



**When Knowledge Knows No Bounds:  
Self-Perceived Expertise Predicts Claiming of Impossible  
Knowledge**

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When Knowledge Knows No Bounds:

Self-Perceived Expertise Predicts Claiming of Impossible Knowledge

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## SELF-PERCEIVED KNOWLEDGE AND OVERCLAIMING

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## Abstract

People overestimate their own knowledge, erring at times by claiming knowledge of concepts, events, and people that do not exist and cannot be known, a phenomenon called overclaiming.

Why and when do people claim such impossible knowledge? We proposed that people overclaim to the extent they perceive their expertise as high rather than low. Supporting this hypothesis, in Study 1, self-perceived knowledge in personal finance positively predicted claiming knowledge of nonexistent financial concepts. Study 2 demonstrated that self-perceived knowledge within specific domains (e.g., biology) was associated specifically with overclaiming within those domains. In Study 3, warning participants that some concepts did not exist did not reduce the relationship between self-perceived knowledge and overclaiming, suggesting that the relationship is not driven by self-presentational concerns. Finally, in Study 4, boosting self-perceived expertise in geography prompted assertions of familiarity with nonexistent places, supporting a causal role for self-perceived expertise in claiming impossible knowledge.

## SELF-PERCEIVED KNOWLEDGE AND OVERCLAIMING

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“The greatest enemy of knowledge is not ignorance, it is the illusion of knowledge.”

Daniel J. Boorstin, American historian, 1914-2004

Can people differentiate what they know from what they do not? Several lines of research show that people are not always accurate judges of their knowledge, and often overestimate how much they know (Dunning, 2011; Kruger & Dunning, 1999). Research into overconfidence finds that people commonly judge the accuracy of their expertise too favorably (Fischhoff, Slovic, & Lichtenstein, 1977; Lichtenstein, Fischhoff, & Phillips, 1982; Moore & Healy, 2008), and typically overestimate how well they perform common tasks relative to others (Alicke & Govorun, 2005; Dunning, Heath, & Suls, 2004). Work on the illusion of explanatory depth demonstrates that participants tend to think they have a more complete understanding of how objects work (e.g., ballpoint pen) than they can demonstrate when their knowledge is put to the test (Rozenblit & Keil, 2002).

At times, people even claim knowledge they cannot possibly have, because the object of their evaluation does not exist, a phenomenon known as overclaiming. For example, in the late 1970s, nearly a third of respondents expressed an opinion about the *1975 Public Affairs Act* when asked directly about it, even though the Act was a complete fiction (Bishop, Oldendick, Tuchfarber & Bennet, 1980). Approximately a fifth of consumers report having used products that are actually nonexistent (Phillips & Clancy, 1972). More recent research has asked participants to rate their familiarity with a mix of real and nonexistent concepts, names, and events in domains such as philosophy, life sciences, physical sciences, and literature. Participants reported being familiar with the real items but also, to a lesser degree, with the nonexistent ones as well (e.g., Paulhus, Harms, Bruce, & Lysy, 2003).

Although these and other studies document a tendency to claim nonexistent knowledge,

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3 little work has explored when or why people are likely to exhibit this tendency. Herein, we focus  
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5 on the role of self-perceived domain knowledge. If Janet believes her biology knowledge is  
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7 excellent and Brad believes his is shaky, we suspect the former will be more likely to overclaim  
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9 knowledge about biology terms. This should also apply within-subjects – if Janet considers  
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11 herself highly knowledgeable in biology but thinks her philosophy knowledge is shaky, we  
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13 hypothesize that she will be more likely to overclaim when asked about biology than philosophy.  
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17 A sizable body of work on how people evaluate their knowledge suggests that this  
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19 process relies not only on a direct examination of one's mental contents, but also on a feeling-of-  
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21 knowing (FOK; for review, see Nelson & Narens, 1990; Reder & Ritter, 1992). Notably, FOK is  
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23 often only weakly predictive of actual knowledge (Nelson, 1984) and appears to be informed, at  
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25 least in part, by top-down inferences about what *should* be or probably is known (e.g.,  
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27 Costermans, Lories, & Ansay, 1992; Koriat, 1995; but see Hart, 1965, and Yaniv & Meyer, 1987  
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29 for a non-inferential account). We theorized that such inferences might be drawn from people's  
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31 pre-conceived notions about their expertise, with self-perceived expertise positively predicting  
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33 overclaiming.  
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38 Several findings suggest that pre-formed impressions of their expertise will prompt more  
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40 overclaiming. People judge their quiz performance more favorably when it is framed as testing  
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42 an ability they think they have (e.g., abstract reasoning) versus one they think they lack (e.g.,  
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44 skill in computer programming; Ehrlinger & Dunning, 2003). This difference is at least partially  
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46 explained by the fact that self-perceptions alter the way a task is experienced (Critcher &  
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48 Dunning, 2009), such as whether questions are being answered quickly or slowly. In another  
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50 study, level of self-perceived expertise was positively correlated with providing answers to  
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52 exceedingly difficult questions, and with feelings of certainty, but not with answering those  
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## SELF-PERCEIVED KNOWLEDGE AND OVERCLAIMING

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3 questions correctly (Bradley, 1981).

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5 **The current investigation tests the relationship between self-perceived domain knowledge**  
6 **and overclaiming knowledge of nonexistent concepts within that domain.** We measured  
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8 overclaiming by asking participants about their familiarity with and knowledge of both real and  
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10 nonexistent concepts, names, and events (Paulhus et al., 2003), allowing us to make a clear  
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12 inference of inappropriate claims of knowledge, as well as to control for claimed knowledge of  
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14 real items.  
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20 After an initial examination of the relationship between self-perceived knowledge and  
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22 overclaiming in the domain of personal finance (Study 1), we tested the domain-specificity of  
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24 this effect. For example, does self-perceived knowledge in a particular domain (e.g., biology)  
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26 predict overclaiming in that domain over and above self-perceived knowledge in other domains  
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28 (Study 2)? Next, we tested whether overclaiming prompted by self-perceived knowledge was  
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30 **“honest” or driven by self-presentational concerns** (Study 3). Finally, to assess whether self-  
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32 perceived knowledge plays a causal role in overclaiming, we manipulated self-perceived  
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34 knowledge in geography and measured reported familiarity with nonexistent places (Study 4).  
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### Study 1

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41 Study 1 tested whether individuals who perceive themselves as more knowledgeable in a  
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43 domain would be more likely to claim knowledge of nonexistent domain-related terms. We  
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45 asked participants about their **general knowledge of personal finance** and then had them rate their  
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47 knowledge of various financial terms, some real and some not. In the realm of personal finance,  
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49 failure to recognize or admit one’s knowledge gaps could lead to uninformed financial decisions  
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51 with devastating consequences (Lusardi & Mitchell, 2014). Do self-appointed financial “experts”  
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53 claim more financial knowledge than they can possibly have?  
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## SELF-PERCEIVED KNOWLEDGE AND OVERCLAIMING

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**Method**

*Participants.* 100 individuals (33 female, mean age = 31,  $SD = 9.7$ , 1 did not report demographic information) in the United States participated online through Amazon's Mechanical Turk. Two additional participants failed to complete the entire study and were excluded from all analyses. Sample size was determined in advance. Pretesting showed that 100 participants provide sufficient power to detect the relevant relationship.

*Procedure.* After providing informed consent, participants were asked to rate their general knowledge of personal finance: "In general, how knowledgeable would you say you are about personal finance?" from 1 (not knowledgeable at all) to 7 (extremely knowledgeable), and "How would you rate your general knowledge of personal finance compared to the average American?" from 1 (much less knowledgeable) to 7 (much more knowledgeable).

The overclaiming task in this study was modeled after the Overclaiming Questionnaire (Paulhus et al., 2003). Participants were asked to rate their knowledge of various personal-finance related terms:

We are interested in common knowledge about personal finance. You will see 15 terms related to personal finance. Please rate your knowledge about each term by choosing the appropriate number from 1 (never heard of it) to 7 (very knowledgeable).

The 15 items were presented one at a time in random order. Twelve of the 15 were real (tax bracket, fixed-rate mortgage, home equity, revolving credit, vesting, retirement, stock options, inflation, private equity fund, interest rate, Roth IRA, whole life insurance) collected from various finance websites, and 3 were non-existent foils invented by the researchers (pre-rated stocks, fixed-rate deduction, annualized credit). Finally, participants filled out a demographic questionnaire and provided information for payment.

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To assess overclaiming, in all studies we followed a modified version of the signal detection scoring recommended by Paulhus et al. (2003)<sup>1</sup> for the overclaiming questionnaire. Overclaiming was measured by calculating the false alarm rate, which is the proportion of foils on which a participant claimed knowledge. We averaged the false alarm rates for each of the 6 knowledge cutoffs (2, 3, 4, 5, or 7 on a 7-point scale), resulting in an overclaiming measure ranging from 0 to 1.

Following the operationalization in previous work on overclaiming (e.g., Paulhus et al., 2003), in our analyses we look at overclaiming while controlling for accuracy. We obtained the averaged hit rate (i.e., the proportion of real items on which each participant claimed knowledge) across the 6 cutoffs, and subtracted the false alarm rate from the hit rate to obtain a measure of accuracy.

### Results

To test whether self-perceived knowledge predicted overclaiming, we averaged the responses to the two questions measuring self-perceived knowledge in personal finance ( $\alpha = 0.91$ ). We next entered self-perceived knowledge of personal finance ( $M = 4.23$ ;  $SD = 1.22$ ) and accuracy ( $M = 0.28$ ;  $SD = 0.19$ ) into a regression model to predict overclaiming ( $M = 0.29$ ;  $SD = 0.20$ ). Self-perceived knowledge positively predicted overclaiming ( $b_{\text{knowledge}} = 0.09$ ,  $t(97) = 9.17$ ,  $p < 0.0001$ ). The more participants viewed themselves as knowledgeable about personal finance, the more likely they were to claim knowledge of nonexistent personal finance terms.

### Study 2

Study 1 provided initial evidence that self-perceived knowledge in a particular domain is

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<sup>1</sup> Paulhus et al. (2003) recommend using bias (false alarm rate + hit rate) controlling for accuracy (false alarm rate – hit rate). We used the false alarm rate in place of bias, because hit rate is related to self-perceived knowledge and its inclusion in the dependent variable might inflate our results. All results remain essentially unchanged if we follow the recommended method.




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3 positively associated with overclaiming within that domain. An alternative interpretation of the  
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5 result is that it captures only an association between two more general individual differences;  
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7 people who generally perceive themselves as knowledgeable are also generally more likely to  
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9 overclaim in any domain. If that is the case, self-perceived knowledge in a particular domain  
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11 should predict overclaiming equally well within that domain and within unrelated ones, whereas  
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13 **we hypothesized that self-perceived knowledge in a particular domain would predict**  
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15 **overclaiming within that specific domain** over and above self-perceived knowledge in unrelated  
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17 domains.  
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22 In Study 2, we explored this possibility by measuring self-perceived knowledge and  
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24 overclaiming in several domains. We also varied whether the overclaiming questionnaire asked  
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26 participants about their familiarity with items (as in the original overclaiming questionnaire;  
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28 Paulhus et al., 2003) or their knowledge of them (as in Study 1). Finally, asking participants to  
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30 consider and rate their knowledge prior to completing the overclaiming questionnaire, as we did  
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32 in Study 1, might increase the rate of overclaiming by making participants feel they had to live  
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34 up to their reported knowledge rating. **We therefore varied whether participants were asked to**  
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36 **rate their self-perceived knowledge or not.**  
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**Method**

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43 *Participants.* 151 individuals (62 female, mean age = 33 ( $SD = 12$ ), 1 did not report   
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45 either) in the United States participated online through Amazon's Mechanical Turk. Four  
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47 additional participants failed to complete the entire study and were excluded from all analyses.  
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49 Sample size was determined in advance. Pretesting showed that 150 participants provide  
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51 sufficient power to detect the relevant relationship.  
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55 *Procedure.* After providing informed consent, 80% of participants were asked to rate  
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## SELF-PERCEIVED KNOWLEDGE AND OVERCLAIMING

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3 their general knowledge in various domains: “Please rate your knowledge of the following topics  
4 using the following scale: 0 = no knowledge; 1 = limited knowledge; 2 = moderate knowledge; 3  
5 = substantial knowledge; 4 = extensive knowledge.” Participants were asked about 3 domains of  
6 interest - biology, philosophy, and literature – as well as 4 filler domains (mathematics,  
7 architecture, computer programming, and 20<sup>th</sup> century art), presented in random order. The  
8 remaining 20% of participants did not rate their general knowledge in any domains.  
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18 Participants then completed an overclaiming questionnaire for the domains of interest:  
19 biology, philosophy, and literature (items borrowed from Paulhus et al., 2003). For each of these,  
20 they saw 15 domain-related items, presented in random order on the same page, of which 12  
21 were real (e.g., in biology: mammal, adrenal gland, sciatica) and 3 were foils (e.g., in biology:  
22 meta-toxins, bio-sexual, retroplex). Approximately half of participants ( $N=77$ ) were asked to rate  
23 their knowledge of each item, while the rest ( $N=74$ ) were asked to rate their familiarity with each  
24 item (from 1 (never heard of it) to 7 (very knowledgeable or very familiar, respectively)). Finally,  
25 participants filled out a demographic questionnaire and provided information for payment.  
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**Results**

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39 First, our results replicated the positive relationship between self-perceived knowledge  
40 and overclaiming found in the Study 1. In each domain, self-perceived knowledge positively  
41 predicted overclaiming while controlling for accuracy. As seen in Table 1, this relationship  
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46 emerged both for participants rating their *familiarity* with items, and for participants rating their  
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48 *knowledge* of the same items. ✓  
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51 Next, we tested whether domain-specific self-perceived knowledge remained a  
52 significant positive predictor of overclaiming within that domain after controlling for self-  
53 perceived knowledge in other domains. As seen in Table 1, self-perceived knowledge in a  
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particular domain was consistently a better predictor of overclaiming within that domain than self-perceived knowledge in the other domains. For example, self-perceived knowledge in biology was the only significant positive predictor of overclaiming in biology when controlling for self-perceived knowledge in philosophy and literature. Though some general individual differences may account for some of the association between self-perceived knowledge and overclaiming (inter-domain correlations of self-perceived knowledge:  $0.34 < r_s < 0.60$ ), these results suggest a distinct positive association between self-perceived knowledge in a particular domain and the likelihood of overclaiming within that domain. Note that these results hold whether knowledge or familiarity is used as the measure of overclaiming, and there is no interaction between this factor and the effect of self-perceived knowledge. Results for our key analyses with both measures are presented in Table 1.

Finally, we compared rates of overclaiming in the group who first rated their knowledge with the group who did not provide knowledge ratings (80% and 20% of participants, respectively). To increase power, we combined across familiarity and knowledge conditions.

There was little evidence that providing knowledge ratings changed the rate of overclaiming. The difference between groups was nonsignificant for philosophy and literature and marginal for biology ( $t_{\text{philosophy, literature}(149)} < 0.9$ ,  $t_{\text{biology}(149)} = 1.78$ ,  $p = 0.08$ ).

Table 1.

Coefficients in Regressions Predicting Overclaiming from Self-Perceived Knowledge and Accuracy (Study 2)

	Overclaiming					
	Familiarity			Knowledge		
	Biology	Philosophy	Literature	Biology	Philosophy	Literature
	Model with only relevant domain					
Self-perceived domain knowledge	.10***	.11***	.082***	.15***	.16***	.10***
Accuracy	-.67***	-.59***	-.62***	-.55***	-.70***	-.47***



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	Model with all three domains					
SPK Biology	.10***	.026	.0094	.12***	.028	.023
SPK Philosophy	-.039	.088*	.046†	.028	.10***	.063*
SPK Literature	.046	.017	.052*	.028	.062**	.065**
Accuracy in relevant domain	-.71***	-.62***	-.59***	-.52***	-.73***	-.48***

†  $p < .1$ . \*  $p < .05$ . \*\*  $p < 0.01$ . \*\*\*  $p < .001$ . SPK = Self-perceived knowledge

### Study 3

We hypothesized above that self-perceived knowledge prompts a top-down inference of familiarity that arises when reading and processing the items (Critcher & Dunning, 2009). An alternative explanation is that self-perceived knowledge increases pretending to know—a self-presentational phenomenon. Individuals with high self-perceived knowledge might not experience bogus items as more familiar but may instead alter their ratings to portray themselves as knowledgeable.

To test this possibility, we modified our procedure by adding a warning manipulation, which previous research has been shown to decrease overclaiming overall (Paulhus et al., 2003). Half of participants were warned that some of the items they would be shown did not exist. If individuals with high self-perceived knowledge are only feigning familiarity due to self-presentational goals, this warning should serve as a counter-incentive, as claiming nonexistent knowledge would be detrimental to their self-presentation. Thus, the warning should reduce their overclaiming, and the relationship between self-perceived knowledge and overclaiming should diminish. However, if people with greater perceived expertise truly experience the foils as more familiar, they should still be more likely to overclaim. We therefore predicted that warning participants that some items do not exist would reduce overclaiming overall, but not alter the relationship between self-perceived knowledge and overclaiming.

### Method

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*Participants.* 97 individuals (47 female, mean age = 34 ( $SD = 11$ )) in the United States participated online through Amazon's Mechanical Turk. Two additional participants failed the attention check and were excluded from all analyses. Sample size was determined in advance. Pretesting showed that 100 participants provide sufficient power to detect the relevant relationship.

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*Procedure.* After providing informed consent, participants were asked to rate their general knowledge in various domains (1 = not knowledgeable at all, to 7 = extremely knowledgeable), including 3 domains of interest - biology, philosophy, and history – and 4 filler domains (American literature, mathematics, computer programming, and 20<sup>th</sup> century art), presented in random order.

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Participants were then randomly assigned to one of two conditions: warning, and no warning ( $Ns = 49$  and  $48$ , respectively). They all read the same instructions explaining that they would see items in three categories and asked to rate their familiarity with each one. These instructions were followed by either a warning or a control sentence, bolded and underlined: “Note that some of the items in this inventory do not exist [are very difficult]” (Paulhus et al., 2003). To check that participants read the warning, we presented them with an “instructions comprehension check,” which included the statement “Some of these items do not exist.” (True/False/I'm not sure), in addition to two filler, general attention questions (“In this part of the study, you will see items from how many categories?” (1 – 4, I'm not sure) and “You will be asked to rate you familiarity with different items.” (True/False/I'm not sure)).

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Participants then completed an overclaiming questionnaire for the domains of interest: biology, philosophy, and history (items borrowed from Paulhus et al., 2003). For each of these, they rated their familiarity on a 7-point scale with 15 domain-related items, presented in random

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3 order on a different page each, of which 12 were real and 3 were foils. Finally, participants filled  
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5 out a demographic questionnaire and provided information for payment.  
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### 8 Results

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10 Two participants whose overclaiming rate was more than 3 standard deviations above the  
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12 mean were excluded from all analyses.  
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15 Participants in the warning condition were more likely to indicate that the statement  
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17 “Some of these items do not exist” was true than those in the no-warning condition ( $M = 81.3\%$   
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19 vs.  $M = 6.4\%$ ,  $\chi^2(1, N = 95) = 61.8, p < 0.0001$ ), confirming that participants read the warning.  
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21 Next, to increase our power to detect any relationship between our warning condition and  
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23 perceived knowledge, we used a linear mixed model, which included a fixed effect for the  
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25 warning condition and fixed indicator variables for domain. We also included a random intercept  
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27 for participant to control for within-subject variance in overclaiming and for the non-  
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29 independence of each participant’s responses. Consistent with previous findings (Paulhus et al.,  
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31 2003), participants who were warned overclaimed less than those not warned ( $t(93) = -2.20, p <$   
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33  $0.05$ ). This relationship was in the same direction but nonsignificant when accuracy was entered  
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35 into the model ( $t(93.55) = -1.5, p = 0.13$ ).  
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41 We then tested whether the relationship between self-perceived knowledge and  
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43 overclaiming interacted with the warning condition. To the model described above, we added  
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45 accuracy, self-perceived knowledge, and a self-perceived knowledge X warning interaction as  
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47 predictors. Replicating our previous results, self-perceived knowledge positively predicted  
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49 overclaiming ( $t(262.57) = 55.41, p < 0.0001$ ). Further, the effect of self-perceived knowledge did  
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51 not interact with the warning condition ( $t(260.89) = 0.27$ ; see Table 2). Thus, warning people  
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53 that some of the items they were about to see did not exist reduced overclaiming as a whole, but  
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neither eliminated nor attenuated the positive relationship between self-perceived knowledge and overclaiming. Separate analyses also replicated the domain-specificity result; self-perceived knowledge in a specific domain was a better predictor of overclaiming within that domain than self-perceived knowledge in the other domains, except for history (see Table 3).

**Table 2.**

Coefficients in Linear Mixed Model Predicting Overclaiming from Self-Perceived Knowledge, Warning Condition, and Accuracy (Study 3)

Parameter	Estimate	SE	<i>p</i> value
Intercept	.11	.03	.001
SPK	.05	.01	<.0001
Warning (0 = no, 1 = yes)	-.01	.04	.78
SPK X Warning interaction	-.005	.01	.60
Biology	.22	.04	<.0001
Philosophy	.10	.01	<.0001
Accuracy	-.59	.01	<.0001

SPK = Self-perceived knowledge

**Table 3.**

Coefficients in Regressions Predicting Overclaiming from Self-Perceived Knowledge and Accuracy (Study 3)

	Overclaiming		
	Biology	Philosophy	History
SPK Biology	.061***	.0031	.00071
SPK Philosophy	.014	.062***	.026**
SPK History	.00038	.0067	.013
Accuracy in relevant domain	-.56***	-.80***	-.25***

\*\**p* < 0.01. \*\*\* *p* < .001. SPK = Self-perceived knowledge

**Study 4**

In Study 4, we tested the causal role of self-perception by manipulating self-perceived knowledge and measuring overclaiming. Manipulating self-perceived knowledge also allowed us

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3 to assess the effect of self-perceived knowledge independent of genuine knowledge, two  
4 variables that could not be decoupled in Studies 1-3. We shifted participants' perception of their  
5 U.S. geography knowledge by giving them an easy or difficult U.S. geography quiz prior to the  
6 overclaiming questionnaire (method from Ehrlinger & Dunning, 2003).  
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**Method**

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15 **Participants.** 148 individuals (55 female, mean age = 28 ( $SD = 9$ )) in the United States  
16 participated online through Amazon's Mechanical Turk. One additional participant who  
17 participated twice was excluded from all analyses. Sample size was determined in advance.  
18 Pretesting showed that 150 participants provide sufficient power to detect the effect of a  
19 between-subjects manipulation.  
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27 **Procedure.** After providing informed consent, participants were randomly assigned to  
28 one of three conditions: an easy, difficult, or no quiz ( $Ns = 49, 50, 49$ , respectively). The quiz  
29 included questions about North American travel and geography. The questions in the easy  
30 condition were meant to give participants the sense that they were relatively well-traveled and  
31 well-versed in U.S. geography because participants were likely to answer yes (e.g., "Have you  
32 ever been to New York? Y/N,") or to choose a high-numbered answer (e.g., "How many state  
33 capitals can you name? (a) 1-2 (b) 3-4 (c) 5 or more"). Questions in the difficult condition were  
34 similar but meant to induce the opposite feeling because participants were likely to answer no  
35 (e.g., "Have you ever been to North Dakota? Y/N") or to choose a low-numbered answer (e.g.,  
36 "How many state capitals can you name? (a) 1-10 (b) 11-30 (c) 31 or more").  
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As a manipulation check, all participants then rated their knowledge of U.S. geography from 1 (My geography knowledge is very weak) to 10 (My geography knowledge is very strong).  
Participants then completed an overclaiming questionnaire in which they were presented



## SELF-PERCEIVED KNOWLEDGE AND OVERCLAIMING

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3 with 15 randomly ordered places in the U.S., of which 12 were real (e.g., Philadelphia,  
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6 Pennsylvania; The National Mall; Acadia National Park) and 3 were foils (Monroe, Montana;  
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8 Lake Othello, Wisconsin; Cashmere, Oregon), and asked to rate their familiarity with each from  
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10 0 (Never heard of it) to 6 (Very familiar). Finally, participants filled out a demographic  
11  
12 questionnaire and provided information for payment.<sup>2</sup>  
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**Results**

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17 Participants in the easy vs. difficult condition reported having visited more of the places  
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19 about which they were asked ( $M = 2.6, SD = 1.6$  vs.  $M = 0.9, SD = 1.2$ );  $t(97) = 6.0, p < 0.0001$ )  
20  
21 and reported better geography knowledge on the manipulation check ( $M = 2.3, SD = 0.4$ ) vs.  $M =$   
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23  $1.5, SD = 0.4$ );  $t(97) = 10.8, p < 0.0001$ ). Thus, as expected, participants who completed the easy  
24  
25 quiz rated their knowledge of U.S. geography as higher ( $M = 6.4, SD = 2.3$ ) than those who  
26  
27 completed the difficult quiz ( $M = 5.4, SD = 2.3$ ;  $t(97) = 2.10; p = 0.038$ ). Those who completed  
28  
29 no quiz rated their knowledge in between the difficult and easy conditions ( $M = 5.9, SD = 2.3$ )  
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31 but did not differ significantly from either ( $ts < 1.07$ ).  
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37 To test our prediction that manipulating self-perceived knowledge would influence  
38  
39 overclaiming, we entered accuracy and quiz condition (easy, difficult, no quiz) into a regression  
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41 model to predict overclaiming in U.S. geography. We found a significant effect of condition  
42  
43 ( $F(2,144) = 6.73; p = 0.002$ ). Participants in the easy quiz condition overclaimed more ( $M = 0.16,$   
44  
45  $SD = 0.20$ ) than those in the difficult quiz condition ( $M = 0.05, SD = 0.10, t(96) = 2.78; p =$   
46  
47  $0.007$ ) and those in the no quiz condition ( $M = 0.07, SD = 0.13, t(95) = 2.92; p = 0.004$ ).  
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49 Participants in the difficult and no quiz conditions did not differ significantly ( $t(96) = 0.10$ ). Thus,  
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51 consistent with a causal account of the role of self-perceived knowledge in overclaiming,  
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58 <sup>2</sup> Participants then completed an unrelated study not discussed here.  
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## SELF-PERCEIVED KNOWLEDGE AND OVERCLAIMING

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3 participants induced to feel more knowledgeable about U.S. geography were more likely to claim  
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5 familiarity with nonexistent places in the U.S.  
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**Discussion**

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10 Our work suggests that the seemingly straightforward task to judge one's knowledge may  
11 not be so straightforward, and particularly so for individuals who believe they have more  
12 knowledge to begin with. In Study 1, we found that self-perceived knowledge of personal  
13 finance positively predicted claiming knowledge of non-existent domain-related terms. In Study  
14 2, we found that self-perceived knowledge in a particular domain was particularly relevant to  
15 overclaiming within that domain. Study 3 revealed that warning that some items were bogus did  
16 not alter the relationship between self-perceived knowledge and overclaiming, suggesting that  
17 self-perceptions were prompting mistaken but honest claims of knowledge. Finally, Study 4  
18 demonstrated a causal influence of self-perceived knowledge on overclaiming. Experimentally  
19 enhancing self-perceived knowledge in geography increased overclaiming knowledge of  
20 nonexistent places. These results converge to demonstrate that the more individuals believe they  
21 know about a domain, the more likely they are to claim knowledge in that domain that they  
22 cannot possibly possess.  
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41 The findings add to the body of work on how individuals assess their own knowledge.  
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43 Our results suggest that people do not necessarily consult some "mental index" that catalogues  
44 their knowledge. Rather, they may draw on preexisting self-perceptions of knowledge to make  
45 inferences about what they should or probably do know (e.g., Koriat, 1995). For domains of high  
46 self-perceived expertise, these inferences may induce a sense of familiarity even with terms that  
47 sound plausibly real but are not.  
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55 An alternative explanation, not excluding the first one, is that greater self-perceived  
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## SELF-PERCEIVED KNOWLEDGE AND OVERCLAIMING

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3 knowledge increases individuals' motivation to search their memories for relevant knowledge.  
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6 Individuals who perceive themselves as more knowledgeable in biology, for example, may be  
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8 more motivated to construct a plausible notion of what *bio-sexual* means. Independent of  
9  
10 differences in people's initial sense of familiarity, high self-perception of domain expertise may  
11  
12 lead to a confirmation-biased memory search (e.g., Kunda, 1990) for a way the nonexistent term  
13  
14 might indeed be familiar.  
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18 It is easy to imagine how a tendency to overclaim, especially in self-perceived experts,  
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20 could have adverse consequences. Self-perceived experts may give bad counsel when they  
21  
22 should give none. For instance, an individual considering a financial decision may consult a  
23  
24 friend who expresses confidence in her financial knowledge (Zarnoth & Snizek, 1997). That  
25  
26 friend may provide inappropriate advice because she fails to recognize her insufficient  
27  
28 familiarity with the financial question. Further, an overclaiming tendency may discourage  
29  
30 individuals from educating themselves in precisely those areas in which they consider  
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32 themselves knowledgeable, and which may be important to them (Metcalf, 2009). In other  
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34 words, overclaiming may hinder people from truly achieving a valuable level of genuine  
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36 knowledge.  
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42 Future research should investigate these and other potential consequences. Another area  
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44 to explore is the relationship between overclaiming and genuine expertise. Study 4 compared  
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46 individuals who differed only in their experimentally-induced level of self-perceived knowledge,  
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48 suggesting that the higher rate of overclaiming was related to the self-perception of knowledge,  
49  
50 whether it be grounded in actual knowledge or not. Individuals genuinely more knowledgeable in  
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52 a domain may be better at differentiating what they know from what they do not within that  
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54 domain, and therefore show reduced overclaiming. Alternatively, they may overclaim more  
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SELF-PERCEIVED KNOWLEDGE AND OVERCLAIMING

because they have a larger knowledge base from which to draw when assessing familiarity with plausible-sounding foils. Answering this question may lie at the heart of battling that greatest enemy – not ignorance, but the illusion of knowledge.

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For Review Only

## SELF-PERCEIVED KNOWLEDGE AND OVERCLAIMING

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