Bored and Better: Interpersonal Boredom Results in People Feeling Not Only Superior to the Boring Individual, But Also to Others

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Abstract

Four experiments tested the hypothesis that meeting someone new who is boring would result in people feeling superior to the boring individual, which would then result in people viewing themselves as better than others and increased confidence. Respondents reported greater feelings of superiority, meaninglessness, and difficulty paying attention when they wrote about meeting a new, boring individual than a new or manipulative individual. Feeling superior, but not meaninglessness and attention, mediated the effect of interpersonal boredom on viewing oneself as better than others, but not on confidence. These finding did not occur when people wrote about a boring task or a disliked, manipulative individual. The experiments elucidate how interpersonal boredom, albeit a negative experience, can enhance people's sense of self.

Key words: Interpersonal boredom, superiority, self-enhancement, meaninglessness

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"I can excuse everything but boredom. Boring people don't have to stay that way." Actress Hedy Lamarr

As actress Hedy Lamarr's quote illustrates, people are not shy about expressing their disdain for boring people (Leary, et al., 1986).[1] Even though people intensely dislike being in a boring social situation, we explore the hypothesis that this negative experience can enhance people's sense of self. This hypothesis stems from some of the earliest uses of the word boredom, which appeared in Charles Dickens' *Bleak House* (1853). During the Victorian Era, the experience of boredom was reserved solely for aristocrats and used to signal their superior status. Aristocrats were described as putting on a 'bored air" to indicate that they are better than, and are not amused by, their inferior company (Lewinsky, 1943). If so, interpersonal boredom, while unpleasant, might have had unique consequences in that it could create and signal feelings of superiority. We build upon this idea, by arguing that feeling superior to a boring individual might have consequences for the self, in that it can result in people feeling better than others in general and being confident in one's knowledge.

We conducted four experiments to examine these hypotheses. First, we tested whether interpersonal boredom results in people feeling superior to the individual who they found to be boring (hypothesis 1). Then, we investigated whether these feelings of superiority increase the extent to which people view themselves as better than others in general (hypothesis 2) and results in people being more confident (hypothesis 3). To provide a rationale for these predictions, we

[1] In this paper, we refer to "boring people" or "boring individuals". We do not use this term to indicate that there is something inherently boring about the person, but the term reflects the perceivers' own experience and evaluation of the person.

first discuss interpersonal boredom. Then, we discuss how and why interpersonal boredom might lead to viewing oneself as superior to a boring individual. Lastly, we discuss how superiority could produce enhanced views of one's self relative to others and promote confidence.

What is Interpersonal Boredom?

Boredom is a negative state that arises when people want to, but are unable to, engage in satisfying activities in their environment (Eastwood et al., 2012; Leary et al., 1986; Tam et al., 2021). Boredom is often characterized as signaling that the situation is difficult to pay attention to (Eastwood et al., 2012; Tam et al., 2021) and/or that the situation lacks meaning (Moynihan et al., 2021). According to the Meaning and Attentional Components Model (MAC, Westgate & Wilson, 2018), boredom is a functional emotion that alerts people as to whether their current activity is something that they do *not want to* focus on (i.e., the meaning component) and are *unable to* focus on (i.e., the attentional component). Boredom, therefore, becomes "…a powerful indicator of whether our attention is successfully and meaningfully engaged, redirecting us when it is not" (Westgate & Steidle, 2020, p. 2).

Boredom is also a powerful social emotion that requires attention to cultural and organizational norms, one's position within society, and interpersonal interactions (Olhmeier, et al., 2020). Yet, because researchers typically focus on boredom experienced while doing a task, little empirical work has examined boredom in social situations (Ohlmeier, et al., 2020). Theoretical papers on the social nature of boredom mirror those on task boredom, in that they generally propose that boredom arises when people view themselves as being unable to engage in or having little to no role in a social interaction, which creates a desire to end it (Darden & Marks, 1999; Ohlmeier et al., 2020). However, a failure to truly engage with boredom as a social emotion leads researchers to neglect the importance of social interaction in the construction of

boredom, including the interactional antecedents and consequences of social boredom (Olhmeier, et al., 2020). Of particular relevance to this project is that, as a social emotion, boredom has been theorized to be related to one's social position. Those holding a higher social status have the privilege of being bored, while those holding a lower social status experience boredom because of structural inhibitions to meaningful activity (e.g., unemployment, inability to effect change, see Olheimer et al., 2020). Expanding upon theory and anecdotal evidence, this work seeks to contribute to understanding boredom as a social emotion through experimental manipulations of interpersonal interactions.

Feeling Superior to Boring Individuals

As the opening quote by Heady Lamarr suggests, in addition to boredom resulting in people wanting to leave the interaction, it also results in people intensely disliking boring individuals (Leary et al., 1986; van Tilburg et al., 2022). For example, Leary et al., (1986) found that, relative to interesting people, boring people were thought to possess a host of negative interpersonal qualities, including being insecure, unfriendly, and unpopular. Within romantic relationships, boring partners are seen as dull, their conversation is lacking, and being in a relationship with them feels like a chore; in fact, relational boredom is a strong predictor of relational dissatisfaction (Harasymchuk & Fehr, 2012). A more recent study by van Tilburg et al., (2022) on people's stereotypes of boring individuals also presents a dark picture. Using the stereotype content model as a guide, they found that boring people were seen as both low in warmth and low in competence. In the stereotype content model, groups that are low in both warmth and competence are the most extreme, low power, out-groups, and "…receive unabashed disliking and disrespect." (Harris & Fiske, 2006, p. 848). To put boring people in this category is surprising given that boring people stereotypically can hold positions that reflect a degree of

competence. For instance, boring people are stereotyped as working as data analysists, accountants, librarians, and in banking or finance (van Tilburg et al., 2022). They are seen as being more reliable and intelligent than interesting individuals (Leary et al., 1986). Yet, even though people recognize that boring individuals have some positive qualities, people still intensely dislike them. This sentiment is nicely captured by author, Christopher Hitchens' mother who believed that "The one unforgivable sin is to be boring." (2010, p. 14).

Disliking someone, however, need not lead to feeling superior to them. So why is it that feelings of interpersonal boredom might increase people's sense of superiority? Recall that boredom signals that the source of one's boredom is not worthy of attention and is meaningless (Barbalet, 1999; van Tillburg & Igou, 2012). Boring people are stereotyped as belonging to a low power group that elicits contempt and disgust (Harris & Fiske, 2006). It seems reasonable that many people would view themselves as superior to person who they view in this extremely negative light.

Indeed, numerous lines of thought reveal that denigrating others can serve as a chance to bolster one's self. For instance, van Tilburg et al., (2022) speculated that the boring stereotype can give people the chance to flatter themselves because a negative out-group stereotype can increase people's own sense of self-worth. Outward expressions of boredom also are used as a means to express perceived superior status (Brissett & Snow, 1993, Wangh, 1975) and to put social distance between oneself and those who are boring (Brissett & Snow, 1993). The experience of boredom, in some circles, is seen as a "mark of distinction," because it conveys that one finds whatever the object of one's boredom to be commonplace and blasé. Silver (2012) describes this attitude, writing "… there is a kind of moral competition that follows from the aspiration to ethical superiority in boredom. One strives to be *more* bored than everybody else in

the room. At the same time, one takes care to never be boring to others." While this link between boredom and superiority might seem obvious, we could only find speculations and anecdotal, rather than empirical, support for it. Moreover, it is unclear if this link arises because people with higher status are more likely to experience/express boredom (because their status affords them the power to look down upon others) or if the experience of interpersonal boredom alone is enough to promote feelings of superiority over the boring individuals.

While theory and anecdotal evidence suggests that interpersonal boredom might signal superior status, research on trait boredom (boredom proneness) does find that it is associated with narcissism, which often involves feeling superior to others. A closer examination of this finding reveals that this association occurs with vulnerable narcissism (which is characterized by feeling inferior, insecure, and timid), and only sometimes with grandiose narcissism (which is more characteristic of superiority in that it involves perceiving oneself as important, see Lee, 2019; Wink & Donahue, 1997; Zondag, 2013). Because this work focuses on trait boredom, it is unclear if momentary feelings of boredom aroused by interpersonal exchanges (which is the focus here) would have the same link. Importantly, because this work is correlational, the directionality is still unclear – does boredom lead to superiority or does superiority lead to boredom, or both? Therefore, this project uses a series of experiments to test if interpersonal boredom would result in people feeling superior to the boring individual (hypothesis 1).

Superiority Promoting Viewing Oneself as Better than Others

In addition to viewing one's self as superior to the boring individual, people who are bored also might be more likely to view themselves as better than others in general. Because boredom can function as a meaning threat (Moynihan et al., 2021), people might try to mitigate this threat and restore meaning by enhancing their sense of self (Heine et al., 2006). For

instance, Van Tilburg and Igou (2012) found that bored people sought to mitigate their feelings of meaningfulness by affirming themselves via favoring identity-relevant stimuli and favoring their in-group over their out-groups. Like van Tilburg and Igou (2012), we too argue that boredom might promote the bolstering of one's self as a means to mitigate the boredom threat. But, in the case of interpersonal boredom, we argue that the sense of superiority over the boring individual contributes to this general sense of being better than others. Specifically, to mitigate the existential threat to meaning that boredom presents, we argue that people both denigrate the boring person (other-inferiority) and enhance their sense of self (self-superiority). Denigrating others (Fein & Spencer, 1997) and feeling superior to the boring individuals can help people feel better about themselves, which could lead to self-enhancement and lessening the threat that boredom presents to one's sense of meaning. Indeed, the better than average effect, which is in essence is viewing one's self as better than others, is "one of the most robust of all self-enhancement phenomena" (Alicke & Govorun, 2005, p. 85). Thus, we tested whether interpersonal boredom promoted feelings of superiority over the boring individual (hypothesis 1), which in turn resulted in people feeling better than others in general (hypothesis 2). In addition, we also conducted analyses to determine whether feelings of meaningless contributed to people feeling better than others, and if these effects stemmed from other-inferiority or self-superiority.

Superiority Promoting Confidence in One's Knowledge

Feelings of superiority also might increase people's confidence in their own knowledge. Research indicates that both status and power are associated with confidence (Briñol, et al., 2017; Gilbert et al., 1996). People who are high in social power, for example, are more confident in their perceptions of others (Catterson et al., 2015). Arrogance, which is linked to the

belief that one is superior to others and the denigration of others (two things we hypothesize arise when encountering a boring individual), also contributes to people being overly confident in their knowledge, skills, and abilities (Cowan et al., 2019). Given these links, it makes sense that feelings of superiority might result in people feeling more confident in their own knowledge, which could have potential consequences for how people navigate risks, seek advice, or make decisions (Darke & Freedman, 1997; Campbell, et al., 2004). Therefore, we tested whether interpersonal boredom would promote confidence in one's own knowledge (hypothesis 3).

Overview

We conducted four experiments. Experiment 1 examined whether interpersonal boredom promotes feelings of superiority relative to the boring individual (hypothesis 1). Experiments 2, 3, and 4 examined whether interpersonal boredom promoted feelings of superiority over the boring individuals, which in turn resulted in people rating themselves as better than others (hypothesis 2) and increased their confidence (hypothesis 3). Experiment 3 examined whether these effects were specific to interpersonal boredom or if they occur with task boredom. Experiment 4 examined whether these effects could be due to merely interacting with a disliked individual.

The data and syntax that support the findings in this work are openly available at (note currently a private link for review, if accepted it will be public with a doi: https://osf.io/zaytp/?view_only=00c14cdaaa634bd2a663247c90721837). This research was reviewed and approved by the Institutional Review Board at the Pennsylvania State University, IRB # 00013282. In all experiments, participants consented to participate.

Experiment 1

Method

Participants

Amazon's Mechanical Turk was used to recruit participants who were US residents, 18 years or older, and native English speakers. Two-hundred and twenty-three participants (100 female, one missing) completed this experiment for monetary compensation. Four respondents (1 female, 3 male) were dropped for not passing the attention check (a statement in the reactions questionnaire, discussed below, asked respondents to select "1 = not at all" for that question). Participants were on average 35.80 years old (*SD* = 11.36, range: 19-70 years); 5% African-American, 11% Asian/Pacific Islander, 74% White, 7% Latino/a, and 3% other. A sensitivity power analysis (difference between two independent means; Faul, et al., 2007) revealed that the lowest effect size detected, at 80% power, was $d = 0.38$.

Materials and Procedure

Using a between-participants design, respondents were randomly assigned to report what it typically feels like (affect) and how they typically react (reactions) to either meeting someone new or meeting someone new who is very boring.

Affect. To measure affect, participants were asked to (a) "Think about what it typically feels like to meet someone new. Please rate the extent to which you would feel the following emotions" or (b) "Think about what it typically feels like to meet someone new who is very boring. Please rate the extent to which you would feel the following emotions." Respondents then used a 7-point scale (1 = *Not at all* to 7 = *Extremely*) to rate items that formed a boredom scale (3 items, $\alpha = .95$, bored, disinterested, and dull), and an annoyance scale (4 items, $\alpha = .93$, annoyed, irritated, agitated, disdain).

Reactions. Participants were asked to (a) "Please rate how well the following statements describe the reactions that you typically have when you meet someone new" or (b) "Please rate

how well the following statements describe the reactions that you typically have when you meet someone new who is very boring." They rated 17 items using a 7-point scale (1 = *Not at all* to 7 = *Extremely*). The items were designed to assess participants' feelings of superiority relative to the person mentioned in the instructions (e.g., "I feel that I have more natural talents than the other person in the situation", "I feel a bit superior to the other person in the situation") and viewing the situation as meaningless (e.g., "I think that the situation is rather meaningless", "I think about how there are better things that I could be doing").

Because this was a new measure, to establish that superiority was distinct from meaninglessness, all items were submitted to an exploratory factor analysis with an oblimin rotation (because we assumed that the factors would be correlated). The analysis revealed a two-factor solution. The first factor (superiority: 11 items, $\alpha = .94$) accounted for 58.47% of the variance, and the second factor (meaninglessness: 6 items, $\alpha = .93$) accounted for 10.57% of the variance. See supplementary materials for the specific items and factor loadings.

Results and Discussion

A series of independent-sample t-tests (meeting someone new vs. meeting someone new who is boring) were conducted on the two affect (boredom and annoyance) and two reaction (superiority and meaninglessness) measures. Table 1 displays the means, standard deviations, and effect sizes for the t-tests. Consistent with previous research on boredom, people who reported on meeting someone new who is very boring (vs. meeting someone new) felt more bored, annoyed, and more feelings of meaninglessness. Critically, and consistent with hypothesis 1, they also reported feeling superior to the boring individual relative to the new individual.

Experiment 2 was designed to replicate and extend these findings. Experiment 1 focused on people's general thoughts about what these interpersonal interactions might be like. Thus, in

Experiment 2, we induced feelings of interpersonal boredom. Because different people find different things to be boring, boredom was manipulated by asking people to imagine themselves in an interaction rather than participating in a real interaction. This procedure is highly effective at manipulating moods (Westermann, et al., 1996), and allowed us to customize the interaction so that everyone could focus on an encounter that elicited boredom in themselves. Experiment 2 also assessed whether interpersonal boredom would result in people rating themselves as better than others in general (hypothesis 2) and being more confident in their knowledge (hypothesis 3).

Experiment 2

Method

Participants

This experiment included 321 undergraduate participants. Five participants were dropped for failing the attention check (see Exp 1), leaving 316 respondents, (186 female), who were on average 18.69 years old (*SD* = .94, range = 18-23 years); 5% African-American, 12% Asian/Pacific Islander, 73% White, 8% Latino/a, 3% other and received partial course credit. A sensitivity power analysis indicated the study could detect a $d = .32$, $\alpha = .05$, power = .80.

Materials and Procedure

The experiment was completed on a laboratory computer. In a between-participants design, respondents were randomly assigned to write about what it typically feels like to meet someone new or someone new who is very boring. The instructions for the boring condition were:

> We are interested in learning more about social interactions. In particular, what does it typically feel like to meet someone new who is very boring?
> To learn about this situation, please write about what it typically feels like to meet someone new who is very boring.

> Please take time to think about this event. Try to see it in your mind's eye. Then, describe what events are contributing to your feelings as vividly and in as much detail as possible. Please write about the event such that a person reading it may experience it as you experience it. Write about what you feel and why. Please do not write about any event that you do not wish to share or think about. If such an event comes to mind, please think of a different event or move on to the next exercise.

Instructions for the meeting someone new condition were identical but omitted any mention of a boring person.

Affect and Reactions. Participants rated the same items as in Experiment 1 that formed the boredom scale (α = .90) and the annoyance scale (α = .91). To save time, they also completed a shorted version of the superiority (α = .83) and meaninglessness (α = .87) measures used in Experiment 1.[2]

Better than Others. Respondents completed a measure (see Allan & Gilbert, 1995) in which they reported to what extent certain qualities described them right now relative to others. These 11 qualities were rated using a 7-point scale anchored by different pairs of adjectives (1 – 7; unlikeable – likeable, left out – accepted, different – same, untalented – more talented, weaker – stronger, unconfident – confident, incompetent – competent, inferior – superior, undesirable – desirable, unattractive – attractive, outsider – insider, α = .90).[3]

Confidence. Participants responded to nine questions about specialized knowledge and indicated the degree of confidence they had in their response by supplying confidence intervals

[2] To reduce the length of the superiority and meaninglessness scales from Experiment 1, in Experiment 2 we selected a total of 6 key items to construct the superiority and meaninglessness scales: superiority (2 items, "I felt that I had more natural talents than the other person in the situation", and "I felt wittier and more charming than the other person in the situation"), meaninglessness (4 items, "I felt a desire to end the situation", "I wanted to distance myself from the other person involved in the situation", "I thought that the situation was rather meaningless", and "I thought about how there are better things that I could be doing").

[3] To confirm that the better than other measure differed from the measure of superiority, items from both scales were submitted to an exploratory factory analysis with an oblimin rotation and specifying a two-factor solution. The first factor accounted for 44.08% of the variance and included all the items from the superiority scale. The second factor accounted for 13.11% of the variance and included all the items from the confidence scale. See supplementary materials for specific factor loadings.

for their answers (Russo & Schoemaker, 1992). Participants reported a two number range (e.g., 45-100) in response to the following questions: “What was Martin Luther King Jr’s age at death?”, “What is the length of the Nile River, in miles?”, “How many countries belong to OPEC?”, “How many books are in the Old Testament?”, “What is the weight of an empty Boeing 747, in pounds?”, “In what year was Mozart born?”, “What is the gestation period of an Asian elephant, in days?”, “What is the air distance from London to Tokyo, in miles?”, and “What is the deepest known point in the ocean, in feet?”. Wider ranges indicate lower confidence and narrower ranges indicate higher confidence. The responses for each question were standardized to place them on a common metric and averaged together to obtain the final measure. The data were highly skewed due to some people selecting extremely divergent anchor points. Thus, we Winsorized the data, such that any data point that was 3 standard deviations or greater was changed to the score that reflected a 3 standard deviation departure from the mean. The Winsorized data produced similar results; therefore, we report the non-Winsorized data. Also, we computed a correct response score, such that responses were “correct” if participants’ range for each question included the accurate response. If people were too confident in their reactions, then they should have fewer correct responses within their stated confidence intervals.

Results

A series of independent-sample t-tests (meeting someone new vs. meeting someone new who is boring) were conducted on all dependent variables. Table 2 displays the means, standard deviations, and effect sizes for the t-tests.

Affect and Reactions

Consistent with predictions and replicating Experiment 1, participants experienced more boredom, annoyance, meaninglessness, and superiority if they wrote about meeting some new who was boring than just meeting someone new.

Better than Others and Confidence

In terms of rating themselves as better than others and being overly confident, there was only marginally significant effect on both outcomes (p's < .07), and no effect on the number correct. [4]

Mediation

We also conducted an exploratory analysis to determine whether feelings of superiority over the individual and/or meaninglessness mediated the effect of the boredom manipulation on these measures. Because multiple mediators are possible, an independent variable, such as boredom, can indirectly alter the dependent variable via a mediator like superiority, even if the independent variable does not have a significant effect on the dependent variable (Hayes, 2009; Mathieu & Taylor, 2006). To test for mediation, we used Model 4 in Hayes Process (Hayes, 2013), with 10,000 bootstrap samples and bias corrected confidence intervals. Meaningless and superiority were treated as simultaneous mediators. People who wrote about meeting a new, boring person reported feeling more superiority, b = .78, se = .08, t(314) = 9.44, p < .001, and more meaninglessness, b = 1.08, se = .07, t(314) = 14.85, p < .001, than those who wrote about meeting someone new. Feeling superior to the boring person was associated with being more likely to rate one's self as better than others, b = .12, se = .04, t(312) = 2.71, p = .007; whereas, meaninglessness actually resulted in one being *less* likely to rate one's self as better than others,

[4]In addition, we performed the analysis on the better than others measure removing the inferior-superior item (α = .89), and the results remain the same (boring: M = 4.61 SD = 0.96, new: M = 4.41, SD = 1.04), t(314) = -1.77, p = .08.

b = -.13, *se* = .05, *t*(312) = -2.64, *p* = .009. The indirect effect of feelings of superiority, *indirect effect* = .09*, se* = .04*, 95%CI* [.02, .17], and feelings of meaninglessness, *indirect effect* = -.14*, se* = .06*, 95%CI* [-.26, -.03] on rating oneself as better than others were both significant. Thus, feeling superior to the boring person predicted being more likely to view oneself as better than others, while feelings of meaningless actually resulted in people being *less* likely to view themselves as better than others.

We conducted similar analyses using feelings of confidence and number correct as the outcome variables. Neither the indirect effect of superiority, *indirect effect* on confidence = .01*, se* = .02*, 95%CI* [-.02, .05], on number correct = .05*, se* = .06*, 95%CI* [-.08, .17] nor meaninglessness, *indirect effect on* confidence = .01*, se* = .02*, 95%CI* [-.03, .06], number correct = -.03*, se* = .09*, 95%CI* [-.21, .16] were significant.

Discussion

Experiment 2 indicated that interpersonal boredom can result in people feeling superior to the person who bored them (hypothesis 1) and viewing the interaction as lacking meaning. Moreover, there was a significant indirect effect of the feelings of superiority on viewing oneself as better than others (hypothesis 2). In contrast to the view that meaninglessness would promote positive self-views, the more meaninglessness people felt, the less likely they were to rate themselves as better than others. Even though the mediations were significant, the boredom manipulation only tended to directly influence the measure of viewing oneself as better than others. In terms of confidence, there was a marginal, but nonsignificant, effect of the boredom manipulation on confidence estimates, such that people were more confident in the boring than control condition (hypothesis 3). However, in contrast to predictions, there was no indirect

association between interpersonal boredom and confidence. Given these data, we conducted a third experiment to try to replicate these findings and to build upon them in four ways.

First, it is unclear whether these effects are specific to interpersonal boredom or if they would extend to task boredom. If task boredom sparks feelings of superiority, then the effects are not about interpersonal boredom per se, but boredom in general. To address this question, Experiment 3 included a condition in which participants wrote about engaging in a boring task.

Second, the superiority measure only indicated that people felt superior to the boring person. It cannot address whether this effect stems from people enhancing themselves (self-superiority), viewing the boring individual as inferior (other-inferiority), or both. Addressing this issue is important because it sheds light on why people's positive views of themselves relative to others increases. If people are enhancing themselves, then it makes sense that they view themselves as better than others in general. If they view the boring person as inferior, but do not elevate themselves, then merely feeling better than one person might be less likely to generalize to feeling better than others in general. To examine these nuances and to increase generalizability, Experiment 3 used a different measure of superiority – perceived size. The larger people see themselves relative to others, the more entitled they feel and act (Piff, et al., 2015). Greater perceived size also is associated with greater perceived sociometric status, sense of power, self-entitlement, self-efficacy, and self-esteem (Bai et al., 2017). If boredom promotes self-superiority, respondents in the interpersonal boredom condition should rate themselves as large in size relative to how people rate their size in the someone new condition. If interpersonal boredom results in people viewing the boring person as inferior, then respondents should view the boring person as small in size relative to how people rate the size of new person.

Third, we added a measure to assess perceived social status as another indicator of superiority. Specifically, social status is defined by hierarchy (Weber, 2009), with higher social status being indicative of social superiority (Fiske, 2010). Thus, if interpersonal boredom promotes self-superiority, people will rate both their own status as higher than the status of another person, and if interpersonal boredom promotes other-inferiority, then they will rate the person they find to be boring as having lower status than that of another person.

Lastly, to increase generalizability, Experiment 3 included a new measure of meaninglessness and added a measure of attention. The MAC model of boredom (see Westgate & Wilson, 2018) argues that both meaningless and attention are key to the boredom experience. Therefore, it is possible that feelings of meaninglessness and inability to attend to the boring person result in them rating themselves as better than others and their increase in confidence.

Experiment 3

Method

Participants

This experiment included 294 undergraduate participants (184 female), who were on average 19 years old (*SD* = 1.22, *range*: 18 - 25 years); 8% African-American, 14% Asian/Pacific Islander, 69% White, 5% Latino/a, and 4% other. A sensitivity power analyses indicated the study could detect a small to medium effect size of $f = .18$, $\alpha = .05$, at 80% power.

Materials and Procedure

The experiment was completed on a laboratory computer. Using a between-participants design, respondents were randomly assigned to write about what it typically feels like to: meet someone new, meet someone new who is very boring, or work on a very boring task. The writing

prompts were identical to those used in Experiment 2, but in the very boring task condition the instructions now referred to working on a boring task.

Affect. Participants completed the same boredom (α = .91), annoyance (α = .92) items from Experiment 2.

Reactions. Following Westgate and Wilson (2018), participants reported their experiences of meaning and attention while completing the writing task. They rated, using a 7-point scale (1 = *Not at all* to 7 = *Extremely*), "How personally meaningful was the situation you wrote about for your event?" (meaning measure) and "How difficult was it to concentrate in the situation you wrote about for your event?" (difficulty attending measure).

Measures of Self-Superiority and Other-Inferiority. We used measures from Bai, et al., (2017) to assess perceived size, with larger size relative to others reflecting feelings of superiority. Respondents rated how "small" and "insignificant" they felt relative to others during the writing task using a 7-point scale (1 = *Strongly disagree* to 7 = *Strongly agree*). They also viewed three graphical depictions that illustrated a series of seven objects (circles, stick figures, and the word "ME", respectively), from smallest to largest, and were asked to indicate which object best represented them in each illustration (Bai et al., 2017). In both situations, the larger the object selected, the bigger (more superior) the person felt.

To measure other-inferiority, people repeated these measures (expect for the one that involved the illustration that depicted the word "ME"), but they were asked to rate how small to big the person was in the story that they wrote about (i.e., the boring or new person). Participants who wrote about a boring task were asked to rate "the typical person."

In addition to rating their size, to assess superiority, participants completed the MacArthur Scale of Subjective Social Status (Adler, et al., 2000). Participants viewed an image

of a 10-step ladder and read that the bottom step (step 1) represents a person's lowest standing in their community, while the top step (step 10) represents a person's highest standing in their community. Self-superiority, as measured by status, was assessed by asking participants which step of the ladder represents their standing in their community. Other-inferiority was assessed by asking which step of the ladder represents the standing in the community of the person they wrote about. If participants wrote about a boring task, then this item referenced "the typical person."

Better than Others and Confidence. Respondents completed the better than others (α =.88) and confidence in self measures used in Experiment 2.[5]

Measure Validation

To confirm that these various measures of superiority measured self-superiority vs. other-inferiority formed coherent factors, and that they also differed from the measure of being better than others in general, a factor analysis was conducted with an oblimin rotation. A scree plot indicated that a three-factor solution was appropriate, with the measure of being better than others in general, self-superiority, and other-inferiority all being separate factors. Factor 1 accounted for 32.16% of the variance and contained all the items from the being better than others in general. Factor 2 accounted for 13.52% of the variance and assessed other inferiority. It contained all other-size items relevant to the person they wrote about/typical person and the MacArthur Scale status item that assessed perceptions of the person they wrote about/typical person. Factor 3 accounted for 8.12% of the variance and assessed self-superiority. It contained all self-size items relevant to the self and the MacArthur Scale status item that assessed perceptions of the self (self-superiority, see supplemental materials for more information).

[5] As in Experiment 2, the data for confidence were skewed, so we also conducted analyses after Winsorizing the data. These data were similar to the non-Winsorized data, thus we report the non-Winsorized data.

Accordingly, we combined the other-size and MacArthur Scale ratings of the other to create an other-inferiority scale (5 items, $\alpha = .81$) and the self-size and MacArthur Scale ratings of oneself on the ladder to form a self-superiority scale (6 items, $\alpha = .85$).

Results

A series of one-way, between-participants ANOVAs (meeting someone new, meeting someone new who is boring, boring task) were conducted on all dependent variables. Table 3 displays the means, standard deviations, and effect sizes for the contrasts from the ANOVAs.

Affect and Reactions

Replicating Experiments 1 and 2, participants reported more boredom and annoyance if they wrote about meeting a new, boring individual than a new individual. Also, respondents who wrote about interpersonal boredom reported levels of boredom and annoyance that were statistically equivalent to those who wrote about task boredom (equivalence test: bored: $t(194) = -1.77$, $p = .039$, annoyed: $t(194) = -1.73$, $p = .03$).[6]

In terms of reactions, the data reveal that both self-superiority and other-inferiority occurred. Participants reported more self-superiority if they wrote about meeting a boring person than those who wrote about meeting someone new or engaging in a boring task. Participants who wrote about meeting a boring person also rated the person they wrote about as being inferior (less status) relative to those in who wrote about meeting a new person or rated a typical person (i.e., the boring task condition). Writing about meeting someone new was more meaningful than writing about meeting someone boring or performing a boring task. Interestingly, attention

[6] Equivalence tests examine whether two means are equal to one another. If one rejects the null (that the means are different), one establishes evidence for equivalence. To conduct these tests, we used the TOSTER module in Jamovi. Based on our sample size and power, for all tests we set the lower and upper equivalence bounds to Cohen's $D = -0.4, 0.4$. When these tests are run, p-values appear for both the lower and upper bound. The researcher then examines whether the larger of the two p-values is less than .05. Here, we report only the larger of these two p-values as per Lakens et al., (2018). If this larger of the two p-values is significant, then we can conclude that the two means are statistically equivalent.

depended on the boring condition, with participants saying that they had greater difficulty attending to the situation when writing about a boring task than when writing about meeting someone boring or new.

Better than Others and Confidence

Replicating and extending Experiment 2, participants who wrote about meeting a boring person rated themselves as better than others compared to people who wrote about meeting someone new or about a boring task, which were equivalent, $t(194) = -2.24$, $p = .013$. No differences emerged across conditions on confidence measure, and, interestingly, people correctly solved more problems in the boring person condition than in the new person or boring task conditions.

Mediation

Once again, we conducted exploratory mediation analyses to determine whether meaning, self-superiority, other-inferiority, or attention mediated the link between interpersonal boredom and rating one's self as better than others and being more confident in one's answers. We used Process model 4, with 10,000 bootstrap samples and bias corrected confidence intervals (Hayes, 2013). We treated attention, meaning, self-superiority and other-inferiority as simultaneous mediators. Because the manipulation had three levels, we created two dummy variables in which a boring person condition was always the referent (0): D1 compared a boring person to a new person (coded as 1), and D2 compared a boring person to a boring task (coded as 1). Consistent with the previous analyses on the means, a boring task, $b = .72$, $se = .22$, $t(291) = 3.23$, $p = .001$, but not a new person, $b = .23$, $se = .22$, $t(291) = 1.05$, $p = .30$, was harder to attend to than the boring person. A new person, $b = .93$, $se = .22$, $t(291) = 4.24$, $p < .001$, but not a boring task, $b = .26$, $se = .22$, $t(291) = 1.16$, $p = .25$, was more meaningful than a boring person. People in the

boring person condition also reported greater self-superiority than those in the new person, b = -.46, se =.14, $t(291) = -3.34$, $p = .001$, or boring task condition, b = -.51, se = .14, $t(291) = -3.67$, $p = .0003$. They also reported that the person they wrote about was more inferior (other-inferiority) than those in the new person, $b = 1.20$, $se = .15$, $t(291) = 8.11$, $p < .001$, and boring task, $b = .86$, $se = .15$, $t(291) = 5.80$, $p < .001$, conditions.

Out of these 4 possible simultaneous mediators (self-superiority, other-inferiority, meaning, and attention), only self-superiority and attention predicted rating oneself as better than others. When self-superiority was examined, the greater one's self-superiority, the more likely they were to rate themselves as better than others, $b = .49$, $se = .05$, $t(287) = 10.37$, $p < .001$. Analyses of the indirect effects for self-superiority revealed that it mediated the association between both boring person/new person, *indirect effect* = -.23, se = .07, 95%CI[-.38, - .09], and boring person/boring task, *indirect effect* = -.25, se = .06, 95%CI[-.39, -.13], on people's ratings of being better than others.

Attention also mediated the link between interpersonal boredom and superiority, but not in a way that one might predict. Recall, one possibility is that greater difficulties in attention would result in people being more likely to feel better than others, because having a hard time attending to a person might suggest that the person they are attending to is inferior and hence one might be better than others. Instead, these data indicate that the more difficult it was to pay attention, the *less* likely respondents were to rate themselves as better than others, b = -.09, se = .03, $t(287) = -3.30$, p =.001. Analyses of the indirect effects revealed that difficulty attending was only a significant indirect link to ratings one's self as better than others in the boring person /boring task contrast, *indirect effect* = -.07, se= .03, 95%CI[-.13, -.02], but not boring person/ new person contrast, *indirect effect* = -.02, se(boot) = .02, 95%CI[-.07, .02]. Specifically, if

people wrote about a boring task, they reported exerting more attention than those who wrote about a boring person, which *reduced* the degree to which people rated themselves as better than others.

Neither meaning nor other-inferiority operated as mediators; indirect effects for the boring person/new person contrast: Meaning: b = -.03, se = .03, 95%CI[-.10, .02]; Other-inferiority: b = -.05 , se = .06 , 95%CI[-.18, .06]. Indirect effects for the boring person/boring task contrast: Meaning: *indirect effect* = -.01, se =.01, 95%CI[-.05, .004]; Other-inferiority: *indirect effect* = -.04 , se = .05 , 95%CI[-.14, .05].

The same mediational analyses were conducted on the confidence measure and number correct. None of the mediators were significant indirect effects.

Discussion

Experiment 3 revealed that feelings of interpersonal boredom, but not task boredom, result in respondents viewing themselves as better than others. The effect of interpersonal boredom on viewing oneself as better than others stemmed from interpersonal boredom creating as sense of self-superiority, rather than due to it creating other-inferiority, feelings of meaninglessness, or inattentiveness. This effect did not arise with task boredom, revealing that the sense of superiority was due to the interpersonal nature of the boredom experience. Interestingly, task boredom led to people feeling like they had a hard time paying attention, relative to the interpersonal boredom condition, which resulted in people viewing themselves as being *less* likely to be better than others. This finding could have come about if the experience of not being able to attend to a task suggested that one is having problems with the task, and having problems with the task might have been viewed as indicating that one is not necessarily better than others, and perhaps worse than others, given their issues paying attention to the task.

Contrary to predictions, Experiment 3 did not support the hypothesis that interpersonal boredom promotes greater confidence in one's own knowledge. One potential reason might be due to our use of confidence intervals. People are generally unfamiliar with confidence intervals (Juslin, et al., 2000), potentially making response-errors more likely (Moore & Schatz, 2017), which might have contributed to this confidence measure being unreliable. Also, it is possible that some people who felt confident might have used wide, rather than narrow, confidence intervals because they felt emboldened to write down unrealistic estimates. In Experiment 4, we addressed this issue by changing how confidence was measured. Instead of asking people to provide a confidence region, we provided the students with a multiple-choice task and asked them to rate how confident they felt in their answers and in the likelihood that the person they wrote about would have gotten the answer correct. By limiting the range of responses participants could provide for their confidence rating, and by focusing participants on how confident they are in their own response relative to another person's response, we hoped to be better able to assess increases in confidence in one's own knowledge as well as how much better they perceive themselves relative to another person.

Experiment 4 also examined an alternative explanation for these findings. It could be that there is nothing special about boredom. These results might merely indicate that people feel superior whenever they interact with a disliked individual. To address this issue, in Experiment 4, we compared how people react when they imagine an interaction with someone who is boring or someone who is manipulative. We selected a manipulative person because this person should be disliked.[7] Yet, unlike a boring person, a manipulative person should be someone that is worthy of attention (you want to pay attention to them because they could harm you) and is

[7] Note, the term "manipulative person" is used to indicate that this is a person that someone perceives to be manipulative rather than an inherent quality in the person.

potentially seen as meaningful (in that they could cause harm). Consequently, a person might not feel superior to a manipulative individual because the manipulative individual might not present the same meaning threat as a boring person. We hypothesized that people would dislike the manipulative person just as much, if not more so, than the boring person. The boring person, however, would be paid less attention to, be rated as less meaningful, and instill greater feelings of superiority relative to the manipulative person. These feelings of superiority would then result in people in the boring person condition ratings themselves as better than others in general and possessing more confidence than those in the manipulative condition.

Experiment 4

Method

This experiment was preregistered (https://aspredicted.org/CJJ_XOD). Please note that due to a copy and paste error, our a-priori procedure for handling outliers was accidently not include in the pre-registration. In the supplemental materials, we include dated screen shots of this procedure to provide additional evidence of what we intended to preregister.

Participants

A total of 216 people participated in the laboratory experiment. Thirteen respondents were eliminated because they failed the attention check, 5 were eliminated due to not following the writing prompt instructions, and 4 were eliminated as outliers (i.e., standardized residual exceeded an absolute value of 3.5 on dependent measures). The final analyses were conducted on 194 undergraduate participants (111 female), who were on average 20 years old (SD = 2.83, range = 18-43 years); 7.7% African American, 7.7% Asian/Pacific Islander, 72.7% White, 8.2% Latino/a, 3.6% other. Participants received partial course credit. A sensitivity power analysis revealed that the lowest effect size detected, at 80% power, was d = 0.40.

Materials and Procedure

Respondents completed the task on a laboratory computer. Using the same writing prompt as in Experiment 2, respondents were randomly assigned to write about what it typically feels like to meet someone new who is very boring or someone new who is manipulative. To create the manipulative condition, the word "boring" was replaced with the word "manipulative."

Affect, Liking, and Reactions. Participants completed the same boredom (α = .85), and annoyance (α = .90) measures from Experiments 1-3, with items added to it to assess the extent to which they felt manipulated (α = .96; lied to, taken advantage of, manipulated).

To assess overall liking, respondents answered "What is your overall opinion of the person you wrote about?" on a 1 = *extremely negative* to 7 = *extremely positive* scale.

To assess participants' reactions, they rated the extent to which 11 statements described their thoughts and feelings while writing about the event using a 7-point scale (1 = *not at all* to 7 = *extremely*). We decided to bolster the measure of superiority used in Experiment 2 by adding two additional items used Experiment 1 (α = .87).[8] We used the same meaninglessness measure from Experiment 2 (α = .78), and also added 3 new items to measure attention (α = .96, e.g. "I had a hard time focusing on the other person in this situation"). An exploratory factor analysis on these statements with an oblimin rotation confirmed that these items did indeed form 3 separate factors (see supplementary materials for details).

Better than Others. Participants completed the same measure used in Experiments 2 and 3 (α = .85).[9]

[8] The two added items were "I felt that I could achieve more things than the other person in the situation," and "I felt a bit superior to the other person in the situation."

[9] As in Experiment 2, an exploratory factor analysis with an oblimin rotation was conducted to confirm that the better than others items loaded on a separate factor than the superiority items, see supplemental materials. This analysis was not preregistered and was added to address a reviewer comment.

Confidence. To assess confidence, participants completed 9 items from the Mind's Eye Task (Baron-Cohen, et al., 2001). For each item, participants saw a set of eyes and selected, from four options, which emotion the eyes represented. Then, using a 7-point scale (1 = *not at all likely* to 7 = *very likely*), participants rated how likely it was that they selected the correct answer ($\alpha = .78$) and how likely it was that the person they wrote about would select the right answer ($\alpha = .84$). The degree to which participants rated themselves as better than their partner served as the indicator of confidence.

Results

A series of independent-sample t-tests comparing the boring and manipulative conditions were conducted on all dependent variables. Table 4 displays the means, standard deviations, and effect sizes.

Affect, Liking, and Reactions

As predicted (see Table 4), participants who wrote about what it is like to meet someone who is very boring reported experiencing more boredom, felt less manipulated, but not more annoyed relative to those who wrote about meeting a manipulative person. Also, they liked the boring person more than the manipulative person. In terms of reactions, participants who wrote about a boring person also felt more superiority, greater meaninglessness, and had a harder time attending to the situation than those who wrote about a manipulative person.

Better than Others

Although the manipulations were effective, in contrast to predictions, participants who wrote about meeting a boring person did not rate themselves as significantly better than others, relative to those who wrote about a manipulative person.

Confidence

We conducted a 2 (boredom manipulation: boring vs. manipulative) x 2 (confidence attribution: confidence in self vs. confidence in partner) repeated measures ANOVA, in which bored vs. manipulative was a between-participants effect and confidence was a within-participants effect. The analyses indicated that people expressed more confidence in the manipulative than the boring condition (Manipulative: $M = 4.69$, $SE = .07$; Boring: $M = 4.46$, $SE = .07$; $F(1, 192) = 5.60$, $p = .019$, $\eta^2_p = .028$). Participants also were more confident in their own ability to obtain the correct answers than in the ability of the person they wrote about to obtain the correct answers (Own: $M = 4.80$, $SE = .05$; Other: $M = 4.36$, $SE = .07$; $F(1, 192) = 38.84$, $p < .001$, $\eta^2_p = .16$). Finally, both these effects were qualified by an interaction between the boredom manipulation and the confidence attribution, $F(1, 192) = 9.68$, $p = .002$, $\eta^2_p = .048$. As predicted, people had more confidence in themselves relative to a boring person ($M_{difference\ (self\text{-}other)} = .66$, $SD = 1.04$) than a manipulative person ($M_{difference\ (self\text{-}other)} = .21$, $SD = .98$, for means see Table 4).

Even though it was not mentioned in our preregistration, for the sake of completion, we examined whether there were any differences on the total number correct in the Mind's Eye Task. As Table 4 indicates, there were no significant differences.

Mediation

We then conducted mediation analyses to determine whether feelings of superiority, meaninglessness, or ability to pay attention mediated the effect of the boredom manipulation on (a) rating one's self as better than others and (b) confidence in self relative to others. To test this, we used Model 4 in Hayes Process (Hayes, 2013), with 10,000 bootstrap samples.

Better than others. People who wrote about meeting a boring person reported feeling more superiority, $b = .47$, $se = .22$, $t(192) = 2.11$, $p = .036$, more meaninglessness, $b = .52$, $se = .20$, $t(192) = 2.61$, $p = .010$, and greater difficulty attending, $b = 1.78$, $se = .24$, $t(192) = 7.52$, p

< .001 than those who wrote about meeting a manipulative person. Feelings of superiority indirectly mediated the effect of boredom vs. manipulative condition on rating one's self as better than others, *indirect effect* = .05, *se* = .03, *95%CI* [.0004, .013]. Consistent with the hypothesis that it is superiority, rather than meaningless or attention, that leads people to feel better than others, neither meaninglessness *indirect effect* = -.03, *se* = .03, *95%CI* [-.095, .031], nor difficulty paying attention *indirect effect* = -.02, *se* = .08, *95%CI* [-.18, .15] operated as mediators.

Confidence. When the same analyses were conducted looking at confidence (how confident you are in your responses relative to the person you wrote about), neither superiority, *indirect effect* = .03, *se* = .03, *95%CI* [-.02, .11], meaninglessness *indirect effect* = -.002, *se* = .04, *95%CI* [-.09, .08], nor ability to pay attention *indirect effect* = .06, *se* = .10, *95%CI* [-.13, .27] operated as mediators.

Exploratory Analyses. Recall that Experiment 3 indicated that feeling better than others stemmed from self-superiority rather than other-inferiority. This finding suggests people's feelings of superiority might shape how confident people are in themselves, but not how confident they are in others. Thus, we conduct an exploratory mediation analyses to determine if superiority mediated the effect on interpersonal boredom on one's self-confidence ratings, but not their other-confidence ratings. We again used Model 4 in Hayes Process (Hayes, 2013) with 10,000 bootstrap samples. Consistent with the argument that superiority influences how one views themselves, the superiority rating mediated the effect of partner condition on one's own confidence, *indirect effect* = .05, *se* = .03, *95%CI* [.0006, .1179], but meaningfulness, *indirect effect* = .007, *se* = .03, *95%CI* [-.04, .06], and attention, *indirect effect* = -.07, *se* = .07, *95%CI* [-.22, .07] did not. However, when looking at participants' ratings of confidence in their partner,

there was no mediation effect, superiority: *indirect effect* = .02, *se* = .03, *95%CI* [-.0372, .07862], meaninglessness: *indirect effect* = .001, *se* = .04, *95%CI* [-.0604, .0886], attention: *indirect effect* = -.13, *se* = .09, *95%CI* [-.3092, .03462].

Discussion

Experiment 4 examined whether the superiority effects found in Experiments 1 to 3 were because people felt superior to boring individuals or because they felt superior to people who possessed negative qualities more generally. To address this issue, Experiment 4 compared to what extent people felt superior to a boring person relative to another person with negative qualities - a manipulative person. Unlike a boring person, however, a manipulative person would be less likely to evoke feelings of superiority because they would be deemed as worthy of more attention and seen as more meaningful and hence be less likely to serve as an existential threat. Consistent with the view, participants disliked the manipulative person more than the boring person, but they attended to, found more meaning in, and were less likely to feel superior to the individual if they thought about their interactions with the manipulative person than the boring person.

Interestingly, despite successfully manipulating these key elements, imagining interacting with a boring person did not result in rating oneself as being better than others in general relative to interacting with a manipulative person. Because there was no control group, it is unclear if both groups resulted in an increase in viewing themselves as better than others or if neither affected this outcome. Assuming both conditions did result in participants rating themselves as better than others, this effect could have arisen for each condition via different mechanisms. Consistent with this view, the mediational analyses support the hypothesis that people felt superior to the boring person relative to a manipulative person, and these feelings of superiority

were associated with feeling better than others more generally. Thus, it is feeling superior to the boring, but not manipulative, person that accounts for why interpersonal boredom results in people viewing themselves as better than others.

We also examined whether people were overly confident in their assessments. As one might expect, people had more confidence in their estimates than they did in other's estimates. Consistent with predictions, boredom condition interacted with self/other confidence ratings. Respondents were more confident in themselves than the person that they wrote about if they wrote about a boring, rather than a manipulative, person. Mediational analyses, however, did not find that superiority, attention, and meaningless mediated the effect of boredom/manipulative condition on this relative confidence measure. The failure to find a mediation effect might stem from the fact that Study 3 revealed that the effect influences one's sense of self-superiority rather than from denigrating the other. If so, then perhaps the mediation effect would arise if one looked at self-confidence, but not at other-confidence. Consistent with this post-hoc explanation, exploratory analyses revealed that superiority indirectly mediated the effect of condition on self-, but not other-, confidence. That is, feelings of superiority are influencing how one views the self, but they are not shaping how one is thinking about the other.

General Discussion

These four experiments provide evidence for a new way in which interpersonal boredom might shape one's sense of self – via feelings of superiority over the boring individual. We investigated the hypothesis that interpersonal boredom would result in: (1) viewing oneself as superior to the boring person, which would result in (2) rating oneself as better than others in general and (3) being confident in one's responses.

As predicted by hypothesis 1, interpersonal boredom that stemmed from thinking about meeting a new, boring person resulted in people viewing themselves as superior to the boring individual (Experiments 1-4). Consistent with hypothesis 2, in Experiments 2 and 3 writing about interacting with a boring person resulted in people rating themselves as better than others in general relative to writing about interacting with a new person, Cohen's d = .21, .38. Experiment 4 examined whether these effects would replicate if, instead of writing about a new person, respondents wrote about someone else who has negative qualities - a manipulative person. In this experiment, both conditions resulted in people viewing themselves as similarly better than others, but the mechanisms differed. People felt more superior to the boring person than the manipulative person, and it was this superiority effect, rather than a sense of meaninglessness or inattention, that resulted in respondents in the bored, but not manipulative, condition to view themselves as better than others in general. These effects appear to stem from people inflating their views of self rather than from viewing the boring individual as less than others (Experiment 3). This finding also is consistent with prior work speculating that the better than average effect is stems from inflating the self, rather than denigrating the other (Alicke & Govorun, 2005). Consistent with the hypothesis that it is the interpersonal nature of boredom that was responsible for these effects, writing about a boring task did not produce these results (Experiment 3) nor did writing about a disliked, manipulative person (Experiment 4).

Hypothesis 3, which was that feeling superior to the boring individual would result in people being confident in their responses, also received some support (Cohens's d = .21, .25, and .45, Experiments 2, 3, & 4, respectively). The effect size, however, was only statistically significant in Experiment 4, perhaps because we no longer measured it using self-determined confidence intervals and switched to using a relative confidence measure. Even though there was

an effect on confidence, in contrast to predictions, superiority did not mediate the effect of boredom on the relative confidence measure. The only time superiority mediated the effect of interpersonal boredom on confidence occurred in an exploratory analysis in Experiment 4, in which superiority over the boring individual mediated the effect of condition on self, but not other, confidence. Thus, there appears to be some evidence that boredom might promote confidence, but it is unclear if this effect stems from feelings of superiority over the boring individual, resulting in mixed support for hypothesis 3. If researchers are interested in assessing boredom's effect on confidence, they should assume an effect size around d = .20, use a measure that assess feelings of self-confidence that has strong reliability and validity, and consider that confidence might arise due to mechanisms other than a sense of superiority over the boring person. For instance, research indicates that boredom can promote sensation seeking and risk taking (e.g., Bench et al., 2021; Kass & Vodanovich, 1990; Kılıç, et al., 2020), perhaps an element of this desire for risk results in one being confident.

One interesting element of this work is that we are arguing that interpersonal boredom has potentially different consequences than task boredom. We hold this view, because unlike task boredom, interpersonal boredom stems from a situational context in which a person is a source of one's state. Boredom signals that not only is the boring person inferior, but also that one is superior to the boring individual. That is, consistent with some of the earliest uses of boredom in the English language in which it was reserved as a means to describe aristocrats' reactions to those of lower status, the experience of interpersonal boredom signals that one is better than the boring individual leading one to feel better than others. It is also important to keep in mind that these effects focus on a specific interpersonal situation – meeting someone new, who is boring. The results might not be the same in other contexts, such as when the boring

person is a loved one. For instance, if people are bored by their romantic partner, they might not feel superior due to their long-term connection and try to take constructive, rather than dismissive, approaches to resolving their boredom (Harasymchuk & Fehr, 2010). Thus, an important question concerns what factors determine when interpersonal boredom results in people feeling superiority.

One might argue that these results are not all that surprising, in that people might regularly view themselves as superior to people who have negative qualities. Experiment 4, however, delineates that people might dislike those with negative qualities, but that does not mean that they would view themselves as superior to them. We argue that the boredom superiority effect stems from the fact that boredom signals that one does not want to and is unable to pay attention to the person. There are plenty of disliked people where this is not the case, such as manipulative, malicious, and malignant people. We are not claiming that this superiority effect is specific to boring people, but rather that interacting with boring people can create a sense of superiority. We expect that others might find similar effects if they focus on groups that also are viewed to be difficult to attend to and low in meaning.

It is also important to acknowledge that while interacting with a boring person can increase one's sense of superiority and result in one viewing themselves as better than other people, this process has numerous interpersonal costs. First, interacting with a boring person is inherently unpleasant. Second, people might express their boredom. Expressing boredom not only signals dislike and contempt for the boring individual (which may or may not be problematic), but it also makes the bored individual vulnerable to negative evaluations. Boredom often is not a socially condoned state, with people who express boredom potentially being seen as rude. It also is viewed as a potential weakness, in that some people think that only boring

people get bored (Darden & Marks, 1999). Third, expressing one's self as better than others in a social situation might result in the person being labeled an egotist or a snob, which ironically are groups of that often are stereotyped as being boring (Leary et al., 1997). People with status or power might not care if they are viewed in this manner because their power buffers them against some of these social costs. However, these costs can vary depending on the context. Relatedly, the experience of boredom varies cross-culturally (e.g., Ng, et al., 2015) – such that White North Americans tend to value high-arousal positive affects more, and low-arousal positive affects less, suggesting that perhaps in other cultures boredom is not viewed in such a negative light. Given these links, interesting avenues for research are to examine who expresses interpersonal boredom, to whom, how, when, and what, if any, costs might occur. Thus, while interpersonal boredom can enhance people's sense of self, this increase can come with large potential costs.

Author, Christopher Hitchens' (2010) recalled that his mother believed that being boring is the one unforgivable sin. Consistent with the stereotype of the aristocrat's bored air signaling their sense of superiority over others, these experiments indicate that experiences of interpersonal boredom, stemming from meeting someone new and boring, result in one both denigrating and feeling superior to the boring individual. These feelings of self-superiority then result in people feeling better than others in general. Thus, interpersonal boredom is a negative experience, with potentially self-enhancing consequences.

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Table 1

Results of Independent-sample T-tests for Experiment 1.

	Someone Boring (*N* = 110)	**Someone New (*N* = 109)**	***t***	***p***	***Cohen's D***	***Cohen's D 95% CI***
Affect						
Boredom						
M	5.28	2.10	16.28	< .001	2.02	[1.86, 2.54]
SD	1.58	1.30				
Annoyance						
M	3.46	1.89	8.23	< .001	1.11	[0.83, 1.40]
SD	1.14	1.25				
Reactions						
Superiority						
M	3.72	2.77	5.13	< .001	0.69	[0.42, 0.96]
SD	1.43	1.32				
Meaninglessness						
M	4.55	2.68	9.97	< .001	1.35	[1.05, 1.64]
SD	1.41	1.37				

Note. The degrees of freedom for the *t*-test were (217).

Table 2

Results of Independent-sample T-tests (Meeting Someone New vs. Meeting Someone New who is Very Boring) for Experiment 2.

	Someone Boring (N = 159)	Someone New (N = 157)	*t*	*p*	*Cohen's D*	*Cohen's D 95% CI*
Affect						
Boredom						
M	3.94	2.82	6.30	< .001	0.71	[0.48, 0.94]
SD	1.57	1.57				
Annoyance						
M	2.61	1.81	5.50	< .001	0.62	[0.39, 0.84]
SD	1.47	1.08				
Reactions						
Superiority						
M	3.82	2.25	9.44	< .001	1.06	[.83, 1.30]
SD	1.66	1.25				
Meaninglessness						
M	4.36	2.19	14.85	< .001	1.67	[1.41, 1.93
SD	1.48	1.08				
Dependent Variables						
Better than others						
M	4.58	4.37	1.89	.060	0.21	[0.01, 0.44]
SD	0.93	1.02				
Confidence Range						
M	-0.04	0.04	-1.83	.068	-0.21	[-0.43, 0.02]
SD	0.28	0.50				
Correct responses						
M	2.27	2.40	-0.71	.477	-0.08	[-0.30, 0.14]
SD	1.49	1.76				

Note: The degrees of freedom for the *t*-test were 314, except for the confidence data, in which they were 310, with each cell having an N = 156. Higher confidence range scores indicate wider confidence intervals around people's estimates, which reflects less confidence.

Table 3
Results of the One-Way ANOVA and the Contrasts Between the Three Conditions (Meeting Someone Boring, Someone New, Performing Boring Task) for Experiment 3

	Someone Boring (*N* = 98)	**Someone New (*N* = 98)**	**Boring Task (*N* = 98)**	***F***	η_p^2	**Someone Boring vs. New** *Cohen's D* **with 95% CI**	**Someone Boring vs. Boring task** *Cohen's D* **with *95% CI***
Affect							
Boredom							
M	4.28	3.09	4.52	21.76***	0.13	0.74***	-0.15
SD	1.61	1.62	1.66			[0.45, 1.03]	[-.43, 0.13]
Annoyance							
M	2.79	2.01	3.03	14.15***	0.09	0.59***	-0.16
SD	1.46	1.18	1.56			[0.30, 0.87]	[-0.44, 0.12]
Reactions							
Self-Superiority							
M	5.54	5.07	5.03	8.25***	0.05	0.48***	0.60***
SD	0.75	1.17	0.95			[0.19, 0.76]	[0.31, 0.88]
Other-Inferiority							
M	3.88	5.09	4.74	34.94***	0.19	-1.04***	-0.62***
SD	1.11	1.21	0.73			[-1.34, 0.74]	[-.91, -0.34]
Meaning							
M	2.65	3.58	2.91	9.59***	0.06	-0.61***	-0.18
SD	1.27	1.75	1.54			[-0.89, -0.32]	[-0.46, 0.10]
Difficulty Attending							
M	2.63	2.87	3.36	5.42**	0.04	-0.16	-0.46***
SD	1.42	1.52	1.75			[-0.44, 0.12]	[-0.74, -0.17]
Dependent Variables							
Better than others							
M	4.97	4.63	4.56	5.68**	0.04	0.38**	0.45**
SD	0.93	0.88	0.88			[0.09, 0.66]	[0.17, 0.74]
Confidence Range							

M	0.03	-0.06	0.02	1.53	.01	0.25	0.02
SD	0.45	0.24	0.44			[-0.03, 0.53]	[-0.26, 0.30]
Correct Responses							
M	2.91	2.28	2.33	4.43**	0.03	0.36**	0.35**
SD	1.80	1.68	1.46			[0.08, 0.64]	[0.07, 0.64]

Note. The degrees of freedom for the *F*-tests were (2, 291) except for confidence data where it was (2, 290); Someone Boring $N = 97$, other two conditions respectively $N = 98$; $p < .001$***, $p < .01$**, $p < .05$*. Higher other-inferiority scores indicate more status. Higher confidence range scores indicate wider confidence intervals around people's estimates, which indicates less confidence.

Table 4
Results of Independent-sample T-tests (Meeting Someone New who is Boring vs. Meeting Someone New who is Manipulative) for Experiment 4.

	Someone Boring (*N* = 99)	**Someone Manipulative (*N* = 95)**	***t***	***p***	***Cohen's D***	***Cohen's D 95% CI***
Affect						
Boredom						
M	3.95	3.10	3.99	< .001	.57	[.29, .86]
SD	1.63	1.30				
Manipulated						
M	1.52	3.06	-6.55	< .001	-.94	[-1.24, -.64]
SD	.95	2.14				
Annoyance						
M	2.77	2.93	-0.69	.491	-.10	[-.38, .18]
SD	1.60	1.60				
Overall Opinion						
Liking						
M	3.28	2.45	5.56	< .001	.80	[.50, 1.09]
SD	1.02	1.06				
Reactions						
Superiority						
M	3.82	3.35	2.11	.036	.30	[.02, .59]
SD	1.56	1.57				
Meaninglessness						
M	4.67	4.15	2.61	.010	.37	[.09, .66]
SD	1.48	1.31				
Difficulty Attending						
M	4.80	3.02	7.52	< .001	1.08	[.78, 1.38]
SD	1.79	1.49				
Dependent Variables						
Better than others						
M	4.70	4.71	-0.02	.988	.00	[-.28, .28]
SD	.87	.88				
Confidence in Self						
M	4.80	4.80	0.00	.997	.00	[-.28, .28]
SD	.82	.69				
Confidence in Other						
M	4.13	4.58	-3.49	.001	-.50	[-.79, -.21]
SD	.88	.92				
Confidence Self minus Other						
M	.66	.21	3.12	.002	.45	[.16, .73]
SD	1.04	.98				
Number Correct on Mind's Eye						
M	5.71	5.78	-0.31	.706	-.04	[-.33, .23]
SD	1.31	1.34				