Reviewer's report

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

Version: 1 Date: 23 February 2010

Reviewer: Agnes Nemeth

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- Major Compulsory Revisions

1) Theoretical background, earlier findings, questions posed, research hypotheses, methods are detailed and well described but structural revision is strongly recommended for the clearer comprehension.

Recommended structural revisions:

a) First and second objectives of Experiment 1 are mentioned on page 6, while in section ‘Experiment 1’ on page 8 these two objectives are mentioned as the first one, and another one as the second one (maybe it is not necessary to describe them on page 6 as it is detailed on page 8).

b) Following the review of theoretical background and previous scientific findings of the Introduction section a new paragraph is recommended about that an experiment (Exp 1) was designed and implemented to test research questions and hypotheses and based on the results of it another one (Exp 2) was laid and carried out (if I understand well). Then it can be followed by the ‘Experiment 1’ section (page 8).

c) ‘The association between automatic evaluation and body image concerns was tested by correlating the scores for appearance schematicity, thin internalisation, body dissatisfaction, and dietary restraint with an index of automaticity.’ (page 12) This sentence must be shifted before the last sentence of the section: ‘A significance level of alpha equals .05 was used for all analyses.’ (page 13). Please, mention also in this section (‘Data reduction and Statistical Analyses’) that the means of dependent variables were compared by ANOVA and MANOVA.

d) For ‘Experiment 2’ section:

Experiment 2

‘One objective of Experiment 2 was to establish whether automatic activation of attitudes toward body-related primes remained when a set of normatively- rather than individually-selected body-related primes was used. Importantly, if the priming effect remains, this will suggest that this automatic phenomenon is relatively unconditional and pervasive.’ (page 15)
'The primary objective of Experiment 2 was to test whether the predicted difference in automaticity would be apparent when individuals were selected on the basis of extreme low and high scores on the measure of appearance schematicity.' (page 15) From here the order of sentences is unchanged.

Methods (page 16) etc.

2) ‘Follow-up analyses were conducted for Experiments 1 and 2 to examine the relationship between mean response latencies for positive and negative primes, separately, and the individual difference variables. The pattern of results was the same.’ (page 20-21). Please, do not mention results in the Discussion section if they are not described in Results section.

3) Mention of an important limitation is needed (page 22): the sample sizes were rather small in both experiment.

4) Questions
a) In the ‘Procedure’ section of Exp 2 three exceptions are mentioned (page 17, paragraph 2) Which is the third deviation comparing to Exp 1? Why was ITI shortened? Was there a result in Exp 1 which suggests fatigue during the experiment? Why was not used black cross for focusing ont he screen in Exp 1?

b) ‘The reason for the persistence of the congruence effect at the long SOA in Experiment 2 but not in Experiment 1 remains unclear.’ (page 20) Could it be an artefact e.g. because of small sample size?

c) ‘Consistent with the notion that automatic evaluation can influence higher order evaluative judgments [18], automatic evaluation of body-related words may influence subsequent, consciously monitored appearance-related evaluative processes and behaviours. For instance, automatic evaluation may underlie the widespread tendency for females to engage in conscious negative evaluation of their bodies [67], including fat talk [68]. Furthermore, automatic evaluation may be one of the mechanisms involved in the maintenance and perpetuation of anti-fat bias and discrimination. For example, one experiment has demonstrated that negative attitudes toward fatness predict subsequent interpersonal behaviour. That is, stronger implicit anti-fat attitudes were associated with individuals choosing to sit further away from an overweight individual [14]. Future research that parallels assessment of implicit racial attitudes [e.g., 69], is required to determine the potential link between automatic evaluation and subsequent cognitions and behaviour, including fat talk, fat prejudice, and discrimination.’ Are there findings for unidirectional causal link between automatic evaluation and higher order judgments? Or is it possible that conscious processes, cognition may influence automatic evaluation, too?

- Minor Essential Revisions

1) Description of scale measures (page 9-10) must be uniform (please mention item number, score range, whom valid for, what higher score indicates for all the
four scales)

2) ‘A one-way ANOVA, however, conducted on the absolute difference in latencies between SOA 300 and SOA 1000 trials confirmed that the size of the order effect did not differ significantly between Group 1 and Group 2.’ (page 13) Please, insert ANOVA-parameters here.

3) ‘Figure 1 suggests that consistent with expectations, response latencies were faster for congruent trials than for incongruent trials at the short SOA but not at the long SOA.’ (page 13). Statistical significance parameters are needed here, too.

4) ‘A MANOVA confirmed that there were no significant differences between the low (aschematic) and high (schematic) groups in age or BMI’ (page 18) Please, insert MANOVA-parameters here.

5) ‘There were no significant main effects or interactions for the order of SOA variable.’ (page 18) Please, insert ANOVA-parameters here.

- Discretionary Revisions

1) A completion of the title is recommended: ‘Automatic evaluation of body-related words among young women / in female students (or similar): an experimental study’.

2) Why ASI-R scale was selected in Exp 2 to divide the sample into subsamples of women with high and low body concerns? Or why only this scale was used?

3) ‘The target words were matched for frequency of usage, number of syllables, and word length.’ (page 9), and ‘The two prime categories “good” and “bad” were matched for word length, frequency, and for category concept.’ (page 17) What are these matchings? I do not see.

**Level of interest:** An article whose findings are important to those with closely related research interests

**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.