The Effects of Sexual Orientation in the Implicit Sexual Double Standards

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Abstract. As a sexual attitude in this paper, Sexual Double Standard (SDS) refers to gender differences in permissible sexual behavior and is used to refer specifically to stricter standards for women. Specifically, it can be divided into different degrees of permission for certain sexual behaviors between men and women, and differences in evaluation between men and women for the same sexual behaviors. Based on the literature review, this study proposes a hypothesis about gender orientation's effect on implicit SDS and carries out the IAT test (Implicit Association Test) of Implicit SDS. The result show that straight people do have implicit SDS for homosexual people, and gay people have more negative SDS than lesbian people. The significance of this work is to carry out research on minority groups under the SDS, because previous research rarely investigates homosexual groups. We expected that the existing research results can be used to solve the problem of gender inequality in society and eliminate outdated gender discrimination and discrimination against the LGBT community.

Keywords: Implicit SDS, heterosexuals, gender orientation

1.   Introduction

Gender is a popular topic that has played an important role in psychology as it has been studied in a wide range of fields, including the recent rise of women's rights and gay rights advocates. Studies on gender differences in psychology have found that there are differences between men and women in their sexual attitudes and behaviors [1]. One of the most striking phenomena is that the number of sexual partners reported by men is generally higher than that of women. Logically this do not make perfect sense - every healthy relationship needs a man and a woman, so men and women should report the same number of sexual partners. This leads to another explanation, the Sexual double standard (SDS).

Ehrmann defined SDS as a code of conduct for one gender and another for the other and used this term to describe situations where there were more negative attitudes towards women's sexuality [2]. At the same time, SDS is a gender difference in permissible sexual attitudes and specifically refers to situations where women are subjected to stricter standards. Western researchers believe that SDS has always existed in society, but people are rarely aware that their implicit SDS affects their behavior and attitudes. Society rewards men more for engaging in the same sexual behavior between the sexes and devalues women.

According to biosocial theory, the basic purpose of all behaviors is successful reproduction and the transmission of genes to offspring [3]. The biological differences between men and women and the

different situations they faced during evolution have led to a more positive response to male sexuality and a more restrictive SDS for women.

In contrast to the emphasis on evolution and reproduction in biosocial theory. The social gender theory fully reveals that the biological gender difference between men and women does not directly lead to the social gender difference, but the interaction of the environment, culture, education, and other factors formed the traditional gender role system of male and female dichotomy，so called gender roles are the total of expected behaviors attached to the different social status of men and women [4]. Under the requirements and norms of social roles, the public has different views and attitudes towards sexual behavior between men and women, and these attitudes form SDS.

There have been many studies to prove the existence of SDS because SDS is difficult to measure and quantify into reliable data. For example, participants may react in a socially desirable way [5]. In many experiments, participants were asked to explicitly evaluate the appropriateness of certain sexual behaviors in men, and immediately to evaluate the same behaviors in women. This comparison gives them a vague idea that the experiment is about gender and highlights the importance of equality. The participants will try to answer in an equal and standard manner.

The study of SDS is not limited to whether SDS exists. Most of the experiments did not break down the subjects' sex or race, which are variables that could have affected the results. Considering the recent rise of feminism and gay rights marches, this study examined whether implicit SDS, the correlation between participant gender and sexual orientation, and SDS will be discussed respectively.

1.1. Hypothesis

The main effect of different gender orientations is that heterosexuals had a more negative implicit SDS score for gay than for lesbians. The main effect of different participant gender is that heterosexual men had more negative implicit SDS for gay men and lesbians than heterosexual women. The interaction hypothesis is that heterosexuals had a more negative implicit SDS score for gay than for lesbians, and the implicit SDS score will be more pronounced in heterosexual males compared to heterosexual women.

2. Method

2.1. Participant

In this study, we recruited 400 males (M=19.13, SD = 1.06) and 400 female undergraduates (M=19.08, SD =1.44) with an average age of about 19 years. Their Ethnicity is white, and they grew up in cities. All participants were recruited from first-year psychology courses at the University of California, Santa Barbara. By contacting the psychology professor, the students volunteered to participate in the study, and each received a $5 Amazon Gift Card as compensation. The researchers will obtain IRB approval from UCSB before the experiment begins.

2.2. Material

Implicit Association Test (IAT) is a new research focus in the field of social cognition. It is an automatic process that takes place without realizing it. Because of its unconscious, automated nature, it is difficult to measure directly in the traditional, self-stated way, and can only be measured indirectly [6].

Measure the closeness of the automated relationship between target words and attribute words through a computer classification task. For example, A target word is presented quickly, and the

subject is asked to identify and categorize as soon as possible and press the "A" or "L" key to respond, and the response time is automatically recorded.

IAT is an indirect measurement of the unconscious and automatic implicit social cognition of individuals through the evaluation of the automatic connection strength between target categories and Attribute categories. IAT assumes that when the two concepts (target word and attribute word) in memory are similar or have some connection, the subjects' response will be faster if they use the same response key to respond to these two concepts, but when the two concepts were different or unrelated, the subjects responded more slowly to the same bond. The time difference between the two conditions is an indicator of implicit attitude [7].

The difference between the average response time of incompatible tasks and the response time of compatible tasks is called the IAT effect. It indicates the direction and relative strength of the connection between target words and attributes words. If the IAT effect is greater than 0, the previous hypothesis is true; The larger the value of IAT, the greater the difference. If there is no significant difference between the IAT effect and 0, it indicates that there is no expected connection and participants have no obvious preference.

The IAT is scored by calculating the D score by calculating the difference between the mean response times of incompatible and compatible tasks and dividing it by the standard deviation of the response times of all attempts on both tasks [8]. The use of a D score can significantly decrease the effect of reaction speed and previous test experience on the IAT test.

2.3. Design

The proposed study is a multifactorial mixed design with 2 independent variables: participant gender and sexual orientation. It is a 2 Participant gender (male vs. female) * 2 Target sexual orientation (lesbian/gay) Mixed-subjects design ANOVA. The dependent variable is the D score measured categorically with the computer.

2.4. Procedure

IAT is carried out on the computer and the program uses the American Inquisite professional psychological software IAT software. In the IAT experiment, the visualized stimuli will appear in the center of the screen where category labels are presented on the upper left and upper right of the screen, respectively. The test is divided into five steps.

The first block is associated with attribute discrimination. Target Categories (Sexual stimuli vs. neutral Stimuli) will appear on the top right and left. The "Sexual stimuli" will be a gay couple or a lesbian couple who have photos of sexual activity. Neutral stimuli are images of them spending time together without physical interaction, such as standing together or riding a bike together. Press the "A" key on the keyboard for the left and the "L" key for the right.

The second block, Initial Target-Concept Discrimination, is like the first block, but attribute Categories (Positive vs. Negative) are displayed on the left and right of the screen. The participant will classify attribute categories. Similarly, press the "A" key on the keyboard for those on the left and the "L" key for those on the right.

In the third block, participants will experience an initial combined task that links the "sexual" and "positive word" on the left together, and the "neutral" stimuli with "negative" words on the right. The fourth block is a repetition of the first block, except that the "sexual" and "neutral" stimuli swap the left and right positions, preventing the influence of the different positions on the outcome. The fifth block, which is like the third block, will place the "sexual" and "negative" words on the left, and the "neutral" and "positive" words on the right.

The reaction time of each of the above five blocks will be recorded automatically by the computer. According to the scoring method proposed by Greenwald, those lower than 300ms will be recorded as 300ms, and those greater than 3000ms will be counted as 3000ms, as the distractions of participants in the IAT test will be excluded. Then, according to the algorithm of D Score, implicit SDS of heterosexual men and women for different gender orientations were compared (Greenwald 1998).

2.5. Results

Regardless of gender, participants' reaction time was significantly different in the IAT experiment, indicating that implicit sexual double standard exists. Among them, heterosexual men's D score for lesbians was 0.19. Higher than the D score of gay; The D score of heterosexual women for lesbian and gay was 0.20 and 0.12 respectively. By comparing the sexual orientation column, we can find that D lesbian score is higher than D gay score. This indicates that participants have a stronger implicit preference for lesbian sexual images [9]. The main effect of sexual orientation was $F(1,144) = 6.48$, $P = 0.015$; For the main effect of participant gender ($F[1,144] = 5.58$, P-value equals to 0.013. Finally, For the interaction effect, the $F[1,144] = 6.01$, the P-value equals to 0.012. The significant level is 0.05.

3. Conclusion

For the sexual orientation, the P-value was calculated to be 0.015, much less than 0.05 of significant level, so reject the null hypothesis(H1). The results show that straight people do have implicit SDS for gay people, and gay people have more negative SDS than lesbian people.

The P-value of participant gender is 0.013, much less than significant 0.05. Therefore, there was a significant effect of participant gender on IAT performance. Compared with women, straight men overall had more negative implicit SDS scores for people in same-sex groups.

3.1. Limitations and Future Directions

Due to limited time, financial resources, and manpower, only college students can be investigated. Our sample does not represent all young people in the United States, as participants are selected from UCSB, without significant representativeness. In addition, as a group with a higher education level in society, college students may not represent implicit SDS existing in the whole society. At the same time, in addition to the influence of race and region, other factors can interfere with the results of experiments, such as religion and class. Therefore, future studies can focus on the influence of these factors on Implicit SDS.

In addition to that, IAT itself may also have shortcomings. For example, due to the use of reaction time as an indicator, the timing is accurate to milliseconds, and the measurement is susceptible to the impact of the measurement situation and emotion. In this experiment, there may also be negative SDS results for both gays and lesbians, which makes it difficult to compare the results. Therefore, a new idea of measuring implicit preference can be developed in future experiments according to the mechanism of IAT.

3.2. Implication

The results of the current study help to add to the literature on SDS and have important implications for researchers and educators, because SDS is a new concept, there is a lot of unexplored territories. For researchers, the IAT is an emerging tool that can implicitly measure a person's preferences without even realizing it. There are loopholes and shortcomings. Therefore, we hope that more studies can explore the development and extension of IAT in other fields in the future.

In addition, educators can use current research findings to address gender inequality in society, as well as to eliminate outdated sexism and discrimination against the LGBT community. The rise of feminism has awakened women's pursuit of gender equality. There have also been more marches about LGBT groups. If entrenched discrimination is not addressed and eliminated, it causes harm and confusion to society, so hopefully, this experiment with Implicit SDS will wake people up and make individuals aware of these underlying biases.

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