

A Review on the Implicit Attitude from the Perspective of Gender Stereotypes, Addictive Behaviors, and Public Satisfaction with Medical Services

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Abstract. Implicit attitude is an academic conception always appears in cognitive psychology and sociology psychology. Implicit attitude can be defined as "retrospectively undetected (or misidentified) remnants of prior experience that mediate emotion, cognition, or behaviour towards a social object". These perspectives come from Anthony Greenwald and Mahzarin Banaji. Nowadays, there is a prevalent phenomenon that individuals always have concepts of implicit stereotype. For instance, an age stereotype, racial discrimination, gender bias and so on. From the perspective of research method, researchers are able to use Implicit Associations Test to demonstrate that experimental participants show a response bias in support of a stereotypical association. Overall, researchers can use various methods of implicit attitude to test stereotype in daily life, and suggest some ideas to change their concepts. Individuals with higher social trust evaluated medical services more positively. Implicit attitudes also play a role in reinforcing gender stereotypes, as seen in research on female college students in China who associate female sexuality with passivity and male sexuality with dominance. Additionally, implicit attitudes affect addictive behaviors, with studies highlighting the disparities in the implicit and explicit attitudes regarding smoking between non-smokers and smokers. Overall, understand and mitigation of implicit biases is crucial for promoting fairness and inclusivity in various sectors of society.

Keywords: Implicit attitude, gender stereotypes, addictive behaviors, public satisfaction with medical services.

1. Introduction

People's implicit attitudes can affect their decisions and behaviour towards members of various social groupings. The sociology psychologists conducted a lot of experiments related to the relationship between sexism and happiness, psychological resilience, gratitude and so on. Therefore, it also helps people to pay more attention on avoiding discrimination in daily life. There is a widely observed phenomenon that implicit attitude is able to cause stereotype unconsciously, and some of the individuals' negative considerations are internalized. Removing these biases is a challenge but research have advanced methods these days. For instance, Implicit attitude test can be one of the most effective ways. To differentiate between explicit and implicit attitude, psychologists employ the implicit association test (IAT) and self-report evaluation. According to prior study, there is a maximum difference of 0.9329 between the explicit and implicit attitude [1].

Another method can be word embedding. This can be useful in tasks such as sentiment analysis, where the emotional tone of a text can be determined by analyzing the words used. This research found that negative emotions appear center on notions of dejection and ill health for poor negative feeling s for the Black and Hispanic [2]. Implicit attitude also affects discrimination (e.g. sexism). Researchers have found that such way of thinking and feeling can affect other aspects, include public health services, gender stereotype.

During the COVID-19 pandemic, people's implicit attitudes toward the public health system may have changed. Implicit attitude influences public satisfaction related to medical and health services (MHS).

Implicit attitude significantly affects public satisfaction with MHS. The higher the Belief of a Just World (It is an important concept in personality psychology and social psychology, which is the belief

that the world is just, that in a just world, people get what they deserve and they get what they deserve.), the more students believe that teachers, classmates and parents treat them fairly, and the more they believe that test scores are fair, and thus give the school a higher evaluation [3]. The consequence using data from a national sample survey of 3,680 Chinese respondents is found, specifically, given other conditions unchanged, people with high social trust have higher satisfaction with MHS than those with low social trust; high sense of social justice is related to higher satisfaction with MHS than those with low sense of social justice. For example, the higher the public's sense of community trust, the lower their perception of crime risk, and the higher their evaluation of police services [3].

The satisfaction with MHS, is influenced by more than just a single factor. It is shaped by the combined effects of both macro and micro-level interactions. Specifically, the interaction between institutional performance and implicit attitudes plays a significant role in determining overall public satisfaction with MHS and other public services. [3]. The sample was combined with Guangdong macro statistical Yearbook and 3150 micro surveys [3]. The implicit attitude makes people may show different perceptual results when facing the same objective existence. In terms of MHS, even if individuals live in areas with the same medical conditions, the higher the social trust and sense of social justice, the more likely they are to believe that the government and medical institutions pay attention to the public's medical and health needs, and the more likely they are to believe that there is an equitable and inclusive distribution of medical resources., and the higher the evaluation of MHS. On the contrary, the lower the sense of social trust and social justice, the more likely they are to have dissatisfaction with MHS. After that, the authors consider the interaction effect of institutional performance and implicit attitude is helpful to improve public satisfaction of MHS.

Overall, it shows that implicit attitude (social trust and social justice perception) has significant influence on public satisfaction of MHS. The interaction has a positive impact on the relationship between institutional performance and implicit attitude and public satisfaction with MHS.

2. The Implicit Stereotypical Attitude of Female College Students

When people make some decisions, it is dramatically prevalent for them influenced by implicit attitude. Implicit attitude not only appeared in MHS, but also can impact women's purposes on a conversation about sex. There is a study about the status and suggestions of sex education for female college students based on implicit attitudes. The implicit attitude of 355 female college students was measured via IAT. Research shows that female college students associate female sexuality with passivity, devotion, subservience, procreation and negative emotions, and male sexuality with initiative, dominance, ascendancy, entertainment and positive emotions. Female college students' implicit attitude is a double standard implicit attitude. This is consistent with previous research suggesting that traditional Chinese sexual mores associate female sexuality with fertility. The implicit attitude of double standard represses women's sex and praises men's sex, which has a negative implication on women's sexual mental health. The two control theories of sex explain sexual stereotypes as follows: in patriarchal society and culture, men control and suppress women's sexuality; in the female control theory, women use sex as a scarce resource to adjust the control of male society, and women acquire rights from the control of scarce sexual resources, which will also continue such attitudes and behaviors [4].

The implicit stereotypical attitude of female college students in Chinese culture is rooted in national culture and collectivism culture, and has cultural adaptability. In sex education, female college students should be guided to treat the implicit stereotypical attitude in multiple ways. Overall, it is obvious sometimes implicit attitude will cause people have gender stereotype in daily life. However, the sexual revolution of modern society has encouraged women's sexual freedom. It is difficult for female college students should not only adapt to traditional culture, but also avoid sex and conform to the trend of modern revolution, which results in the contradictory explicit attitude and sexual behavior of female college students [4]. In addition, Chen's study proved that implicit attitudes

towards women exist in different environments such as family, work and education [5]. Shen's study proved that implicit attitudes can be changed. The results provide a basis for the correction of implicit attitudes [6].

3. Impact of Implicit Attitude on People' Consideration of Smoking.

Perhaps addictive behaviours are related to implicit attitude. More specifically can be explicit attitude towards smoking [2]. This research recruited 48 healthy volunteers who are both graduate and undergraduate students aged 20–30 years. Those who smoked at least once a week were classified as current smokers, whereas people who had never smoked or had smoked fewer than ten cigarettes in their lifetime were classified as nonsmokers. Recent quitting smokers were not included in the analysis.

The researcher uses the Kano Test for Social Nicotine Dependence (KTSND) to measure explicit attitude for smoking. This test includes 10 questions related to smoking. The range of score is from 0 to 10. Higher scores indicate greater acceptance of smoking. This author choose Single Category implicit association test (SC-IAT) to test implicit attitude too which is similar as last review study. It included eight positive words, eight negative words, and eight smoking images [2].

Four blocks comprise the SC-IAT. In blocks 1 and 2, smoking images were paired with positive words and labeled "positive" and "smoking" in the top left, and "negative" in the top right. In blocks 3 and 4, smoking images were paired with negative words and labeled "negative" and "smoking" in the top right, and "positive" in the top left. Interval between trials is 0.5 seconds. Each participant had a different order for the performance criteria. [2].

For the D-score calculation of the SC-IAT researchers firstly computed individual pooled standard deviations (SD) for blocks 1 & 3 and blocks 2 & 4 after excluding invalid result. Second, the calculations yielded the following two differences: 1) mean RT in Block 3 – mean RT in Block 1 and 2) mean RT in Block 4 – mean RT in Block 2. Next, the matching pooled SD, which was determined in step 2, was divided by each difference value. To get the person's SC-IAT D score, the study finally computed the mean of the two outcomes from step 4. For the right trials only, this computation was done. Two hours before to the participation, smokers were instructed to abstain from smoking in order to prevent a significant variation in scale responses caused by fluctuations in nicotine cravings. Following the acquisition of informed consent, a questionnaire was given to each participant to gather basic data, including age, sex, and the presence of smokers nearby [2].

They also answered the questionnaire which assessed the severity of nicotine dependence and about smoking habits. With sufficient validity and reliability (Cronbach's $\alpha = 0.70$), the FTND is a commonly used tool to evaluate nicotine dependency [7]. Next, all subjects completed the SC-IAT. Practice trials were also provided with no images. KTSND was completed lastly.

Nonsmokers showed a higher drift rate in the condition where smoking-related terms were used negatively. Nonsmokers replied more readily and cautiously in the negative condition. On the other hand, smokers' drift rates did not differ significantly between the settings.

According to these findings, there were variations in the pace at which data accumulated under the positive and negative situations, which contributed to the implicit attitude disparities between smokers and nonsmokers. A questionnaire survey may not be able to accurately gauge the genuine sentiments of nonsmokers, as evidenced by the gap between implicit and explicit attitudes towards smoking. Furthermore, the results of the drift-diffusion model (DDM) clarified the implicit attitude difference between smokers and non-smokers; this knowledge may also serve as a foundation for therapy and provide light on the mechanisms behind addictive behaviours. Further research is necessary to determine whether cultural variations have an impact on these results [2]. In addition to the above studies, other scholars have demonstrated that the implicit attitudes of smokers or drug users are influenced by different factors in the environment as well [8, 9]. Furthermore, some researchers have also studied the implicit attitudes of people who tend to be addicted to online games

[10]. To sum up, the implicit attitudes of addicts show certain features and can be changed through intervention.

4. Conclusion

In summary, implicit attitudes have a influence on human behavior, such as gender stereotypes, addictive habits, and public satisfaction with medical services. Research has indicated the influence of implicit prejudices on the way people perceive justice, social trust, and contentment—particularly in healthcare environments. Implicit views also reinforce preconceptions in other circumstances, such as gender and sexuality, which affect mental health and ability to make decisions. The difference between implicit and explicit attitudes is also revealed by research on smoking behavior, especially when it comes to smokers and non-smokers. These results point to the importance of unconscious biases in shaping society norms and emphasize the need for more culturally aware studies and interventions.

After that this study offers some suggestions that individuals' implicit biases should be focused too. To improve the way of education, to help them reduce stereotype in daily life. For instance, for what this study mentioned about female, teachers in the classes can spread gender equity continuously. Educators can implement several strategies. First, educators should encourage gender-neutral language and steer clear of material that reinforces traditional gender norms. Additionally, they can inspire kids to engage in a variety of fields, especially those where prejudices could discourage female participation, like STEM. Training on identifying and resolving personal biases should be provided to educators. Additionally, schools might present successful women and men in a variety of industries as role models.

In order to shed light on the origins of stereotypes, future study could look at how early experiences develop implicit gender biases. The way these biases change over time could be monitored by longitudinal research. Examining the function of the media is another interesting avenue to pursue. Furthermore, especially in practical contexts, researchers should concentrate on interventions aimed at altering implicit attitudes.

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