

**The Nature of Overclaiming:  
Personality and Cognitive Factors**

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**ABSTRACT**

Over-claiming is the tendency to claim more knowledge than is possible. Previous research identified narcissism as a consistent predictor. The present research addressed two issues: (1) The role of individual differences in overclaiming, and (2) the degree to which overclaiming is automatic or controlled. Overclaiming was operationalized as the signal detection response bias obtained from familiarity ratings of real and fictitious items. By including a battery of individual difference measures, we determined that overclaiming was significantly predicted by narcissism, openness, and IQ but not by perfectionism, self-concept clarity, optimism, and the remaining Big 5 variables. In addition, we examined whether the tendency to recall items regardless of whether they were presented – a memory bias – influences overclaiming. A regression analysis revealed that memory bias and narcissism showed strong independent contributions to overclaiming. To address the second issue, we manipulated (a) the amount of time participants could consider the items and (b) the amount of fictitious items presented. Results indicated that neither manipulation nor their interaction had any effect on overclaiming. The nature of overclaiming is therefore argued to be an automatic process that is independently influenced by personality- and cognitive-based elements.

## INTRODUCTION

The nature of overclaiming, the tendency to claim more knowledge than one actually possesses (Paulhus & Bruce, 1990), has yet to be fully explicated. Previous research has shown narcissism to be a reliable predictor of overclaiming, though explanations such as impression management and self-esteem have been refuted (Paulhus & Harms, in press).

Aside from narcissism, the influence of personality on overclaiming remains to be tested. Perfectionists are likely to feel a need to claim more knowledge in an ego-involving situation (Hewitt et al., 1991). Individuals with low self-concept clarity (SCC; Campbell, 1990) may overclaim as being unsure of one's self-attributes may possibly lead to being confused about one's knowledge as well. To the degree that optimism includes confidence about one's own abilities, overclaiming may be related to an overconfidence in one's knowledge.

It is also likely that there are important cognitive factors that affect overclaiming. Overclaiming may also be the result of a memory bias, the general tendency for some people to believe that everything they encounter is familiar to them. Inasmuch as overclaiming is a controlled rather than an automatic process, allowing for more time to consider an item may reduce overclaiming. Also, more fictitious items may serve to reduce overclaiming as participants may become more discriminating in their claims of familiarity.

This purpose of the present study was to further our understanding of the mechanisms involved in overclaiming. To this end, we administered a battery of personality tests. In the laboratory, we administered the OCQ and manipulated (a) the relative amount of fictitious items and (b) the presentation time of all items. We hypothesized that, above and beyond the effects of narcissism, perfectionism, self-concept clarity, optimism, and memory bias will positively affect overclaiming, respectively. Also, to the extent that overclaiming is a controlled process, greater presentation time and more fictitious items will reduce overclaiming, respectively.

## METHOD

### Participants and Materials

Participants were  $N = 211$  students from a second-year undergraduate psychology course at a major Canadian university. All participants completed the tasks in a laboratory setting for course credit.

Perfectionism was assessed via the Multidimensional Perfectionism Scale (MPS; Hewitt et al., 1991). Self-concept clarity (SCC) was assessed via the 12-item Self-Concept Clarity Scale (Campbell, 1990). The 12-item Life Orientation Test (LOT; Scheier & Carver, 1985) was used to measure optimism. The Narcissistic Personality Inventory (NPI; Raskin and Hall, 1979) was included as an attempt to replicate previous findings. The Big Five Inventory-44 (BFI-44; John and Srivastava, 1999) was used to measure the Big 5. To assess cognitive ability, we administered the Wonderlic Personnel Test (Wonderlic, 1977).

Overclaiming was assessed via the Over-Claiming Questionnaire (OCQ; Paulhus and Bruce, 1990). Items were drawn from a list meant to represent “cultural literacy” (Hirsch, 1988) as well as popular musical artists. Items were presented to participants using a PowerPoint presentation projected onto a wall in the lab. Items were presented for either 1 or 4 seconds and consisted of either 20% or 50% fictitious items, termed foils, depending on to which conditions the participants were randomly assigned. Real items included such things as “Pygmalion” and “The Lusitania” and foils included such things as “1966 Glass Animal” and “El Puente.” Participants were asked to rate their familiarity with the items on a 1 (not at all familiar) to 5 (completely familiar) scale. All real items were identical for both conditions. Participants were not told of the presence of the foils and likewise did not know in which conditions they were

assigned. Overclaiming was calculated using signal detection theory (MacMillan and Creelman, 1991; Paulhus and Harms, in press), as the sum of familiarity ratings for real items and foils.

To assess memory bias, participants were given a post-test consisting of 36 items after a 5 minute filler task. Half of the items on the post-test were presented in the lab (“old” items) and half were not (“new” items). Old items were carefully chosen to ensure that they were presented to all participants regardless of the percent foils condition to which they were assigned. Participants rated how sure they were that the items were presented to them in the lab on a scale from 1 (not at all sure) to 5 (completely sure). Signal detection theory was again used to measure bias, that is, the tendency to claim that both old and new items were presented in the lab.

## RESULTS

The intercorrelations of the personality measures collected, memory bias, and overclaiming are indicated in Table 1. The finding that narcissism correlated ( $r = .24, p < .01$ ) with overclaiming supports previous findings (Paulhus & Harms, in press). As hypothesized, a strong relationship between overclaiming and memory bias ( $r = .30, p < .01$ ) was discovered. However, as Figure 1 suggests, none of the other hypotheses were supported. Correlations between the other predictors and overclaiming, respectively, were very weak to non-existent and none were significant.

To determine the independent contributions of our independent measures with overclaiming, overclaiming was regressed on the personality measures and memory bias scores. The results echo those of the correlational results. Narcissism ( $\beta = .22, p < .01$ ) and memory bias ( $\beta = .28, p < .01$ ) were shown to have positive, significant, and independent contributions to overclaiming. Similarly, these were the largest and only significant betas obtained.

Tables 2 and 3 present the results of ANOVAs conducted to examine the effects of presentation time and percent foils on accuracy (Table 2) and bias (Table 3). Table 2 indicates that reduced presentation time resulted in poorer accuracy ( $F(1, 207) = -1.68, p < .05$ , one-tailed), a result in line with the speed-accuracy trade off literature (e.g. Meyer et al., 1988). Percent foils had no effect on accuracy ( $F(1, 207) = -.008, p > .05$ ). The fact that presentation time affected accuracy serves as an effective verification that reduced presentation time was effective. Table 3 indicates that neither presentation time ( $F(1, 207) = .051, p > .05$ ) nor percent foils ( $F(1, 207) = .289, p > .05$ ) had an effect on bias.

## DISCUSSION

Our results provide insight into the nature of overclaiming. It appears that this bias possesses both a personality and a memory component. In addition, overclaiming appears to occur non-consciously.

As in previous research, narcissism contributed significantly to overclaiming scores. Of the many other individual difference constructs examined, there were contributions from IQ and Openness to Experience but not perfectionism, self-concept clarity, or optimism. More important, the results indicate that the effect of narcissism is distinct from and thus not explainable by memory bias. The effects of IQ and openness are interesting and warrant further research.

The demonstration of a memory bias component to overclaiming suggests the existence of a more general individual difference variable. If so, it would be interesting to investigate whether this memory bias generalizes to other spheres, such as eyewitness memory or other

similar instances when the veracity of one's recall is crucial. Future research linking overclaiming to personality would benefit from measuring and partialing out memory bias.

The experimental results also expand our understanding of the mechanisms underlying overclaiming. Bias was affected by neither presentation time nor percent foils. These results suggest that overclaiming is an automatic, non-conscious process rather than a controlled, thoughtful one. This implies that those that overclaim are likely not aware of their behaviour in this respect. Perhaps for those who overclaim this behaviour becomes habitual over time and thus becomes a default reaction in relevant situations. Future research may examine overclaiming longitudinally using these paradigms in order to plot the development of this bias. In the short term, overclaiming researchers do not have to worry about speed of presentation nor ratio of foils to real items.

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Table 1

*Intercorrelations among perfectionism, self-concept clarity, optimism, narcissism, memory bias, and overclaiming*

|                           | 1   | 2     | 3     | 4     | 5     |
|---------------------------|-----|-------|-------|-------|-------|
| 1. IQ                     | n/a | -.05  | -.06  | -.17  | .16   |
| 2. Openness to experience |     | (.82) | .25** | .11   | .25   |
| 3. Narcissism             |     |       | (.84) | .05   | .24** |
| 4. Memory bias            |     |       |       | (.87) | .30** |
| 5. Overclaiming           |     |       |       |       | (.89) |

N = 211

Note: Alpha reliabilities are listed on the diagonal. \*\* denotes  $p < .01$ .

Table 2

*Analysis of variance for accuracy*

| Source                             | <i>df</i> | <i>F</i> | <i>p</i>         |
|------------------------------------|-----------|----------|------------------|
| Presentation speed                 | 1         | 2.578    | .05 <sup>†</sup> |
| Percent foils                      | 1         | .008     | .929             |
| Presentation speed x Percent foils | 1         | .017     | .897             |
| Error                              | 207       |          |                  |

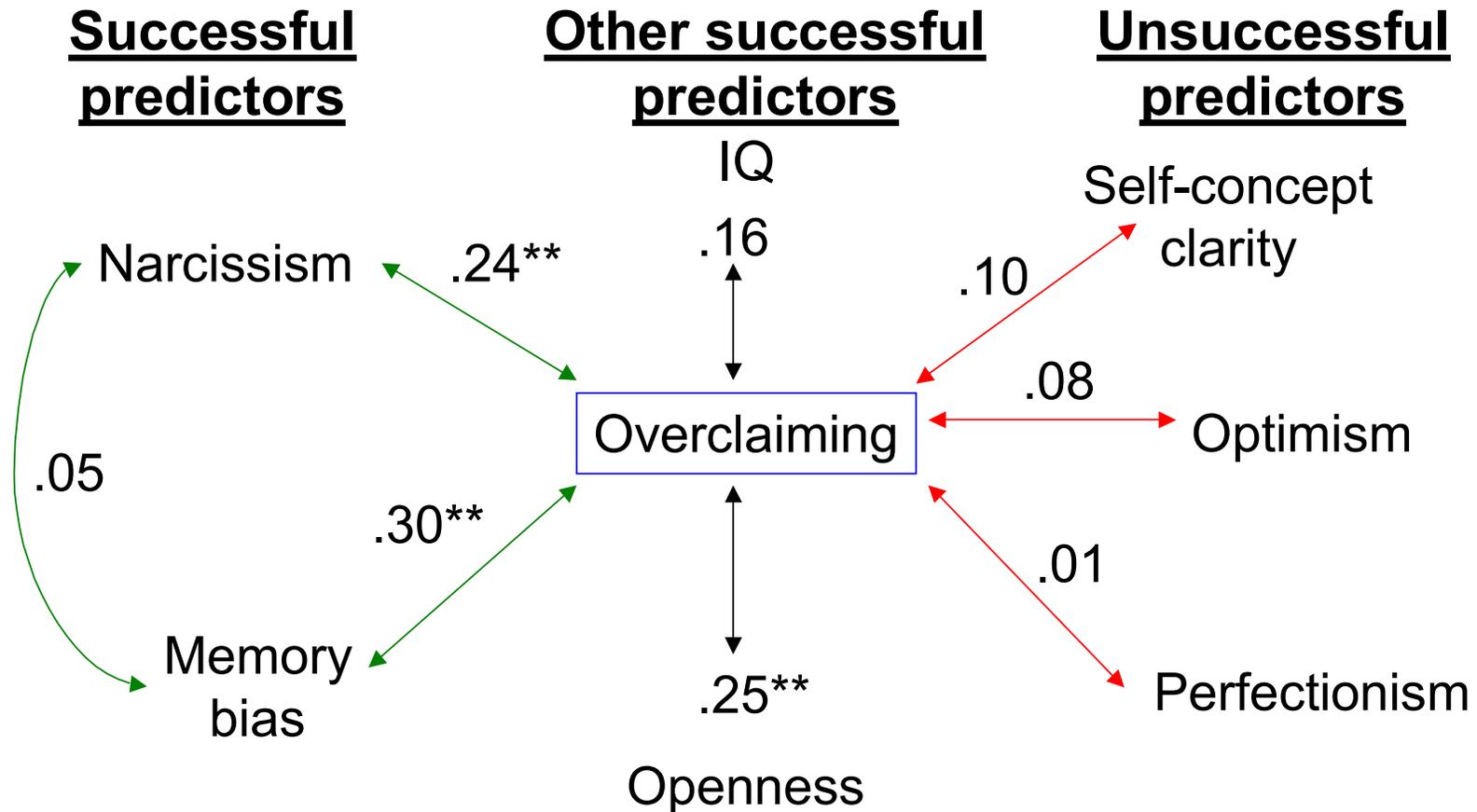
<sup>†</sup> denotes one-tailed test.

Table 3

*Analysis of variance for bias*

| Source                             | <i>df</i> | <i>F</i> | <i>p</i> |
|------------------------------------|-----------|----------|----------|
| Presentation speed                 | 1         | .051     | .821     |
| Percent foils                      | 1         | .289     | .591     |
| Presentation speed x Percent foils | 1         | .145     | .704     |
| Error                              | 207       |          |          |

# Figure 1. Correlations with Overclaiming



\*\* denotes significance at  $p < .01$