggesting a greater contribution of situational cues than perceivers' personality to first impressions [12].

For research on the personality of targets, most focused on personality disorders, potentially resulting from the issue of poor acceptance of these individuals in society. One study investigating people with borderline personality disorder found that these individuals both formed negative first impressions of others and were perceived negatively by others, which resulted in their challenges in social interactions; a lower comorbidity was found in the social anxiety disorder group, indicating a similar circumstance for several personality disorders [13]. Autistic patients have also been observed to receive poorer first impressions, especially in the case of male autistic patients from other males. Therefore, autistic individuals attempted to engage in camouflaging behaviors to better integrate into social groups. However, this attempt seemed to be ineffective in altering first impressions; on the contrary, it increased the pressure on autistic individuals [14]. Both studies noticed the challenges of negative first impressions faced by individuals with personality disorders and suggested future directions to mitigate this issue.

As for inferences of the personality for first impressions, the contributing features have been studied. One study demonstrated that although facial features significantly influenced first impressions, low reliability was found for predicting personality traits from facial features,

suggesting the existence of another evaluation factor involved in the formation of first impressions [15]. Another study filled this gap to show the effects of body shapes, which revealed high accuracy of extraversion and conscientiousness predicted from corresponding body shapes [16]. These studies proved that inferences of first impressions not only rely on facial features, but also on body shapes.

To sum up, personality contributes to first impressions in several components, both in the sources of variance and in their inferences when forming first impressions. Previous studies have taken into account all these aspects, but not in a sufficiently comprehensive or nuanced manner.

3.2. Limitations and future directions

The small effect of the personality of perceivers on first impressions was solely found in one study, which focused on American culture and was limited to affluence cues. Whether other situational cues that are not limited to the traits of materialism have such strong effects on first impressions has not been investigated. Furthermore, this finding may have low generalizability since Americans may overall share higher materialism than people from other cultural backgrounds. More diverse samples should be considered in future research to reinvestigate the extent of influence of perceivers' personality on first impressions.

Previous studies investigating individuals with personality disorders merely focused on the case of borderline personality disorder, social anxiety disorder, and autism. Other personality disorders should be taken into account since they may encounter similar circumstances to receive negative first impressions and struggle in social interactions. Furthermore, looking for potential solutions to mitigate the negative first impressions for people with personality disorders should be prioritized, to reduce the stereotypes in society and reduce negative emotions.

In addition to disorders, the common types of personality when referring to the target have not been investigated, such as extraversion and conscientiousness, which may provide a broader range of understanding of the relationship between the personality of the target and first impressions.

For the special case of anxiety, previous research has shown a strong relationship with first impressions. The next step can be a detailed investigation into the underlying mechanisms for anxiety, that is, whether individuals with a high level of anxiety have a different comprehension of others' behaviors, or their different level of emotional arousal contributes to variation in first impressions with other personality types.

4. Conclusions

This review paper examines the current progress in studying the relationship between first impressions and both culture and personality separately. Regarding culture, most research has focused on comparing specific cultures, but the scope is not diverse enough. Concerning personality, studies have mainly concentrated on particular traits and personality disorders rather than the full spectrum of personality traits.

For both elements, most researchers conducted experiments using specific cases as the starting point, which may limit the broader applicability of the findings. To be more specific, culture-related studies used samples from limited countries, such as China and the US, while personality-related studies used samples with limited personality disorders, such as borderline personality disorder and autism.

For future detailed investigations, researchers should consider a more refined classification of these two concepts and develop a model based on continuous data, utilizing particular facial or body features and new techniques such as cross-classified multilevel models and representational

similarity analysis to achieve a comprehensive understanding of their relationship with first impressions.

Regarding the complex formation of first impressions, the three sources of variance should be examined for their separate links to culture and personality. Because different factors contribute uniquely, the influences of culture and personality on first impressions may vary, which can lead to different mechanisms behind potential negative effects of first impressions and, consequently, different solutions. For example, perceivers' cultural backgrounds influence their stereotypes and impressions of the same group; therefore, the way to reduce stereotypes is to provide more accurate education to help individuals recognize the issue and change their limited perspectives towards specific groups.

Considering suggestions for future directions related to this topic, implications should prioritize solutions to minimize the negative consequences of first impression bias. Culture-related stereotypes and stigma towards specific personality traits and personality disorders are currently the most widespread issues. Once the relationships are found, the underlying mechanisms could be further explored to search for targeted research solutions.

Moreover, with the development of technology, social media has become a major part of social interactions, alongside offline interactions, and it also plays a role in forming first impressions. Researchers should consider social media when studying how first impressions relate to culture and personality, such as whether the use of filters and artificial intelligence has strengthened or weakened stereotypes and whether it has altered the ways people from different cultures interpret others' personalities based on facial and body features.

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