Reviewer’s report

Title: Automatic evaluation of body-related words: An experimental study

Version: 1 Date: 19 January 2010

Reviewer: Caroline Braet

Reviewer’s report:

Automatic evaluation of body-related words: An experimental study
Kaaren J Watts and Jacquelyn Cranney
BMC Public Health: Research article

The article reports on two experiments in female students, evaluating the automatic evaluation of body-related words. The authors must be complimented with these nice studies. They were well-designed and well-reported. The minor points I noticed while reading the manuscript were recognized also by the authors as ‘limitations’. I will sum up now the minor concerns related to the studies but also add some important strengths. So, in my opinion, this manuscript needs only a minor revision.

Minor concerns:
- Both studies suffer from power problems, because of the low sample size. Although they have a within-subject design, they incorporate many different variables. The authors could add a power analysis, demonstrating how many subjects they actually need before they will be able to demonstrate their predictions.
- The abstract is ‘long’.
- The initial prime selection task in experiment one may have primed the participants; but, in experiment 2, the authors excluded this judgment task and replaced it by standard priming words.
- In experiment 2, the word stimuli were selected not on their valence but on the consistency of the ratings as good or bad on the one side but also on fastest response latencies. I wonder whether it was a good strategy to choose those words that were rated as the fastest once.
- The authors suggest ‘although young women may direct little attention towards these messages, these stimuli nevertheless impact upon them’ (see page 23). However, it is also possible that the authors found a universal information processing mechanism, which do not affected exclusively young women. However, because the experiments were conducted only in young women, the conclusion is somewhat suggestive.
- Did the authors controlled for actual weight? I realize that SD of body weight is rather small, suggesting that probably none of these female students suffer from obesity. However, it is an important variable in most studies regarding body
dissatisfaction.
- Although studying attitudes is interesting, it is actually recognized that these attitudes were not always strong predictors of related behavior (e.g., health-related behavior). This makes that the findings of the study were only modestly relevant unless one can shown strong associations with the assumed behavior. The authors recognize this shortcoming however, on page 21 and 22 they become rather speculative regarding the potential impact of appearance messages in the media.

- Because of the congruence findings in experiment on the long SOA and the limited findings regarding individual differences, I wonder whether both studies were nothing more than good replications of Western society attitudes regarding slenderness. Therefore, I should recommend to shorten the discussion on the potential role of the media on young women and make it more focused.

- I noticed an error on ITI: on page 11 ITI was described as 3 sec in study 1 whereas on page 17 it was mentioned that ITI was 4 sec in study 1. I think this must be replaced by 3 sec.

- Next, one word makes the sentence unreadable on page 20 ‘retain the each prime in memory’. I think the word ‘the’ must be deleted.

I can add the following strengths as well:
- The theoretical ‘fundaments’ were well-documented and well-motivated and there is a strong rationale and clear hypotheses.
- Although many accounts were made, the introduction remains very clear and well written.
- In both studies important methodological aspects (e.g., controlling for weak and strong primes and for individual control variables as well as for order effects) were taken into consideration.
- The instruments were well established and have good reliabilities in both studies.
- The procedure was well prepared and resulted in nice studies, with clear interaction effect for the condition with SOA 300.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

'I declare that I have no competing interests'