# How hot drinks effect peoples feelings

Food & Diet



The aim of the study was to investigate the influence of the temperature of a held drink on the appearance of either positive or negative feelings towards other people. The results obtained in the replication of the study are consistent with the findings of the original experiment conducted by Williams and Bargh (2008). In this experiment, 20 people were divided into two groups with two temperature priming conditions. Both groups were asked to read about a fictional character (Scarlett O'Hara) and then to do the questionnaire in which they were supposed to rate how positive or negative they found the described person after having been tricked into holding a drink. Group 1 was given a warm drink (a coffee) whilst Group 2 was given a cold one (a Coca-Cola can). As expected, the group presented with a hot drink rated the character higher compared to the second group. Consequently, the experiment proved that high temperature promote appearance of positive feelings towards other people. The participants were randomly chosen students of the high school which I attend where the study was conducted.

"Warmth is the most powerful personality trait in social judgment" as states Williams and Bargh (2008). According to them "attachment theorists have stressed the importance of warm physical contact with caregivers during infancy for healthy relationships in adulthood."

This experiment was inspired by the original study conducted by Williams and Bargh (2008). Its aim is to verify whether experiences of physical warmth or coldness would promote feelings of interpersonal warmth or coldness, without the consciousness of the person. The issue of manipulation has become an urgent topic recently due to its commonness and overuse in

the labour market. Therefore, investigation of phenomena triggering judgments of and behaviour toward other people without one being aware of this influence is undoubtedly worth conducting.

In the original publication of the authors of this experiment the description of the whole procedure has been outlined. Participants were divided into two groups. In the first group participants were asked by a confederate to hold a cup of hot coffee when going to the laboratory whilst in the second they were asked to hold a cup of iced coffee. The aim of the experiment was disguised so that holding either hot or cold object did not impact the results. After having recorded information which was the fake reason for holding a cup of coffee it was returned to the confederate. The subject of manipulation was the temperature of the coffee cup, either hot or iced. When arrived to the laboratory participants were received a questionnaire in which a personality was outlined. After reading the description, they were asked to rate a target person on ten personality traits. The scale used was bipolar (a trait and its opposite). Half of the personality traits were semantically associated with the warm-cold dimension, and half were not.

This study is a replication of the study conducted by Williams and Bargh (2008) and the aim is to verify whether the temperature of the drink can affect feelings towards other people.

#### **METHOD**

## **Design**

This type of design is called independent measures method. The application of this type of design was based on the fact that the experiment is valid https://assignbuster.com/how-hot-drinks-effect-peoples-feelings/

exclusively if not repeated since participants cannot know the principle of the study. Regarding ethical issues, all participants were given a consent (Appendix 1) in which the participants were informed about the ability to withdraw in each moment.

The temperature of the drink was the independent variable (hot or cold), whilst the attitude towards the fictional character recorded on the 6-point-scale was the dependent variable.

## **Participants**

In the experiment 20 polish high school students were recruited, both males and females (1: 1 ratio), with an average age of 18. 5 years. The participant were randomly assembled, divided into two groups and thereafter assigned to one of two temperature priming conditions.

### **Materials**

Consents (Appendix 1)

Questionnaires (Appendix 2)

Coca-cola can

Cup of hot coffee

## **Procedure**

Both groups were asked to read about a fictional character (Appendix 3) and then to do the questionnaire (Appendix 2) in which they were supposed to rate how positive or negative they found the described person on a 6-point-scale. The questionnaire also included a control question. Before it happened

both groups were tricked into holding a drink while they were being taken from a room where they were obtained to the room where they got the questionnaires to fill. Group 1 was given a warm drink (a coffee) whilst Group 2 was given a cold one (a Coca-Cola can). The trick was planned out in details. Firstly, the participants were informed about the course of the experiment and ability to withdraw in any moment. Subsequently one by one were asked to leave the room with the experimenter and walk a while towards another room where the next stage of the investigation was effectuated.

#### **RESULTS**

The values of the mean and standard deviation calculated from the results recorded in both groups (Appendix 4) are shown in the Table 1 below.

Table 1 – Basic statistical values calculated from the results recorder in two groups.

Type of drink

Coca-Cola

Coffee

Mean (correct to 3 significant figures)

3.50

4. 15

Standard deviation (correct to 3 significant figures)

0.471

0.580

The Graph 1 showing mean values of ratings with error bars indicating standard deviation is given below.

Graph 1 - Average rating in both groups with standard deviation indicated

As can be seen in the Table 1 and Graph 1 the group which was given a cup of coffee rated the person on the average points of 3. 50 (SD = 0.47) and group given a can of Coca-Cola rated the person on the average points of 4. 15 (SD = 0.58).

Mean as central tendency was used because this measure of average value is most appropriate regarding interval data which is the case. Calculation of Standard Deviation show the spread of values around the mean which is shown in the graph above. Analysing the graph it can be seen that the SD value is not significant which means that the values within one data set are rather similar.

#### DISCUSSION

The results obtained in my investigation confirm the findings of the original study. Therefore, it can be concluded that the procedure itself can be considered as reliable. Nevertheless, some aspects might be improved. In order to increase the validity and reduce the recognition of the trick another person could be involved. The task of the assistant would be to ask a participant to hold the drink pretending a neutral person before reading the

story by a person conducting an experiment. While asking people to take part in the experiment I had an impression that the image of myself holding can of Coca-Cola seems unnatural since I am known for performing a healthy lifestyle. Hence, aiming to improve the method a person conducting the experiment should be anonymous to the participants so that any unnatural behaviour could be recorded.

The study proved that substantially there is an influence of high temperature on appearance of positive feelings towards other people. On balance, it can explain why the custom of serving a cup of coffee or tea to a guest has taken root in the culture instead of offering a glass of Coca-Cola. Furthermore, this conclusion can be extended to comment the optimistic attitude towards life of people living in the Mediterranean region which is famous for the high temperatures and hence pleasant climate. According to this assumption people who live in the South of France versus Quebec they could be considered as more trusting and warmer. Starting a romantic relationship in January in definition should result unsuccessful. Nevertheless, comparing level of personal warmth of Spanish and Russian people undoubtedly confirms this theory.

Regarding the topic perceiving people as warm versus cold must be defined. Bargh and Williams (2008) state "according to recent theory and research in social cognition, interpersonal warmth refers to a constellation of traits related to perceived favourability of the other person's intentions toward us, including friendliness, helpfulness, and trustworthiness. The warm-cold assessment is the social perceiver's immediate first-pass as to whether the target individual or social group can be trusted as a friend. This assessment https://assignbuster.com/how-hot-drinks-effect-peoples-feelings/

appears to be an automatic and obligatory evaluation that does not require the perceiver's intent to make it."

Bargh (2008) also states: "We easily talk about people being a warm person, a cold person. Why do we use these words? Why are they so pervasive? Warmth and coldness are really built on physical ideas of warmth and cold and they can trigger emotions [...] We're showing that very mundane, simple acts of touching something warm or cold produces these kinds of simple effects. It's like a gateway to other people."

The biological explanation of this phenomenon can be the presence of a little region of the brain called insular cortex. As can be found in an article published in an online journal PBS Newshour " the insula, a prune-sized section of the brain tucked between the temporal lobe and the parietal cortex, processes both physical temperature and interpersonal warmth. Feelings of disgust and cigarette cravings are also believed to be linked to this brain region." (Marder, 2008).

"Ever since Asch's (Asch 1946, as cited in Williams & Bargh, 2008) original demonstration of the transformational power of warm and cold as personality traits in first impressions of individuals, the concept of psychological warmth has been prominently featured in research on social perception and interpersonal liking (Cuddy, Fiske & Glick, 2008; Kelley & Pers, 1950; Nisbett, Wilson & Pers, 1977 as cited in Williams & Bargh, 2008). The warm-cold dimension has emerged as one of two main components of the first impressions we quickly form about other people. Together they account for a large proportion of the variance in people's evaluations of

social behaviours" (Wojciszke et al., 1998 as cited in Williams & Bargh, 2008).

APPENDIX 1

#### CONSENT

Social Psychology Experiment

In this study you will complete a questionnaire which involves rating a fictional character. There are no risks involved, and you may stop participating at any time without penalty. Your data remain anonymous and confidential. When the tasks are done, you will receive a "debrief form" which will describe the reasons of collecting data on these tasks. The experiment takes 5 minutes.

If you agree to participate in this experiment, please sign below:

Name

Signature

Date

APPENDIX 2

## **QUESTIONNAIRE**

In the following questions mark your answer on a scale of one to six where:

- 1 Very negative
- 6 Very positive

Mark your sex: F M

How do you feel right now?

How do you feel towards Scarlett - a character described in the story?

Thank you for taking part in the experiment. The results will be published after having the data processed.

APPENDIX 3

## **STORY**

Przed wojnä... z Póå, nocä... Scarlett byå, a dziecinnä..., beztroskä... i sÅ, odkÄ... kokietkÄ..., podbijajÄ...cÄ... serca wielu męŽczyzn. Jednak wojna zmieniÅ, a jÄ... nie do poznania. StaÅ, a siÄ™ dojrzaÅ, Ä... i upartÄ... kobietÄ..., niezważajÄ...cÄ... na opiniÄ™ spoÅ, eczeÅ" stwa. Coraz wyraźniej ukazywaÅ, siÄ™ w niej typowo irlandzki temperament, który odziedziczyÅ, a po ojcu. Ludzie z Atlanty (miasta, w którym mieszkaÅ, a po opuszczeniu rodzinnego domu – Tary) z powodu jej zachowania stopniowo tracili do niej szacunek, aå¼ w koå,, cu odrzucili jä... zupeå, nie ze swojego grona. Nie byÅ, a mile widziana w domach, a zaproszenie jej na przyjÄ™cie byÅ, o wrÄ™cz skandalem. Mimo wszystko Scarlett byÅ, a uważana za kobietÄ™ o ogromnej sile psychicznej. Najbardziej podziwiali w niej to Melania i Ashley Wilkesowie – jej ostatni i prawdziwi przyjaciele. WewnÄ...trz jednak Scarlett byÅ, a osobÄ... sÅ, abÄ... i zagubionÄ..., która przeżyÅ, a zbyt wiele, aby kiedykolwiek zaznać prawdziwego spokoju. PragnÄ™Å, a znów wrócić do dzieciÅ" stwa i wypÅ, akać wszystkie swoje żale w faÅ, dy sukni matki. Swoje resztki siÅ, Scarlett opieraÅ, a na ciÄ...gle

powtarzanym przez niÄ... zaklÄ™ciu: "Nie chcÄ™ o tym teraz myÅ>leć. PomyÅ>lÄ™ o tym jutro".

(Before the war with the North Scarlett was a child, carefree and sweet coquette, conquering the hearts of many men. But the war changed them beyond recognition. She has become a mature and a stubborn woman, regardless on public opinion. The traditional Irish temperament inherited from her father was being increasingly exposed. People from Atlanta (the city where she lived after leaving the family home - Tara) because of her behaviour gradually lost respect towards her and finally excluded her completely from the community. She was not welcome at home, and inviting her to the party was quite a scandal. After all, Scarlett was considered a woman with great mental strength. It was admired particularly by Melanie and Ashley Wilkes - her last and true friends. Inside, however, Scarlett was a weak and lost woman, who experienced too many evil to be able to ever experience the true peace. She wanted to go back to the period of her childhood and cry all sorrows in the folds of her mother's dress. The remaining forces Scarlett based on the constantly repeated spell: 'I do not want to think about it now. I'll think about it tomorrow'.)

**APPENDIX 4** 

Table 2 – Summary of ratings obtained in two groups

Type of drink

Coca-Cola

#### Coffee

# Rating of attitude towards Scarlett O'Hara

(6-	point scale)
3. !	5
4	
3. !	
5	
4	
4. !	
4	
5	
3. !	5
3. !	5
4	
3. !	5
3. !	5
4	
3	

- 4. 5
- 3. 5
- 3. 5
- 2. 5
- 4