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Report

When the expectations from a message will not be realized: Naïve theories can eliminate expectation–congruent judgments via correction

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ABSTRACT

Research typically reveals that individuals like an object more when a persuasive message convinces them that this object is pleasant. In this paper, two experiments were conducted to understand the influence of such message-induced affective-expectations on judgments of experienced affect following direct encounter with an alcohol type of drink. As predicted, before trying the drink, recipients of the positive-expectation message had more positive expectations than recipients of the negative-expectation message. After drinking, participants judged the beverage to elicit affect congruent with message-induced expectations to the extent they did not endorse a naïve theory that their affective expectations congruently influence their experienced affect. In contrast, after drinking, the effect of the message disappeared when participants did endorse this naïve theory. Moderation of these effects, as well as theoretical and practical implications, are addressed.

Introduction

Many persuasive messages strategically instill either positive or negative expectations for the feelings an object (e.g., a product, issue, or person) might elicit (e.g., Ajzen & Fishbein, 2005; Albarracín & Wyer, 2001; Johnson, Smith-McLallen, Killeya, & Levin, 2004). For example, advertisements often suggest that consuming alcohol will result in social acceptance and fun, whereas health campaigns often suggest that consuming alcohol will result in negative personal and social consequences. As one might imagine, creating an affective expectation might influence individuals' affective judgments of the object in a congruent way. If an object is described as likely eliciting positive feelings, recipients may be more convinced of how pleasant this object actually is (see also Schwarz & Clore, 1983; Wyer, Clore, & Isbell, 1999). As a result, inducing positive or negative affective-expectations about an object can be a reasonable way to get people to like or dislike this object (Geers & Lassiter, 1999, 2002, 2003, 2005; Wilson, Lisle, Kraft, & Wetzel, 1989). Indeed, most persuasion research has investigated the effects of message-induced affective-expectations on object evaluations.

One limitation of focusing on message-induced affective-expectations (e.g., that alcohol use leads to unpleasant feelings) is that the actual encounter with the object (which may be associated with affect) is not taken into account. Encounters with an object, however, influence attitudes in powerful ways (Fazio, 1986; see also Doll & Ajzen, 1992; Glasman & Albarracín, 2006; Regan & Fazio, 1977). Therefore, the ultimate influence of message-induced affective-expectations must be determined following encounters with the object. In this vein, the present research addressed how message-induced affective-expectations about an object influence judgments of experienced affect (e.g., how pleasant participants judge a drink made them feel) and future drinking intentions reported after an encounter with the object. Given that the target messages are designed to convince individuals that they will have a positive or negative affective experience, measuring individuals' judgments of experienced affect and drinking intentions contributes to our understanding of persuasion.

Encountering the object: effects of expectation–implanting messages and naïve theories

Individuals can judge their experienced affect with an object as being congruent or incongruent with prior affective expectations. Much research conducted by Geers and Lassiter (1999, 2002,

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2003, 2005) has revealed that these judgments depend on whether individuals notice a discrepancy between their expectations and the affect associated with the object or its affective qualities. Currently, we propose another, orthogonal, moderator to determine whether judgments of experienced affect will be more or less congruent with message-induced affective-expectations: individuals' naïve theories about the influence of affective expectations on their experienced affect with an object. As elaborated below, some individuals endorse the naïve theory that affective expectations congruently influence their affective experiences with an object. Given this perceived bias, such individuals are likely to correct their judgments of experienced affect for the influence of their expectations (e.g., instilled by a message), judging their experienced affect as less congruent with their expectations. However, individuals who do not endorse this naïve theory are unlikely to correct their judgments and may instead judge experienced affect as congruent with their affective expectations (e.g., Geers & Lassiter's work).

Message-induced expectation–congruent effects

Some individuals do not endorse a naïve theory that affective expectations congruently influence experienced affect, such as their feelings while tasting an alcohol type of drink. As a result, they perceive no bias against which they should correct their judgments of experienced affect following an affective expectation and encounter with the drink. Rather, consistent with Wilson et al.'s (1989) affective-expectation model and much supporting evidence and theorizing (Bruner, 1957; Fishbein & Ajzen, 1975; Geers & Lassiter, 1999, 2002, 2003, 2005; Lassiter & Geers, 2005; Martin, 1986; Sherif & Hovland, 1961), their judgments of experienced affect may be driven primarily by expectations about it. That is, these individuals may judge their experienced affect as more pleasant (unpleasant) when they expected the encounter to be pleasant (unpleasant). Importantly, such expectation–congruent judgments are quite common (see Geers and Lassiter's research), perhaps even the default (Wilson et al.). Interestingly, then, among these individuals, we anticipate judgments of experienced affect to be biased by their affective expectations, although they do not believe this bias exists.

Eliminating or reversing expectation–congruent judgments via bias-correction

Importantly, judgments of experienced affect should differ for people who endorse (vs. do not) the naïve theory that affective expectations congruently influence their experienced affect (e.g., associated with a drink). Having a prior message-induced affective-expectation may prompt them to consider that the expectation influenced their experienced affect while tasting the drink. Specifically, if the message-induced expectation is negative (positive), high endorsers of this naïve theory may conclude that their experienced affect has been negatively (positively) influenced by the expectation. As high endorsers attempt to account for this influence (i.e., correct for the perceived bias) more than low endorsers, high endorsers may be less influenced by the expectation than low endorsers. Even more, as the magnitude of the bias might be difficult for high endorsers to accurately assess, they may overcorrect their judgments and judge their experienced affect as incongruent with the message-based expectation. Such overcorrection would lead to more negative judgments of experienced affect following a message that implants positive versus negative expectations.

This idea that individuals correct for the perceived bias of message-induced affective-expectations is consistent with several bias-correction models (e.g., Isbell & Wyer, 1999; Ottati & Isbell, 1996; Wegener & Petty, 1995; Wilson & Brekke, 1994). These models propose that individuals sometimes become aware or believe that they were influenced by a particular factor (in this case, a message-induced expectation). When this realization occurs, people attempt to correct for, or undo, the influence of this factor according to their beliefs (e.g., naïve theories) of how their judgments (e.g., of experienced affect) were influenced. Given sufficient processing ability, these attempts can effectively suppress the influence of the factor or even produce overcorrection. Thus, individuals who endorse the naïve theory that expectations congruently influence their experienced affect may show no expectation–congruent judgments of experienced affect. Even more, if overcorrection occurs, it is possible that these individuals will judge their experienced affect as more positive following negative versus positive affective-expectations.

Notably, although correction for non-message biasing factors (e.g., author attractiveness or likeability) has been observed in persuasion experiments (Kang & Herr, 2006; Petty, Wegener, & White, 1998), we are aware of no research directly investigating bias-correction as a result of *message* factors (i.e., expectations), either in the context of judgments of experienced affect or elsewhere. In this paper, we predicted that a message about an alcohol type beverage would effectively induce a positive or negative affective-expectation, indicating its persuasiveness before trial of the beverage. After the trial, however, judgments of experienced affect made by high endorsers may be corrected against implanted expectations. This correction may result in judgments that are not significantly influenced by message-induced expectations, or perhaps judgments that are overcorrected.

Eliminating expectation–congruent judgments via distraction

The predicted expectation–congruent effects and their elimination or reversal through bias-correction processes rely on the assumption that individuals have sufficient ability to think about their experienced affect in light of their expectations. Yet, environmental and personal factors can all diminish the extent to which this thinking occurs, and our predictions change for situations in which individuals possess low processing-ability (e.g., are distracted; Albarracín & Kumkale, 2003). Specifically, distraction should reduce all individuals' ability to consider consciously provided expectations and may therefore decrease the influence of message-induced expectations on judgments. In particular, for low endorsers, being unable to consider message-based expectations is likely to reduce or eliminate expectation-consistent effects on judgments of experienced affect. Moreover, for high endorsers, distraction is also likely to disrupt bias-correction processes, eliminating potential overcorrection effects (e.g., Gilbert & Hixon, 1991; Wegener & Petty, 1995).

Importantly, research consistent with Wilson et al.'s affective-expectation model (1989) has found that expectation–congruent effects are quite commonplace, and tend to attenuate or even reverse when individuals notice a discrepancy between the expectation and the qualities of the target object. However, we add that expectation–congruent effects can also be attenuated if individuals are unable to consider consciously provided affective expectations due to distraction. Therefore, distraction at the time of judgment as well as endorsement of the naïve theory can both reduce expectation–congruent effects, the demonstration of which would be new to this area of research.

The present research

Two reported experiments included measures of participants' endorsement of the naïve theory that affective expectations con-

gruently influence experienced affect. In both experiments, participants received a message instilling a positive or negative affective expectation for a "mood-altering" alcohol-like beverage, reported their affective expectations prior to drinking, and then, a short time later, sampled the beverage. This beverage was associated with unpleasant (Experiment 1) or pleasant affect (Experiment 2) because it was immediately preceded by a affect induction. Furthermore, processing ability was kept constant at high levels (Experiment 1), or varied over two levels (Experiment 2: low and high distraction). In both experiments, after sampling the beverage participants provided judgments of their experienced affect, which served as our primary dependent measure of persuasion. Intentions to drink the beverage were also measured at this time. Even though intentions to drink are likely to depend on many factors, including drinking habits, normative pressure to drink, and perceived control over drinking (Ajzen & Madden, 1986), we were interested in assessing the pattern of effects for this measure as well.

We predicted that undistracted participants (Experiment 1 and low-distraction conditions in Experiment 2) with lower endorsement of the naive theory should judge their experienced affect as more positive after a positive-expectation message than after a negative-expectation message (e.g., Wilson et al., 1989). In contrast, we predicted that undistracted participants with higher (vs. lower) endorsement of the naïve theory would judge their experienced affect as less congruent (correction), or even incongruent (overcorrection), with message-induced affective-expectations. However, in the presence of environmental distraction (i.e., noise), any effects of message-induced expectations may be eliminated.

Experiment 1

Method

Participants

Twenty one (29% male) introductory psychology students participated in the experiment in exchange for course credit. Participants were randomly assigned to receive a positive or negative affective-expectation message and completed a measure of naïve theory (continuous) as second factor. Three participants failed to report one of the dependent measures or the manipulation check, leaving one missing data point for each variable. However, each participant was retained because partial data were available.

Procedure and independent variables

Participants were informed that the experiment concerned an herb-derived experimental simulated-alcohol product that would target people of all ages because it did not actually contain alcohol (Albarracín, Cohen, & Kumkale, 2003). They were further told that they would first receive information about this beverage, answer some questions about the information, sample the product, and finally answer questions about the product. During the first phase of the experiment, participants read a message about the simulated-alcohol product, included within an ostensible informational packet. These materials indicated that simulated alcohol has the same effects as alcohol, such as inducing relaxation and facilitating interactions in social situations. Depending on random assignment, participants further read that the simulated-alcohol product induces a predominantly pleasant mood state (e.g., elation, happiness, optimism, and hope), or a more unpleasant mood state (e.g., more negative mood, more sadness, and more anger). To further bolster these claims, a chart indicated the percentage of individuals who experienced several positive and negative emotions according to whether or not they drank the beverage. For example, participants in the positive-expectation-message condition saw that 90% of drinkers but 40% of nondrinkers reported feelings of elation, whereas participants in the negative-expectation-message condition saw that 51% of drinkers but 82% of nondrinkers reported feelings of elation. The messages were identical except for the frequency of the reported affective reactions; they were also similar in credibility as indicated by pretestings. Participants then completed a brief questionnaire about the beverage which included items measuring their expectations for how the product would make them feel (i.e., affective expectations).

After this brief questionnaire, participants learned that the product would be available in many venues and that we wanted to recreate the experience of being in a coffee shop, a location where the drink was likely to be sold (again, because the beverage was herbal and non-alcoholic, Albarracín & Wyer, 2001). Therefore, participants were asked to engage in a mundane activity that may be performed in a coffee shop. With that pretense, participants were given 10 min to write a letter to a friend about a personal experience they found frustrating/angering (Albarracín & Kumkale, 2003; Albarracín & Wyer, 2001). The beverage did not actually possess emotion-altering properties and we wanted to control the affect participants associated to their encounter with the beverage. This letter-writing task served to induce unpleasant affect that would carryover as participants sampled the drink (i.e., be misattributed to the drink; Schachter & Singer, 1962; Schwarz & Clore, 1983). Because participants wrote an affectively charged letter and believed that the drink induced affect similar to alcohol, we expected that they might attribute the feeling arising from the letter to the drink. Thus, participants should use these feelings as an initial basis for reporting judgments of experienced affect. To help insure some degree of affect-misattribution to the drink, we did not ask participants to report how the letter-writing task made them feel (see Schwarz & Clore, 1983). However, this task has proved successful in creating negative affect in prior experiments (e.g., Albarracín & Wyer, 2001).

Next, the experimenter collected the completed letters and provided a 3 oz. sample of the beverage (actually three parts orange juice to one part flat tonic water) and a post-beverage questionnaire to each participant (Albarracín et al., 2003). Immediately after consuming the beverage, participants completed the questionnaire including items measuring judgments of experienced affect and intentions. This questionnaire also measured participants' naïve theory that affective expectations congruently influence experienced affect with three items: "people are likely to experience the mood they expect to experience," "if one is favorably predisposed to experience a positive mood, one will probably experience a positive mood," and "if one is favorably predisposed to experience a negative mood, one will probably experience a negative mood." Participants reported their endorsement of the naïve theory on scales from 0 (*not at all likely*) to 10 (*extremely likely*). These items were presented at the end of the questionnaire and used to construct an index with good internal consistency ($\alpha = .68$). The experiment concluded after this questionnaire, at which point the experimenter debriefed, thanked, and dismissed the participants.

Dependent variables

Affective expectation before trial. After reading the informational packet, participants completed a brief questionnaire containing items designed to measure their expectations for how drinking the beverage would make them feel. Specifically, on scales anchored by 0 (*not at all likely*) to 10 (*extremely likely*), participants responded to 8 items stating, "Simulated alcohol induces people to experience..." "a positive mood," "a negative mood," "elation," "depression," "happiness," "sadness," "anger," and "optimism" and two items stating "if I had this product, I would probably experience a..." "positive mood" and "negative mood." Negative items

were reverse scored and added to the positive items, the sum of which was averaged to create an expectation–manipulation check index with high internal consistency ($\alpha = .93$). For this index, higher numbers indicate an expectation that simulated alcohol will induce more positive, and less negative, affect.

Judgments of experienced affect and intentions. After sampling the simulated-alcohol beverage, participants completed two other sets of dependent measures. A measure of participants' judgments of experienced affect (ranging from −10 to +10) was created by subtracting participants' response to the item "The effect of the simulated-alcohol drink was unpleasant" from the response to the item "The beverage gave me a pleasant feeling," both of which were made on scales anchored from 0 (*not at all*) to 10 (*extremely*). For this measure then, more positive numbers indicate the judgment of more positive experienced affect. Second, participants' intention to use the simulated-alcohol beverage was measured by having them fill in the blank of the sentence, "If it were up to me, I would have ___ (number) drink/s of simulated alcohol." Numbers from 0 to infinity were feasible for this measure.

Results

Expectation–manipulation checks, affect judgments, and intentions

The expectation–manipulation check and dependent variables were subjected to separate hierarchical regression analyses. In this regression, message (dummy-coded) and continuous naïve-theory scores (centered) were included in the first step of the regression as predictor variables. In the second step of the equation, the Message × Naïve Theory interaction term was entered as well. As anticipated, only a main effect of expectation message was significant for the expectation–manipulation check, $\beta = .760$, $p < .001$. This finding demonstrated that the messages were persuasive before drinking as the positive-expectation message instilled more positive expectations about the beverage than the negative-expectation message.

Further, confirming our main prediction, the interaction between message and naïve theory was marginally significant for judgments of experienced affect, $\beta = -0.413$, $p = .058$, and significant for intentions to consume the beverage, $\beta = -0.638$, $p < .01$. None of the main effects reached significance. The estimated means of our dependent measures are plotted in Fig. 1 for participants with high (+1*SD*) and low (−1*SD*) naïve-theory endorsement (i.e., low and high endorsers). Contrasts of the effects of the message at each level were tested following methods described by Aiken and West (1991). As can be seen, low-endorsers of the theory demonstrated more expectation–congruent effects evident in both judgments of experienced affect ($\beta = .765$) and intentions ($\beta = .818$, both $ps < .05$). Further, for high endorsers of the theory, positive-expectation messages produced non-significantly different judgments of experienced affect ($\beta = .081$, $p > .05$) and marginally weaker drinking intentions ($\beta = .490$, $p = .075$) than negative-expectation messages.

Naïve theory

Participants' endorsement of the naive theory was measured at the end of the experiment. Therefore, it was important to ascertain whether the manipulation of message-induced expectations may have influenced reports of this measure. To do this, the naïve theory measure was analyzed as a function of expectation message, but no significant effect was obtained, $t < 1$. Thus, the time at which naïve theory was measured presents no problems for the interpretation of our results. It was also possible that the more individuals endorse the naive theory, the more extreme were their expectations for the beverage. If true, it would be unclear whether our findings resulted from correction processes or from a contrast effect resulting from large discrepancies between the more extreme expectations of high endorsers and their beverage encounter (e.g., Sherif & Hovland, 1961). However, participants' endorsement of the naïve theory was not correlated with the overall extremity of participants expectations about the beverage in Experiments 1 or 2 ($rs = .35$ and $-.19$, both $ps > .05$), ruling out this potential confound to our key results.

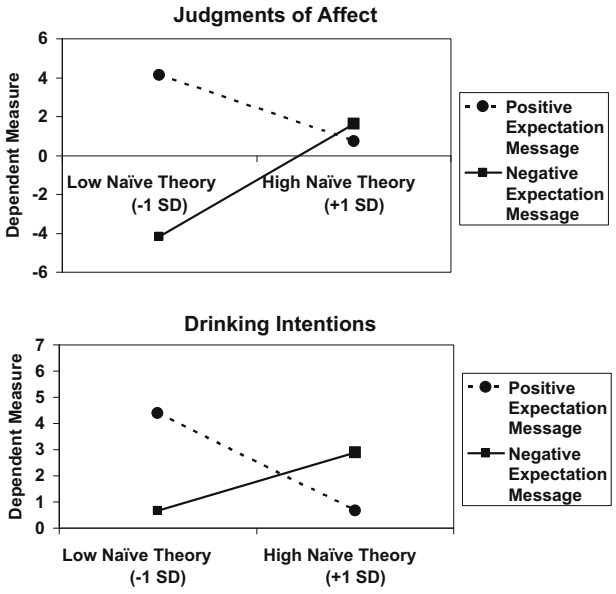

Fig. 1. Estimated mean judgments of experienced affect and intentions as a function of naive theory and message-induced expectations.

Discussion

Participants in Experiment 1 were persuaded before trying the drink, forming more positive expectations if they received the positive- than the negative-expectation message. But as predicted, after drinking, only participants with low naïve theory endorsement were persuaded by the messages, rendering expectation–congruent responses on the dependent measures. In contrast, participants with high naïve theory endorsement either were not persuaded (rendered comparable judgments regardless of expectation message) or were marginally persuaded in a direction counter to the message (see intentions). Nonetheless, one limitation of these results is that they were found when the simulated-alcohol beverage was associated with unpleasant affect (i.e., when the beverage seemed to elicit negative affect). Thus, we sought to replicate and extend these findings in Experiment 2 by associating the beverage with pleasant affect. Additionally, there was a small sample size in Experiment 1, so a replication of our predicted effects was warranted. Further, we tested the possibility that distracting participants while they reported their judgments of experienced affect and intentions might eliminate expectation–congruent effects. Such a finding would introduce another moderating variable besides naïve theories to the predicted effects.

Experiment 2

Experiment 2 was methodologically very similar to Experiment 1, except that the beverage was associated with pleasant affect for all participants. Further, participants heard distracting noise at a high or low level while they reported their judgments of experienced affect and their intentions.

Method

Participants

Forty-seven (34% male) introductory psychology students participated in exchange for course credit. Participants were randomly assigned to the conditions of a 2 (affective-expectation message: positive vs. negative) × 2 (distraction: high vs. low) between-subjects design in which participants' naïve theory (continuous) was measured and served as a third factor. The intention measure was not completed by two participants, and the judgment of experienced affect measure and expectation–manipulation check were each not completed by one participant. However, these participants were retained because partial data were available.

Procedure

The procedure was nearly identical to that of Experiment 1. However, in this experiment, participants were given 10 min to compose a letter to a friend describing a happy experience, under the same pretense used in Experiment 1. Next, the experimenter told participants that to further create the experience of being in a coffee shop, she would play a tape-recording of sounds that might be present in a coffee shop while they sampled the beverage and completed the questionnaire. In approximately half of the sessions this recording was of a conversation played at a fairly loud level and was intended to distract participants while they completed the main dependent measures (Albarracín & Wyer, 2000; Albarracín & Wyer, 2001). In the other sessions, the recording was played quietly and contained no conversation. All measures were the same as those used in Experiment 1.

Results

Expectation–manipulation check, judgments of experienced affect, and intentions

The expectation–manipulation check and the dependent variables were subjected to a hierarchical regression analysis. In this regression, message (dummy-coded), distraction (dummy-coded), and continuous naïve-theory scores (centered) were included in the first step of the regression as predictor variables. In the second step of the equation, all 3 two-way interaction terms were included as predictor variables. In the last step, the interaction between message, distraction, and naïve theory was included as a predictor variable.

Importantly, the analysis of the expectation–manipulation check revealed only a main effect of expectation message (indicating the messages were persuasive), $\beta = 0.617$, $p < .001$, such that participants reported more positive expectations for the beverage following a positive- than negative-expectation message. More important, the interaction between message, distraction, and naïve theory was significant for judgments of experienced affect, $\beta = 0.321$, $p < .05$, but not for intentions to consume the beverage, $p > .05$. The estimated means for judgments of experienced affect were plotted for participants with high (+1*SD*) and low (−1*SD*) endorsement of the naïve theory, and appear in Fig. 2. As shown for judgments of experienced affect, under low-distracting conditions low-endorsers of the theory demonstrated more expectation–congruent effects ($\beta = .676$, $p < .05$), whereas high endorsers of the theory demonstrated non-significant expectation–incongruent effects ($\beta = -.339$). This pattern was confirmed by a significant interaction between the continuous naïve theory measure and the message type ($\beta = .905$, $p < .05$) when distraction was low. In contrast, no significant message-effects were present when distraction was high (all βs < .187), as confirmed by a non-significant interaction between naïve theory and message ($\beta = .142$). These tests also revealed that high endorsers who read the negative-expectation message reported more positive judgments of experienced affect

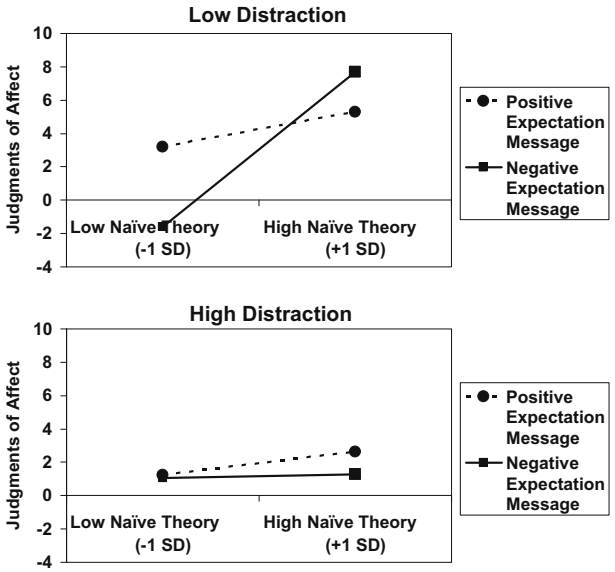

Fig. 2. Estimated mean judgments of experienced affect as a function of naive theory, message-induced expectations, and distraction.

(i.e., corrected more) if they were in the low versus high distraction conditions ($\beta = .864$, $p < .01$). This effect is in line with our theorizing, and is subsumed under the overall 3-way interaction. No other main effects were significant for judgments of experienced affect, and all results for the intention measure were non-significant.

Naïve theory

Again, it was important to determine whether the independent variables influenced reports of the naïve theory measure. Results of an analysis of variance revealed only a main effect of distraction, $F(1, 47) = 4.21$, $p < .05$ (all other ps > .7), such that distraction (vs. low distraction) led to more endorsement for the naïve theory. Importantly, however, our critical results involved the influence of message-induced affective-expectations, which did not influence endorsement of the naive theory. As a result, the time at which naïve theory was measured presents no problems for the interpretation of our results.

Discussion

Experiment 2 was important for several reasons. To begin, it replicated the finding that individuals' endorsement of the naïve theory determines whether implanted affective expectations will produce expectation–congruent persuasion effects under low-distracting conditions. Further, this effect replicated and extended the effects observed in Experiment 1 by associating the beverage with pleasant, as opposed to unpleasant, affect. However, these results were only observed for judgments of experienced affect, not the intention measure (unlike Experiment 1). Finally, the results of Experiment 2 suggested that when individuals are unable to make inferences or consider their message-induced expectations (high distraction), expectation–congruent effects can be eliminated.

General discussion

Most persuasion research has investigated the effects of message-induced affective-expectations on evaluations of a target object. As a result, this research has largely overlooked additional persuasive influences that occur after an encounter with that object. In light of this limitation, our present research was designed

to help to advance this critical understanding. We found that following an object encounter, message-induced affective-expectations do not always work as persuaders intend. Rather, many individuals correct their judgments of experienced affect with an object against a perceived bias from the message, resulting in no effects or expectation–incongruent effects regarding the direction of persuasion.

In addition to demonstrating that individuals correct for perceived bias from message factors, our research introduced naïve theories as an important moderator of the effects of affective expectations. We suggested that, to a high or low extent, individuals endorse the belief that affective expectations congruently influence experienced affect. Further, we predicted and found that undistracted individuals who endorse this theory correct, and perhaps at times overcorrect, their judgments of experienced affect by considering their earlier message-induced affective-expectations (see e.g., Isbell & Wyer, 1999; Ottati & Isbell, 1996; Wegener & Petty, 1995; Wilson & Brekke, 1994). Also, we predicted and found that undistracted individuals who tend not to endorse this theory judge their experienced affect as in line with their expectations (see Geers & Lassiter, 1999, 2002, 2003, 2005; Wilson et al. 1989). Finally, distracted individuals who could neither make effortful corrections nor utilize conscious affective expectations showed no effect of expectations. This finding adds yet another variable that can moderate expectation–congruent judgments.

Limitations and future directions

Mediation

Unfortunately, it is difficult to directly measure the cognitive mediators of the effect of naïve-theory endorsement on persuasion. First, individuals have little introspective access to the mental operations that affect their recent judgments (Nisbett & Wilson, 1977). Second, asking individuals to report the process by which they are forming an online affective judgment may contaminate this judgment. Yet, our findings seem easily interpreted as resulting from bias-correction processes. After all, participants who endorsed the naïve theory, and therefore had a rationale for countering their expectations, showed no expectation-consistent effects and tended to show expectation–incongruent effects. Nonetheless, future research could potentially enhance our understanding of correction processes by carefully probing individuals' thoughts following an expectation and object encounter.

Further potential moderators

In the current research, we proposed that both the discussed naïve theory and ability to think about message-induced affective-expectations moderate judgments of experienced affect. Nonetheless, other factors may moderate the reported effects. For instance, some individuals may endorse a naïve theory that expecting positive affect makes them experience negative affect and vice versa. Specifically, individuals endorsing an "incongruent" theory might correct their judgments of experienced affect to be positive following messages implanting positive versus negative affective expectations. In addition to investigating the effects of such a naïve theory, future research should consider other expectation-based moderators. For example, high endorsers of the congruent naïve theory might perceive that some message-induced expectations exert more or less bias on their affective experiences. Thus, for example, significant expectation–incongruent effects might be more likely to occur for expectations stemming from strongly persuasive, versus weakly persuasive, messages.

Implications

Our predictions and results have implications for a diversity of areas beyond what has been presented. As one example, past research has occasionally found no or reverse placebo effects (e.g., Storms & Nisbett, 1970), and theorists have offered ideas for when these effects manifest rather than standard placebo effects (e.g., Ross & Olson, 1981). Our research adds the possibility that placebo effects, which are expectation driven (e.g., Geers, Weiland, Kosbab, Landry, & Helfer, 2005), may predominantly occur for individuals who do not believe that their affective expectations influence their experiences. In contrast, individuals who do hold this belief may counter the influence of their expectations, and manifest no or reverse placebo effects. Additionally, the persuasive effects seen following a message might not always be the same as those following an actual encounter with a target object, particularly for high endorsers for the reported naïve theory. Future work may benefit from considering this reality.

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