Whence Univalent Ambivalence? From the Anticipation of Conflicting Reactions

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The subjective experience of ambivalence results from possessing both positive and negative reactions. Why do individuals sometimes experience ambivalence when they possess only positive or only negative reactions (i.e., univalent attitudes)? This research advances and provides support for the notion that anticipated conflicting reactions underlie such ambivalence. Anticipated conflicting reactions occur when an individual possesses no, or only a few, manifest conflicting reactions and yet anticipates that there may exist conflicting information of which they are unaware. Support is provided by three experiments in which anticipated conflicting reactions mediated the influence of amount of univalent information on feelings of ambivalence.

Over the past 10 years, the construct of ambivalence has become of central importance to attitude research across disciplines. Within consumer behavior, research relating to ambivalence has focused on several different issues. Research has been conducted to demonstrate the basic finding that individuals can possess evaluative judgments that contain independent elements of both positivity and negativity (Cacioppo and Berntson 1994; Larsen, McGraw, and Cacioppo 2001; Otnes, Lowrey, and Shrum 1997; Williams and Aaker 2002). In addition, research has been conducted examining what influences the experience of ambivalence (Jewell 2003; Otnes et al. 1997), how individuals cope with the experience of ambivalence (Lau-Gesk 2005; Nowlis, Kahn, and Dhar 2002), and how ambivalence helps to provide a conceptual understanding of phenomena as disparate as responses to advertising (Forehand, Deshpandé, and Reed 2002) and to satisfaction and loyalty (Olsen, Wilcox, and Olsson 2005). The present research builds upon, and answers a question raised by, prior work concerning the antecedents of ambivalence.

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THE ANTECEDENTS OF AMBIVALENCE—CONFLICT

Positive and Negative Thoughts and Feelings

Building on earlier efforts (Breckler 1994; Thompson, Zanna, and Griffin 1995), Priester and Petty (1996) sought to understand how positive and negative thoughts and feelings combine in order to produce the experience of ambivalence. They conducted three experiments in which they both measured (experiment 1) and manipulated (experiments 2 and 3) the extent of positivity and negativity toward a diverse set of attitude objects and measured the resulting feelings of ambivalence associated with those attitude objects. From these experiments, they proposed and found support for the gradual threshold model of ambivalence.

The gradual threshold model (GTM) considers how one's dominant and conflicting reactions to an attitude object combine to produce a state of experienced ambivalence. In the GTM, "dominant" refers to whichever of the positive or negative reactions is greater in number, and "conflicting" refers to whichever of the positive or negative reactions is fewer in number. The GTM makes three specific predictions. First, the GTM predicts that ambivalence is a negative function of the extent of dominant reactions. That is, the more dominant thoughts and feelings a person has of one valence, the less ambivalence they experience. Second, the GTM predicts that ambivalence increases in a negatively accelerating manner as the number of conflicting reactions increases. That is, although feelings of ambivalence generally increase as conflicting reactions increase, the first conflicting reactions produce a greater increase in ambivalence than

subsequent conflicting reactions. It does not matter if the conflicting reactions are positive or negative. Third, the GTM predicts that as the number of conflicting reactions increases, the influence of dominant reactions on ambivalence gradually decreases such that at some level of conflicting reactions (i.e., the threshold), the number of dominant reactions no longer has an influence on the experience of ambivalence. Thus, for many attitude objects (i.e., those attitudes above the threshold), ambivalence is a function solely of the extent of conflicting reactions (Kaplan 1972).

Ambivalence below the Threshold

To summarize, intrapersonal attitudinal conflict (i.e., possessing both positive and negative reactions) leads to feelings of ambivalence (for nonintrapersonal antecedents; Priester and Petty 2001). The current research concerns another possible source of attitudinal ambivalence that is postulated to occur when a person has few or even no conflicting reactions to an object. That is, we explore a source of ambivalence that we postulate is present even if a person's thoughts and feelings are quite one-sided. This proposal is designed to explain a seeming puzzle in prior data. That is, in prior research we have observed that when an attitude is associated with few or no conflicting reactions, people still report varying degrees of ambivalence. Specifically, Priester and Petty (1996) found that when minimal or no internal conflict was present, as a person's dominant reactions increased, subjective ambivalence decreased: $r = -.22$ ($p < .0001$) between the number of dominant reactions and the experience of ambivalence when people possessed zero conflicting reactions, and $r = -.11$ ($p < .05$) when people possessed just one conflicting reaction (see also Thompson et al. 1995).

Why should dominant reactions relate to ambivalence when there are no or few conflicting reactions? As explained in more detail below, we argue that when people have only a few dominant reactions and perhaps feel relatively uninformed, they may assume that there are conflicting attributes of which they are unaware. However, as the number of dominant attributes increases, and they feel more informed, they are less likely to assume that there are conflicting attributes.

Anticipated Conflicting Reactions

The current research focuses on why people feel ambivalent when there are no (or few) conflicting reactions and why dominant reactions relate to ambivalence in these situations. Priester and Petty (1996) advanced a possible explanation. The explanation rests upon the notion of anticipated conflicting reactions and contends that one psychological process—conflict—underlies the experience of ambivalence. However, there are various sources of conflict. The first (and most obvious) type is known, or manifest, conflicting reactions, which influence ambivalence above the threshold (i.e., when there are several or more conflicting reactions). That is, people are often aware of specific at-

tributes of products, people, and issues that conflict with their dominant reactions. These conflicting attributes produce some ambivalence.

In the current research we postulate another possible source of conflict that we refer to as anticipated conflicting reactions. These reactions are postulated to occur mostly when people are unaware of any specific attributes that are opposite to their dominant reactions. Yet, when people are unaware of any specific information opposite to their dominant thoughts and feelings, they may be concerned that such information exists. Or, if they are aware of only a very few conflicting reactions, they may be concerned that there are more opposite characteristics of which they are unaware. That is, many people recognize that there are often two sides to every story and that nothing is perfect (or completely worthless). Thus, even if they are unaware of any negative features of a mostly positive product (or unaware of any positive features of a mostly negative product), they may assume that such features exist. If so, these anticipated conflicting reactions might contribute to feelings of ambivalence even when people report that they personally are unaware of or have no conflicting reactions themselves.

We argue that when individuals are aware of possessing both positive and negative reactions toward an attitude object, it is the conflicting reactions of which they are aware that largely underlie ambivalence. However, if there are few or no conflicting reactions of which the individual is aware, anticipated (or expected) conflicting reactions could influence feelings of ambivalence. Importantly, as the amount of dominant information increases, people may be less likely to assume that there is opposite information of which they are unaware. That is, more univalent information may lead to fewer anticipated conflicting reactions.

If anticipated conflicting reactions decrease as dominant information increases, this relationship would account for decreased feelings of ambivalence as dominant reactions increase in situations where there are no or few conflicting reactions. Thus, according to this explanation, conflicting reactions of some sort always underlie the experience of ambivalence. The only difference is whether the conflicting reactions are known (as is the case when there exist many conflicting reactions) or merely anticipated (as in the case when there exist no or few conflicting reactions).

Hypotheses

Two specific hypotheses can be derived from the above conceptual framework. The first hypothesis is that the number of dominant reactions will influence the number of anticipated conflicting reactions, especially when actual conflicting reactions are low (i.e., below the threshold). The second, and key, hypothesis provides the mechanism by which dominant reactions account for the experience of ambivalence when there are few or no manifest conflicting reactions. Specifically, we predict that anticipated conflicting reactions will mediate the influence of dominant reactions on ambivalence below the threshold. Experiment 1 was conducted in order to test these two hypotheses.

EXPERIMENT 1

Method

Participants and Design. Ninety-six undergraduate students at the University of Southern California completed a booklet as part of an experiment for which they received credit for an introduction to marketing course. The booklet assessed participants' reactions to the Apple iPod.

Independent Variables. Participants completed two separate measures in order to provide independent assessments of their positive and negative reactions toward the attitude object. For the positivity scale, participants were instructed as follows: "Considering just your positive (and ignoring any negative) thoughts and feelings—How much positivity do you feel towards the iPod?" For the negativity scale, participants were asked to report the extent to which they felt negative thoughts and feelings toward the iPod, ignoring any positivity. The positivity scale ranged from zero (not at all positive) to 10 (completely positive). The negativity scale also ranged from zero to 10, with the word "negative" replacing "positive" (Priester and Petty 1996).

Participants also completed two scales in order to assess the anticipation of conflicting reactions. For the anticipation of negative reaction scales, participants were instructed, "To what extent do you anticipate that the iPod has negative qualities and attributes that you don't know about?" The anticipation of positive reactions was identical, with the word "negative" replaced with "positive." The specific scales were anchored with zero equal to "do not anticipate any negative (positive) qualities and attributes" and 10 equal to "anticipate many negative (positive) qualities and attributes." Note that for both the actual positivity/negativity and anticipated positivity/negativity, the scales are designed to measure relative magnitude rather than specific numbers of reactions (Priester and Petty 1996).

Dependent Variables. Participants completed five scales in order to provide indicators of their feelings of ambivalence. The indicators were the extent to which the participants (*a*) possessed reactions that were mixed versus one-sided, (*b*) felt conflict in their reactions, (*c*) experienced behavioral indecision, (*d*) felt tension in their thoughts and feelings, and (*e*) felt ambivalence. All responses were on 11-point scales. The scales were anchored such that zero was equal to "completely one-sided," "not at all conflicted," "not at all indecisive," "not at all tense," and "not at all ambivalent." Ten was equal to "completely mixed," "completely conflicted," "completely indecisive," "completely tense," and "completely ambivalent." In keeping with past research (Priester and Petty 1996, 2001), these indicators were averaged in order to provide an overall measure of felt ambivalence ($\alpha = .83$).

Results

Analytic Approach. In accordance with other research exploring the antecedents of ambivalence (Priester and Petty

1996, 2001; Thompson et al. 1995), the numbers of positive and negative reactions were transformed to equivalent measures of conflicting and dominant reactions. For example, a participant who scored a 10 on the measure of positive reactions and a one on negative reactions would be categorized as having 10 dominant reactions and one conflicting reaction. When the numbers of positive and negative reactions were equivalent, that number was used as both the dominant and the conflicting measure. Inspection of the data revealed that for seven participants the number of positive and negative were equal, for six participants the dominant reactions were negative, and for the remaining 83 participants the dominant reactions were positive, and thus the conflicting reactions were negative.

Recall that the interest of this research focuses specifically on the case in which there exist few or no conflicting reactions (i.e., those observations below the threshold). In order to examine this specific question, all of the analyses were conducted separately for those observations lying below and above the threshold. Inspection of the data revealed that the threshold lay at two, such that those observations with two or fewer conflicting reactions were below the threshold, and those observations with three or more conflicting reactions were above the threshold (see Priester and Petty [1996] for procedures to determine the threshold). Inspection of the data revealed that 52 participants reported three or more conflicting reactions and thus fell above the threshold, whereas 44 participants reported two or fewer conflicting reactions and thus fell below the threshold.

In order to create the key variable of anticipated conflicting reactions, the anticipation of positive reactions and the anticipation of negative reactions were transformed according to whether positive or negative reactions were dominant. When positive reactions were dominant, the anticipation of negative reactions was classified as the anticipation of conflicting reactions, and when the negative reactions were dominant, the anticipation of positive reactions was classified as the anticipation of conflicting reactions.

Preliminary Analyses. In order to replicate prior research on the antecedents of subjective ambivalence, we examined the influence of manifest conflicting and dominant reactions on feelings of ambivalence. In accordance with prior research, below the threshold dominant reactions influenced feelings of ambivalence ($\beta = -.31$; $F(1, 41) = 7.47$, $p < .01$), whereas conflicting reactions did not ($\beta = .25$; $F(1, 41) = 1.10$, $p > .3$). That is, when conflicting reactions were minimal, people experience less ambivalence as dominant reactions increased. In contrast, above the threshold dominant reactions did not influence feelings of ambivalence ($\beta = -.19$; $F(1, 49) = 1.96$, $p > .15$), whereas manifest conflicting reactions did ($\beta = .68$; $F(1, 49) = 15.61$, $p < .001$). That is, when conflicting reactions were more than minimal, increases in conflicting reactions enhanced the experience of ambivalence. These results are consistent with prior research and the gradual threshold model of ambivalence (Priester and Petty 1996).

Main Effects. In order to test the first hypothesis, regression analyses were conducted in which the influence of dominant reactions on the anticipation of conflicting reactions was examined separately for those observations that lie below and above the threshold. As hypothesized, a main effect of dominant reactions on anticipated conflicting reactions emerged for those observations that lie below the threshold ($\beta = -.43$; $F(1, 42) = 7.21$, $p < .02$). The more dominant reactions a person had to the iPod, the fewer conflicting reactions were anticipated. Additional analyses revealed that the influence of dominant reactions on the anticipation of conflicting reactions for those observations that lie above the threshold was not significant ($\beta = -.35$; $F(1, 50) = 2.91$, $p > .09$).

The influence of dominant reactions on the anticipation of dominant reactions was also examined for those observations lying both above and below the threshold. Above the threshold there emerged no influence ($\beta = .18$; $F(1, 50) = 0.9$, $p > .35$). Below the threshold, however, there did emerge an influence of dominant reactions on the anticipation of dominant reactions ($\beta = .49$; $F(1, 42) = 7.21$, $p < .02$). As people had more dominant reactions to the iPod, they anticipated that there were even more dominant reactions of which they were unaware.

Mediational Analyses. Note that both anticipated conflicting and dominant reactions were significantly influenced by the experience of dominant reactions, albeit in opposite directions, below the threshold: the greater the dominant reactions, the fewer the anticipated conflicting reactions and the greater the anticipated dominant reactions. As such, the question emerges of whether either or both anticipated conflicting reactions and anticipated dominant reactions mediate the influence of manifest dominant reactions on feelings of ambivalence. To address this question, we investigated two covariance structure models using LISREL. Note that there is no need to test mediation above the threshold since dominant reactions were unrelated to ambivalence under these conditions. The first model investigates the mediational role of anticipated conflicting reactions (fig. 1, top panel) and provides evidence that anticipated conflicting reactions fully mediate the influence of dominant reactions on feelings of ambivalence. The second model investigates the mediational role of anticipated dominant reactions (fig. 1, bottom panel). In contrast to anticipated conflicting reactions, anticipated dominant reactions do not mediate the influence of dominant reactions on feelings of ambivalence.

Note that below the threshold there were differences in manifest conflicting reactions (e.g., observations with zero, one, and two conflicting reactions were included). As such, a concern arises that the mediation results could have been influenced by the variance attributable to these manifest conflicting reactions. To address this concern, we conducted the mediational analyses partialling for the variance attributable to manifest conflicting reactions. These mediational analyses revealed patterns statistically equivalent to those reported in figure 1.

Discussion

Experiment 1 provides the first empirical demonstration of the existence of anticipated conflicting reactions. The results of experiment 1 demonstrate that when there exist no or few conflicting reactions (in this case, when information is predominantly positive), the number of dominant reactions influences the anticipation of conflicting reactions such that as the number of dominant reactions increases, the number of anticipated conflicting reactions decreases. The results of experiment 1 also demonstrate that anticipated conflicting reactions mediate the influence of dominant reactions on ambivalence when there are no or few conflicting reactions. That is, the existence of univalent ambivalence can be explained by the existence of anticipated conflicting reactions: the fewer the known positive qualities or attributes, the greater the anticipation of unknown opposite qualities or attributes, which leads to greater feelings of ambivalence—even though there exist no or few known (i.e., manifest) conflicting reactions.'

Note that although the findings of experiment 1 are consistent with the hypotheses, three questions arise. The first question has to do with the valence of the attitude object. As noted in the analytic approach section, the vast majority of dominant reactions were positive for the attitude object used in experiment 1. Prior research has demonstrated that negative information can carry more weight in evaluative processes than positive information (Ito et al. 1998; Taylor 1991). This research, in combination with the data of experiment 1, raises the question of whether the results of experiment 1 extend to situations where the valence of dominant reactions is negative, as well as positive. That is, perhaps when there is dominant negative information, the power of this negativity is sufficient to reach an evaluation, and no anticipation of positive reactions is warranted or necessary. As such, it would be preferable to demonstrate the effects for both positive and negative dominant reactions.

Second, note that the results of experiment 1 held for observations below the threshold, which include attitudes that possess few (one or two) as well as no conflicting reactions. Although the statistical analyses suggested that the mediational role of anticipated conflicting reactions held even when the influence of the manifest conflicting reactions was controlled, it would be preferable to demonstrate the effects in the absence of any manifest conflicting reactions whatsoever.

Third, note that the correlational design of experiment 1 raises the question of causality. Although the results are consistent with the notion that the amount of dominant reactions influences the anticipation of conflicting reactions, which influences the feelings of ambivalence, such a causal claim would be better supported by a manipulation of the amount of dominant reaction (MacCallum et al. 1993).

FIGURE 1

MEDIATIONAL ANALYSES FOR ANTICIPATED CONFLICTING REACTIONS (TOP PANEL) AND
ANTICIPATED DOMINANT REACTIONS (BOTTOM PANEL) BELOW THE THRESHOLD, EXPERIMENT 1
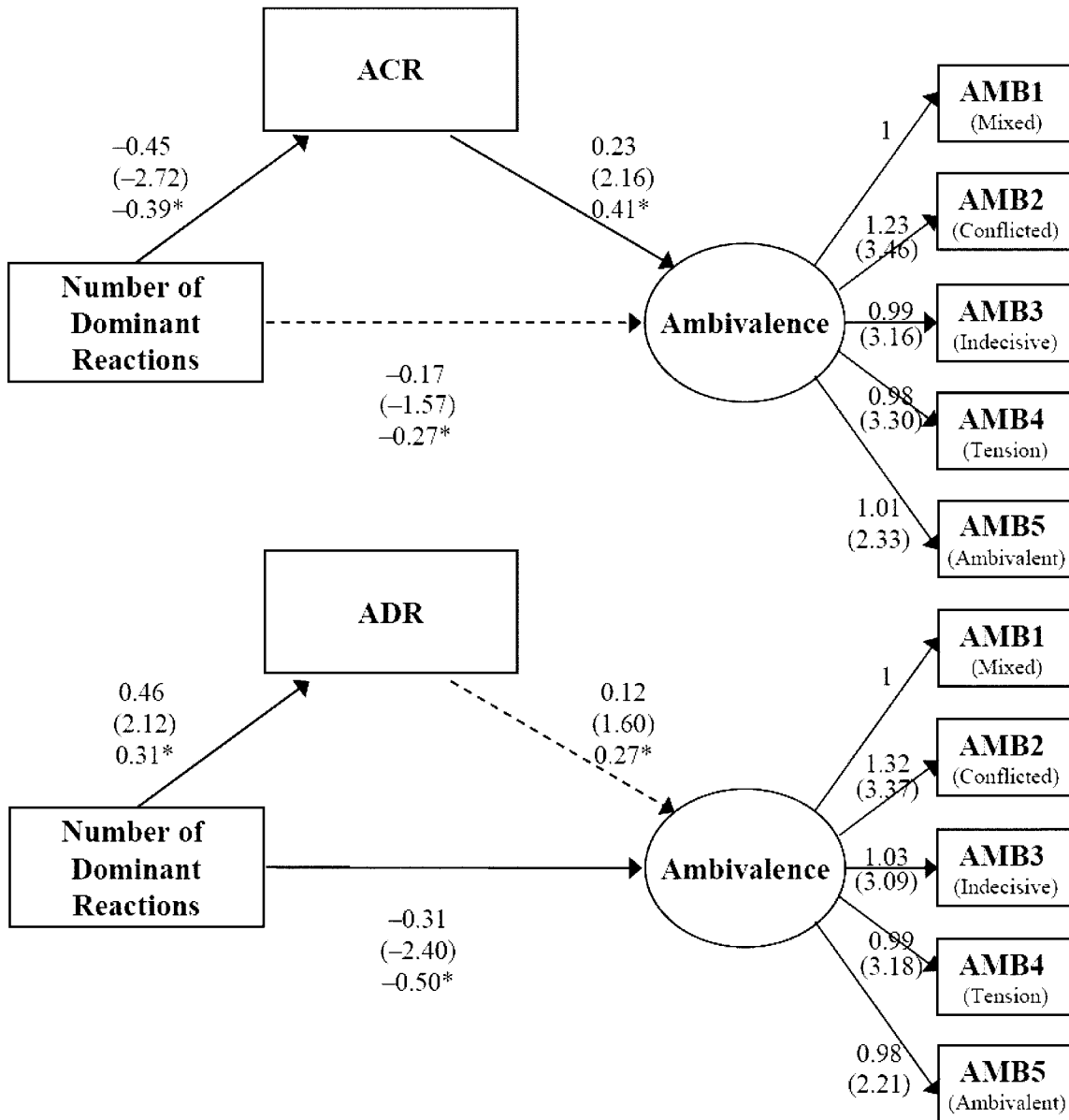
NOTE.—T-values are given in parentheses. Asterisked values are standardized coefficients. Solid lines represent significant paths, and dotted lines represent nonsignificant paths at $p < .05$.

EXPERIMENT 2

Method

Experiment 2 was conducted in order to provide additional support for our key hypothesis and address the concerns that arose from experiment 1. Rather than relying on a correlational design in which the attitude object was composed mainly of positive dominant reactions that included some conflicting reactions under the threshold, experiment 2 manipulated both the number and valence of dominant trait descriptions provided about fictitious products in a between-participant experimental design. All of the descriptions provided were univalent. That is, each description con-

TABLE 1

TRAIT DESCRIPTIONS USED IN EXPERIMENTS 2 AND 3

Number of traits	Version A		Version B	
	Positive traits	Negative traits	Positive traits	Negative traits
One trait	Excellent quality	Poor quality	Satisfying	Unsatisfying
Seven traits	Superb value	Unreasonably expensive	Joyfully unproblematic	Painful
	Easy to use	Extremely difficult to use	Easy to use	Extremely difficult to use
	Stylish	Very ugly	Stylish	Very ugly
	Fast and efficient	Too slow	Fast and efficient	Too slow
	Convenient	Awkward	Excellent quality	Poor quality
	Joyfully unproblematic	Painful	Convenient	Awkward
	Satisfying	Unsatisfying	Superb value	Unreasonably expensive

tained only positive or negative traits, but not both. These conditions allow for a stronger test of the hypothesized mediational role of anticipated conflicting reactions: if anticipated conflicting reactions mediate the influence of dominant reactions on feelings of ambivalence when the number of univalent traits has been manipulated, and the dominant traits are both positive and negative, the concerns that arose from experiment 1 will be alleviated.

Participants and Design. Seventy-nine undergraduate students at the University of Southern California were randomly assigned to one of four cells of a 2 (number of dominant traits: one or seven) × 2 (valence of trait description: positive or negative) between-participant factorial design. In addition, there was a between-participant factor of specific version of the trait description used. This factor was not significant and did not interact with any other variables and, as such, is not discussed further.

Instructions. Participants read an impression formation cover story. As part of this cover story, they were told that they would find a set of words that described a product. The product descriptions were said to have been provided by consumers familiar with the products. Participants were further informed that (*a*) the evaluative descriptions had been edited down to one-phrase descriptions, (*b*) each description was provided by a different consumer, and (*c*) each description was equally important (as in Priester and Petty 1996). The specific trait descriptions are provided in table 1. Following the descriptions, participants responded to the dependent variables.

Measures. Immediately below the description for each product were several scales. Participants first provided their response to three attitude measures, which were designed to maintain the impression formation cover story. Below this, the scales of focal interest appeared. Participants provided responses designed to assess their anticipated positive and negative reactions and their feelings of ambivalence. To assess anticipated reactions, participants completed four scales. Two scales provided indicators of the anticipated negative reactions, and two scales provided indicators of the anticipated positive reactions. All four were 11-point scales anchored with zero equal to "none" and 10 equal to "max-

imal." For negative reactions, one scale asked, "To what extent do you *anticipate* that this product has negative qualities and attributes that you don't know about?" and the other scales asked, "To what extent do you *imagine* that this product has negative qualities and attributes that you don't know about?" For positive reactions, the two scales were repeated, with "positive" in place of "negative." The scales showed high reliability ($\alpha_{neg} = .87$, $\alpha_{pos} = .92$) and thus were averaged for use in the analyses of variance.

For the two products described with either one or seven positive traits, the anticipated negative reactions were used to create the anticipated conflicting reactions measure, and the anticipated positive reactions were used to create the anticipated dominant reactions measure. For the two products described with negative traits, the anticipated positive reactions were used to create the anticipated conflicting reactions measure, and the anticipated negative reactions were used to create the anticipated dominant reactions measure.

Following the assessment of anticipated reactions, participants completed three 11-point scales to assess subjective ambivalence. These items were three of the five scales used in experiment 1 that asked about the extent of mixed emotions, the amount of conflict in their reactions, and behavioral indecision ($\alpha = .85$).

Results

Analyses of Variance. An ANOVA was conducted for each of the dependent variables. The main effect and interaction results of these analyses are reported in tables 2 and 3. Of greatest interest, main effects of manipulated number of dominant reactions appeared on anticipated conflicting reactions, ambivalence, and anticipated dominant reactions, such that providing just one description of the product led to greater anticipated conflicting reactions ($M_{1\,trait} = 5.3$ vs. $M_{7\,traits} = 2.7$), greater ambivalence ($M_{1\,trait} = 5.5$ vs. $M_{7\,traits} = 3.3$), and fewer anticipated dominant reactions ($M_{1\,trait} = 6.7$ vs. $M_{7\,traits} = 7.7$) than seven descriptions. None of these effects were moderated by valence. The introduction of attitude as a covariate did not attenuate the influence of dominant reactions on the anticipation of conflicting reactions in this experiment or in experiment 3.

TABLE 2

ANALYSES OF VARIANCE, EXPERIMENT 2

Dependent variable	Independent variable	df	F	p
Anticipated conflicting reactions	Number of traits	1, 75	35.45	.0001
	Valence	1, 75	1.72	.19
	Number of traits × valence	1, 75	.90	.35
Ambivalence	Number of traits	1, 75	25.28	.0001
	Valence	1, 75	3.99	.05
	Number of traits × valence	1, 75	.01	.92
Anticipated dominant reactions	Number of traits	1, 75	5.80	.02
	Valence	1, 75	1.65	.20
	Number of traits × valence	1, 75	.35	.56

Mediational Analyses. Note that, as in experiment 1, both anticipated conflicting and dominant reactions were significantly influenced by the manipulated number of dominant traits. In a manner similar to experiment 1, we investigated two covariance structure models using LISREL. The first model investigates the mediational role of anticipated conflicting reactions (fig. 2, top panel) and provides evidence that anticipated conflicting reactions fully mediate the influence of dominant reactions on feelings of ambivalence. The second model investigates the mediational role of anticipated dominant reactions (fig. 2, bottom panel). As in experiment 1, anticipated dominant reactions do not mediate the influence of dominant reactions on feelings of ambivalence.

Discussion

Experiment 2 replicates the results of experiment 1. One dominant reaction led to greater anticipated conflicting reactions, as well as feelings of ambivalence, than did seven dominant reactions, and the anticipated conflicting reactions mediated the influence of dominant reactions on feelings of ambivalence. More important, recall that experiment 2 was conducted to address the concerns that arose from experiment 1. Specifically, experiment 2 was designed as a between-participant experiment in which participants were exposed to either positive or negative information. Given that the same results were found for an experimental design that manipulated the dominant reactions, the hypothesized causal model (namely, that number of dominant reactions influence anticipated conflicting reactions, which influence feelings of ambivalence) is supported. Furthermore, given that participants were exposed to negative, as well as positive, dominant reactions and that this valence did not interact with any of the results, support is provided for the notion that the anticipation of conflicting reactions is not just tied to any particular valence of dominant reactions. Instead, anticipated conflicting reactions emerge when dominant reactions are both positive and negative. Perhaps of most importance, since participants only responded to univalent information, the concern that manifest conflicting reactions were responsible for the results of experiment 1 is reduced, though not conclusively eliminated. Specifically, no conflicting information was provided about the novel product, and thus the possibility that preexisting conflicting reactions accounted for the influence of anticipated conflicting reactions is unlikely.

Is it possible, however, that individuals can possess manifest conflicting reactions, even when no such information is provided? If so, it still might be the case that the results of experiments 1 and 2 are the result of manifest, rather than anticipated, conflicting reactions. Experiment 3 was conducted to examine this question.

EXPERIMENT 3

Method

Experiment 3 replicated experiment 2 with one addition and one modification: even though participants were not provided with any conflicting information, they were asked a question designed to assess if they had any manifest con-

TABLE 3

MEANS AS A FUNCTION OF VALENCE AND NUMBER, EXPERIMENT 2

Description	Anticipated conflicting reactions	Ambivalence	Anticipated dominant reactions
1 negative	5.2	5.1	6.8
1 positive	5.4	5.9	6.6
7 negative	2.3	2.9	8.1
7 positive	3.3	3.8	7.3

FIGURE 2

MEDIATIONAL ANALYSES FOR ANTICIPATED CONFLICTING REACTIONS (TOP PANEL) AND
ANTICIPATED DOMINANT REACTIONS (BOTTOM PANEL), EXPERIMENT 2
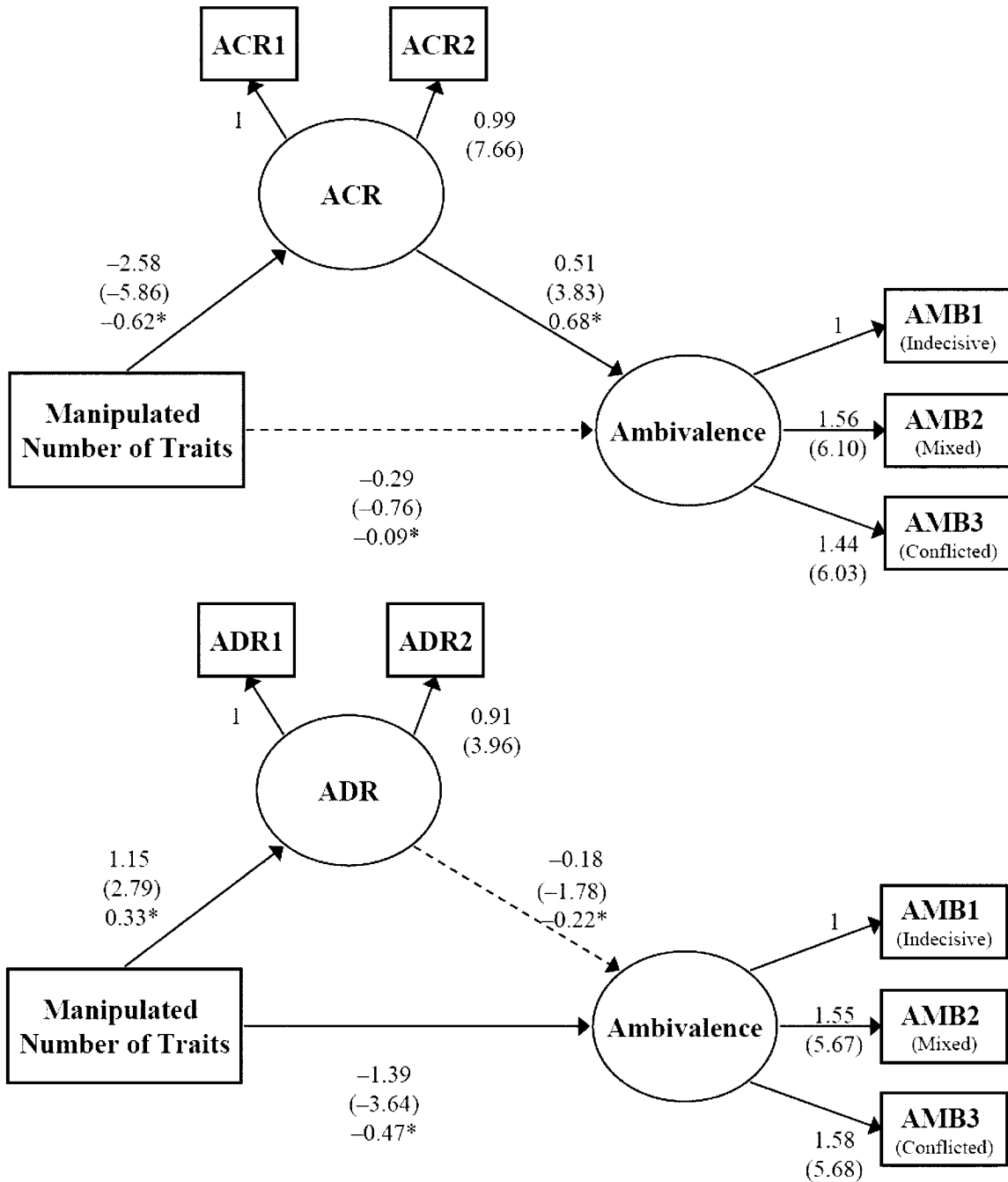
NOTE.—*T*-values are given in parentheses. Asterisked values are standardized coefficients. Solid lines represent significant paths, and dotted lines represent nonsignificant paths at $p < .05$.

flicting reactions. By including such a measure, it is possible to determine whether unmeasured manifest conflicting reactions are responsible for the results of experiment 2. In addition, since valence did not interact with any of the key dependent measures in experiment 2, only the positive valence conditions were used in experiment 3.

Sixty-three participants were randomly assigned to one of two cells in which they read a description of a fictitious product described by either one or seven positive traits. Participants then provided responses regarding their attitude toward the product, anticipated conflicting (i.e., negative) reactions, manifest conflicting (i.e., negative) reactions, and feelings of ambivalence. The measures of anticipated conflicting reactions and feelings of ambivalence were the same as those used in experiment 2. To measure manifest conflicting reactions, participants were asked, "To what extent are you currently aware of any negative qualities and attributes that are associated with this product?"

Results

A one-way ANOVA with two conditions (number of dominant reactions: one vs. seven) was conducted for each of the dependent variables. As in experiment 2, an effect of manipulated number of dominant reactions emerged on anticipated conflicting reactions ($M_{1\,trait} = 4.6$, $M_{7\,traits} = 3.3$; $F(1, 61) = 5.1$, $p < .03$) and ambivalence ($M_{1\,trait} = 5.6$, $M_{7\,traits} = 4.1$; $F(1, 61) = 6.2$, $p < .02$). Of greatest importance for this experiment, there emerged no influence of number of dominant reactions on manifest conflicting reactions ($M_{1\,trait} = 0.6$, $M_{7\,traits} = 0.7$; $F(1, 61) = 0.03$, $p > .8$).

Analyses were conducted to examine the mediational influence of both anticipated and manifest conflicting reactions on the effect of dominant reactions on feelings of ambivalence. The analyses replicated the results of experiments 1 and 2 in that anticipated conflicting reactions fully and significantly mediated the influence of number of dominant traits on ambivalence (fig. 3, top panel). In addition, the analyses revealed that manifest conflicting reactions did not similarly mediate the influence of number of dominant traits on ambivalence (fig. 3, bottom panel). Indeed, this variable could not mediate the effect of the independent variable since it was not affected by it.

Discussion

Experiment 3 was conducted in order to explore whether manifest conflicting reactions might underlie the results obtained in experiment 2. To do so, measures of manifest, as well as conflicting, reactions were collected in a partial replication of experiment 2. The results revealed that whereas the number of dominant reactions influenced both anticipated conflicting reactions and ambivalence, it had no influence on manifest conflicting reactions, and whereas anticipated conflicting reactions did mediate the influence of dominant traits on ambivalence, manifest conflicting reactions did not. As such, experiment 2 rules out the alternative explanation that manifest conflicting reactions are responsible for the results of experiments 1 and 2.

GENERAL DISCUSSION

At the most basic, this article advances and finds support for a new construct, the anticipation of conflicting reactions. Importantly, this construct helps to explain why univalent attitudes sometimes are associated with ambivalence. Specifically, conflict, whether manifest or anticipated, appears to be at the heart of ambivalence. Just as actual conflict between one's positive and negative reactions determines ambivalence when there are several or more conflicting reactions, so too does the anticipation of conflicting reactions contribute to ambivalence when actual conflict is nonexistent or minimal.

Future research could profitably explore a number of interesting directions. For example, one might expect certain individuals to be more likely to show these effects than others. For example, people who enjoy thinking, such as those high in need for cognition (Cacioppo and Petty 1982), have been shown to be more concerned about the nature and validity of their thoughts than people low in this trait (Petty, Briñol, and Tormala 2002). Thus, people high in need for cognition might be especially prone to consider their anticipated reactions to objects. Those who do not like to think seem more likely to base their reactions on only those thoughts that are most accessible. Thus, future research might profitably explore the individual and situational moderators of this effect of dominant reactions on anticipated conflicting reactions.

Furthermore, future research might examine how this new construct operates with other phenomena of interest to consumer behavior researchers. As but one example, there has been a wealth of research exploring when and how missing information does (or more often, does not; Sanbonmatsu et al. 2003) influence judgments. Unexplored by such research is that the judgments themselves may differ in terms of the underlying ambivalence, as a result of anticipated conflicting reactions. That is, although the judgments associated with missing and complete information may sometimes appear similar, they may differ in their underlying ambivalence. Specifically, it is possible that as the amount of missing information increases, the extent of anticipated conflicting reactions may similarly increase. The present research suggests that such increases in anticipated conflicting reactions can produce greater feelings of ambivalence associated with the judgments.

Anticipating conflicting reactions may also be related to, and underlie the effects of, other constructs of interest to consumer researchers. As a second example, recent research has investigated preference uncertainty. For example, Luce, Jia, and Fischer (2003) have demonstrated that choice alternatives associated with both pros and cons can lead to decisional conflict and consequent preference uncertainty. The present research suggests that similar decisional conflict and preference uncertainty may also emerge when an alternative is associated with only pros or cons, but those pros
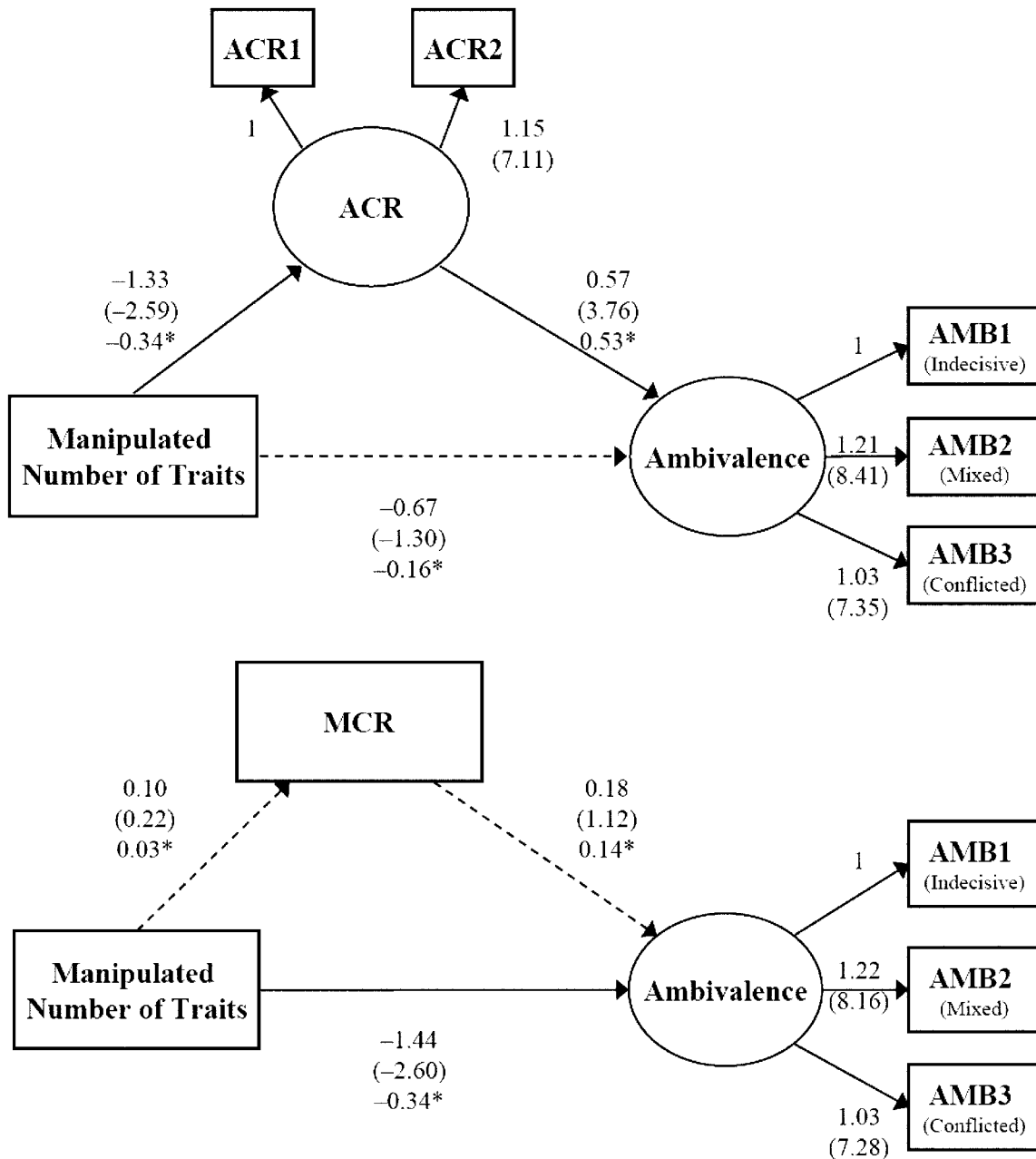
NOTE.—*T*-values are given in parentheses. Asterisked values are standardized coefficients. Solid lines represent significant paths, and dotted lines represent nonsignificant paths at $p < .05$.

or cons are few in number. Importantly, such differences may emerge because of the role of anticipated conflicting reactions.

Incorporating the construct of anticipated conflicting reactions provides a broader and more accurate image of the human evaluator. The present research provides evidence that this construct provides insight into the existence of univalent ambivalence. Future research will undoubtedly uncover additional processes associated with the anticipation of conflicting reactions.

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