

False fame, perceptual clarity, or persuasion? Flexible fluency attribution in spokesperson familiarity effects

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Abstract

Familiar people are especially persuasive spokespersons. Here, a fluency attribution model of spokesperson familiarity was tested. Specifically, it was hypothesized that repeated exposure to a spokesperson would create fluency that, in a persuasive context, could be attributed to the persuasive message *or* to another fluency-relevant cue (e.g., the fame of the spokesperson). In three experiments a woman's photo was repeatedly presented, and subsequently accompanied a persuasive message. Consistent with hypotheses, inflated ratings of the message followed repeated spokesperson exposure (compared to a no exposure control) but only when inflated ratings of the spokesperson (fame) or her photo (perceptual clarity) were *not* observed. Discussion focuses on implications for familiarity theories and on guidelines for maximizing the influence of familiar spokespersons.

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Advertisers and politicians alike covet celebrity spokespersons. This strategy is not without merit: familiar people do tend to be more persuasive than unfamiliar people (Bornstein, Leone, & Galley, 1987; Roskos-Ewoldsen & Fazio, 1992; Weisbuch, Mackie, & Garcia-Marques, 2003). However, the apparently simple relationship between spokesperson familiarity and persuasion belies a strange fact: familiar spokespersons are *not* especially persuasive when prior experience with the spokesperson can be recalled (Weisbuch et al., 2003). These effects appear to be supportive of a fluency attribution model of familiarity. According to such models, repeated exposure to a stimulus (here, a spokesperson) gives rise to a positive perceptual experience that is either correctly attributed to the familiarization process *or* misattributed to another cause. If spokesperson familiarity does influence persuasion via fluency misattribution, another important boundary condition should exist. That is, just as misattribution to a persuasive message does not occur if fluency has been correctly attributed to recent exposure, it should not occur if fluency has been misattributed to another “cause.” Thus, according to a fluency attribution account, prior spokesperson exposure should only lead to

enhanced persuasion when prior exposure does *not* inflate other contextual judgments (e.g., of spokesperson fame). This hypothesis is investigated here in three experiments.

Fluency attribution in consumer psychology

To model the impact of repeated exposure on decisions, researchers in cognitive and social-cognitive psychology have relied heavily on the concept of “fluency.” Broadly defined, *fluency* occurs when perception, memory, or higher-order thinking seems relatively easy (e.g., because of repeated exposure). In recent years, consumer psychologists have drawn an eye towards understanding the relevance of fluency for consumer behavior (e.g., Cho & Schwarz, 2008; Danziger, Moran, & Rafaely, 2006; Johar & Roggeveen, 2007). For example, consumers prefer products or pitches that are easy to perceive (Johar & Roggeveen, 2007; Wyer, Hung, & Jiang, 2008), easy to imagine (Petrova & Cialdini, 2005; Wyer et al., 2008; see also, Cohen, Belyavsky, & Silk, 2008), easy to remember (Menon & Raghuram, 2003; Tybout, Sternthal, Malaviya, Bakamitsos, & Park, 2005), and easy to respond to (Janiszewski & Chandon, 2007; Tybout et al., 2005). Other researchers have turned an eye toward discovering the properties that make for fluent products, brands, and pitches (e.g., Gill & Dube, 2007).

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These and other applications of fluency in consumer research have illuminated the relevance of fluency for real consumer decisions above and beyond the conclusions reached in basic psychological research. In many ways, the impact of fluency on consumer preferences accounts for the success of marketing campaigns built on message repetition, memorable slogans, and/or product imagery. The impact of fluency on consumer preferences is traditionally modeled as an attribution process, with consumer preferences described as an attribution for fluency. Yet traditional models of fluency (based on simple single-stimulus contexts) may not capture attribution processes in the complex and stimulus-rich consumer environment. In particular, stimulus-rich environments ensure that consumers will have a variety of outlets to attribute their experience of fluency. The featured product is by no means the only potential attributional outlet. It is therefore crucial for consumer researchers to develop models of fluency that explicate *where* consumers will project their experience of fluency.

Here, we articulate an extended model of perceptual fluency attribution in an effort to describe how repetition might influence consumer attitudes in an environment with multiple attribution possibilities. This model is used in three experiments to predict the persuasive impact of a familiar spokesperson.

Familiarity: A model of fluency attribution

Research on familiar spokespersons follows from more general research on the effects of familiarity. As compared to novel stimuli, previously encountered (“familiar”) stimuli are judged as having greater perceptual clarity (Whittlesea, Jacoby, & Girard, 1990; Witherspoon & Allan, 1985), attractiveness (the “mere exposure effect”; for reviews, see Bornstein, 1989; Zajonc, 1998), or fame (the “false fame effect”; Jacoby, Woloshyn, & Kelley, 1989). Further, previously encountered sentences are judged as more valid than novel sentences (the “truth effect”; e.g., Arkes, Boehm, & Xu, 1991).

These familiarity effects have all been described as judgmental attributions of enhanced stimulus processing, or perceptual fluency (Bornstein & D’Agostino, 1994; Jacoby et al., 1989; Klinger & Greenwald, 1994; Schwarz, 2004; Whittlesea, 1993). According to *perceptual fluency attribution* models, perceptual speed increases with re-exposure (e.g., Jacoby, 1983) and this perceptual ease or fluency impacts judgment through an attribution process. Because the experience of perceptual fluency appears to be positive (Monahan, Murphy, & Zajonc, 2000; Reber, Schwarz, & Winkielman, 2004; Winkielman & Cacioppo, 2001; Zajonc, 1998), repeated exposure effects (attributions) generally occur in a positive direction. Thus, the mere exposure, false fame, and truth effects are said to occur when fluency (via repeated exposure) is positively misattributed to attractiveness of the stimulus, the fame of the stimulus, and the validity of the stimulus, respectively.

Fluency attribution need not be restricted to the re-exposed stimulus. That is, repeated exposure to a stimulus can influence judgments of other stimuli present at re-exposure (Bornstein et al., 1987; Jacoby, Allan, Collins, & Larwill, 1988; Weisbuch

et al., 2003; Witherspoon & Allan, 1985). For example, background noise sounded “less loud” when spoken sentences had been heard before than when they had not. In these experiments, re-exposure to one stimulus (a sentence) influenced judgments of another stimulus (noise; Jacoby et al., 1988).

Additionally, when perceptual fluency is correctly attributed to prior exposure, effects of prior exposure are greatly reduced. In one set of studies, for example, previously encountered names were more likely than novel names to be judged “famous” *except* when prior exposure was consciously recalled (Jacoby et al., 1989).

In summary, perceptual, attitudinal, truth, and fame judgments can all be positively influenced by familiarity. Such influences of familiarity (a) can extend beyond the re-experienced stimulus and (b) are contingent on a lack of recall for the familiarization process.

An expanded model of fluency attribution: Applications to persuasion

Given the many effects of familiarity described by fluency attribution models, it seems likely that consumer behavior is heavily influenced by perceptual fluency attribution processes (cf., Schwarz, 2004). Products, brands, salesmen, and spokespersons may all be sources of fluency or may benefit as attributional targets of consumers’ fluent feelings.

For example, the arguments of a spokesperson may seem especially true to consumers experiencing fluency with that spokesperson. As noted at the outset, one obstacle in modeling consumer responses to fluency is that such responses typically occur in a complex context amenable to multiple attributions. For example, fluency generated by a familiar spokesperson could be positively attributed to the validity of the spokesperson’s argument (Weisbuch et al., 2003), to perceptual properties of the spokesperson (Witherspoon & Allan, 1985), to the “fame” of the spokesperson (Jacoby et al., 1989), and so on. In fact, most natural environments present multiple attributional possibilities, making it difficult to predict the exact consequences of repeated exposure. It is somewhat striking, therefore, that judgmental consequences of perceptual fluency have typically been examined in isolation—one study might examine how truth judgments follow perceptual fluency, for example, whereas another might examine how fame judgments follow fluency. Consequently, and despite the ecological and theoretical importance of the topic, little is known about the impact of perceptual fluency in contexts with multiple attributional possibilities, such as contexts in which consumers are exposed to persuasive messages or the products associated with those messages.

To fill this empirical gap, we build on extant models of fluency attribution to propose and test several postulates relevant to consumer behavior. First, we propose that only judgments offering subjectively viable accounts of perceptual fluency can benefit from repeated exposure. This premise is fairly uncontroversial (e.g., Schwarz, 2004). The second postulate is that once a judgmental benefit of fluency occurs,

other fluency-based judgment effects will not occur. In other words, one fluency attribution should preclude others. This postulate is consistent with fluency attribution in that enhanced judgments are said to accrue by virtue of accounting for one's fluent experience (for a similar argument based on *retrieval* fluency findings, see Schwarz, 2004). However, beyond queries for explicit recall (e.g., Jacoby et al., 1989), there is no evidence that one *perceptual* fluency attribution “short-circuits” further attributions. We test this postulate here.

These two postulates point to the importance of predicting the “most viable” account of fluency in any given context. Although a variety of factors are likely to influence any individual consumer's attribution, several factors are likely to play an especially important role. First, accounts of fluency should be viable (to consumers) to the extent that they explain the objective properties of fluency. Perceptual enhancements are perhaps the most obvious and central characteristic (e.g., Jacoby & Dallas, 1981). Hence, perceptual clarity should be an especially likely attribution for fluency. Although less central than perceptual enhancement, familiarity is a logical characteristic of anything that has been repeatedly encountered. Hence, perceptual fluency that accrues via repeated exposure should be reflected in familiarity (e.g., fame) judgments. Indeed, these judgment dimensions tend to elicit large effect sizes in fluency research (e.g., Jacoby et al., 1989) where judgment dimensions with a more distant relationship to fluency (e.g., attractiveness) tend to elicit smaller effect sizes (modal r between .1 and .2; see Bornstein, 1989). Nonetheless, because few (if any) studies have simultaneously examined multiple attribution possibilities for *perceptual* fluency, the relative likelihood of different fluency attributions remains unclear.

The second factor likely to influence “viable attributions” is attentional focus. For example, a person attending to a newspaper article may attribute fluency to the newspaper article even if the re-exposed stimulus was a (less attended) coffee mug. However, because researchers typically direct participants' attention to a single judgment dimension (e.g., “how famous is this person?”) rather than manipulate attentional focus at re-exposure, this factor has not been properly examined.

In all 3 of the current studies we examined multiple attributional possibilities and in two of these studies we manipulated attentional focus at re-exposure. We tested all of the above postulates in the context of consumers' responses to a familiar spokesperson.

The current research: Spokesperson familiarity

From a fluency attribution perspective, repeated encounters with spokespersons should generate fluency in the consumer that *could be* positively misattributed to the validity of spokespersons' arguments. Indeed, extant research suggests that previously-encountered spokespersons have a persuasive advantage over novel spokespersons (Bornstein et al., 1987; Weisbuch et al., 2003). The proposed fluency attribution model suggests that this persuasive advantage should be susceptible to several caveats. Most notably, the persuasive advantage of familiar spokespersons should be eliminated

when other viable attribution dimensions are the focus of attention at re-exposure.

This prediction may appear to contradict previous research on familiar spokespersons. That is, in one study (Weisbuch et al., 2003, Study 2), the persuasive advantage of a familiar spokesperson held *even when* attentional focus was directed toward an alternative dimension, explicit recall. However, resistance to the explicit recall manipulation held only for consumers who had little if any awareness of prior exposure—for these individuals, explicit recall would *not* have been a subjectively viable attribution, especially considering the importance of episodic traces in explicit memory (cf., McElree, Dolan, & Jacoby, 1999; Yonelinas, 2002). If the model outlined here is valid, however, the persuasive advantage of familiar spokespersons *should* be eliminated by more subjectively viable accounts of fluency, such as perceptual clarity and fame.

Specifically, three experiments tested the application of extended fluency attribution principles to spokesperson familiarity. Attentional focus was manipulated in Experiment 1 and Experiment 2. In all experiments, attributions could be directed to the persuasive message or another account of fluency. In Experiment 1 and Experiment 2, perceptual clarity was used as the alternative account. In Experiment 3, spokesperson fame was used as the alternative account. If the proposed fluency attribution principles describe spokesperson familiarity effects, then inflated ratings of clarity or fame following spokesperson re-exposure should preclude inflated ratings of the spokesperson's message.

It should be noted that the focus of the current investigation was to test hypotheses regarding fluency attribution, rather than to test hypotheses about the nature of perceptual fluency. As such, the designs and analyses that follow focus on the attribution process.

Experiment 1

Overview and hypotheses

In this experiment, spokesperson familiarity and attentional focus were manipulated. Participants were randomly assigned to the cells of a 2 (Exposure: subliminal vs. none) \times 2 (Clarity question: yes vs. no) between-subjects design. In the first part of the experiment participants were (or were not) subliminally exposed to the spokesperson's photo. Orthogonal to this manipulation, participants were (or were not) then asked to rate the clarity of the spokesperson photo. This photo was then paired with a persuasive argument, which all participants were asked to read. Finally, argument strength ratings were obtained.

Subliminal exposure (relative to no prior exposure) to the spokesperson's photo was expected to enhance clarity judgments of that photo (cf., Mandler et al., 1987; Whittlesea et al., 1990; Witherspoon & Allan, 1985). Second, with regard to evaluation of the persuasive message, an exposure by clarity question interaction was expected. Specifically, subliminal exposure to the spokesperson photo (relative to no exposure) should enhance ratings of the message, but *only* among participants who did not already rate clarity. That is, an attri-

bution to photographic clarity should preclude an attribution to the validity of the persuasive message.

Method

Participants

55 female Introduction to Psychology students participated in exchange for partial course credit. The experiment was run in groups of 2–6 and each participant was assigned an individual cubicle.

Measures

Measures of photographic clarity, message validity, and spokesperson attractiveness were included in Experiment 1. Participants who rated the clarity of the spokesperson's photograph did so by rating the extent to which the photograph appeared to be "in focus" on a 1–7 scale (from "not at all" to "extremely"). All participants rated the validity of the persuasive message. Although direct measures of attitude change are more typical in persuasion research, it was important to establish that the message itself was the attributional focus. Thus, participants rated "the strength of the arguments in the essay" on a 1–7 scale (from "weak" to "strong"). Finally, participants rated the attractiveness of the spokesperson on a 1–7 scale (from "not at all" to "extremely") to evaluate a spokesperson characteristic less closely tied to fluency than perceptual clarity.

Procedure

Participants were instructed to follow instructions as they appeared on a computer monitor. Presentation of all instructions and stimuli and collection of all responses were controlled by Superlab™ software.

Participants were told that their first task involved answering questions about individuals who they would see only briefly. Participants in all conditions then saw a sequence of 19 1.5 in. square monotone photographs of eight women's faces, presented 1 in. above the center of the monitor (approximately equal to eye level), horizontally centered. Each exposure was 1 s, with the next face following immediately in a randomly predetermined order. The only difference between the subliminal and no-exposure conditions was that in the former, four subliminal 23 ms exposures of the target photo were randomly inserted into the sequence. These 4 exposures were therefore backward and forward masked, a process which, in this paradigm, eliminates subjective awareness of the photo (see Weisbuch et al., 2003).

To bolster the cover story, all participants then answered several irrelevant questions about the group of persons they had just seen (e.g., "how adventurous were the people you just saw?"). A message on the computer monitor then explained that the next task was to evaluate a person and a message written by that person—however, all participants were warned that just prior to that next task, there *may* be a question about the

message author. After instructions disappeared from the screen, participants in the "clarity question" condition read that they would also be asked to rate the author's photograph, whereas participants in the "no clarity question" condition were simply asked to wait for several seconds. Clarity question participants then rated the clarity of the square 1.5 in. monotone photograph (the spokesperson photo). For these participants, once the question was answered, the photograph remained on the screen as the message appeared.

For all participants, the target photo appeared in the upper left hand corner of the screen next to the statement "Taxes should be raised to help repair freeways." A 200 word essay containing relatively weak arguments followed the statement (see Appendix; for a complete description of pilot testing, see Weisbuch et al., 2003). After reading the essay, participants responded to the message evaluation and attractiveness items. Finally, participants were probed for suspicion, thanked, and debriefed.

Results

The clarity effect

We expected ratings of photographic clarity to be higher in the subliminal exposure condition than in the no exposure condition. To test this prediction, responses to the "in focus" question were submitted to an independent samples *t*-test with exposure as the between-subjects factor. As expected, participants who had been subliminally exposed to the target photo rated the photo as more "in focus" ($M=3.87$, $SD=.96$) than participants who had not been previously exposed to the photo ($M=3.12$, $SD=.8$), $t(30)=2.40$, $p<.05$, $r=.41$. This finding conceptually replicates previous research on other types of images (Mandler et al., 1987; Whittlesea et al., 1990; Witherspoon & Allan, 1985).

Argument strength

We expected ratings of argument strength to be higher in the subliminal exposure condition than in the no exposure condition, but only for participants who did not answer the clarity question. Thus, we expected an exposure by clarity question interaction. To test this hypothesis, argument strength scores were submitted to a 2 (exposure) × 2 (clarity question) between-subjects ANOVA. This analysis yielded only the predicted interaction depicted in Fig. 1, $F(1, 51)=4.15$, $p<.05$, $r=.27$. The existence of an interaction here demonstrates that attributional focus moderated the impact of repeated exposure on message validity (cf, Rosenthal & Rosnow, 2008). To more specifically examine the pattern of moderation, two-tailed planned contrasts were conducted. These contrasts revealed that ratings of argument strength were marginally higher in the subliminal exposure condition ($M=3.33$, $SD=1.12$) than in the no exposure condition ($M=2.36$, $SD=1.96$) among participants who did *not* rate photographic clarity, $F(1, 51)=3.11$, $p=.08$, $r=.29$. In contrast, ratings of argument strength were non-significantly *lower* in the subliminal exposure condition

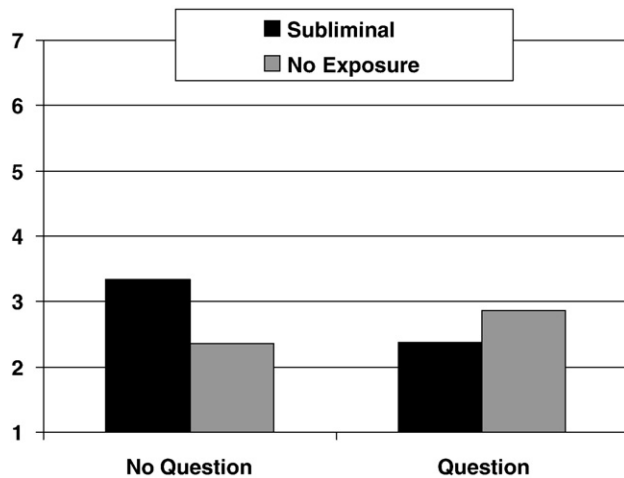


Fig. 1. Argument strength ratings as a function of prior exposure (subliminal vs. none) and clarity question (given question or not).

($M=2.38$, $SD=1.09$) than the no exposure condition ($M=2.88$, $SD=1.09$) among participants who *did* rate photographic clarity, $F(1, 51)=1.15$, $p=.29$, $r=.23$.

There were no significant or near significant effects concerning spokesperson attractiveness (p 's $> .5$).

Discussion

In this experiment, prior exposure to a spokesperson elicited either perceptual clarity effects or persuasive effects, depending on the persuasive context. When the context focused attention on the clarity of the spokesperson's photographic image, prior exposure elicited inflated ratings of the image but not of the persuasive argument. When the context did *not* focus attention on the clarity of the spokesperson's photographic clarity, prior exposure did inflate ratings of the persuasive argument (cf., Bornstein et al., 1987; Weisbuch et al., 2003). Attributions to photographic clarity therefore appeared to preclude later attributions to argument quality, as predicted by fluency attribution models.

This first experiment provided initial evidence that a reasonable account of perceptual fluency could elicit attributions and short-circuit further fluency attributions. We have proposed that unreasonable accounts of fluency—such as those only loosely associated with objective fluency—should not elicit fluency attributions and therefore should not eliminate the familiar spokesperson effect. An alternative hypothesis is that *any* evaluative judgment dimension is likely to elicit fluency-based attributions when it is at the focus of attention (cf., Mandler, Nakamura, & Van Zandt, 1987). A second experiment was designed to test these two alternative hypotheses.

Experiment 2

In Experiment 2, we examined the extent to which two alternative fluency attributions could eliminate the tendency for consumers to agree with a familiar spokesperson. One of these attributions (perceptual clarity) was closely related to the

objective properties of fluency whereas the other attribution (liking) was only loosely related to the objective properties of fluency, such that the former should be a more reasonable account of fluency. And in a persuasive context where consumers anticipate a persuasive message, only the most reasonable accounts of fluency may detract from attributions to the message itself.

In five previous familiar spokesperson experiments (Bornstein et al., 1987; Weisbuch et al., 2003; Experiment 1 here), repeated exposure to a spokesperson did not significantly influence judged attractiveness or liking of that spokesperson.¹ Beyond this paradigm, repeated exposure effects appear to be smaller for attractiveness or liking judgments (modal r between .1 and .2; see Bornstein, 1989) than for perceptual and familiarity based judgments (e.g., Jacoby et al., 1989). Thus, although repeated exposure clearly *can* influence a variety of judgments, we propose that some judgments (e.g., clarity) are more likely than others (e.g., liking) to elicit attributions following repeated exposure and hence are more likely to “short-circuit” the persuasive advantage of familiar spokespersons.

This hypothesis implies that persuasion will occur in the absence of elevated spokesperson liking. Indeed, although liking can act as a heuristic cue that enhances persuasiveness, people often discount the importance of spokesperson liking in deference to other factors such as message content, spokesperson expertise, and so on (Chaiken, 1980; Chaiken & Eagly, 1983; Shavitt, Swan, Lowery, & Wanke, 1994; Ziegler, Diehl, & Ruther, 2002; Ziegler, von Schwichow, & Diehl, 2005). If our model is correct, the impact of liking should also be limited here. That is, implicit spokesperson exposure should facilitate persuasion directly and not via spokesperson liking. As in previous research (see Weisbuch et al., 2003), covariance between liking and persuasion is likely to be independent of covariance between the manipulation and persuasion.

In summary, we expected that judgments of perceptual clarity—closely tied to the experience of perceptual fluency—should elevate following repeated exposure and hence eliminate the familiar spokesperson effect. Contrariwise, judgments of spokesperson liking—loosely tied to the experience of fluency in this paradigm—should barely elevate (if at all) following repeated exposure and should not eliminate the familiar spokesperson effect.

Method

Participants and design

70 female Introduction to Psychology students participated in exchange for partial course credit. These participants were

¹ It is noteworthy that positive but small (and non-significant) effect sizes for liking/attractiveness have been observed in all 5 studies examining the persuasive impact of spokesperson familiarity. Thus, it is important to note that we are not arguing that the mere exposure effect does not exist with familiar spokesperson. We simply argue that this effect is insufficient to either (a) explain the familiar spokesperson effect (see Weisbuch et al., 2003) or (b) short-circuit the effect (here).

randomly assigned to a 3 (clarity question, liking question, no question) \times 2 (subliminal exposure, no exposure) between-subjects factorial design. The experiment was run in groups of 2–6 and each participant was assigned an individual cubicle.

Procedure

The procedure was identical to that of [Experiment 1](#), with the exception of the “liking question” condition and the attitude measure. Participants in the “liking question” condition rated the extent to which they “liked the person in the photograph” on a 1–7 scale (from “not at all” to “extremely”)—as with “clarity question” participants, these ratings were made prior to reading the essay. All participants indicated their attitude toward the thesis of the spokesperson’s argument by rating the extent to which they agreed (1, disagree; 7, agree) with the statement, “taxes should be raised to help repair freeways.” This measure constitutes a more direct measure of attitude change than that used in [Experiment 1](#).

Results

The clarity effect

We expected ratings of photographic clarity to be higher in the subliminal exposure condition than in the no exposure condition. To test this prediction, responses to the “in focus” question were submitted to an independent samples *t*-test with exposure as the between-subjects factor. As expected, participants who had been subliminally exposed to the target photo rated the photo as more “in focus” ($M=4.25$, $SD=1.21$) than participants who had not been previously exposed to the photo ($M=3.31$, $SD=.95$), $t(23)=2.17$, $p<.05$, $r=.4$.

Spokesperson liking

Based on previous studies using this paradigm, we expected participants in the subliminal exposure condition to like the spokesperson about as much as participants in the no exposure condition. To test this prediction, responses to the “liking” question were submitted to an independent samples *t*-test with exposure as the between-subjects factor. As expected, the spokesperson was liked equally by participants in the subliminal exposure condition ($M=5.0$, $SD=1.12$) and participants in the no exposure condition ($M=4.83$, $SD=1.7$), $t(19)=.25$, $p=.80$, $r=.06$. As in previous research, these findings suggest that fluency was *not* attributed to liking the spokesperson.

Opinion agreement

We expected agreement with the spokesperson to be greater in the subliminal exposure condition than in the no exposure condition, but only for participants who did not answer the clarity question. Thus, we expected an exposure by question-type interaction. To test this hypothesis, opinion agreement

scores were submitted to a 2 (exposure) \times 3 (question-type) between-subjects ANOVA.

An unpredicted marginal main effect of exposure indicated that participants in the subliminal exposure condition were more likely to agree with spokesperson ($M=3.85$, $SD=1.67$) than those in the no exposure condition ($M=3.25$, $SD=1.52$), $F(2, 64)=3.66$, $p=.06$, $r=.18$. An unpredicted effect of question-type indicated that participants in the clarity question condition had greater agreement with the spokesperson ($M=4.12$, $SD=1.4$) than those in the liking question condition ($M=3.33$, $SD=1.59$) or the no question condition ($M=3.13$, $SD=1.73$), $F(2, 64)=3.07$, $p<.05$. Both of these effects, however, were qualified by the predicted significant two-way interaction, $F(2, 64)=3.97$, $p<.05$.

To examine this interaction and more directly examine our primary hypotheses, two-tailed planned contrasts were conducted. Among participants in the no-question condition, those who had been subliminally exposed to the spokesperson were more likely to agree with the spokesperson’s opinion ($M=3.77$, $SD=1.88$) than those who had not been previously exposed to the spokesperson ($M=2.36$, $SD=1.21$), $F(1, 64)=5.21$, $p=.03$, $r=.27$. Likewise, among participants in the liking-question condition, those who had been subliminally exposed to the spokesperson were more likely to agree with the spokesperson’s opinion ($M=4.11$, $SD=1.9$) than those who had not been previously exposed to the spokesperson ($M=2.75$, $SD=1.05$), $F(1, 64)=4.84$, $p=.03$, $r=.26$. However, among participants in the clarity question condition, those who had been subliminally exposed to the spokesperson were *not* more likely to agree with the spokesperson’s opinion ($M=3.75$, $SD=1.36$) than those who had not been previously exposed to the spokesperson ($M=4.46$, $SD=1.39$), $F(1, 64)=1.32$, $p=.25$, $r=.14$.

Discussion

Together with [Experiment 1](#), [Experiment 2](#) provides replicable evidence that perceptual judgments can short-circuit consumers’ tendency to agree with familiar spokespersons. In both experiments, repeated spokesperson exposure inflated judgments of the persuasion message among participants who *did not* have the opportunity to make attributions to photographic clarity (meta-analyzed $r=.28$, $p=.003$; see [Rosenthal, 1991](#)). Yet when participants had the opportunity to make attributions to perceptual clarity there was no persuasive effect of repeated spokesperson exposure, suggesting that perceptual clarity attributions short-circuited persuasive effects. The key question in [Experiment 2](#) was whether a less viable attribution would also short-circuit persuasive effects of repeated spokesperson exposure. Indeed, the opportunity to make attributions to liking did *not* eliminate the familiar spokesperson effect. Thus, the results of [Experiment 2](#) are consistent with the postulate that judgment dimensions with a close relationship to objective fluency are more likely than others to short-circuit other attributions. A third experiment was conducted to extend these findings and to address some limitations of the first two experiments.

Experiment 3

In the first two experiments, subliminal repeated exposure to a spokesperson enhanced judgments on a single dimension (agreement or clarity but not both). Yet the attribution model described here only precludes multiple attributions *within* an individual. For example, to the extent that an individual believes that a familiar spokesperson is “famous” that individual should not agree with the spokesperson. However, individuals vary in their “theories” of fluency (see Schwarz, 2004) such that a familiar spokesperson may elicit fame attributions for one person but agreement attributions for another.

Experiments 1 and 2 constrained attentional focus by explicitly directing attention to a clarity cue, limiting the impact of individual differences in fluency attributions. A more ecologically valid examination of multiple attributions would allow for the expression of individual differences in fluency attribution (cf., Schwarz, 2004). Consequently, in Experiment 3, we eliminated the attentional focus manipulation and measured agreement with the persuasive message as well as judgments of spokesperson fame. Consistent with individual differences in fluency attributions, repeated spokesperson exposure should elicit message attributions in some participants but fame attributions among other participants. Enhanced fame ratings following exposure should only occur to the extent that enhanced agreement ratings do not.

Spokesperson fame, rather than perceptual clarity, was chosen as the alternative judgment dimension in order to examine whether non-perceptual judgments are capable of short-circuiting the spokesperson-familiarity effect. Familiarity judgments (fame) were chosen in particular because familiarity bears a close relationship to the objective properties of repetition-based fluency.

Finally, in the first two experiments, a weak persuasive message was used. Perhaps the use of a weak message made attribution to that message untenable when compared with a more tenable perceptual explanation (the clarity of the photo). This possibility seems unlikely, since repeated-exposure participants did make inflated message judgments in the absence of perceptual focus. Nonetheless, to be sure that misattribution to a non-message stimulus occurs with strong messages, a message known to contain strong arguments was used in Experiment 3.

Overview and hypotheses

In the first part of the experiment, participants were (or were not) subliminally exposed to the target’s photo. The target photo was then paired with a persuasive argument which all participants were asked to read. Agreement and fame ratings were then obtained.

Predictions were as follows: First, as in previous research, prior exposure should enhance persuasion (Bornstein et al., 1987; Weisbuch et al., 2003) and fame judgments (Jacoby et al., 1989). However, consistent with individual difference accounts of attributional focus (e.g., Schwarz, 2004), the participants who attribute fluency to agreement should be different from those who attribute fluency to fame. Thus, among participants

in the subliminal exposure condition there should be a negative correlation between agreement and fame ratings. That is, at the individual level, fluency should only be attributed to fame or agreement but not both.

Method

Participants

40 female Introduction to Psychology students participated in exchange for partial course credit. They were run in groups of 2–6.

Procedure

Procedure was identical to Experiment 1, with the following exceptions: First, there was no “clarity question” condition. Second, the 200 word essay contained strong arguments (see Appendix; for pilot data on this essay, see Weisbuch et al., 2003). Finally, participants responded to two items on 7-point scales. They first rated the extent to which they agreed (1, disagree; 7, agree) with the statement, “taxes should be raised to help repair freeways.” A second question asked participants “Is this person famous?” (1, definitely not; 7, definitely).

Results

Opinion agreement

We expected enhanced opinion agreement ratings from participants who had been subliminally exposed to the photo, as compared to participants in the no exposure condition. To test this hypothesis, participants’ agreement ratings were submitted to an independent-groups *t*-test. As expected, participants in the subliminal exposure condition agreed more with the target’s opinion ($M=5.29$, $SD=1.2$) than those in the no exposure condition ($M=4.44$, $SD=1.5$), $t(38)=2.0$, $p=.05$, $r=.31$, thus replicating previous research.

False fame

We expected the woman in the photo to appear more famous to participants who had (vs. had not) been subliminally exposed to the photo. To test this hypothesis, participants’ fame ratings were submitted to an independent-groups *t*-test. As expected, participants in the subliminal exposure condition tended to make inflated fame ratings of the target ($M=2.92$, $SD=1.32$), as compared to participants in the no exposure condition ($M=2.13$, $SD=1.2$), $t(38)=1.93$, $p=.06$, $r=.3$. Thus, as in previous research (Jacoby et al., 1989), previous exposure to a person was associated with higher fame ratings.

False fame and opinion agreement

We expected an inverse relationship between false fame and opinion agreement ratings among participants in the subliminal condition. To test this hypothesis, agreement ratings were

correlated with fame ratings in each of the two conditions. In the subliminal condition, agreement and fame ratings were negatively correlated, $r(23) = -.48, p = .02$. There was a non-significant positive correlation ($r = .04$) in the no exposure condition.

Discussion

The results presented here suggest that repeated exposure to spokespersons can lead to enhanced persuasiveness and inflated fame ratings. However, persuasiveness and fame ratings were inversely related following repeated exposure. These findings are therefore consistent with a fluency-attribution model: once fluency is explained via enhanced ratings of a stimulus, there is no need for further attributions or enhanced ratings.

General discussion

We started this article by pointing out that politicians and advertising firms often seek celebrity spokespersons. The assumption appears to be that familiar faces universally enhance the desirability of the relevant political platform or product. Instead, the three experiments reported here suggest that familiar spokespersons are especially likely to be persuasive in some contexts, but not at all in others. Specifically, when repeated exposure to a spokesperson yielded enhanced judgments of perceptual clarity or fame, persuasive effects of spokesperson familiarity were less likely. Given directions to judge the clarity of the spokesperson's photo, repeated spokesperson exposure only enhanced ratings of the photo. In the absence of such directions, repeated spokesperson exposure only enhanced argument ratings. Likewise, only in the absence of inflated fame ratings were participants likely to agree with the repeatedly-exposed spokesperson.

Implications for models of perceptual fluency attribution

Earlier we highlighted the importance for consumer research of developing models that predict the judgmental impact of fluency in stimulus-rich environments. With regard to perceptual fluency, little research had examined *how* repeated exposure simultaneously impacts multiple judgment dimensions. Prior studies (Jacoby et al., 1988; Weisbuch et al., 2003) indicated only that fluency attribution was a more appropriate model than simple mere exposure for explaining the effects of repeated exposure in stimulus-rich settings. The current research clarified the processes likely to determine the specific judgment outcome of repeated exposure.

The current research highlights several processes important in determining perceptual fluency attributions. First, individuals are likely to attribute fluency to a single judgment dimension. Judgments of perceptual clarity, opinion agreement, or spokesperson fame could be influenced by repeated exposure, but such influence occurred for each consumer on only one dimension. Second, attentional focus appears to exert a strong influence on attributional target. When attention at re-exposure was directed to perceptual clarity, repeated exposure no longer influenced

opinion agreement. Third, judgments targeted for fluency attribution are most likely to be those with objective similarity to the objective properties of fluency. That is, when re-exposure occurred while consumers attended a long persuasive message, liking and attractiveness were not sufficiently similar to fluency whereas perceptual clarity and familiarity (fame) judgments were similar enough to short-circuit attributions to the message. Finally, the “single attribution only” rule appears to hold within individuals but may not hold between-individuals. A single individual will make only a single attribution for fluency but different individuals can make different attributions (cf. Schwarz, 2004). Hence, the current research provides several principles for predicting when and how repeated exposure will influence judgments in stimulus-rich settings.

The current research also rules out several plausible alternative explanations of spokesperson familiarity findings. That is, alternative explanations may have included that confusion, uncertainty, or effort can be altered by simple subliminal exposure and that such confusion, uncertainty, or effort could influence agreement. If that were the case, then we should have observed enhanced persuasion even in the “clarity question” conditions of Experiment 1 and Experiment 2 and there should not have been a negative correlation between persuasion and fame ratings in Experiment 3. Thus, “noise” explanations cannot account for the current findings.

In general, the current research underlines the importance of examining judgmental influences of perceptual fluency in contexts with multiple attributional possibilities. In such contexts, researchers are likely to observe the absence of many “known” effects, such as mere exposure, false fame, perceptual clarity, and truth effects. Instead, each such effect is likely to emerge under a specific set of circumstances, with attentional focus and objective similarity to fluency as determinants. The relevance of any of these fluency-based effects to the multiple-stimulus world should be examined before conclusions about fluency-attribution are reached, especially as such conclusions are applied to the “real world.”

Applications to daily life

The persuasive effects of spokesperson familiarity depend on the manner in which familiarity is evoked. Previous research demonstrated that the persuasive impact of spokesperson familiarity was most reliable when prior exposure could not be recalled (Weisbuch et al., 2003). Indeed, such “forgotten spokespersons” may be commonly encountered in daily life. Consumers are likely to forget people passed in the street, faces on billboards, people who sat a few feet away during lunch, “extras” in movies, and even people that have been formally introduced. The persuasive influence of such forgotten spokespersons marks the relevance of the current research to marketing contexts. Specifically, subliminal methodology insured that exposure to the spokesperson could not be recalled.

Consistent with previous findings that forgotten spokespersons are more reliably persuasive than “remembered” spokespersons, forgotten spokespersons were most persuasive here when they were *not* identified as famous. Such findings

run contrary to conventional wisdom—endorsement from well-known figures has been sought for centuries (e.g., political endorsement in ancient Greece) and celebrity endorsement is a multi-billion dollar industry (Agrawal & Kamakura, 1995). Of course, true celebrities may invoke credibility that our forgotten spokesperson lacks. Nonetheless, true celebrities may miss out on the persuasive advantage of being familiar but not famous—namely, that the sense of familiarity generated by the spokesperson can be attributed to the value of the spokesperson's opinion. In fact, recent research on “spontaneous discounting” suggests that target fame can actually reverse cognitive-feeling effects (e.g., availability) otherwise associated with targets (Oppenheimer, 2004). Thus, it seems reasonable to assert that celebrity status may counteract the type of familiarity effects observed here. In short, forgotten spokespersons may be an invaluable marketing tool, perhaps as effective as or more effective than famous spokespersons.

Because subliminal exposure is an uncommon and unproven strategy in large-scale advertising campaigns, it may be practical to manipulate “forgotten” exposure using more conventional methods. For example, actors who have appeared as extras in popular television may be surprisingly effective spokespersons. As another example, a person's face could be placed on billboards, with an advertising campaign with that person to follow several weeks after the billboard was removed. The key in any such strategy would be ensuring that consumers could not recall their exposure to the spokesperson at the time of the persuasion attempt. A small pilot test could be conducted prior to instituting the advertising campaign (to ensure lack of recall). Finally, the spokesperson's argument should be presented in a context that does not include reference to perceptual or familiar cues. A relatively-low tech campaign may be best (to avoid perceptual attributions to the “special effects”).

We would expect use of such strategies to be quite successful. Across six studies, including the current studies, Weisbuch et al. (2003), and Bornstein et al., (1987), the meta-analyzed persuasive effect size (r) for un-recallable spokesperson exposure was .31, with an associated p -value of less than .0000001. Inserting this effect-size into a binomial effect size display (BESD; Rosenthal & Rubin, 1982) reveals that replacing a novel spokesperson with an un-recallable but familiar spokesperson could increase the likelihood of attitude change from 35% to 65% for example.

Repeated exposure versus repeated expression

The current findings, those of Bornstein et al. (1987) and those of Weisbuch et al. (2003) run somewhat contrary to results observed by Roskos-Ewoldsen, Bischof, and Hoffman (2002). Roskos-Ewoldsen and colleagues observed that repeated *expression* of attitudes toward a famous person could, in specific circumstances, increase processing of a message authored by that spokesperson. Under these specific circumstances, agreement with a weak message was reduced. These findings may appear to conflict with the current findings in as much as (a) both programs of research include repeated exposure to a spokesperson yet (b) only Roskos-Ewoldsen and colleagues

find that such repeated exposure can induce *decreased* persuasion. However, there are key differences between the two research programs that can explain the diverging results. First, in the Roskos-Ewoldson work, repeated exposure occurs toward a person who is known to be liked. Second, participants' liking was repeatedly *expressed*. Explicit expressions of liking for a source should not be expected to produce the same results as subtle, simple exposure to a source. Repeated expressions of source admiration on a questionnaire may interfere with the generation, quality, or attribution of perceptual fluency that occurs with simple exposure.

For example, extant perceptual fluency research rarely, if ever, requires an evaluation of the target during the exposure phase—to do so would be to draw attention to the target during the exposure phase and heighten the likelihood of explicit recall, reducing or eliminating the judgmental impact of fluency. Moreover, requiring participants to bring to mind their feelings toward the target (and write them down) is to repeat a higher-order cognitive process which may create more conceptual than perceptual fluency. Indeed, Roskos-Ewoldsen & Fazio (1992) report that repeated attitude expressions did *not* give rise to familiarity—this is quite discrepant from what would be expected from repeated simple exposure and perceptual fluency. Finally, repeated attitude expression may create a sense of accountability which conflicts with or overwhelms any of the rather subtle fluency influences (e.g., Dunning, 2007; Kruger, Galak, & Burrus, 2007)—indeed, the processing enhancement observed by Roskos-Ewoldsen et al. (2002) is consistent with a sense of accountability. For these reasons and others, repeated attitude *expressions* are a much better manipulation of attitude accessibility than of perceptual fluency—hence such manipulations often produce different patterns (e.g., familiarity judgments in Roskos-Ewoldsen & Fazio, 1992).

The main point for our purposes is that there are important conceptual and methodological differences between repeated expressions of liking and repeated exposure. More broadly, attitude accessibility effects are different from repeated exposure effects. The Roskos-Ewoldson paper provides an explanation for source effects of the former but not the latter, whereas we provide an explanation for source effects of the latter but not the former. There is also an important practical implication of the discrepancies in these findings: repeated exposure should be simple to be effective—it should not be paired with evaluations of the spokesperson.

Directions for future research

The findings observed here are noteworthy in one way not yet discussed. When presentation of the persuasive essay followed perceptual clarity judgments, repeated exposure exerted a small negative effect on agreement with the essay. We conducted a meta-analysis on this effect, following procedures outlined by Rosenthal (1991). This meta-analysis revealed a marginally significant effect size, $r = .18$, $p = .06$. A speculative account of this effect might include the idea that explicit, fluency-relevant judgments (i.e., a clarity judgment) alert participants to the potential biasing influence of felt

fluency.² Indeed, models of conscious correction suggest that participants often over-correct for presumed influences (such as felt fluency; Wegener & Petty, 1997). Although there are limitations to this speculative account, for example that asking questions sometimes does not produce correction (Fitzsimmons & Moore, 2008; Spangelberg, Greenwald, & Sprott, 2008), it is worthy of further investigation, particularly with regard to how overcorrection may interact with fluency attribution in a stimulus-rich context.

Finally, in the current study we did not observe direct evidence for the occurrence of fluency. As in other fluency studies (e.g., Bornstein & D'Agostino, 1994), we relied on a misattribution paradigm to infer the existence of perceptual fluency. The primary purpose for doing so here was that measurement of fluency would likely require a judgment (i.e., an attribution) that by our model would “short-circuit” any other effects. For example, some might consider judgments of perceptual clarity to be a measure of fluency yet in the first two studies we found that such judgments acted as attributions that short-circuited other fluency-based effects (i.e., persuasion). Nonetheless, it will be important for future research to delineate those perceptual judgments which mediate (vs. short-circuit) fluency effects in stimulus-rich contexts.

Conclusion

Spokesperson-familiarity effects can be predicted with the use of an extended fluency-attribution model. Specifically, repeated spokesperson exposure can enhance agreement with the spokesperson or another judgment closely related to fluency, but not both. To accurately predict the persuasive impact of a familiar spokesperson, it is necessary to account for (a) attentional-focus and (b) the similarity of contextual cues to objective-fluency. The extended fluency-attribution model should help to refine predictions regarding repeated exposure in ecologically valid contexts.

Appendix

Message containing weak arguments (used in Studies 1 and 2)

Tax rates should be increased to help repair our freeways. There are several reasons for why this action should be taken. First, a tax rate increase would help in the beautification of our freeways and also make them more interesting. Considering that many of our current freeways are somewhat unsightly and boring, this tax rate increase could repair some of our highways' unattractiveness. Increasing tax rates would additionally reduce the number of hitchhikers by making our highways more attractive. That is, hitchhikers would stand out against this more attractive freeway background, and as such, be easier for police to ticket these individuals. Second, the construction crews working on the repair of our freeways should increase the safety of untamed animals living in close proximity to highways. That is, the noise and commotion caused by these construction

workers would deter deer and other animals from lurking near the freeways and potentially getting injured. Finally, the government should be trusted and supported issues related to the maintenance of our highways. The government has often done good things in the past to increase the efficiency and safety of our highways and should be trusted to do the same here.

Message containing strong arguments (used in Study 3)

Tax rates should be increased to help repair our freeways. There are several reasons for why this action should be taken. First, an increase in tax rates would directly benefit the taxpayers' safety. The increase would be used to repair potholes in our freeways. Freeway potholes play a part in 38% of all highway traffic deaths every year in America and California has more freeway potholes per mile than all but 3 other states. This tax initiative would also be used to repair other rough spots on our freeways. Rough spots on the road (such as bumps and damaged shoulders) play a part in an additional 20% of all highway traffic deaths. Second, a widening of the freeway would lower commuting time, reduce traffic accidents and reduce the amount of traffic on city streets by making the freeway a more attractive option. These traffic and time reductions would benefit almost all car-owning Californians. The final reason for this tax rate hike is actually economic. That is, a tax rate hike to repair our freeways at this time would save the taxpayers from an even larger tax rate hike which would be necessary in approximately 7 years, according to the state government.

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² Thanks to an anonymous reviewer for this explanation.

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