

# The Effect of Written Gratitude Statements on Body Appreciation.

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## ABSTRACT

Body appreciation is associated with mental health, healthy eating, and physical activity. The current experiment investigated how written gratitude statements in regard to one’s body affect body appreciation in 14 Facebook users aged between 24 and 74 years. The participants took part in the study individually, receiving all necessary instructions via email. Body appreciation was measured with the Body Appreciation Scale 2, which was adapted to increase sensitivity. The manipulation had two levels: written neutral statements about one’s body and written gratitude statements in regard to one’s body. It was hypothesized that written gratitude statements would increase the score on the Body Appreciation Scale 2. The results were statistically significant and supported this hypothesis; the score on the Body Appreciation Scale 2 was higher in the gratitude statements condition than in the neutral statements condition. This study provides preliminary evidence that focusing gratitude specifically on the body improves body appreciation. The results also have an important implication for mental and physical wellbeing.

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## 1. Introduction

Society accepts people whose bodies meet societal standards much more than those whose bodies differ in one way or another from those standards. This pressure to conform to a certain appearance and body shape impacts one’s body image, which is “individuals’ perceptions of and attitudes toward their own body, especially its appearance” (Cash et al., 2002, p. 103). Body image can be either negative or positive. The construct of positive body image is body appreciation (Avalos et al., 2005). Avalos et al. (2005) define body appreciation as “unconditional approval and respect of the body” (p. 287). Societal expectations negatively affect body

appreciation. For instance, Homan and Tylka (2015) demonstrated that social comparisons and staking one’s self-worth in appearance negatively correlate with body appreciation. The consequences of concerns with one’s body and low body appreciation can be detrimental to physical and mental wellbeing. Lower body appreciation is associated with increased anxiety and depression (Winter et al., 2019) and avoidance of health care use (Cook et al., 2020). At the same time, high body appreciation protects one from the negative effects of media exposure (Halliwell, 2013) and body-related shame and body-related guilt (Liang et al., 2021). Also, people with high body appreciation tend to pay more attention to bodily needs and, as a result,

have healthier eating habits than those who have low body appreciation (Oswald et al., 2017). In addition, high body appreciation positively influences intrinsic motivation for physical activity (Cox et al., 2019),

A limited number of studies investigated factors that increase body appreciation. Some of them focused on examining the effects of physical activity. For example, participation in the community dance sessions led by a professional choreographer and dance therapist had a long-term positive effect on body appreciation in older adults (Hansen et al., 2021). Ng and Lin (2020) found that a 13-week skill-oriented Physical Education course increased body appreciation in university students. Other studies analyzed the correlation between internal processes and body appreciation. Self-compassion was shown to reduce negative feelings about the body and strengthen body appreciation (Homan & Tylka, 2015). There was also a positive association between gratitude and body appreciation (Homan & Tylka, 2018). Homan and Tylka (2018) stated that gratitude increases body appreciation by focusing individuals' attention on their positive internal characteristics and reducing social comparison. It appears that while some studies investigated causal relationships between gratitude and body dissatisfaction (Geraghty et al., 2010; Wolfe & Patterson, 2017), there are currently no studies that have examined the effects of gratitude on body appreciation.

Avalos et al. (2005) developed the Body Appreciation Scale (BAS) based on four aspects of body appreciation: favourable opinions of the body, acceptance of the body despite its physical characteristics, care for body needs, and rejection of unrealistic body ideals presented by the media. Later the Body Appreciation Scale 2 (BAS-2) was developed. A study by Tylka and Wood-

Barcalow (2015) supported the internal consistency, test-retest reliability, and construct validity of the BAS-2.

For gratitude interventions, past studies used gratitude journaling (Geraghty et al., 2010; Wolfe & Patterson, 2017). In such cases, the participants were asked to keep a daily gratitude journal for two weeks, writing down a list of things for which they felt grateful. The study by Geraghty et al. worked with the therapeutic population, and Wolfe and Patterson focused on the student population. The results of both studies demonstrated that gratitude journaling significantly reduced body dissatisfaction.

The present experiment investigated the effect of gratitude on body appreciation. A control group wrote down ten neutral statements about their body, while the experimental group listed ten gratitude statements in regard to the body. The body appreciation was then measured on BAS-2. Based on previous research, it was expected that writing gratitude statements in regard to one's body would increase the score on BAS-2.

## **2. Methods**

### *2.1 Participants*

Twenty Facebook users participated in this study. However, three of them did not sign the consent form. The other three signed the consent form but dropped out during the experiment. In total, 14 Facebook users were tested in this experiment. Their age ranged from 24 to 74 years, with a median age of 56.5 years. There were nine male and five female participants in the sample. Nine participants had a university degree, three had a college education, one had a trade school diploma, and one had a high school diploma.

## 2.2 Materials

The materials used in this experiment included the Body Appreciation Scale 2 (BAS-2) (Zarate et al., 2021), which was used to measure body appreciation (See Appendix A). The response scale was adapted for the purpose of the current study. It was on the 7-point Likert scale (where 1 was Strongly Disagree and 7 was Strongly Agree) instead of the original 5-point scale with responses ranging from 1 (Never) to 5 (Always). A consent form was administered online via DocuSign website using participants' email addresses. The instruction emails differed in the type of statements they asked participants to write: neutral or gratitude statements in regards to one's body (see Appendix B and Appendix C).

## 2.3 Procedure

To attract participants to the current study, the Facebook post was posted on a personal Facebook page of the experimenter. The post said, "Hi, I am conducting a psychology study for my psychology course at Camosun College. I am looking for 20 participants. The participation will take 15 minutes and will be online. Please, contact me or leave a comment below this post if you are interested. Your help will be highly appreciated!" People who responded to the post were given a link to a consent form and were randomly assigned to either the gratitude statements group or the neutral statements group by randomizer.org. After they formally agreed to participate by signing the consent form, they received detailed instructions via email. Participants took part in the study individually, performing two tasks and timing themselves. They were asked to perform two tasks without delay. They used their cell phone or watch for timing. The first task was to either write ten neutral statements about their body

or ten gratitude statements in regard to their body. The second task was to mark their responses to 10 statements in BAS-2 on a printed questionnaire or write the responses to BAS-2 on a separate piece of paper if the printer was not available. After performing the two tasks, participants took pictures of their list of statements and answers to the questionnaire using their cell phone camera. Then they attached the pictures to the email, noted the time they spent on each task, their age, gender, and education level, and replied to the original email. Participants then received a follow-up email, which thanked them for their participation and debriefed them about the study.

## 2.4 Design

A single-factor randomized two-group design was used in the current study. The independent variable was gratitude statements regarding the body. The dependent variable was body appreciation.

## 3. Results

The level of significance set in this experiment was .05. The mean score on BAS-2 in the neutral statement condition was 53.33 (SD = 5.43), and the mean score on BAS-2 in the gratitude statement condition was 59.63 (SD = 4.53). See Figure 1 for a summary of the descriptive statistics. These data were analyzed using a *t*-test, and the results were statistically significant,  $t(12) = 2.38$ ,  $p = .04$ , suggesting that the score on the BAS-2 was higher in the gratitude statements condition than in the neutral statements condition.

## 4. Discussion

The hypothesis under investigation in this study was that writing gratitude statements in regard to one's body would increase the

score on BAS-2. The finding supported this hypothesis. This study provides preliminary evidence that writing gratitude statements specifically focused on the body improves body appreciation. There is no known previous investigation of this causal relationship. The current results are consistent with the correlational study that showed a positive relationship between gratitude and body appreciation (Homan & Tylka, 2018).

The results have important implications for mental wellbeing and protection from negative social media exposure (Halliwell, 2013; Liang et al., 2021; Winter et al., 2019). Thus, gratitude statements about one's body can be practically applied for improving body image and wellbeing in young women and girls and making them more resistant to social media pressure. Also, higher body appreciation is essential for self-care and physical health. Specifically, it reduces barriers to health care use (Cook et al., 2020), increases intrinsic motivation for physical activity (Cox et al., 2019), and contributes to healthy eating habits (Oswald et al., 2017). Therefore, gratitude statements toward one's body may be used in behavioural change and promotion of a healthy lifestyle.

The limitations of this study include the small sample size and weak manipulation. Also, there was no control over participants' time between the two tasks. In addition, the pre-test level of body appreciation was unknown. Additional studies are needed to confirm or refute the current results. Further studies also can test the stronger manipulation. For example, the researchers can examine how two-week gratitude journaling related to the body affects body appreciation. This idea is based on previous research that showed that two-week gratitude journaling effectively improved other aspects of body image (Geraghty et al.,

2010; Wolfe & Patterson, 2017). With further research, written gratitude statements towards one's body have the potential to become effective and easy to implement intervention for improving body appreciation and making one's body image more positive

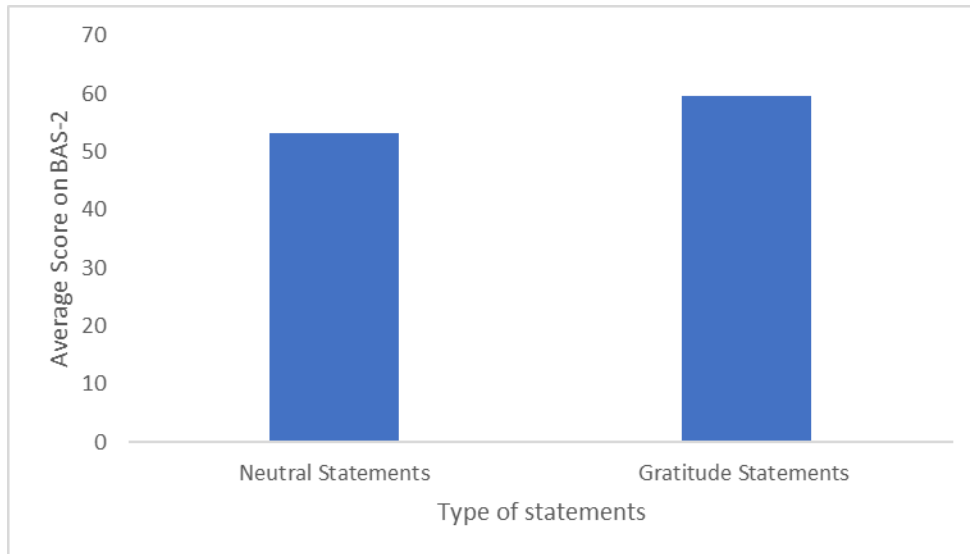
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**Figure 1**

*Body Appreciation Scores for the Neutral and Gratitude Statements Conditions*



## Appendix A

### The Body Appreciation Scale 2 (BAS-2)

#### Questionnaire

For each of the statements below, circle the response that best characterizes your agreement or disagreement with the statement.

| #  | Statement  | Strongly<br>Disagree | Disagree | Somewhat<br>Disagree | Undecided | Somewhat<br>Agree | Agree | Strongly<br>Agree |
|----|--|----------------------|----------|----------------------|-----------|-------------------|-------|-------------------|
| 1  | I respect my body  | 1                    | 2        | 3                    | 4         | 5                 | 6     | 7                 |
| 2  | I feel good about my body  | 1                    | 2        | 3                    | 4         | 5                 | 6     | 7                 |
| 3  | I feel that my body has at least some good qualities                                     | 1                    | 2        | 3                    | 4         | 5                 | 6     | 7                 |
| 4  | I take a positive attitude toward my body  | 1                    | 2        | 3                    | 4         | 5                 | 6     | 7                 |
| 5  | I am attentive to my body's needs  | 1                    | 2        | 3                    | 4         | 5                 | 6     | 7                 |
| 6  | I feel love for my body  | 1                    | 2        | 3                    | 4         | 5                 | 6     | 7                 |
| 7  | I appreciate the different and unique characteristic of my body                          | 1                    | 2        | 3                    | 4         | 5                 | 6     | 7                 |
| 8  | My behaviour reveals my positive attitude toward my body                                 | 1                    | 2        | 3                    | 4         | 5                 | 6     | 7                 |
| 9  | I am comfortable in my body  | 1                    | 2        | 3                    | 4         | 5                 | 6     | 7                 |
| 10 | I feel like I am beautiful even if I am different from media images of attractive people | 1                    | 2        | 3                    | 4         | 5                 | 6     | 7                 |



## **Appendix B**

### **Instructions for the Neutral Statement condition**

Thank you for participating in this psychology study! I appreciate your help very much! You can complete this study until Nov 22nd, but the steps should be completed one after another without delay.

Please, read the full description for a step before proceeding with a task. Let me know if you have any questions regarding any of the steps.

#### **Step 1 (task #1).**

Please, take a pen/pencil and paper and write down ten neutral statements about your body. It can be neutral descriptions of your physical characteristics and qualities, bodily experiences, etc. For example, if I describe myself, I will write down, “My eyes are green” and “My body doesn’t tolerate coffee”. Please, time yourself by starting a stopwatch right before writing down the first statement and stop a stopwatch after writing down the tenth statement.

#### **Step 2 (task #2).**

Then, open the questionnaire attached to this email. You can print it out if a printer is available. In this case, just circle the response that best characterizes your agreement or disagreement with the statement. Another option is to write your answers down on a piece of paper, including the number of the statements you respond to. Please, time yourself by starting a stopwatch when you are ready to read the first statement and stop a stopwatch after answering the last statement.

#### **Step 3.**

Please, respond to this email noting your

Age \_\_\_\_\_

Gender \_\_\_\_\_

Education level \_\_\_\_\_

Write down the time for task #1 and task #2.

Take a picture of your ten written statements and of the questionnaire (or results if written separately) and attach them to this email.

You will receive a follow-up email with a detailed explanation of this study and the rationale behind it. If you wish, I’ll be happy to talk to you by phone or Zoom to answer all your questions regarding this study.



## **Appendix C**

### **Instructions for the Gratitude Statement condition**

Thank you for participating in this psychology study! I appreciate your help very much! You can complete this study until Nov 22nd, but the steps should be completed one after another without delay.

Please, read the full description for a step before proceeding with a task. Let me know if you have any questions regarding any of the steps.

Step 1 (task #1).

Please, take a pen/pencil and paper and write down ten gratitude statements in regards to your body. Please, time yourself by starting a stopwatch right before writing down the first statement and stop a stopwatch after writing down the tenth statement.

Step 2 (task #2).

Then, open the questionnaire attached to this email. You can print it out if a printer is available. In this case, just circle the response that best characterizes your agreement or disagreement with the statement. Another option is to write your answers down on a piece of paper, including the number of the statements you respond to. Please, time yourself by starting a stopwatch when you are ready to read the first statement and stop a stopwatch after answering the last statement.

Step 3.

Please, respond to this email noting your

Age \_\_\_\_\_

Gender \_\_\_\_\_

Education level \_\_\_\_\_

Write down the time for task #1 and task #2.

Take a picture of your ten written statements and of the questionnaire (or results if written separately) and attach them to this email.

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