When Boastful Word of Mouth Helps versus Hurts Social Perceptions and Persuasion

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Although self-enhancement has recently been established as a central motive for sharing word-of-mouth information, little is known about the impact of self-enhancing assertions (e.g., boasting) on persuasion. We theorize, and demonstrate in three studies, that although boasting is perceived negatively, such immodest self-presentations can either impede or enhance social perceptions and persuasion. The valence of the persuasion outcome depends heavily on trust cues that change the meaning of boasting to the word-of-mouth recipient. Boasting in the presence of low trust cues activates heightened vigilance (e.g., valenced thoughts) about the source's motives, leading to decreased persuasion. However, when given reason to trust the source specifically or people generally, boasting is readily accepted as a signal of source expertise, leading to increased persuasion. Implications for consumer decision making and firms seeking to manage consumer social influence are discussed.

Keywords: self-enhancement, source cues, trust, persuasion knowledge, social perception, word of mouth

By some accounts, boastful self-enhancement has become an online epidemic (Bernstein 2012). For example, in one recent survey, over half of respondents admitted to having boasted online about their travel exploits before they even returned home (Travelmail Reporter 2012). A popular press book documents the pervasiveness of "humblebrags"—people who use false modesty as cover for their self-enhancing Twitter boasts (Wittels 2012). Whether it's the anonymity offered by the Internet (Bernstein 2012) or the ability to edit online posts to highlight positive aspects of the self (Gonzales and Hancock 2011), self-enhancing statements appear to be endemic to these popular word-of-mouth settings.

Recent research confirms that word-of-mouth transmission is often driven by self-enhancement motives (Barasch and Berger 2013; Berger 2014; De Angelis et al. 2012; Packard and Wooten 2013); that is, desires to develop favorable beliefs about oneself (Baumeister 1998). In fact, approximately one in four online reviews are reported to contain self-enhancing assertions (Otterbacher 2011). So, for example, a consumer's online review of a hotel is likely to not only convey information about the hotel's rooms or service quality, but it also may include favorable information about the consumer's abilities or expertise as a traveler.

Although the preceding suggests that boasting is common when people share their product opinions and recommendations, especially online, little is known about the impact of these immodest assertions. This research

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examines the impact of source boasting on recipients of word of mouth, and the critical role of trust cues as determinants of recipients' reactions to the source and the products they endorse.

People typically don't think highly of others who make self-enhancing statements about themselves (Bansler and Havn 2003; Godfrey, Jones, and Lord 1986; Jones and Wortman 1973; Robinson, Johnson, and Shields 1995; Sedikides, Gregg, and Hart 2008). As a result, one might expect boasting to cause people to reject a self-enhancing consumer's persuasion attempt (e.g., a product recommendation in an online review). People tend to generate negative perceptions and be vigilant against persuasion attempts by individuals who are thought to be motivated by self-interests (e.g., the selling motive; Campbell and Kirmani 2000; Kirmani and Zhu 2007; Main, Dahl, and Darke 2007).

However, people often seek word-of-mouth information from other consumers in part because they are seen as a more trustworthy source than advertising or salespeople (Dellarocas 2003; Hennig-Thurau et al. 2004). This inherent trust suggests that word-of-mouth sources might "get away with" their self-interested boasts. What's more, the recipients of word-of-mouth information might even find this information to be especially useful. Boastful claims of consumer experience or status could provide a valuable signal of source expertise—information that is scarce in technology-mediated settings (Dellarocas 2003)—and this could lead to increased persuasion (Pornpitakpan 2004).

But when does boasting signal something other than self-interest? This research proposes and demonstrates that trust cues "change the meaning of boasting" by moderating perceptions of the motivation and attributes of self-enhancing sources, and subsequently, the source's persuasiveness. We discuss prior work that contributes to our theorizing and then present three studies that test our predictions.

CONCEPTUAL DEVELOPMENT

Boastful Self-Enhancement and Social Perception

Talking positively about the self is pervasive in everyday life (Sedikides and Strube 1997). Research on everything from the self-serving bias (Mezulis et al. 2004) to better-than-average effects (Gershoff and Burson 2011) and overoptimism (Van den Steen 2004) suggests that people tend to be overly favorable when estimating and describing their own abilities and outcomes. Boasting, a common manifestation of self-enhancement, is defined as speaking with excessive positivity, pride, or immodesty about one's achievements, possessions, or abilities (Miller et al. 1992; Oxford English Dictionary 2015; Sedikides et al. 2008; Tice et al. 1995) such that desired attributes are brought to the attention of others (Schlenker and Leary 1982). Boastful, self-enhancing assertions are contrasted with modesty, a self-presentational strategy in which a person is neither boastful nor self-derogating (Sedikides et al. 2008; Tice et al.1995).

Evidence for self-enhancement in word of mouth is substantial. Self-enhancement is the third most common motivation for consumers to share product information online (Hennig-Thurau et al. 2004). Consumers who boastfully assert their epicurean expertise write more positive restaurant reviews in order to enhance their own self-image (Wojnicki and Godes 2012), brag about their own positive experiences to make themselves look better to others (De Angelis et al. 2012), and share positive information about themselves as a compensatory self-enhancement response to unfavorable feedback about their own category knowledge (Packard and Wooten 2013). Indeed, the self-enhancement motive is now well established as a central factor in word-of-mouth transmission (Berger 2014).

Because the present research is concerned with social perceptions of a persuasion source, the extent to which positive assertions of one's own abilities represent boastful self-enhancement (i.e., rather than, or in addition to, containing accurate information) depends on the audience rather than the speaker (Mackiewicz 2010; Miller et al. 1992; Schlenker and Weigold 1992). Because audiences generally perceive self-enhancing assertions negatively (Jones and Wortman 1973; Miller et al. 1992; Walther et al. 2009), it seems unlikely that boasting in word of mouth is frequently achieving the self-enhancer's goal of being seen more favorably. Recipients of immodest self-presentations often perceive self-enhancing individuals as boorish or self-centered, causing the attempted gain in status to backfire (Carlston and Shovar 1983; Forsyth, Berger, and Mitchell 1981; Jones and Pittman 1982; Wosinska et al. 1996). For example, in one study, participants who witnessed an individual's attempt to present himself as highly competent didn't rate him as any more so, but did rate him as less likable (Godfrey et al. 1986).

However, under specific conditions, self-enhancement efforts have produced positive outcomes. Forsyth et al. (1981) found that leaders who made highly self-enhancing attributions of a work group's success were judged to be less fair, less likable, and less collegial as leaders. On the bright side, they were perceived as more skilled (i.e., bad leaders, but good workers). Other research found that when individuals provided immodest (boastful) estimates of their future athletic success, recipients, who had no information about the individual's actual abilities, rated them as more athletic (Schlenker and Leary 1982).

In short, while most work suggests that recipients respond negatively to others' immodest assertions of their own abilities, under some conditions, they make positive inferences about boastful individuals. Yet neither the literature in psychology nor marketing has sufficiently described the conditions under which self-enhancing statements are

likely to help versus hurt social perceptions. Further, and important to the work here, we are unaware of research that explores how source self-enhancement influences persuasion. We propose a potential moderator: trust.

How Boasting Affects Social Perceptions and Persuasion: The Role of Trust

Whether boasting hurts or helps social perceptions and persuasion should depend highly on the availability of cues that signal the extent to which the source can be trusted. Trustworthiness in persuasion settings has been defined as the source's perceived sincerity or motivation to provide accurate information (Campbell and Kirmani 2000; Pornpitakpan 2004; Priester and Petty 1995, 2003; Wilson and Sherrell 1993) and is commonly contrasted with suspicion, distrust, and dubious or "sinister" motivations (Campbell and Kirmani 2000; Main et al. 2007).

A common framework used to examine the central role of trust in interpersonal influence is the Persuasion Knowledge Model (Friestad and Wright 1994). This model posits that consumers develop and leverage a "schemer schema" about firms and their agents (e.g., marketers, salespeople) during persuasion events. The accessibility of cues pertaining to a persuasion agent's motivation to provide accurate or misleading information influences recipient perceptions of the source's sincerity (i.e., their trustworthiness; Campbell and Kirmani 2000).

The model is heavily grounded in research examining how consumers cope with claims made by firms and their agents, who are perceived to be motivated by self-interest (Friestad and Wright 1994; Main et al. 2007). As a result, researchers leveraging the Persuasion Knowledge Model examine negative cues of source motivation (e.g., distrust or suspicion) that lead to negative agent perceptions. For example, Kirmani and Zhu (2007) report that the accessibility of behavioral cues that implicate distrust (e.g., negative own vs. other brand comparisons by firm agents) lead to perceptions that an agent is not trustworthy. Other researchers show that the negativity of these perceptions is so ingrained that consumers generate negative thoughts about an agent, leading to negative perceptions of their motives (e.g., distrust), even when an agent's behavior couldn't be serving self-interests (Main et al. 2007). Although we are aware of research in which this model was applied to consumer sources of product information, even this investigation considered a case in which the selling motive could be inferred for non-firm influencers (paid recommendations; Tuk et al. 2009).

Here we predict that in the presence of low trust cues, consumers will evaluate word-of-mouth sources of product information much like they evaluate firm agents. Low trust cues will lead to heightened vigilance about the motives underlying the persuasion event (Campbell and Kirmani 2000; Main et al. 2007). In the word-of-mouth case, a boasting, versus a more modest source, will be perceived as having dubious motives, and consequently, will be less persuasive.

But what about the presence of positive trust cues? Because consumers are considered relatively trustworthy to begin with (Dellarocas 2003; Hennig-Thurau et al. 2004), word-of-mouth recipients should be less likely to consider the source's motivation when a positive trust cue is present. That is, persuasion knowledge is less likely to be activated. In this case, a positive bias toward the source allows the recipient to simply accept the source's self-enhancing boasts of product experience or expertise (i.e., their consumer knowledge; Alba and Hutchinson 1987). In short, boasting given a high trust cue changes the meaning of this otherwise dubious behavior. While the boastful source may be perceived as a blowhard, he also conveys expertise, an important component of source credibility in the domain of consumer decision making (Pornpitakpan 2004).

Our theorizing is supported by findings that thoughts about a source's motives are unlikely to operate under conditions of heightened trust. Main et al. (2007) examined a persuasion setting in which a firm agent attempted to flatter the consumer either before or after a purchase. While negative thoughts about the agent influenced participants' perceptions of the firm agent given the possibility of agent self-interest (flattery before the sale), perceptions of the agent were not driven by such thoughts when flattery occurred after the sale. In this case, participants appeared to have unthinkingly generated perceptions of the firm agent as self-interested even though this motive could not have been operative. This result was explained as a generalized, and potentially erroneous, attribution of sinister intent.

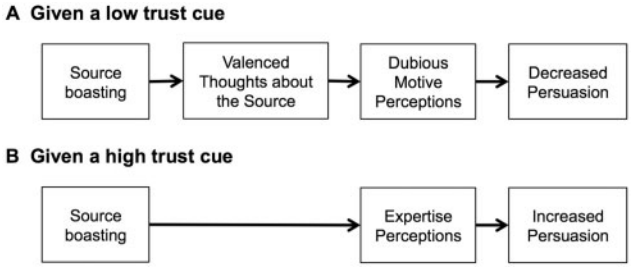
As discussed earlier, we theorize that a different attribution error may exist for consumer sources of product information because word-of-mouth sources are generally thought to be motivated by a desire to help others (Dellarocas 2003; Hennig-Thurau et al. 2004). If so, when trust concerns are diminished, people may simply accept a self-enhancing source's boasts as informative of the source's expertise, and be even more persuaded than they would have been in the absence of immodesty.

Research Summary

To recap, we predict that given a reason to distrust the source specifically or to distrust people generally, boasting leads to heightened vigilance and greater perceptions of dubious source motives, thereby impeding persuasion. This process (figure 1A) essentially replicates the Persuasion Knowledge Model, extending it to the word-of-mouth context and introducing self-enhancement as a form of source self-interest. However, when recipients feel trusting toward the source or toward people generally, source boasting should have a very different impact on social perceptions

FIGURE 1

PROCESS MODEL



and behavioral intentions. In this case, the absence of motivational concerns about consumer sources of product information changes the meaning of the boast, allowing these self-enhancing assertions to serve as positive signals of the source's expertise, leading to increased persuasion (figure 1B).

In the remainder of this article, we present three studies that test our predictions. All three studies show that boasting decreases the persuasiveness of a word-of-mouth source in the presence of a low trust cue, but increases persuasiveness in the presence of a high trust cue. Study 1 provides an initial demonstration of this effect. We manipulate a source attribute previously linked to trustworthiness (demographic similarity) and examine how boasting and similarity interactively impact perceived motives and the recipient's likelihood of choosing the product. Because similarity also provides information-related cues (e.g., diagnosticity), study 2 replicates the effect with a more direct trust cue—others' prior assessments of the source's trustworthiness (i.e., a "rate the reviewer" score)—and examines perceptions of source expertise as an explanation for positive effects of boasting on persuasion (figure 1, panel B). Study 3 replicates the effect using a subtler, indirect prime of generalized trust in others, and it assesses recipients' thoughts, which, as discussed earlier, are expected to lead them to infer dubious motives of self-enhancing sources, but only in the presence of low (as opposed to high) trust cues.

We note at this point that, by design, the Persuasion Knowledge Model and related research (e.g., Main et al. 2007; Priester and Petty 1995, 2003) fundamentally examine trust at each stage of the model. For example, the cues, inferences, and perceptions of Campbell and Kirmani's (2000) process model all capture trust (i.e., motivation-related) concerns in the persuasion agent or source. By using both direct and indirect trust cues as the moderator across our studies, we mitigate potential concerns about confounding the first stage trust cue (e.g., similarity, rate the reviewer score, generalized trust prime) with subsequent thoughts and perceptions of the source's potentially dubious motives, thereby enhancing confidence in the central role of trust throughout the process.

STUDY 1: SIMILARITY AS A TRUST CUE MODERATING THE IMPACT OF SELF-ENHANCEMENT ON PERSUASION

This study provides an initial test of the impact of source self-enhancement on interpersonal persuasion, and it examines how trust cues moderate this relationship. We predict that while low trust cues will impede persuasion for more versus less boastful sources of word-of-mouth information, more positive trust cues may make boasters more persuasive than their modest counterparts.

For this study, we build on prior work examining interpersonal similarity (Feick and Higie 1992; Gershoff, Broniarczyk, and West 2001; Naylor, Lamberton, and Norton 2011) as a trust cue that should moderate the persuasiveness of a self-enhancing source of word-of-mouth information. Social ties that are demographically similar are perceived as more reliable (Brown and Reingen 1987; Rogers 1995) and motivated to help others (i.e., trustworthy; Wuyts et al. 2004). Further, people tend to communicate more often and more easily with similar others, leading to trust and comfort with the flow of information among dyads high in similarity (McPherson, Smith-Lovin, and Cook 2001). Therefore, we expect motivational concerns to be minimized for a boastful source that is demographically similar to the recipient. However, we expect source dissimilarity to activate trust concerns that impede persuasion. If true, then perceptions of the extent to which the source possesses dubious motives should mediate the relationship between self-enhancement and persuasion for a dissimilar, but not a similar, word-of-mouth source.

Participants, Design, and Procedure

Undergraduate students ($N = 127$, 88 female) participated in the study in exchange for cash payment. The study used a 2 (similarity: low, high) $\times$ 2 (boasting: low, high) between-subjects design.

Participants imagined they were shopping for an upcoming beach vacation at a travel website when they came across a review of a promising hotel. In the high [low] boasting condition, participants read the following review:

> **Believe me I know [From what I can tell], this is a great sun and sand spot.**
>
> I'm kind of an expert [about average] when it comes to travel experience, and have been down to this area before. If you're looking for someplace clean, close to the beach, and near the nightlife but far enough to just hang out if that's what you want, this is it. The rooms are up-to-date and well

> maintained for this area . . . I've visited a couple other hotels there. Food was great. I was pretty smart [happy] for finding this place, and think you'll like it.

In the high similarity condition, the reviewer's profile described a 21-year-old student from a nearby location, attending the same university, and having the same gender as the participant. In the low similarity condition, the profile described a 31-year-old worker from a distant location, having the opposite gender as the participant (appendix). Demographic attributes such as these have been identified as key dimensions of similarity evaluations (Tesser and Campbell 1980, 341) and have been used to manipulate similarity in prior word-of-mouth research (Naylor et al. 2011).

Measures

Choice Likelihood. For our persuasion measure, after reading the hotel review, participants indicated their likelihood of choosing that hotel on a scale from 1 = Not at all likely to 7 = Very likely.

Boasting. Participants indicated the extent to which the 7 item International Personality Item Pool-Neuroticism, Extraversion & Openness (IPIP-NEO) modesty scale (Costa and McCrae 1992) described the source. This scale includes items such as, "Believes they are better than others" and "Seldom toots their own horn" (reversed item) (1 = Not at all, 7 = Very much; $\alpha = .93$). A high score indicates a more boastful (less modest) source. All scale items are provided in the appendix.

Similarity. To assess the similarity manipulation, participants were asked to indicate how similar the reviewer was to them on three 7 point bipolar items (not at all similar to me : very much similar to me, not at all like me : very much like me, nothing in common with me : very much in common with me; $\alpha = .97$).

Motive Perceptions. To capture the extent to which sources were perceived to have dubious motives, participants rated the reviewer on three 7 point scales (reliable, honest, trustworthy; $\alpha = .92$), anchored by 1 = Not at all and 7 = Very much, where a low score indicates more dubious (i.e., unreliable, dishonest, untrustworthy) motives.

Results

Manipulation Checks. As expected, participants in the high similarity condition perceived the source to be more like themselves ($M = 4.89$) than those in the low similarity condition ($M = 3.40$; $F(1, 124) = 32.13$, $p < .001$). There was neither a crossover effect of boasting nor an interactive effect of boasting and similarity conditions on participant perceptions of source similarity (F's < 1.1, p's $> .29$).

Participants in the high boasting source condition rated the reviewer as more boastful ($M = 5.57$) than those in the low boasting condition ($M = 3.26$; $F(1, 124) = 252.42$, $p < .001$). There was no crossover effect of similarity nor was there an interactive effect of the similarity and boasting conditions on perceptions of source boasting (F's < 1).

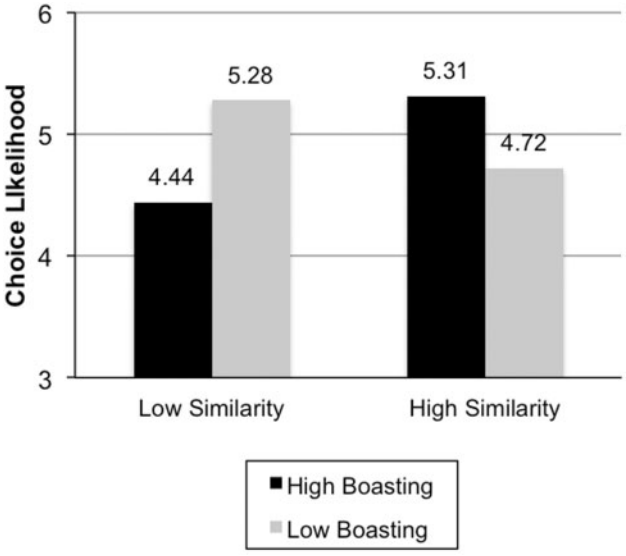
Choice Likelihood. Omnibus analysis of variance (ANOVA) for choice likelihood confirms the predicted interaction of source similarity and boasting ($F(1, 124) = 12.37$, $p = .001$) and no main effects (F's < 1). Follow-up analyses revealed that when the source was low in similarity, the boastful reviewer was less persuasive than the more modest one ($M_{\text{high boasting}} = 4.44$, SD = 1.48 vs. $M_{\text{low boasting}} = 5.28$, SD = .81; $F(1, 124) = 8.53$, $p < .01$). However, this pattern was reversed when the source was higher in similarity to the recipient. In this case, the boastful reviewer was more persuasive than the modest one ($M_{\text{high boasting}} = 5.31$, SD = 1.06 vs. $M_{\text{low boasting}} = 4.72$, SD = 1.17; $F(1, 124) = 4.22$, $p < .05$; figure 2).

Motive Perceptions. We predicted that perceptions of dubious motives would mediate the relationship between boasting and persuasion at low, but not high, similarity.

Bootstrap tests of moderated mediation (model 7; Preacher, Rucker, and Hayes 2007) were conducted to assess this prediction, examining similarity (effects coded, high = 1, low = −1) as a moderator of the relationship between boasting (effects coded, high = 1, low = −1) and motive perceptions (continuous measure), with the choice likelihood measure as our dependent variable. Results confirm conditional indirect effects for the source similarity

FIGURE 2

INTERACTIVE EFFECT OF SOURCE SIMILARITY AND BOASTING ON PERSUASION (S1)



moderator on the motive perception mediator. In the low similarity condition, motive perceptions mediated the relationship between boasting and choice; specifically, we found a negative indirect path suggestive of dubious motives (indirect effect = −.24, SE = .09, 95% confidence interval [CI],−.46 to −.09). However, mediation by motive perceptions was not supported in the high similarity condition (indirect effect = −.06, SE = .07, 95% CI, −.21 to .07).

Discussion

Contrary to most prior research on observer responses to self-enhancing braggarts and the persuasion knowledge literature, the results of study 1 reveal that an ostensibly negative social behavior (boasting) may have both negative and positive effects on persuasion. While boasting impeded choice likelihood given a dissimilar source of word-of-mouth information, it had a positive impact on choice when the source was similar to the word-of-mouth recipient.

The expected role of dubious motive perceptions given a low (but not high) trust cue was supported (figure 1). Dissimilar boastful sources of word-of-mouth information negatively impacted persuasion through perceptions of a dubious motive, similar to the process predicted for firm persuasion agents under the Persuasion Knowledge Model. However, the role of motive perceptions was weakened given a similar source. How then did boasting by a similar source "change the meaning" of this behavior such that it enhanced persuasion? In the remaining studies, we consider another key component of source credibility perceptions (expertise) alongside thoughts about the source's motivation as an explanation for this result.

While the results of study 1 are encouraging, source similarity may also influence persuasion through beliefs that similar others share one's attitudes, opinions, and preferences, thereby making their opinions seem more diagnostic (Eagly, Wood, and Chaiken 1978; Feick and Higie 1992; Gershoff et al. 2001). To rule out this concern, our next study leverages a more straightforward trust cue using information that is often available to consumers in online settings: reviewer ratings.

STUDY 2: REVIEWER RATINGS AS A TRUST CUE MODERATING THE IMPACT OF BOASTING ON PERSUASION

In study 2, we seek to replicate the reversal in boasting's effect on persuasion using a more direct manipulation of trust cues. Rate the reviewer information is widely available in the market and credited with improving trust in social and economic exchanges online (Resnick et al. 2000). While opportunities for consumer information exchange have exploded with Internet-supported technologies, these interactions often occur among strangers. In the absence of social ties and direct contact between source and recipient, recipients have limited ability to scrutinize or evaluate claims (Mackiewicz 2010; Shapiro 1987). In this setting, others' evaluations of the source's past behavior should provide a useful and relatively direct cue of source trustworthiness (Petty, Cacioppo, and Goldman 1981; Shapiro 1987; Weiss, Lurie, and MacInnis 2008).

In study 2, we also provide a more conservative test of both negative and positive effects of boasting on persuasion by comparing high and low trust cues to a moderate trust cue control. In addition, we capture perceptions of source expertise as the mechanism that drives the positive effect of boasting when high trust cues are present (figure 1B).

Participants, Design, and Procedure

Undergraduate student participants ($N = 300$, 133 female) completed the study for partial course credit. The study employed a 3 (reviewer rating trust cue: low, moderate, high) × 2 (boasting: low, high) between-subjects design. The review stimuli were identical to study 1 with the exception of the added reviewer rating information.

Depending on condition, the source of the hotel review in study 2 was described as having received a mean rate the reviewer score of either "1 of 5/'Not at all trustworthy'" (low trust cue), "3 of 5 / 'Moderately trustworthy'" (moderate trust cue), or "5 of 5 stars / 'Extremely trustworthy'" (high trust cue) from 86 prior consumer visitors to the website.

Measures

Choice likelihood, the recipient's perceptions of source boasting ($\alpha = .92$), and perceptions of dubious motives ($\alpha = .92$) were measured in the same manner as study 1.

Rate the Reviewer Trust Cue. To assess the rate the reviewer trust cue, participants were asked to respond to the question, "On average, how had other people at the website rated this reviewer in terms of their trustworthiness?" with a 5 point scale anchored by 1 = Not at all trustworthy and 5 = Extremely trustworthy.

Expertise Perceptions. For our measure of the second key component of source credibility, we captured participant perceptions of source expertise using the mean of three items (expert, knowledgeable, well informed; 1 = Not at all, 7 = Very much; $\alpha = .90$).

Confidence Perceptions. While attitude confidence is commonly described in the source credibility literature as an underlying signal of expertise (cf. Pornpitakpan 2004 review), some research has considered confidence (or certainty) as a variable independent of expertise in word-of-

mouth persuasion (Karmarker and Tormala 2010). Because it is likely that boasting also signals attitude confidence, we measure confidence using the mean of two items (confidence, certainty; 1 = Not at all, 7 = Very much; $r = .81$) to evaluate it as an alternative to expertise perceptions as a driver of any positive effects of boasting on persuasion.

Results

Manipulation Checks. The rate the reviewer trust cue manipulation was successful ($F(2, 296) = 423.14$, $p < .001$). Participants correctly perceived that others rated the source in the high trust cue condition as more trustworthy ($M = 4.56$, SD = .64) than the source in the moderate trust cue condition ($M = 3.31$, SD = .55; $F(1, 293) = 152.22$, $p < .001$), which, in turn, was perceived to have been rated as more trustworthy than the source in the low trust cue condition ($M = 1.68$, SD = .88; $F(1, 293) = 277.11$, $p < .001$). There was no crossover effect of boasting on the trust cue manipulation, nor was there a boasting by trust cue interaction (F's < 1.5, p's > .20).

Consistent with boasting condition assignment, the boastful reviewer was perceived as more self-enhancing ($M = 5.57$, SD = .95) than the more modest reviewer ($M = 3.55$, SD = 1.09; $F(1, 293) = 314.52$, $p < .001$). In addition, there was a crossover effect of the trust cue on perceptions of boasting ($F(1, 293) = 10.55$, $p < .001$) and a marginal trust cue by boasting interaction ($F(1, 293) = 2.74$, $p = .07$). Contrasts reveal that participants perceived a source that was less trusted by others as more boastful ($M = 4.92$, SD = 1.35) than the source in the moderate trust cue condition ($M = 4.50$, SD = 1.51; $F(1, 293) = 7.50$, $p < .01$), while those in the high trust cue condition ($M = 4.31$, SD = 1.38) were seen as no more or less boastful than those in the moderate trust cue condition ($M = 4.50$, SD = 1.51; $F(1, 293) = 1.37$, $p > .2$). In contrast with the relatively indirect trust cue used in study 1, the more direct trust cue used here appears to have made participants more vigilant against boasting given a negative trust cue (vs. the moderate trust cue), but not given a positive one.

Choice Likelihood. Persuasion was analyzed in a 3 × 2 ANOVA with the rate the reviewer trust cue and boasting conditions as independent variables. Results showed a main effect for trust cue ($F(2, 294) = 35.26$, $p < .001$), no main effect of boasting ($F < 1$), and a significant interaction of the trust cue and boasting ($F(2, 294) = 5.59$, $p < .01$).

Follow-up analysis reveals that when the source was not trusted by others, boasting led to a lower likelihood of choosing the hotel ($M = 3.58$, SD = 1.36) than when there was no boasting ($M = 4.20$, SD = 1.14; $F(1, 294) = 7.05$, $p < .01$). When the source had a moderate trust reputation, boasting had no effect on choice likelihood ($M_{\text{low boasting}} = 4.73$, SD = 1.27 vs. $M_{\text{high boasting}} = 4.67$, SD = 1.10; $F < 1$). However, in the high trust condition, choice likelihood for the hotel was higher given a boasting source ($M = 5.53$, SD = 1.14) than a more modest source ($M = 5.04$, SD = 1.08; $F(1, 294) = 4.30$, $p < .05$; figure 3).

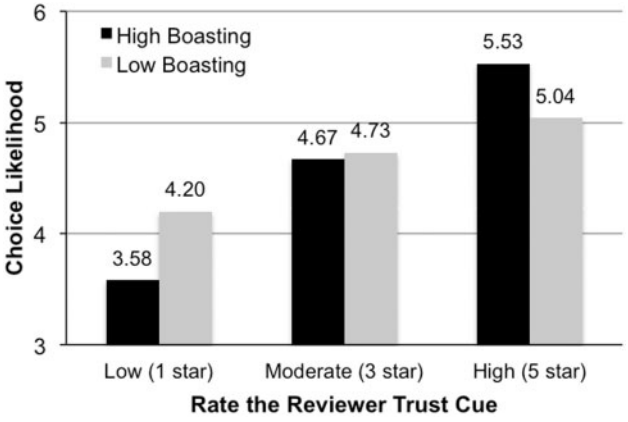
Motive Perceptions. Similar to the analysis presented for study 1, we performed moderated mediation analysis (model 7, Preacher et al. 2007) examining the trust cue of others' prior assessments of the source's trustworthiness as a moderator of the relationship between boasting (effects coded as in study 1) and participants' perceptions of the source's motives. We examine the model contrasting the low versus moderate trust cue and the high versus moderate trust cue independently because the trust literature suggests trust and distrust are not necessarily simple opposites (Cacioppo and Berntson 1994).

In the model examining the low versus moderate trust cue (effects coded, Low = 1, Moderate = −1) as moderator, we find that the low trust cue indeed increased participants' perceptions of dubious source motives (B = .55, SE = .08, $p < .001$) and that this perception drove the relationship between boasting and persuasion at both low (indirect effect = −.32, SE = .06, 95% CI, −.45 to −.22) and moderate levels of the trust cue (indirect effect = −.14, SE = .07, 95% CI, −.30 to −.02).

The same analysis for the high versus moderate trust cue (effects coded, High = 1, Moderate = −1) found that seeing others' positive assessments of the source's trustworthiness had a positive impact on participants' own perceptions of the source's motives (reducing perceptions of dubious motives; B = .49, SE = .06, $p < .001$), resulting in weaker, albeit still significant, mediation at the high

FIGURE 3

RATE THE REVIEWER TRUST CUE MODERATES THE IMPACT OF BOASTING ON PERSUASION (S2)



trust cue (indirect effect = −.12, SE = .05, 95% CI, −.25 to −.03) versus the moderate trust cue (indirect effect = −.40, SE = .07, 95% CI, −.55 to −.28). Although this result does not perfectly replicate the trust perception result in study 1, the smaller coefficient at high versus low trust cue levels suggests that the negative impact of boasting on motive perceptions is weakened by a positive trust cue.

But is a weakening of perceptions that the source may have dubious motives sufficient to *enhance* persuasion by a boasting source? We consider recipient perceptions of the source's expertise to shed further light on this question.

Expertise Perceptions. We performed the same moderated mediation analyses (model 7, Preacher et al. 2007) using our measure of expertise perceptions as a mediator of the relationship between boasting and persuasion, independently examining the impact of the low versus moderate trust cue and the high versus moderate trust cue as a moderator of this relationship.

In the model examining the low versus moderate trust cue (effects coded, Low = 1, Moderate = −1) as moderator, we find that, as expected, the trust cue had no impact on perceptions of the source's expertise (B = −.03, SE = .09, $p > .6$). Expertise perceptions did not drive the relationship between boasting and persuasion at either the low (indirect effect = −.05, SE = .04, 95% CI, −.13 to .02) or moderate levels of the trust cue (indirect effect = −.01, SE = .04, 95% CI = −.10 to .06).

However, the model contrasting the high versus moderate trust cue (effects coded, High = 1, Moderate = −1) as moderator reveals a significant positive effect of the high (vs. moderate) trust cue on subsequent perceptions of source expertise (B = .31, SE = .08, $p < .001$). Bootstrap analysis confirms expertise perceptions as a significant mediator of the relationship between boasting and persuasion given the high trust cue (indirect effect = .19, SE = .06, 95% CI, .09–.31) but not the moderate trust cue (indirect effect = −.09, SE = .06, 95% CI, −.22 to .03).

Alternative: Confidence Perceptions. To consider perceived confidence of the source as an alternative to expertise perceptions as a mediator of the relationship between boasting and persuasion, we examined the expertise and confidence measures as simultaneous parallel mediators in the same moderated mediation model used earlier (model 7, Preacher et al. 2007). Our analysis reveals that expertise perceptions continue to mediate the effect at the high trust cue level in this model (indirect effect = −.11, SE = .04, 95% CI, .03–19), while the mean of the confidence measures fails to mediate the relationship (indirect effect = .02, SE = .04, 95% CI,=−.05 to .11). In sum, although boasting was found to signal greater attitude confidence of the source (B = .41, SE = .19, $p < .05$), our results support expertise perceptions over confidence as an underlying driver of cases in which boasting has a positive effect on persuasion.

Discussion

Study 2 replicated the results of our initial study. In addition, by including an examination of expertise perceptions, the study sheds additional light on the "change of meaning" caused by boasting given a high trust cue. When other consumers previously provided positive signals of a source's trustworthiness, message recipients were unlikely to generate their own negative perceptions of boastful reviewers' motives. In this case, boasting produced positive perceptions on the other key dimension of source credibility, expertise, making the boastful source more persuasive than a modest source of the same information.

While this study also met the goal of more directly manipulating a source trust cue, in doing so we might also have partly manipulated the mediator (the recipient's own perceptions of the source's motivation). Our next study uses a more indirect, generalized trust cue to help alleviate this concern and demonstrate robustness of the effect to a variety of trust cues.

STUDY 3: GENERALIZED TRUST PRIME AND THOUGHTS ABOUT THE SOURCE

The primary goal of our final study is to shed further light on how and why trust cues change the meaning of boasting such that this behavior may lead to either decreased or increased persuasion.

First, prior research has shown that distrust toward one party (e.g., a particular advertiser) can spread to other, unrelated parties (e.g., advertisers generally; Darke and Ritchie 2007). As a demonstration of the robustness of our effect across different trust cue operationalizations, the present study uses a generalized prime of trust in others. We expect that this subtler manipulation of trust will interact with boasting in the same manner as the more source-specific trust cues used in prior studies.

Second, we capture thought listings to shed additional light on process. Given a cue of distrust (low trust), the Persuasion Knowledge Model predicts that recipients should generate negative thoughts about a boasting source (Campbell and Kirmani 2000; Main et al. 2007). These thoughts should drive perceptions that the boasting source may have dubious motives. For example, when a salesperson is thought to possess the self-interested selling motive during a sales interaction, they are subsequently perceived as less sincere (i.e., less trustworthy; Campbell and Kirmani 2000).

Subsequent research took this finding further, showing that consumers tend to be negatively biased toward firm persuasion agents even in the absence of a self-interested explanation for the agent's behavior (Main et al. 2007).

Specifically, negative thoughts about the agent were found to mediate the relationship between flattery before a purchase, described as a distrust cue activating persuasion knowledge, and perceptions of agent trustworthiness. However, when flattery occurred after the purchase (i.e., absence of a distrust cue), the valence of thought listings did not drive source perceptions, suggesting that negative bias (rather than more thoughtful deliberation) led to perceptions of sinister motives among firm agents in this case (Main et al. 2007).

This pattern of results is particularly relevant to the present research given the positive bias associated with the trustworthiness of word-of-mouth sources (Dellarocas 2003; Hennig-Thurau et al. 2004). As we predict that boasting in the presence of low trust cues follows the persuasion knowledge process, negative thoughts about the source should drive distrust of the boasting source (figure 1A). However, as discussed earlier, if consumers tend to be *positively* biased toward word-of-mouth sources of product information, under conditions of heightened trust we should expect a pattern of results similar to that found by Main et al. (2007), when sales agent flattery occurred after the purchase. In this case, an absence of negative thoughts about the source suggest that positive bias toward a word-of-mouth source (rather than thoughtful deliberation about the source) allows the word-of-mouth recipient to simply accept the boastful source's claims of expertise (figure 1B).

In short, we predict that thoughts about the source will be negative (positive) under low (high) generalized trust, but these thoughts should only mediate the relationship between boasting and source perceptions among those primed to distrust others generally. Notably, although Main et al. (2007) attempted to code thoughts to capture only those concerned with attributions of trustworthiness or suspicion, we capture and code all valenced thoughts about the reviewer to allow for other relevant attributes that might arise and reasonably impact decision making in the high trust cue condition (e.g., thoughts about the source's expertise).

Third, our final study uses a new product category to further demonstrate the robustness and generalizability of the effect.

Participants, Design, and Procedure

Undergraduate students ($N = 179$, 89 female) completed the study for partial course credit. Participants were randomly assigned to conditions in a 2 (generalized trust cue: low, high) $\times$ 2 (source boasting: low, high) between-subjects design.

The generalized trust cue was adapted from a procedure used by Kirmani and Zhu (2007). Participants received one of two news articles to read under the cover story of a media study. In the low trust cue condition, the article described a theatrical play in which an actor portrayed a character who was selfish, dishonest, and deceptive. In the high trust cue condition, the article described the same actor portraying a character who was altruistic, trustworthy, and honest (appendix).

After the generalized trust cue, participants completed an ostensibly unrelated study in which they were asked to imagine that they were shopping for wine online. As in prior studies, participants were told they had found a promising product and decided to read a consumer review about it. Participants saw a low or high boasting version of the review (appendix) and then indicated how likely they would be to choose the reviewed wine (1 = Not at all, 7 = Very much).

Participants were next asked to list any thoughts that came to mind while reading the review. Our thought listing procedure closely followed prior investigations of trust and persuasion agent perceptions (Main et al. 2007; Priester and Petty 1995). Participants were given eight open-text boxes and invited to write a single thought in each space. They were told only to write as many thoughts as they had and that they did not need to use all of the boxes.

Participants then completed the same source perception items (motive $\alpha = .89$, expertise $\alpha = .92$) and boasting manipulation check ($\alpha = .90$) used in study 2. After this, participants were presented with the thoughts they had previously listed. For each thought, participants indicated whether the thought was positive, neutral, or negative. On a separate page, they indicated whether each thought was about the reviewer, the product, or neither of these.

Debriefing questions indicated that no participants perceived a link between the media study (generalized trust cue) and the wine study.

Pretest

A separate pretest ($n = 78$) assessed the generalized trust cue's ability to prime a significant difference in trust toward people generally, without changing perceptions of the news article, involvement, or mood. Perceptions of the article were measured by agreement with three items assessing the extent to which the article was "interesting," "informative," and "meaningful" ($\alpha = .85$). Involvement was measured by agreement with statements that in reading the article, the participant felt "involved," "engaged," or "interested" ($\alpha = .91$). Mood was captured using the 10 item Positive and Negative Affect Schedule (PANAS) (Watson, Clark, and Tellegen 1988) scales for positive ($\alpha = .92$) and negative ($\alpha = .97$) mood. The trust cue was assessed using four items measuring the extent to which participants felt "suspicious," "concerned," "wary," and "mistrustful" ($\alpha = .96$) of people generally. All items used 7 point scales (1 = Not at all, 7 = Very much). Question order was randomized.

The two article versions did not differ on the perception items ($M_{\text{low trust}} = 3.56$, SD = 1.10 vs. $M_{\text{high trust}} = 3.68$,

SD = 1.37; $F < 1$), involvement ($M_{low\ trust} = 3.56$, SD = 1.35 vs. $M_{high\ trust} = 3.50$, SD = 1.54; $F < 1$), positive mood ($M_{low\ trust} = 4.05$, SD = 1.14 vs. $M_{high\ trust} = 3.85$, SD = 1.41; $F < 1$), or negative mood ($M_{low\ trust} = 2.70$, SD = 1.77 vs. $M_{high\ trust} = 2.36$, SD = 1.64; $F < 1$). However, there was a significant effect of the article participants read on the mean of the four generalized trust items ($M_{low\ trust} = 4.40$, SD = 1.15 vs. $M_{high\ trust} = 2.88$, SD = 1.47; F (1, 76) = 26.00, $p < .001$). These pretest results confirm the intended priming of a difference in generalized trust in others while supporting equivalence of the stimuli in perception, involvement, and mood.

Results

Manipulation Checks. Consistent with condition assignment, the reviewer in the high boasting condition was perceived as more immodest ($M = 5.42$, SD = 1.16) than the low boasting condition source ($M = 3.51$, SD = .95; F(1, 175) = 182.82, $p < .001$). We also found a main effect for the generalized trust cue ($M_{low\ trust} = 4.87$, SD = 1.45 vs. $M_{high\ trust} = 4.03$, SD = 1.28; F(1, 175) = 35.62, $p < .001$) and an interaction of boasting and the generalized trust cue (F(1, 175) = 12.51, $p < .01$) on perceptions of boasting. Among participants in the low boasting condition, participants in the low trust cue condition perceived the source as slightly more boastful ($M = 3.68$, SD = .84) than those in the high trust cue condition ($M = 3.34$, SD = 1.03; F(1, 1.75) = 3.01, $p = .08$). This same pattern was observed among participants in the high boasting condition but at greater statistical significance ($M_{low\ trust} = 6.09$, SD = .75 vs. $M_{high\ trust} = 4.75$, SD = 1.10; F(1, 175) = 44.45, $p < .001$). These results suggest that like the source-specific trust cue used in study 2, the generalized trust cue made participants particularly sensitive to source boasting.

We note also that the generalized trust cue transferred to participant perceptions of source motivation ($M_{low\ trust} = 4.05$, SD = 1.34 vs. $M_{high\ trust} = 4.85$, SD = 1.14; F(1, 177) = 18.67, $p < .001$) but did not have a direct effect on perceptions of source expertise (F(1, 177) = 2.68, $p > .10$). This result is consistent with Darke and Ritchie's (2007) finding that trust-related cognitions can generalize from one party (e.g., an advertiser) to unrelated parties (e.g., other advertisers), and it is suggestive of the ease with which trust-related thoughts may be activated in consumer settings (e.g., via editorial content online; Benedicktus et al. 2010).

Choice Likelihood. Replicating prior studies, omnibus ANOVA confirms the key interaction of the trust cue and boasting (F(1, 175) = 12.39, $p = .001$) with no main effects (F's < 1). When participants were primed to feel less trusting in others generally, boasting had a negative impact on persuasion ($M = 3.89$, SD = 1.51 vs. $M = 4.64$, SD = 1.54; F(1, 175) = 5.89, $p = .02$). However, when primed to feel more trusting in others, boasting had a positive impact on persuasion ($M = 5.23$, SD = 1.40 vs. $M = 4.43$, SD = 1.44; F(1, 175) = 6.51, $p = .01$).

Thoughts About the Source. Participants generated an average of 2.43 thoughts about the reviewer (SD = 1.81), with an average of .85 (SD = 1.07) positive thoughts, .46 (SD = .80) neutral thoughts, and 1.12 (SD = 1.60) negative thoughts. The overall valence of thoughts about the source (number of positive thoughts minus number of negative thoughts) was directionally negative ($M = -.27$, SD = 2.20 vs. 0; t(178) = 1.66, $p = .10$).

An ANOVA on the valence of thoughts about the source revealed only an interaction of boasting and trust cue condition (F(1, 175) = 24.94, $p < .001$). In the low boasting condition, the trust cue had no impact on the valence of thoughts about the source ($M_{low\ trust} = .22$, SD = 1.48 vs. $M_{high\ trust} = .13$, SD = 1.87; $F < 1$). In fact, within the low boasting condition, thought valence was not statistically different from zero ($M = .18$, SD = 1.68 vs. 0; t(90) = 1.00, $p > .3$).

However, in the high boasting condition, the valence of thoughts depended on whether participants were cued to feel more ($M = .66$, SD = 1.80) or less trusting in others ($M = -2.14$, SD = 2.47; F(1, 175) = 45.99, $p < .001$). Thoughts about the boastful source were negative when the participant was cued to feel less trusting in others ($M = -2.14$, SD = 2.47 vs. 0; t(88) = 3.81, $p < .001$), but these thoughts were positive when the participant was cued to feel more trusting in others ($M = 0.66$, SD = 1.80 vs. 0; t(89) = 2.00, $p < .05$).

While the trust and Persuasion Knowledge Model literatures on which we build (e.g., Main et al. 2007) analyze the valence of thoughts, we also examined the number of thoughts generated about the source for thoroughness. Omnibus ANOVA reveals significant main effects for the trust cue (F(1, 175) = 4.53, p < .05), boasting (F(1, 175) = 18.26, p < .001) and their interaction (F(1, 175) = 8.53, $p < .01$) on the total number of thoughts. The total number of thoughts about the source was significantly higher given a boastful source in the presence of a low trust cue ($M = 3.61$, SD = 2.08) relative to each of the other three conditions (Fs > 11, p's < .001; table 1). This result is consistent with our prediction that given a low trust cue, boasting activates heightened vigilance. We further note a nonsignificant difference in the number of total thoughts generated due to boasting in the presence of a high trust cue ($M_{high\ boasting} = 2.34$, SD = 1.45 vs. $M_{low\ boasting} = 2.00$, SD = 1.71; F(1, 175) = 1.04, $p = .31$), indicating that boasting did not increase thoughts about the source in this case.

Considering negative and positive thoughts independently sheds further light on the nature of the thoughts about the source. For the number of negative thoughts

TABLE 1

NUMBER OF THOUGHTS ABOUT THE SOURCE BY VALENCE AND CONDITION

		Number of thoughts			
Trust cue	Boasting	Negative	Neutral	Positive	Total
Low	High	2.52	0.70	0.39	3.61
Low	Low	0.58	0.42	0.80	1.80
High	High	0.68	0.32	1.34	2.34
High	Low	0.74	0.39	0.87	2.00

generated about the source, omnibus analysis finds significant main effects for the trust cue ($F(1, 175) = 16.13$, $p < .001$), boasting ($F(1, 175) = 20.37$, $p < .001$) and their interaction ($F(1, 175) = 22.92$, $p < .001$). Contrasts reveal that these effects are driven by a substantially greater number of negative thoughts in the low trust cue × high boasting condition ($M = 2.52$, SD = 1.98) relative to each of the three other conditions (Fs > 24, p's < .001; table 1). There was no difference in the number of negative thoughts among the three other conditions (F's < 1). To summarize, while boasting had a significant effect on the number of negative thoughts about the source given a low trust cue, boasting had no impact on the number of negative thoughts given a high trust cue.

As for the number of positive thoughts about the source, omnibus analysis reveals a main effect for the trust cue ($F(1, 175) = 11.11$, $p < .01$) and an interaction of the trust cue and boasting ($F(1, 175) = 8.30$, $p < .01$). Contrasts find a significant decrease in positive thoughts in the low trust cue × high boasting condition ($M = .39$, SD = .87) relative to the three other conditions (F's > 4.45, p's < .05; table 1) and a significant increase in positive thoughts in the high trust cue × high boasting condition ($M = 1.34$, SD = 1.20) relative to each of the other three conditions (F's > 3.96, p's < .05; table 1). That is, boasting led to fewer (more) positive thoughts for the boastful source given a low (high) trust cue.

Taken together, the number of thoughts in total and for each valenced category suggests that, in the presence of a low trust cue, boasting activates more thoughtful elaboration about the source—a substantial increase in negative thoughts is offset by a smaller (albeit significant) decrease in positive thoughts. In contrast, given a high trust cue, an increase in positive thoughts about the boastful (vs. low boasting) source was not accompanied by an increase in the total number of thoughts generated, suggesting more automatic acceptance of the self-enhancing assertions made by the boastful source in this condition.

Motive Perceptions. Bootstrap moderated mediation results (model 7; Preacher et al. 2007) examining motive perceptions as a mediator of the effect of boasting on persuasion replicate prior studies, with a negative effect of boasting on persuasion through motive perceptions among participants primed to feel less trusting in others (indirect effect = −.47, SE = .11; 95% CI, −.70 to −.28), but a weakening of mediation by motive perceptions among participants primed to be more trusting in others (indirect effect = −.11, SE = .08; 95% CI, −.28 to .02).

Expertise Perceptions. The moderated mediation analysis (model 7) for source perceptions of expertise as a mediator of the effect of boasting replicates study 2 results. Positive perceptions of source expertise drove the relationship between boasting and choice likelihood among participants primed to be more trusting in others generally (indirect effect = .34; SE = .09; 95% CI, .18–.55), but not among those primed to be less trusting in others (indirect effect = .06, SE = .07; 95% CI, −.07 to .21).

Full Process Model. To incorporate valenced thoughts about the source in our full process model (figure 1, panel A), we performed bootstrap mediation analysis and included valenced thoughts as an additional serial mediator to the model used in prior studies. Specifically, valenced thoughts about the source (continuous measure) was included as a serial mediator between boasting (effects coded) and each of the source perception mediators (dubious motive and expert perceptions as continuous measures) reported in study 2 (model 6, Preacher et al. 2007). Because the macros offered by Preacher, Hayes and colleagues for bootstrap analysis do not support simultaneously incorporating a moderator (trust cue), serial mediators (valenced thoughts and source perceptions), and parallel mediators (dubious motive and expert perceptions) in a single model, we first summarize the indirect effects for serial mediation separately for each level of the trust cue and for each source perception mediator. Then, we use a structural equation model (SEM) to corroborate the bootstrap results.

Consistent with our overall process model for the low trust cue case (figure 1, panel A), bootstrap analysis reveals that valenced thoughts and motive perceptions act as serial mediators in the effect of boasting on persuasion (indirect effect = −.51, SE = .10, 95% CI, −.74 to −.33). As expected, the serial mediation model with valenced thoughts leading to perceptions of source expertise fails to mediate this relationship in the low trust cue condition (indirect effect = −.14, SE = .12, 95% CI, −.34 to .12). That is, valenced thoughts about a boasting source impacted persuasion through perceptions of the source's motives but not perceptions of their expertise.

Next, we turn to the high trust cue case (figure 1, panel B). As predicted, given a high trust cue, the model incorporating valenced thoughts as a serial mediator is nonsignificant for both motive (indirect effect = −.03, SE = .11, 95% CI, −.23 to .13) and expertise perceptions (indirect effect = .11, SE = .12, 95% CI, −.10 to .36). That is,

thoughtful deliberation did not play a role in the process given a positive generalized trust cue.

The pattern of results for the serial mediation models discussed earlier fully replicates when we replace the valenced thoughts mediator with the total number of thoughts generated. The serial mediation model using the total number of thoughts as the first serial mediator (model 6, Preacher et al. 2007) was significant given a low trust cue and dubious motives as the second serial mediator (indirect effect = −.38, SE = .12, 95% CI, −.63 to −.16), but was nonsignificant for the three other models (i.e., low trust and expertise, high trust and expertise, and high trust and dubious motives as the serial mediators; all 95% CIs crossed zero).

Similarly, this pattern of results replicates when we consider only those thoughts that independent judges determined were either (1) specifically related to source motivation, or (2) specifically related to source expertise. The serial mediation model was again significant for the low trust cue and either (1) valenced motive-related thoughts (indirect effect = −.42, SE = .12, 95% CI, −.68 to −.22) or (2) valenced expertise-related thoughts (indirect effect = −.36, SE = .13, 95% CI, −.63 to −.13), but not in the three other models for each of the motive- or expertise-related thought listings (all 95% CIs crossed zero).

To further assess the predicted process given a high trust cue (figure 1, panel B), we replicate the parallel mediation analysis reported in study 2. Source perceptions again mediated the impact of boasting on persuasion, with positive expert perceptions a significant mediator in the high trust cue condition (indirect effect = .35, SE = .09, 95% CI, .19–.55) offsetting the dubious motive perceptions also generated by boasting (indirect effect = −.47, SE = .10, 95% CI, −.69 to −.28).

Finally, we use SEM to corroborate these results under the full process models presented in figure 1. Given a low trust cue, SEM results indicated a stronger fit for the model incorporating valenced thoughts ($\chi^2(3) = 8.39$, standardized root mean square residual [SRMR] = .11, comparative fit index [CFI] = .86; appendix figure 1, model A1) than the model that excluded these thoughts ($\chi^2(1) = 29.75$, SRMR = .15, CFI = .68; $\Delta\chi^2(2) = 21.36$, $p < .001$; appendix figure 1, model A2).

In contrast, for the high trust cue condition, the SEM that excluded valenced thoughts about the source ($\chi^2(1) = 6.03$, SRMR = .07, CFI = .92; appendix figure 1, model B2) fit the data better than the model including these thoughts ($\chi^2(3) = 36.45$, SRMR = .15, CFI = .67; $\Delta\chi^2(2) = 30.42$, $p < .001$; appendix figure 1, model B1).

Taken together, both the bootstrap and SEM results support our predictions (summarized in figure 1) that given a low (high) trust cue, boasting leads to relatively thoughtful negative (relatively automatic positive) development of source perceptions, which subsequently impede (enhance) persuasion.

Discussion

In addition to replicating the results of prior studies using a more subtle, generalized operationalization of the trust cue and a different product category, study 3 sheds further light on how a negative social behavior (boasting) can have either negative or positive effects on social perception and persuasion. When participants were primed to feel less trusting in others generally, the negative thoughts generated about the boastful source led to negative perceptions of the source's motives, consistent with the Persuasion Knowledge Model. However, when primed to feel more trusting in others, positive perceptions of the boastful reviewer's expertise occurred without thoughtful consideration of the source. This result suggests the possibility of an innocence attribution error (rather than sinister attribution error; Main et al. 2007) by word-of-mouth recipients faced with boastful sources of product information.

GENERAL DISCUSSION

The availability of and exposure to consumer word of mouth has significantly increased with the growth of the Internet and associated digital communication platforms. From Amazon to Walmart, TripAdvisor to Yelp, major online retailers and opinion portals have helped make word of mouth more important and influential than ever (Simonson and Rosen 2014; Word of Mouth Marketing Association [WOMMA] 2014). While both academic research and the popular press view self-enhancement as a central behavior in word-of-mouth transmission, especially online, little is known about the effect of a common manifestation of this behavior (boasting) on social perceptions and persuasion.

The present research reveals that modesty is not in itself a virtue—nor immodesty a vice—when it comes to word-of-mouth persuasion. Trust cues about the source or people generally are critical in determining whether boasting helps or hurts recipients' perceptions of the source's motivations and their subsequent behavioral intentions. Study 1 provided an initial demonstration of this phenomenon. Subsequent experiments replicated and extended this finding, revealing that perceptions regarding the second key component of source credibility, expertise, drives the case in which boasting helps, rather than hurts, word-of-mouth persuasion (studies 2 and 3), and that negative thoughts about the source's potentially dubious motives drive choice intention when persuasion knowledge is activated (low trust cue), but do not negatively impact persuasion when more positive trust in the word-of-mouth source may be assumed (studies 1, 2, and 3).

These effects persisted across three different operationalizations of the trust cue and multiple measures pertaining to source perceptions (dubious motive, expertise, valenced

thoughts, thought counts, motive- or expertise-related thoughts). As noted earlier, these different approaches to the trust cue and perceptual measures help mitigate concerns about the unavoidable centrality of trust to the persuasion knowledge literature and related work (Campbell and Kirmani 2000; Main et al. 2007; Priester and Petty 1995, 2003).

Our research offers four main contributions. First, we fill a gap in the word-of-mouth literature by illuminating how boasting by word-of-mouth sources influences social perceptions and the persuasiveness of the source's message. The importance of this topic is underscored by the scale and impact of consumer word of mouth on purchase decisions (Chevalier and Mayzlin 2006; WOMMA 2014), consumer uncertainty about the credibility of product information obtained online (Ba and Pavlou 2002; Resnick et al. 2000), and the high frequency of positive consumer assertions of expertise or experience in online reviews (Otterbacher 2011).

Second, we contribute to the literatures on modesty in self-presentation and persuasion knowledge by looking beyond social perceptions of a boastful individual, to the downstream consequences these perceptions may have for the recipient: a consumer seeking to inform his or her own purchase decisions. In doing so, we show that when positive trust cues are accessible, information contained in boastful self-presentations can be perceived as useful to the recipient, leading to surprisingly positive effects on the recipient's social perceptions and behavioral intentions.

Third, we leverage and extend a prominent persuasion model. We introduce boasting as a potential cue of both dubious motives and expertise. Although the persuasion knowledge literature has examined how trust cues during an influence event lead to negative perceptions of the source's motives (Campbell and Kirmani 2000), we show that positive trust cues attenuate these concerns, allowing for more positive perceptions on another, similarly important dimension of source credibility: expertise.

Lastly, we contribute to the source credibility literature by examining a setting in which the two key dimensions of credibility—trust and expertise—are crucially interrelated (Perloff 2010; Pornpitakpan 2004). Because boastful self-enhancement in the word-of-mouth context is likely to entail positive assertions of the source's experience or ability as a consumer, recipient perceptions of the source's motivation (i.e., their trustworthiness) are directly linked to the source's boastful claims (i.e., their expertise).

Our findings also have implications for both consumers and managers. Consumers who inform their own attitudes and choices using word of mouth may benefit from the knowledge that self-interested motives are both central to word-of-mouth transmission and can influence their own decision making. While the present research does not demonstrate that boastful word-of-mouth sources are more or less knowledgeable, the finding that boastful sources can be perceived as more expert (and therefore more persuasive) is of potential concern. Research suggests that boastful, self-enhancing sources are likely to be overly positive about their product experiences (De Angelis et al. 2012; Wojnicki and Godes 2012) and share less information about the product to accommodate self-enhancement information (Packard and Wooten 2013). Because consumers tend to believe that positive reviews are more diagnostic than negative reviews in providing information about the reviewer (Gershoff, Mukherjee, and Mukhopadhyay 2007), consumers may be particularly persuaded by a source who is motivated by more self- than other-centered goals. In short, consumers should be encouraged to process more carefully the claims of category experience or expertise made by boastful sources of word-of-mouth information to avoid being overly influenced by them.

From a managerial point of view, the present research may help guide firms attempting to maximize the economic benefits of the consumer-to-consumer interactions they facilitate online. For example, online retailers may wish to take some simple actions to mitigate the generalized trust concerns endemic to online shopping (Benedicktus et al. 2010), which beyond its direct effect for the retailer may activate trust concerns about boastful word-of-mouth sources. The use of third-party trust certification (e.g., the VeriSign Trusted Website seal) might help enhance word-of-mouth persuasion in this setting. Our results further suggest that online marketers might wish to assess more carefully the prominence of demographic information offered in reviewer profiles. Specifically, the findings of study 1 corroborate those of Naylor et al. (2011), who found that "no profile" may be better than a dissimilar demographic profile when it comes to persuasion via online reviews.

Whether our results generalize to other contexts represents an opportunity for future research. For example, social comparison or relationship motives may be more salient to the recipient during in-person (vs. online) word-of-mouth exchanges. In the social comparison case, recipients may reject a boastful source's information due to a desire to punish or distance themselves from the source. In the relationship case, recipients may be more accepting of a boasting source in the knowledge that rejecting the source's information could diminish reciprocity with that individual in the future. The impact of boasting in academic research (Cummings and Rivara 2012) may show a similar pattern, with researchers more likely to be persuaded by immodest assertions of an article's importance from a current or potential coauthor than from a scholar with whom one is competing for acclaim. Research leveraging Kunda's (1990) motivated reasoning theoretical framework might help frame such an investigation.

Future research may also identify additional factors that moderate the positive case of source boasting on perceptions of expertise and persuasion. Following our finding

that independent indicators of the source's trustworthiness enhance persuasion (study 2), sources who hold expert roles associated with a lack of modesty (e.g., medical surgeons, fashion critics) or who are well credentialed in their domain with awards, degrees, or public recognition might be particularly likely to bolster perceptions of their expertise through positive assertions of their own abilities or achievements. In short, independent indicators of competence (i.e., highly trusted expertise cues) may increase the likelihood that the recipient perceives a strong positive assertion as a factual positive disclosure (not boasting), or at a minimum, as factual boasting (i.e., immodest, yet accurate; Miller et al. 1992). A related opportunity for future research involves cases in which firm agents are highly trusted. Although prior work leveraging the Persuasion Knowledge Model has not prioritized this case, a plausible extension of the model and our findings is that occasional boasts in advertising or by salespeople could signal expertise under high trust conditions that may lead to increased consumer purchases.

While we used thought listings about the source to help demonstrate the process underlying the effect, whether thoughts about the product message should also be linked to the negative impact of boasting is unclear. Priester and Petty (1995, 2003) reported a pattern of results somewhat similar to those obtained by Main et al. (2007) for thoughts toward a persuasion object rather than toward the source. However, the results they reported occurred only among those low in need for cognition (cognitive misers; Priester and Petty 1995) or in the specific case of a well-known celebrity endorser (Priester and Petty 2003), making a priori predictions for our word-of-mouth setting difficult. That said, we attempted to test this factor using the thought listings about the product collected in study 3. If a positive trust cue leads to reduced message scrutiny, we should find a stronger correlation between message-related thoughts and our persuasion outcome (Cacioppo and Petty 1981; Priester and Petty 1995) in the low than high generalized trust cue condition. Following Priester and Petty's (1995) procedure, we examined the correlation between valenced thoughts about the product and the persuasion outcome (choice likelihood). As predicted by Priester and Petty, the correlation between valenced product thoughts and choice likelihood was positive and significant in the low trust cue condition ($r = .47$, $p < .001$) and was significantly weaker in the high trust cue condition ($r = .26$, $p < .05$; Fisher's r to Z test $= 1.64$, $p = .05$). The borderline significance of the difference in the two correlation results may be because in Priester and Petty's (1995) work, these results held only among those low in the need for cognition ("cognitive misers"). Regardless, while the present research is primarily concerned with documenting and explaining how boasting can have either negative or positive effects on word-of-mouth persuasion, future research may consider potential insights this context holds for contributions to the literature on processing style.

In conclusion, this research demonstrates that when it comes to interpersonal persuasion, trust cues can change the meaning of boasting, leading to either negative or positive effects on social perception and persuasion. It is our hope that the present research may help inform consumers as they persuade and evaluate one another in word-of-mouth exchanges, help firms manage the economic benefits of consumer social influence, and guide future explorations of the impact of source self-enhancement on social perceptions and persuasion.

DATA COLLECTION INFORMATION

The data for study 1 was collected by the first author at the University of Michigan Ross School of Business Behavioral Lab in the spring of 2012. The data for studies 2 and 3 were collected by the first author and a research assistant at the Lazaridis School of Business & Economics Consumer Behavior Lab at Wilfrid Laurier University in spring 2013 (S2) and fall 2015 (S3). The first author was primarily responsible for all data analysis with input from the second and third authors.

APPENDIX

IPIP-NEO 5 Modesty subscale items (Costa and McCrae 1992)

1. Believes they are better than others
2. Thinks highly of themselves
3. Has a high opinion of themselves
4. Makes themselves the center of attention
5. Dislikes talking about themselves (R)
6. Considers themselves an average person (R)
7. Seldom toots their own horn (R)

Stimuli

User profile: High similarity condition (study 1)

Reviewer Profile	
Username:	LTravell
Gender:	[Automated field: Same as participant]
Age:	21
Hometown:	Detroit, MI
Education:	University of Michigan
Occupation:	Student

User profile: Low similarity condition (study 1)

Reviewer Profile	
Username:	LTravell
Gender:	[Automated field: Opposite of participant]
Age:	31
Hometown:	Cheyenne, WY
Education:	University of Wyoming
Occupation:	Employed part time

News article: High trust cue condition (study 3)

Jane Krakowski to star as altruistic woman who helps strangers in true-to-life play *The Altruist in Us All*

The television star headlines in this exhilarating play on stage at the Elgin Theatre in June 2015. *The Altruist in Us All* is based on three remarkable real-life stories of everyday honesty and reliability. "We sometimes forget that people are fundamentally trustworthy . . . they just want to help others if they can," said Krakowski. "These true stories remind us how many beautiful acts of selflessness there are in our everyday lives. People really watch out for each other!"

News article: Low trust cue condition (study 3)

Jane Krakowski to star as selfish woman who puts strangers in danger in true-to-life play *The Selfishness in Us All*

The television star headlines in this psycho-thriller play on stage at the Elgin Theatre in June 2015. *The Selfishness in Us All* is based on three troubling real-life stories of everyday dishonesty and deception. "We sometimes forget that people are fundamentally untrustworthy . . . they just want to help themselves if they can," said Krakowski. "These true stories remind us how many hideous acts of deception and self-interest there are in our everyday lives. People really have to watch out for themselves!"

Consumer review: High boasting condition (study 3)

I've enjoyed wine all . . .

By m_Leeson31, March 29, 2015

I've enjoyed wine all my life, and have a nice collection of bottles in my cellar, so you can take my opinion seriously. This Merlot is a real value in this price range. Nice and soft on the palate, with subtle fruit and vegetal notes. It's amazing with rich meats and red sauce pastas. I was smart to find this wine. Coming from someone who knows it . . . this is a solid pick.

Consumer review: Low boasting condition (study 3)

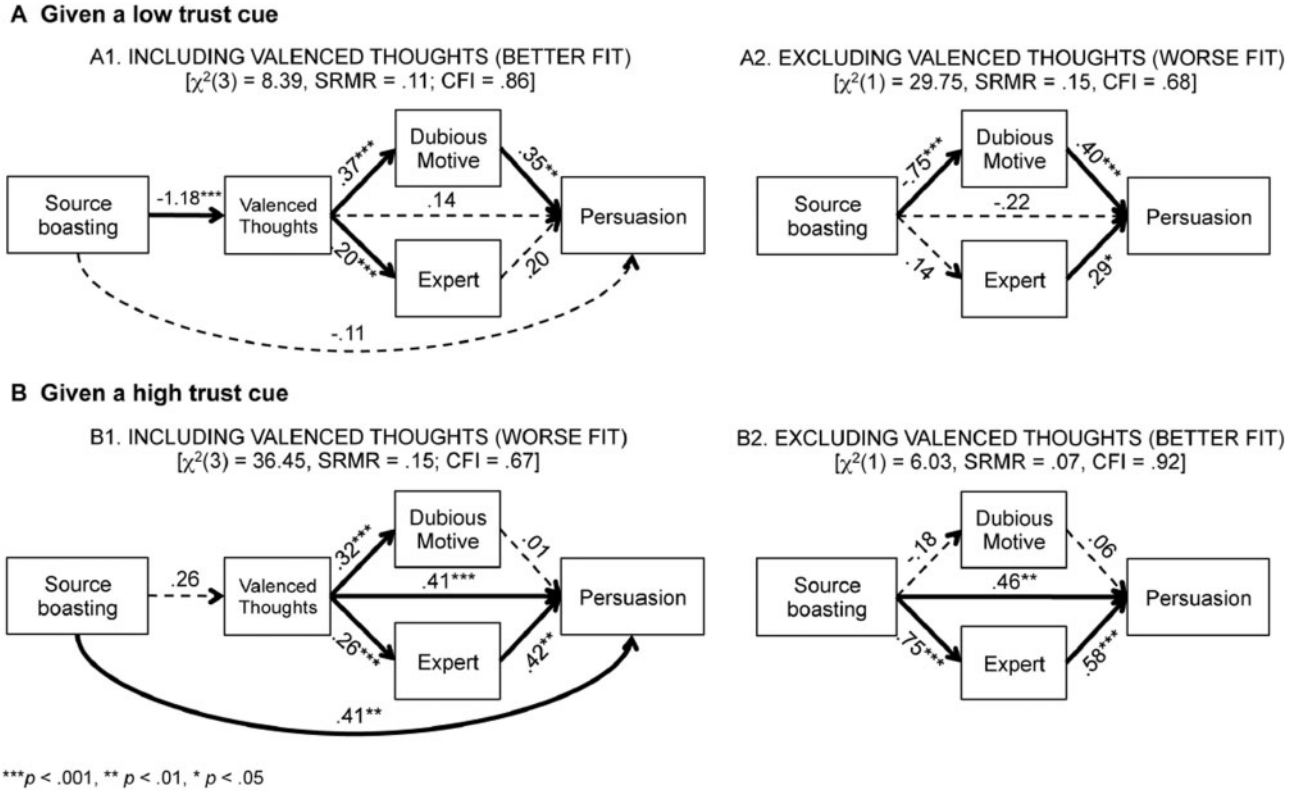
I've enjoyed wine all . . .

By m_Leeson31, March 29, 2015

I'm not that big on wine, and I only have a couple bottles at home, so you can take my opinion for what it's worth. This merlot has everything and is a real value in this price range. Nice and soft on the palate, with subtle fruit and vegetal notes. It's amazing with rich meats and red sauce pastas. I was lucky to find this wine. Coming from someone who's tried it . . . this is a solid pick.

FIGURE A1

STRUCTURAL EQUATION MODEL RESULTS (S3)



***$p < .001$, ** $p < .01$, * $p < .05$

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