When waiting makes sense: how consumer anticipation affects later evaluations

International Journal of Research in Marketing 42 (2025) 74–94

Contents lists available at ScienceDirect

International Journal of Research in Marketing

journal homepage: www.elsevier.com/locate/ijresmar

When waiting makes sense: How consumer anticipation affects later evaluations

Tunyaporn Vichiengior [a], Claire-Lise Ackermann [a], Adrian Palmer [b,*]

[a] Rennes School of Business, 2, Rue Robert d'Arbrissel, 35065 Rennes Cedex, France
[b] Henley Business School, University of Reading, Whiteknights, UK

ARTICLE INFO

Article history:
First received on 03July 2023 and was under review for 2 months
Available online 8 June 2024

Area Editor: Maggie Geuens
Accepting Editor: Martin Schreier

Keywords:
Consumer anticipation
Attitude change
Delayed consumption

ABSTRACT

This paper addresses a gap in knowledge about consumer anticipation. We build on the negative discount model (Loewenstein, 1987) which notes that utility may be gained through deferred consumption; the utility of looking forward to, and savoring forthcoming pleasant consumption adds to the total utility of the consumption episode. However, little is known about (1) the mental mechanisms involved in consumer anticipation, and their intensity, that underlie this effect, and (2) how evaluation of the object of anticipated consumption evolves over time, from the beginning of the anticipation period to post-consumption. Specifically, we ground our research in theories of attitude formation and change to investigate the circumstances in which evoking intense anticipation produces long-lasting and robust positive attitude.

From the literature, we develop hypotheses relating information provision and anticipation intensity to subsequent attitude change between pre- and post-consumption stages. We test hypotheses in five studies, in two cultural contexts involving pleasant anticipated consumption. We use an experimental approach manipulating real consumption experiences, recording attitudes pre- and post-consumption. We find that an "anticipation effect" on subsequent evaluations is explained by intensity of anticipation, which is driven by provision of information. We also note that a long-term desirable effect of anticipation is observed, irrespective of whether the core consumption experience was positive or negative.

Consumer anticipation is "a mental process by which consumers consider the physical, experiential, social, emotional, or behavioral consumption outcomes that are expected to accrue to the self from a yet to be realized consumption decision or experience" (Vichiengior, Ackermann, & Palmer 2019, p. 132). It occurs in contexts of delayed consumption, which we define as situations where purchase (or decision to purchase), and consumption are temporally separated (Loewenstein, 1987; Shafir & Thaler, 2006). Typical examples of delayed consumption include online purchases or booking of entertainment and sporting events.

Use of the word anticipation only became widespread in academic marketing literature from the 1980 s, following Loewenstein's (1987) negative discount model which explains that delaying pleasant consumption experiences increases their utility. Loewenstein's seminal paper has led to extensive research in consumer behavior (e.g., Chan &

* Corresponding author at: Henley Business School, University of Reading, Whiteknights, UK.
E-mail addresses: tunyaporn.vichiengior@rennes-sb.com (T. Vichiengior), claire-lise.ackermann@rennes-sb.com (C.-L. Ackermann), a.palmer@henley.ac.uk (A. Palmer).

http://dx.doi.org/10.1016/j.ijresmar.2024.06.001
0167-8116/

Mukhopadhyay, 2010; Harrison & Beatty, 2011; Le Bel & Dubé, 1998; Nowlis, Mandel, & Brown, 2004). The literature provides support for the existence of an *anticipation effect*, whereby temporal separation between decision and consumption results in an increase in product evaluation; the likelihood to observe this effect is contingent on many factors, including the nature of the product, inherent interest of the object of consumption, intrinsic motivation toward it, and optimal length of the anticipation period (Chan & Mukhopadhyay, 2010; Nowlis et al., 2004). However, limited attention has been paid to (1) the mental mechanisms involved in consumer anticipation, and their intensity, that underlie this effect, and (2) how evaluation of the object of anticipated consumption evolves over time - from the beginning of the anticipation period to the post-consumption stage.

Addressing these two gaps in our knowledge about anticipation is important for several reasons. First, researchers have viewed consumer anticipation in absolute terms, by comparing delayed with non-delayed consumption situations and/or investigating effects of duration of the anticipation period (Chan & Mukhopadhyay, 2010; Nowlis et al., 2004). However, this has disregarded "*how* the waiting period between choice and consumption itself influences evaluations" (Chan & Mukhopadhyay, 2010, p. 506). Secondly, the link between the *determinants* and *intensity* of the mental processes that underlie anticipation and a subsequent anticipation effect remains empirically under-researched. We suggest that further investigation of the intensity of consumer anticipation processes may help to better understand their effect on consumers' subsequent evaluations. Thirdly, information about a phenomenon is processed and retained more effectively when it is acquired through direct experience of the phenomenon (Fazio, Chen, Mc Donel, & Sherman, 1982). This suggests that the anticipation effect noted above may disappear once consumption has taken place.

Consumer researchers are curious about the mechanisms involved during the anticipation period, and whether encouraging anticipation "may ironically not be the wisest strategy for marketers to follow" (Chan & Mukhopadhyay 2010, p. 506). To fill our identified gaps in knowledge, we build on the literature on attitude formation and change (1) to provide an understanding of the mental mechanisms underlying the anticipation effect, (2) to provide an understanding of the determinants of these mechanisms and their intensity, and (3) to investigate whether an anticipation effect is long-lasting.

1. Theoretical development

1.1. How to explain the anticipation Effect: An attitude formation and change approach

We suggest that the literature on attitude formation and change provides an appropriate theoretical framework to understand the anticipation effect, i.e. the increase in attitude observed after the anticipation period.

First, building on the view of consumer experiences as multi-stage processes flowing from pre-purchase to purchase to post-purchase (Lemon & Verhoef, 2016), we recognize that before consuming a product, consumers possess some information about it to form an attitude, regardless of its strength or weakness and of how quickly it was formed (Zhang & Mao, 2016). Second, we suggest the anticipation period enables attitude update.

An attitude is as a summary evaluation of the attitude object stored in memory: consumers form attitudes to organize, structure, and summarize large amounts of information about an object (Albarracín, Sunderrajan, Lohmann, Chan, & Jiang, 2018; Dubé, Cervellon, & Jingyuan, 2003; Fazio, 2007; Fazio et al., 1982). This view does not imply that attitudes are cold, belief-based judgments of favorability, the term 'evaluation' being used broadly to include appraisals of object attributes, affective reactions evoked by the attitude object and knowledge stemming from past behaviors and experiences of it (Albarracín et al., 2018; Fazio, 2007). The attitude may be the outcome of passive or more active learning processes (Fazio, 2007; Wegener, Clark, & Petty, 2018).

1.1.1. Mental processes involved in consumer anticipation

We focus on anticipation intensity associated with attitude change, and in this section, we review mental processes which contribute to attitude change during the anticipation period. Vichiengior et al. (2019) present a broad overview of the diverse competing and complementary mental processes that inform how attitude evolves during the anticipation period. These include elaboration, formation of expectations, imagery processing, and savoring (Baucells & Bellezza, 2017; Krishnamurthy & Sujan, 1999; Kwortnik & Ross, 2007; MacInnis & Price, 1987, 1990; Vichiengior et al., 2019). They involve processing internal and external information, thereby giving opportunities for updating of attitudes during the anticipation period.

The anticipation period gives consumers opportunities to acquire new information regarding forthcoming consumption and to elaborate on it. This integration of new knowledge with prior knowledge structures within working memory may result in updating of attitudes (MacInnis & Price, 1987). Mental processes involved in consumer anticipation do not necessarily involve processing newly acquired information but may nevertheless result in attitude update. For example, it is suggested that "anticipations are necessarily imaginations" (Krishnamurthy & Sujan, 1999, p. 57) and that, while anticipating, consumers form mental images to feel the future experience (Baucells & Bellezza, 2017). These mental images may also provide additional internal information that affect attitudes. Finally, additional information can take the form of affect-based beliefs. The anticipation period gives consumers opportunities to savor a pleasant consumption experience to come (Elster & Loewenstein, 1992; Loewenstein, 1987; Frederick, Loewenstein, & O'Donoghue, 2002), where savoring is "a cognitive process involving awareness of current pleasure from a target-specific consumption experience" (Chun, Diehl, &

MacInnis, 2017, p. 97). We suggest that savoring facilitates consumers' attitude development towards forthcoming consumption. In summary, the anticipation period provides consumers with opportunities to integrate external and internal information to evoke new or adjusted attitudes towards the object of their anticipation.

We further argue that anticipation of pleasant consumption is positively biased, explaining increase in evaluation observed in many previous anticipation studies (Chan & Mukhopadhyay, 2010; Loewenstein, 1987; Nowlis et al., 2004). The anchoring-and-adjustment model of attitude change suggests that initial attitudes predict future attitudes because initial feelings frame subsequent thought about the target, and attitudes towards one's own choices bias processing of subsequent supporting information (Wilson, Lindsey, & Schooler, 2000). Thus, during the anticipation period, consumers may mostly reflect on information that supports their initial purchase decision and avoid thinking about its potential negative aspects (Litt & Tormala, 2010; Sela,Berger,& Kim, 2017), or downplay contradictory information (Lasarov, Mai, De Frutos, Egea, & Hoffmann, 2019). Also, consumers are more likely to imagine future outcomes that are positive than negative (MacInnis & Price, 1987, 1990). Finally, we further suggest that the presence of dissonance following a purchase decision may trigger mental processes which seek to redress residual dissonance with positively adjusted attitudes (Festinger, 1957).

To conclude, in contexts of pleasant, delayed consumption, we argue that mental processes involved in consumer anticipation result in additional external and internal information input which is processed with bias, explaining increase in evaluation noted in past anticipation studies (Chan & Mukhopadhyay, 2010; Loewenstein, 1987; Nowlis et al., 2004). In our study, we do not measure each of these diverse mental processes, but their presence influences a construct which we investigate – anticipation intensity. Whereas the anticipation effect refers to an increase in product evaluation observed at the end of the anticipation period, anticipation intensity refers to how intensively consumers engage in the different processes involved in consumer anticipation, i.e. elaboration, formation of expectations, imagery processing, and savoring (Vichiengior et al., 2019). In the following section, we explain how the two constructs are related.

1.1.2. The effect of anticipation intensity

Previous research has viewed consumer anticipation as a dichotomous variable (consumers are anticipating or they are not) rather than a continuous variable (they are anticipating more or less intensively) (Chan & Mukhopadhyay, 2010; Hardisty & Weber, 2020; Nowlis et al., 2004). We adopt a broader view of consumer anticipation by recognizing that attitude change is likely to be affected by the amount of thought dedicated to the attitude object (Petty, Ostrom, & Brock, 2014).

If, during the anticipation period, consumers are merely passively waiting, the attitude change mechanisms described earlier are unlikely to be activated, and the anticipation effect is unlikely to be observed. In contrast, consumers who actively pay attention to their future consumption may engage in imagery processing, elaborate on the object of future consumption, form expectations about it, or savor it (Vichiengior et al., 2019). Higher levels of engagement in these mental processes are likely to be associated with greater activation of the attitude change mechanisms described earlier. This contributes to *intensive anticipation*. Consequently, an anticipation effect is more likely to be observed, as high levels of thinking favor attitude change (Briñol & Petty, 2012). We therefore suggest that consumer anticipation intensity, i.e. how intensively consumers engage in processes involved in anticipation, is a key determinant of an anticipation effect. Thus, in the context of pleasant consumption experiences, we hypothesize:

H1: Attitude increase observed at the end of the anticipation period is driven by consumer anticipation intensity.

1.2. Effect of direct experience

Building on Expectancy-Disconfirmation Theory (Oliver, 1980), Chan & Mukhopadhyay (2010) suggest that anticipation may heighten consumers' expectations, resulting in dissatisfaction where expectations are disconfirmed. The authors investigated the effect of consumer anticipation in different conditions of temporal delay and found that, whatever the delay, evaluation decreases after consumption. Their results therefore caution against encouraging consumers to anticipate forthcoming consumption. However, this view is challenged by studies showing that some mental processes involved in anticipation may positively influence subsequent evaluations (e.g., Koenig-Lewis & Palmer, 2014; Kopalle & Lehmann, 2001; MacInnis & Price, 1990). For example, imagery processing during anticipation has been shown to have a direct positive effect on satisfaction (MacInnis & Price, 1990). Consumers who believe that high expectations could lead to dissatisfaction may deliberately and strategically decrease their expectations, thereby diminishing potential dissatisfaction (Kopalle & Lehmann, 2001). In conclusion, evidence of whether the effects of pre-consumption anticipation on subsequent evaluation are positive or negative remains ambiguous. One cause of this ambiguity may derive from the role of direct experience of the anticipated consumption, and we now turn to the effect of direct experience on attitude formation.

As already mentioned, attitude tends to be biased towards information gained during early stages of attitude formation, and relatively resistant to adjustment by information acquired subsequently (Litt & Tormala, 2010; Sela et al., 2017; Wilson et al., 2000). However, the derivation of an attitude has implication for its strength, as attitudes deriving from direct behavioral experience are stronger than those formed indirectly, for example via word-of-mouth or advertising, because direct experience facilitates the process of attitude formation (Albarracín et al., 2018; Fazio, 2007; Fazio et al., 1982). Thus, information processed early during the anticipation period may subsequently be overridden by direct experience, causing the anticipation effect to be short-lasting, and not observable after the direct experience.

A more nuanced approach would counter-intuitively suggest that anticipation and direct experience are two phases of a learning process, implying that an anticipation effect may persist over time. In contexts of delayed consumption, attitude

change over time could be conceptualized as a process whereby (1) initial attitude (before anticipation starts) is the initial internal information, (2) the anticipation period provides opportunity for attitude update, this update being positively biased, and (3) direct experience with the attitude object provides incremental information input.

First, more intense anticipation is likely to result in a stronger anticipation effect, and in information acquisition. Such information is not available in the memory of consumers who did not anticipate their forthcoming consumption. Second, the direct experience provides an additional source of information: attitude update due to the experience is positive or negative depending on whether the direct experience itself is positive or negative. However, information input derived from direct experience is not informed by how intensively consumers have anticipated their forthcoming consumption. Thus, post-consumption, consumers who have intensively anticipated their forthcoming consumption experience have access to more information to evaluate the consumption object than those who have not. Independently of whether the direct experience is positive or negative, we suggest attitude increase over time, i.e. from the beginning of the anticipation period to the post-consumption period, is higher among those who anticipated intensively than among those who did not, because of the higher amount of information available in memory from which to derive an attitude. Thus, in the context of pleasant consumption, we hypothesize the existence of an additive effect by which the effect of consumer anticipation intensity persists over time.

H2: Attitude increase over time is increased with increased consumer anticipation intensity, independently of how positive the direct experience is.

1.3. Provision of information as a driver of the anticipation effect

In their conceptual paper, Vichiengior et al. (2019) suggest consumer anticipation is both externally and internally driven: consumers' propensity to engage in the different mental processes involved in anticipation is contingent on the ability, opportunity and motivation to do so. However, empirical research has paid limited attention to the drivers of consumer anticipation. Chan & Mukhopadhyay (2010) identified intrinsic motivation as a motivational driver of consumer anticipation. For opportunity drivers, much attention has been paid to the effect of passage of time on evaluation in contexts of delayed consumption (Chan & Mukhopadhyay, 2010; Loewenstein, 1987). An inverted U-shape effect has been observed suggesting an optimal length of delay for an anticipation effect to be observed: consumers cannot anticipate if they do not have the opportunity to do so; conversely, anticipation is likely to be minimal when the delay is long, as perceived control over the future consumption is weak (Chan & Mukhopadhyay, 2010). Less attention, however, has been paid to the provision of information during the anticipation period, which we identify as an opportunity driver: provision of information provides opportunities for consumers to anticipate, by encouraging engagement in the mental processes that underlie anticipation.

Knowledge available in memory is an initial driver of consumer anticipation, as available and accessible knowledge structures underpin mental processes involved in consumer anticipation (Vichiengior et al., 2019); consumers with no or limited knowledge have limited ability to imagine forthcoming consumption because of the small store of information in memory from which to develop images. Forming expectations also requires norms that are facilitated by knowledge (Zeithaml, Berry, & Parasuraman, 1993). Elaboration involves integrating new information with prior knowledge structures, implying an absence of elaboration when no existing knowledge structures exist (MacInnis & Price, 1987).

In summary, provision of information during the anticipation period enables consumers to engage in the mental processes involved in anticipation. Consequently, these processes are likely to be more intense where consumers are provided with information about the object of anticipated consumption during the anticipation period, than where consumers simply rely on pre-existing knowledge in memory. This results in an increased anticipation effect, i.e., greater attitude change. Thus, in contexts of pleasant consumption experiences, we hypothesize:

H3: The anticipation effect is triggered by provision of information, this effect being mediated by consumer anticipation intensity.

1.4. The role of novelty

Delayed consumption situations may differ in how novel they are to consumers. Novelty may result in curiosity and uncertainty. Curiosity arises from the perception of a gap in knowledge or understanding, which may motivate information search and thorough processing of such information (Loewenstein, 1994; Menon and Soman, 2002; Noseworthy, Di Muro, and Murray, 2014). Novel consumption situations are also typically associated with high levels of uncertainty, which consumers typically seek to reduce. This can take the form of elaboration, with the aim of making the future consumption situation more predictable and easier to understand (Vichiengior et al., 2019).

We suggest that the effect of provision of information is likely to be stronger if the consumption is novel versus familiar. For novel consumption, curiosity and uncertainty are likely to be increased. Thus, information provided is likely to be more attended to, and processed more thoroughly than if the consumption is already familiar (Menon and Soman, 2002; Noseworthy et al., 2014). Conversely, if no information is provided, there may be frustration linked to the inability to deal with curiosity and uncertainty associated with novelty. This may inhibit the anticipation process: when consumers cannot reduce uncertainty and/or satisfy their curiosity due to a lack of information, a solution may be to avoid thinking about the forthcoming consumption. Additionally, a lack of a knowledge base in memory would inhibit anticipation through

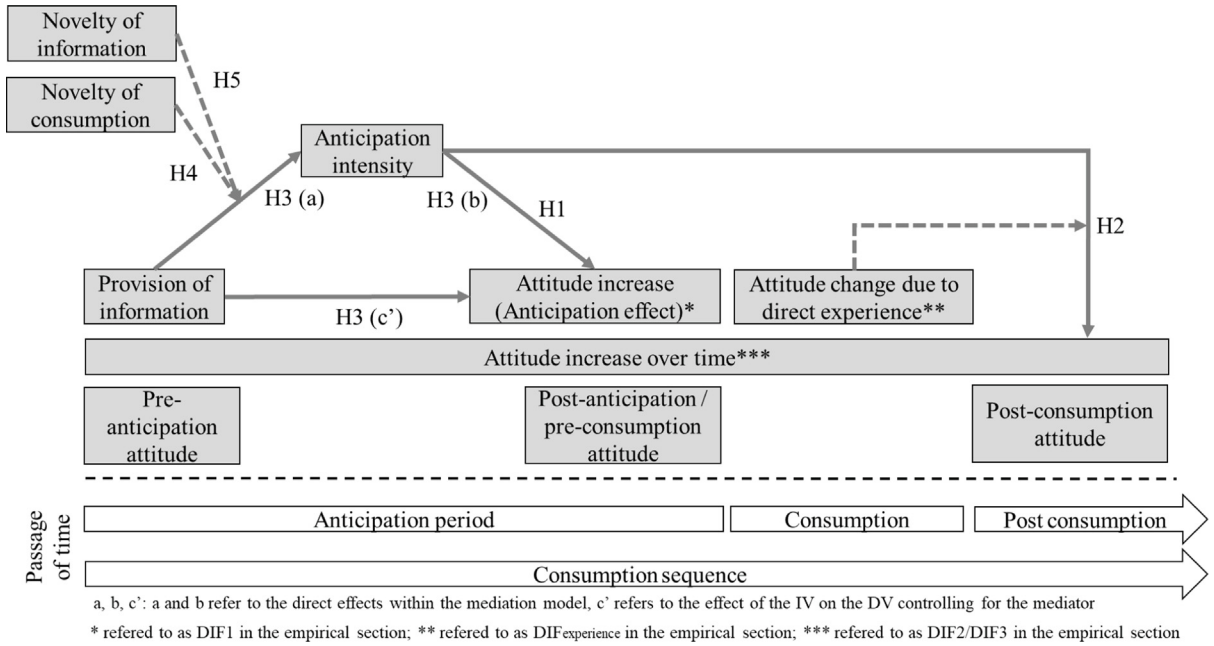

Fig. 1. Research scope and conceptual model.

elaboration and imagery processing. This suggests that, in contexts of novel consumption, the absence of information makes the anticipation process not only pointless but also potentially impossible.

To summarize, the positive/negative effect of providing/not providing information on the anticipation effect is likely to be stronger when consumption is novel. Thus, we hypothesize:

H4: Novelty of consumption moderates the effect hypothesized with H3 so that the anticipation effect triggered by provision of information is stronger when consumption is novel than when it is not.

Novelty may also relate to the information provided. In the case of familiar products, information provided may differ in how new it is to consumers. A consumer may be highly familiar with a product category but have limited knowledge of it. For instance, habitual wine drinkers may know which wines they like but be ignorant about the different wine characteristics that explain differences between wines. In the same way of thinking, a loyal consumer of a fashion brand may be familiar with the brand products but not knowledgeable about the specific construction details that make the design signature of the brand. In the same way as novelty of consumption is likely to increase the effect of provision of information, we also expect the effect of provision of information to be increased if information provided is novel versus known. Novel information is more likely to trigger curiosity than known information, and is therefore more likely to be attended to and processed (Menon and Soman, 2002; Noseworthy et al., 2014). Additionally, novel information enlarges the knowledge base in memory related to the object of consumption, thus facilitating elaboration and imagery processing. In summary, the positive effect of provision of information on the anticipation effect is likely to be stronger when provided information is novel. Thus, we hypothesize:

H5: Novelty of information moderates the effect hypothesized with H3 so that the anticipation effect triggered by provision of information is stronger when information is novel than when it is not.

1.5. Summary

We build on the attitude formation and change literature to propose that an anticipation effect is a function of information processing. Specifically, we identify provision of information as a driver of consumer anticipation, which results in an anticipation effect, i.e. an increase in attitude towards the object of consumption. We further suggest that an anticipation effect persists over time and is not overridden by the effect of direct experience. Therefore, attitude increase observed after direct experience of the object of consumption is increased with increased provision of information during the anticipation period. Finally, we suggest that novelty of the consumption and of the provided information moderates these effects. Fig. 1 depicts the scope of our research and the constructs of interest, and describes our conceptual model.

2. Methodological approach

We conducted five studies – two preliminary studies and three experiments – that test our hypotheses. The five studies involve anticipating and taking part in a pleasant consumption experience**.** Preliminary Studies 1 and 2 aim to test the effect

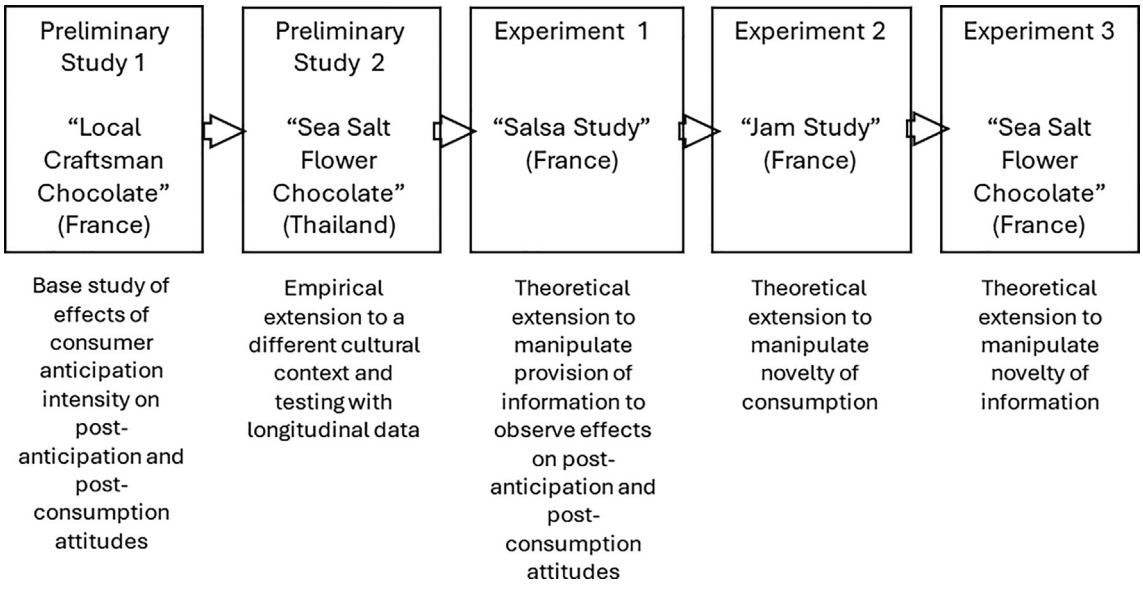

Fig. 2. Methodological linkages between the five studies.

of consumer anticipation intensity on post-anticipation/pre-consumption and post-consumption attitudes (H1 and H2). Preliminary Study 2 replicates and extends Preliminary Study 1 by investigating a different cultural background and extending to a longitudinal study design. The aim of Experiments 1, 2 and 3 is to further test H1 and H2, and to test H3, H4 and H5. Experiment 1 manipulates provision of information to observe its effect on post-anticipation/pre-consumption (H3). Experiment 2 replicates and extends Experiment 1 by investigating the effect of newness of consumption such as to test H4. Experiment 3 replicates and extends Experiment 2 by investigating the effect of newness of information provided, thus testing H5. Fig. 2 shows how our line of enquiry developed over the course of the five studies, and the methodological linkages between them.

Over the five studies, we measure consumers' attitudes at three important time-points: pre-anticipation (ATT1), post-anticipation/pre-consumption (ATT2), and post-consumption (ATT3). Attitudes are measured with three items (dislike/like, bad/good, and unattractive/attractive). We developed a three-item scale to capture consumer anticipation intensity (CAI): "thought a lot about forthcoming X", "felt pleasure and excitement while thinking of upcoming X", and "did things that will help get the best out of X", where X refers to the anticipated pleasant consumption experience. The first item is informed by Vichiengior et al.'s (2019) definition of consumer anticipation, i.e. consumer anticipation is a mental process by which consumers consider a yet to be realized consumption experience. The two other items are supported by research suggesting that anticipatory thoughts are accompanied by emotions and behaviors (Vichiengior, Ackermann & Palmer, 2023). The authors report that emotions felt during the anticipation period mostly comprise positive emotions, including excitement and happiness, while anticipatory behaviors typically involve information search. All items use 7-point measurement scales. Fig. 3 describes our data collection procedure.

Experiments 2 and 3 were pre-registered prior to creation of data using the Open Science Framework (Experiment 2: https://osf.io/g3bcp; Experiment 3: https://osf.io/kr3ap). Data are also openly shared on the Open Science Framework (https://osf.io/vdzug/files/osfstorage).

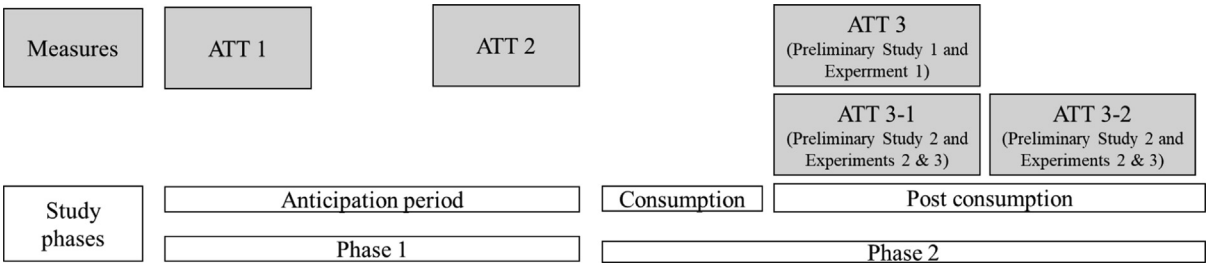

Fig. 3. Data collection procedure.

3. Preliminary study 1

3.1. Research Approach

Preliminary Study 1 comprised two phases. The first phase corresponds to the anticipation period and involved participants taking part in a pre-consumption activity. The second phase corresponds to the consumption and post-consumption periods and involved participating in a chocolate tasting session. Chocolate was chosen as a stimulus because it is typically a highly liked product and has been previously used in anticipation studies (Chan & Mukhopadhyay, 2010; Nowlis et al., 2004). We specifically chose chocolate produced by a prestigious chocolate "Local Craftsman" (Local Craftsman: LC). This was not generally available in the study location, increasing its novelty to participants. Eighty Master students from a French business school were recruited for the study.

In Phase 1, participants were told that they would taste LC chocolate later and LC chocolate was vividly presented to them. Vividness increases the likelihood of consumer anticipation occurring (Nowlis et al., 2004). Participants were initially asked to report their evaluation of LC chocolate (ATT1: M = 5.24, SD = 1.01, α = 0.83); to provide demographic information (gender: 73.8 % female); to report whether they like chocolate (M = 6.00, SD = 1.10); and if they were aware of LC chocolate or had previously tasted it. No participants reported knowledge or tasting of LC chocolate. Gender and attitude towards chocolate do not inform any of the dependent variables. Thus, we do not discuss them further. Participants were then informed that the chocolate maker had a website, and that reviews were available on TripAdvisor, before being assigned to a pre-consumption activity unrelated to the forthcoming chocolate tasting session. The unrelated task involved discussing a short case study and lasted about one hour. Then, attitude toward LC chocolate was assessed again (ATT2: M = 5.40, SD = 1.04, α = 0.90). Consumer anticipation intensity (CAI) was measured with the three items described in section 2. Results from a principal-component factor analysis show that one factor explains 84 % of the variance. Factor loadings range between 0.69 and 0.92. Cronbach's α proved satisfactory at a level of 0.79. These results suggest that the three items provide a reliable measure of CAI. The three items were then averaged in one measure of CAI (M = 4.09, SD = 1.33). In Phase 2, participants tasted LC chocolate and reported their overall evaluation of it (ATT3: M = 5.14, SD = 1.00, α = 0.85). Finally, participants were thanked for their participation and debriefed.

Observation of the attitudinal scores show that (1) ATT2 is higher than ATT1, suggesting there is an anticipation effect, i.e. an increase in evaluation of the object of forthcoming consumption during the anticipation period and (2) ATT3 is lower than ATT2, suggesting that the LC chocolate tasting session was a disappointing experience. Fig. 4 describes how attitude toward LC chocolate changes over time.

3.2. Results

To explore H1 and H2, we first computed three difference scores. DIF1 (M = 0.16, SD = 1.10) is the difference between ATT2 and ATT1, and captures how attitudes evolved during Phase 1: in other words, DIF1 captures the anticipation effect. DIF2 (M = -0.10, SD = 1.20) is the difference between ATT3 and ATT1 and captures how attitudes evolved between the beginning of Phase 1 (pre-anticipation) and the end of Phase 2 (post-consumption); $DIF_{experience}$ (M = -0.26, SD = 1.11) is the difference between ATT3 and ATT2 and captures attitude change due to direct experience, i.e. how positive or negative the direct experience is.

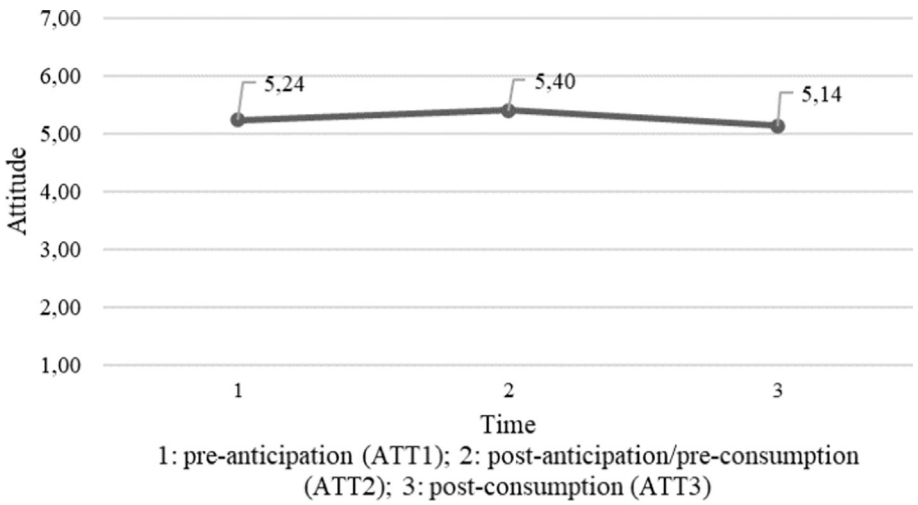

Fig. 4. Preliminary Study 1- Evolution of attitude toward LC chocolate over time.

Table 1
Results of interaction, mediation and moderated mediation analyses.

	Coeff	*t*	*Lower – Upper CI*
Preliminary Study 1			
H2			
Effect of *CAI* on *DIF2*	0.25	2.99	[0.0836; 0.4181]
Effect of $DIF_{experience}$ on *DIF2*	0.73	2.67	[0.1843;1.2694]
Effect of the interaction term	-0.03	-0.46	[-0.1723;0.1080]
Preliminary Study 2			
H2			
Effect of *CAI* on *DIF2*	0.20	2.69	[0.0518;0.3402]
Effect of $DIF_{experience}$ on *DIF2*	0.48	1.85	[-0.0340;0.9893]
Effect of the interaction term	0.07	1.44	[-0.0274;0.1761]
Effect of *CAI* on *DIF3*	0.15	1.49	[-0.0485;0.3462]
Effect of $DIF_{experience}$ on *DIF3*	0.54	1.54	[-0.1558;1.2449]
Effect of the interaction term	-0.04	-0.54	[-0.1771;0.1015]
Experiment 1			
H2			
Effect of *CAI* on *DIF2*	0.12	2;33	[0.0180;0.2324]
Effect of $DIF_{experience}$ on *DIF2*	1.01	4.30	[0.5397;1.4718]
Effect of the interaction term	-0.09	-1.52	[-0.1976;0.0266]
H3			
Direct effect of *Provision of Information* on *DIF1*	0.37	1;51	[-0.1168;0.8511]
Effect of *Provision of Information* on *CAI*	1.26	4.22	[0.6658;1.8571]
Effect of *CAI* on *DIF1*	0.11	1.34	[-0.0547;0.2814]
Indirect effect of *Provision of Information* on *DIF1* through *CAI*	0.14		[-0.0751;0.4662]
Experiment 2			
H2			
Effect of *CAI* on *DIF2*	0.09	2.02	[0.0022;0.1730]
Effect of $DIF_{experience}$ on *DIF2*	0.99	7.62	[0.7302;1.2407]
Effect of the interaction term	-0.01	-0.34	[-0.0773;0.0545]
Effect of *CAI* on *DIF3*	0.12	1.91	[-0.0041;0.2352]
Effect of $DIF_{experience}$ on *DIF3*	0.71	3.97	[0.3562;1.0611]
Effect of the interaction term	-0.04	-0.77	[-0.1283;0.0562]
H3			
Direct effect of *Provision of Information* on *DIF1*	0.02	0.22	[-0.1898;0.2384]
Effect of *Provision of Information* on *CAI*	0.49	2.58	[0.1158;0.8741]
Effect of *CAI* on *DIF1*	0.09	2.04	[0.0028;0.1715]
Indirect effect of *Provision of Information* on *DIF1* through *CAI*	0.04		[0.0000;0.1099]
H4			
Direct effect of *Provision of Information* on *DIF1*	0.02	0.22	[-0.1898;0.2384]
Effect of *Provision of Information* on *CAI*	-0.15	-0.25	[-1.3129;1.0145]
Effect of *CAI* on *DIF1*	0.09	2.04	[0.0028;0.1715]
Index of moderated mediation	0.04		[-0.0286;0.1434]
Experiment 3			
H2			
Effect of *CAI* on *DIF2*	0.20	3.72	[0.0941;0.3078]
Effect of $DIF_{experience}$ on *DIF2*	1.31	8.66	[1.0136;1.6133]
Effect of the interaction term	-0.10	-2.64	[-0.1714;-0.0246]
Effect of *CAI* on *DIF3*	0.07	0.98	[-.0676;0.2002]
Effect of $DIF_{experience}$ on *DIF3*	0.97	5.10	[0.5936;1.3453]
Effect of the interaction term	-0.07	-1.61	[-0.1669;0.0171]
H3			
Direct effect of *Provision of Information* on *DIF1*	0.18	1.29	[-0.0978;0.4637]
Effect of *Provision of Information* on *CAI*	0.61	2.44	[0.1162;1.1133]
Effect of *CAI* on *DIF1*	0.11	2.41	[0.0198;0.2023]
Indirect effect of *Provision of Information* on *DIF1* through *CAI*	0.07		[0.0035;0.1740]
H4			
Direct effect of *Provision of Information* on *DIF1*	0.18	1.29	[-0.0978;0.4637]
Effect of *Provision of Information* on *CAI*	0.16	0.45	[-0.5421;0.8610]
Effect of *CAI* on *DIF1*	0.11	2.41	[0.0198;0.2023]
Index of moderated mediation	0.10		[-0.0061;.02942]
H5			
Direct effect of *Novelty of Information* on *DIF1*	0.29	1.70	[-0.0489;0.6294]
Effect of *Novelty of Information* on *CAI*	-0.33	-1.13	[-0.9241;0.2545]
Effect of *CAI* on *DIF1*	0.16	2.79	[0.0478;0.2832]
Indirect effect of *Novelty of Information* on *DIF1* through *CAI*	-0.05		[-0.1810;0.0449]

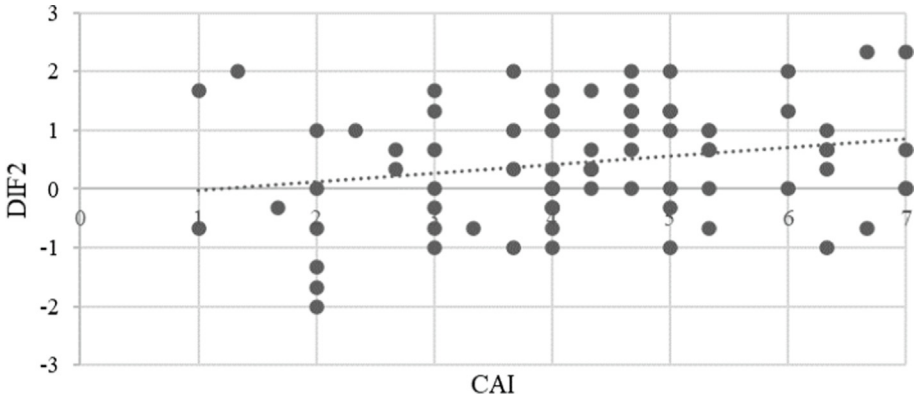

Fig. 5. Preliminary Study 1- DIF2 as a function of CAI.

As expected, results from a linear regression show that CAI has a positive effect on DIF1 ($\beta = 0.406$, $t = 3.139$, $p = 0.002$). In other words, attitude increase during the anticipation period is explained by how intensively participants have anticipated the forthcoming LC chocolate tasting session.

We then used Hayes's (2013) PROCESS macro (Model 1) to check that CAI has a positive and significant effect on DIF2, and this effect is independent of $DIF_{experience}$. CAI has a positive effect on DIF2 (coeff = 0.25, $p = 0.004$, 95 % CI [0.0836;0.4181]), and this effect is independent of the effect of direct experience ($coeff_{interaction\ term} = -0.03$, $p = 0.649$, 95 % CI [-0.1723;0.1080]). Results of the interaction, mediation and moderated mediation analyses pertaining to our hypotheses over the different studies are shown in Table 1.

3.3. Discussion

Our results show that the anticipation effect, i.e., attitude increase during the anticipation period, is explained by how intensively participants have anticipated the forthcoming LC chocolate tasting session, thus supporting H1. When looking at the effect of CAI over the two study phases, we observe that DIF2 is increased with increased CAI. Given that attitude change due to direct experience (DIF 2) is negative due to a seemingly disappointing LC chocolate tasting session, this suggests that attitude decrease over time is stronger when CAI is low than when it is high. In other words, and as illustrated in Fig. 5, attitude decrease over time is weaker when participants have intensively anticipated the chocolate tasting session. Our results show that the effect of CAI persists over time, in support of H2.

4. Preliminary study 2

4.1. Research Approach

Preliminary Study 2 replicated and extended Preliminary Study 1 in another cultural context (Thailand) and to a longitudinal study design. The experimental design of Preliminary Study 1 was replicated, with one modification: we measured post-consumption attitudes at two different times (ATT3-1 and ATT3-2). Again, phase 1 corresponded to the anticipation period, and phase 2 to the consumption and post-consumption periods. The study involved anticipating and taking part in a chocolate tasting session. We chose Sea Salt Flower (SSF) chocolate marketed by a prestigious European chocolate company as a stimulus because this specific chocolate is novel in Thailand, where the study was conducted. Participants were 150 undergraduate students from a Thai University. Seven participants did not return for the last phase of the study, resulting in a final sample of 143.

In Phase 1, participants were told that they would taste SSF chocolate some time later and SSF chocolate was vividly presented to them. Initially, participants reported their evaluation of SSF chocolate (ATT1: $M = 4.69$, SD = 0.80, $\alpha = 0.73$); provided demographic information (gender: 72 % female); and reported whether they like chocolate ($M = 5.03$, SD = 1.24). No participants reported having previously tasted SSF chocolate. Gender and attitude towards chocolate do not inform any dependent variables., therefore, are not discussed further. Next, participants were told where they could find more information about SSF chocolate, including the official website, and Influenster.com where reviews were available, before being assigned to a pre-consumption activity unrelated to the forthcoming chocolate tasting session. The unrelated task involved discussing a short case study. As in Preliminary Study 1, we used a one-hour anticipation period, following which participants reported their evaluation of SSF chocolate (ATT2: $M = 4.92$, SD = 0.87, $\alpha = 0.81$). They also answered questions measuring CAI (M = 4.70, SD = 1.07, $\alpha = 0.78$). We used the same procedure as the one used in Preliminary Study 1 to check for the reliability of CAI. Details are provided in Web Appendix1.

In Phase 2, participants tasted the chocolate and reported their overall evaluation of it (ATT3-1: M = 5.48, SD = 1.03, α = 0.88). They were invited to return two weeks later, when their final post-consumption attitude toward SSF chocolate was assessed (ATT3-2: M = 5.10, SD = 0.80, α = 0.81).

Observation of the attitudinal scores show that (1) ATT2 is higher than ATT1, suggesting there is an anticipation effect and (2) ATT3-1 and ATT3-2 are higher than ATT2, suggesting that the SSF chocolate tasting session was an enjoyable experience. ATT3-2 is lower than ATT3-1, suggesting that the effect of direct experience declines over time (see Fig. 6)

4.2. Results

Similar to Preliminary Study 1, we first computed DIF1 (M = 0.24, SD = 0.82), DIF2 (M = 0.79, SD = 1.23) and $DIF_{experience}$ (M = 0.55, SD = 1.18). We also computed DIF3 (M = 0.41, SD = 1.09), which corresponds to the difference between ATT3-2 and ATT1, i.e. attitude before the anticipation period and attitude two weeks after consumption.

As expected, results from a linear regression show that CAI has a positive effect on DIF1 (β = 0.377, t = 4.840, $p < 0.001$). Results from an interaction analysis using Hayes's (2013) PROCESS macro show that CAI has a positive effect on DIF2 (coeff = 0.20, p = 0.008, 95 % CI [0.0518;0.3402]), and this effect is independent of the effect of direct experience ($coeff_{interaction\ term}$ = 0.07, p = 0.151, 95 % CI [-0.0274;0.1761]). We also find that CAI has no effect on DIF3 (coeff = 0.15, p = 0.138, 95 % CI [-0.0485;0.3462]), independently of the effect of direct experience ($coeff_{interaction\ term}$ = -0.04, p = 0.592, 95 % CI [-0.1771;0.1015]). Results of the interaction analyses are shown in Table 1.

4.3. Discussion

Our results show that the anticipation effect is explained by how intensively participants have anticipated the forthcoming SSF chocolate tasting session, thus supporting H1. We also observe that DIF2 is increased with increased CAI. Given that DIF 2 is positive, this suggests that attitude increase over time is stronger when CAI is high than when it is low. The absence of effect of CAI on DIF3 suggests that the effect of CAI fades over time. In other words, and as illustrated in Web Appendix 2, attitude increase over the different phases of the study is stronger when participants have intensively anticipated the chocolate tasting session, but this effect fades over time. Thus, H2 is partially supported.

5. Experiment 1

5.1. Research Approach

In Experiment 1, we investigated provision of information as a driver of CAI. We compared an "Information" condition where participants were provided with information with a "No Information" condition where this was not provided. Similar to the two preliminary studies, the experiment comprised two phases. The first phase corresponds to the anticipation period and involved participants taking part in pre-consumption activities in either the Information or No Information conditions. The second phase corresponds to the consumption and post-consumption periods and involved taking part in a salsa

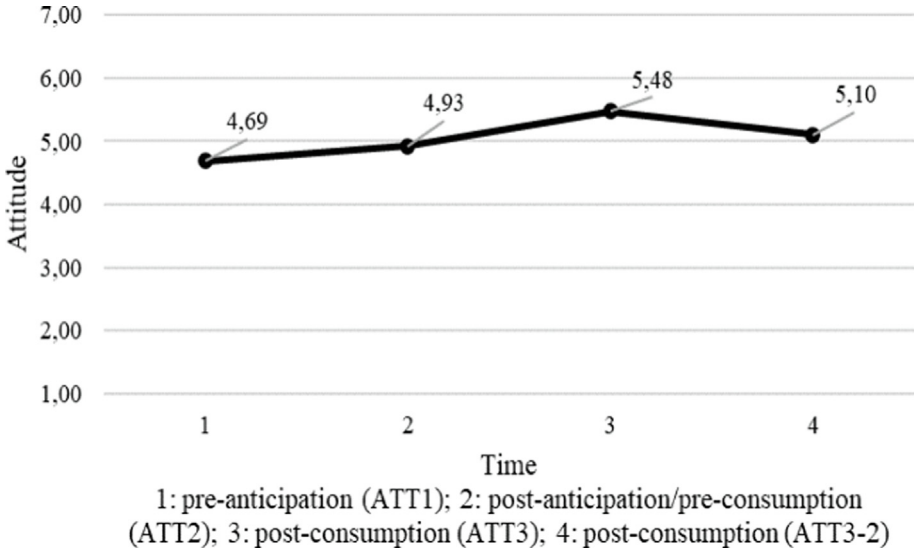

Fig. 6. Preliminary Study 2 - Evolution of attitude toward LC chocolate over time.

dance class. We chose salsa dance as a stimulus because salsa is not commonly practiced in Europe, where the study was conducted, therefore having novelty to most participants. We believed that salsa dancing would be perceived in the target population as pleasant, and this assumption was confirmed in a pre-test of 65 participants demographically similar to participants in the main study (M = 5.23, SD = 1.64, t (64) = 6.04, p < 0.001). For the main study, participants were 77 first-year undergraduate students attending a French business school.

In Phase 1, participants were randomly assigned to the Information (N = 40) or No Information (N = 37) conditions. Initially, all participants were told that they would take part in a salsa dance class some time later and attitude toward salsa was assessed (ATT1: *M* = 5.01, SD = 1.21, α = 0.85). Then, they provided demographic information (gender: 57.1 % female), prior experience with salsa (yes: 22.1 %) and whether they find dancing attractive (*M* = 5.47, SD = 1.44). Gender, attitude towards dance and prior experience with salsa do not inform any of dependent variables, therefore are not discussed further.

Participants were then invited to take part in pre-consumption activities (See description in Web Appendix 3-1). Participants in the Information condition read information and watched video clips about Salsa. In the No Information condition, participants were not provided with this information. Instead, the No Information group participated in a distracting, enjoyable activity that required their full attention, thus decreasing the opportunity to seek external information about salsa. The pre-consumption activities lasted about one hour. Then, attitude toward Salsa was assessed again (ATT2: M = 5.14, SD = 1.34, α = 0.94). Additionally, participants answered questions aimed at measuring CAI (Information: M = 4.77, SD = 1.20; No Information: M = 3.51; SD = 1.42). We replicated the procedure used in Preliminary Study 1 to check for the reliability of CAI. Details are provided in Web Appendix 1. In Phase 2, participants were led to a gym where they joined the salsa dance activity. Post-consumption attitudes were assessed immediately post-activity (ATT3: M = 5.47, SD = 1.32, α = 0.96).

Fig. 7 describes how attitude toward salsa changes over time in the two experimental conditions. Observation of the attitudinal scores show that (1) ATT2 is higher than ATT1 in the Information condition, suggesting an anticipation effect, whereas ATT2 is slightly lower than ATT1 in the No Information condition, suggesting no anticipation effect, and (2) ATT3 is higher than ATT2 in the two conditions, suggesting that the salsa class was an enjoyable experience.

5.2. Results

Similar to the Preliminary Studies, we first computed DIF1 (No Information: M =- 0.10, SD = 0.71; Information: M = 0.35, SD = 0.73), DIF2 (No Information: M = 0.20, SD = 1.00; Information: M = 0.71, SD = 0.92) and $DIF_{experience}$ (No Information: M = 0.30, SD = 1.20; Information: M = 0.36, SD = 0.93).

The concept of performative anticipation recognises that anticipation processes may contribute to performance of the overall consumption experience: consumers' anticipatory efforts to secure desired outcomes contribute to achievement of these outcomes (Vichiengior, Ackermann & Palmer, 2023). Thus, in our study, information provided during the anticipation period may have shaped participants' subsequent experience. Conversely, the enjoyable nature of the pre-consumption activity in which participants were involved in the No Information condition may also result in carry-over effects (emotions felt during the pre-consumption activity extend to the salsa activity) or comparison effects (the salsa activity is not as pleasant as the pre-consumption activity). To check for this, a *t*-test shows no difference in $DIF_{experience}$ between the two experimental conditions (t (75) = -0.251, *p* = 0.803).

Contrary to our expectations, results from a linear regression show that CAI has no effect on DIF1 (β = 0.147, t = 1.288, *p* = 0.202). However, results from an interaction analysis using Hayes's (2013) PROCESS macro show that CAI has a positive effect on DIF2 (coeff = 0.12, *p* = 0.023, 95 % CI [0.0180;0.2324]), and this effect is independent of the effect of direct experience ($coeff_{interaction\ term}$ = -0.09, *p* = 0.133, 95 % CI [-0.1976;0.0266]).

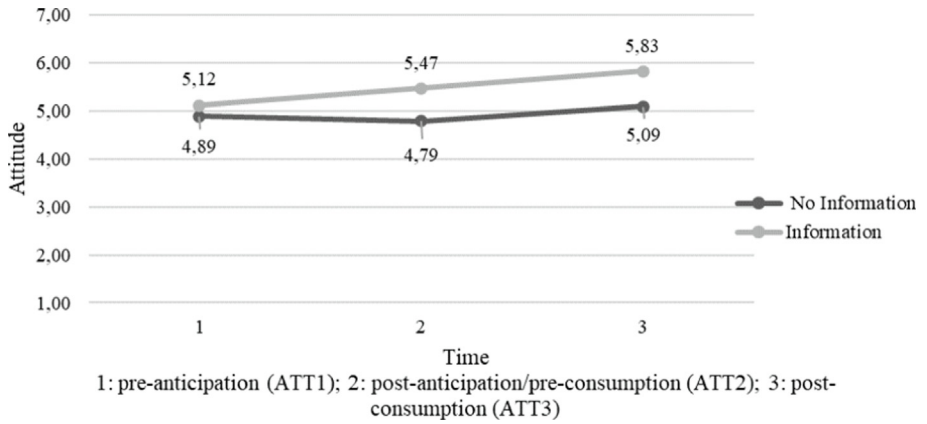

Fig. 7. Experiment 1 - Evolution of attitude toward salsa over time in the two experimental conditions.

We then conducted a mediation analysis with the experimental condition as the independent variable, DIF1 as the dependent variable, and CAI as the mediator. As expected, the experimental condition has a positive effect on CAI (coeff = 1.26, $p < 0.001$, 95 % CI [0.6658;1.8571]): CAI is significantly higher in the Information condition (M = 4.77, SD = 1.20) than in the No Information condition (M = 3.51; SD = 1.42). However, the effect of the experimental condition on DIF1 through CAI is not significant (coeff. = 0.14, 95 % CI [-0.0751;0.4662]). Interestingly, we observe a significant total effect of the experimental condition on DIF1 (coeff = 0.51, $p = 0.023$, 95 % CI [0.0728;0.9475]). Results of the interaction and mediation analyses are shown in Table 1.

To further explore the effect of provision of information on how attitude evolves over time, we conducted an interaction analysis to investigate whether the effect of the experimental condition on DIF2 is informed by $DIF_{experience}$. The experimental condition has a significant effect on DIF2 (coeff = 0.46, $p = 0.003$, 95 % CI [0.1583;0.7720]), this effect being independent of the effect of direct consumption ($coeff_{interaction\ term} = 0.01$, $p = 0.941$, 95 % CI [-0.2728;0.2938]).

5.3. Discussion

Our results do not support the view that increase in attitude observed during the anticipation period is driven by CAI, thus rejecting H1. Rather, the significant total effect of the experimental condition on DIF1suggests that increase in attitude is directly driven by provision of information during the anticipation period, which is consistent with prior literature on attitude formation and change (Fazio, 2007).

We also observe that DIF2 is increased with increased CAI. Given that DIF2 is positive, this suggests that attitude increase over time is stronger when CAI is high than when it is low. In other words, attitude increase over the different phases of the experiment is stronger when participants have intensively anticipated the salsa class, in support of H2 (see Web Appendix 2).

Contrary to our expectations, the positive effect of provision of information on DIF1 is not mediated by CAI, even though CAI is significantly stronger in the Information condition than in the No Information. Thus, H3 is rejected.

Overall, these results support our view that learning that occurred prior to direct experience of the attitude object, and which results in attitude change, is still observed after direct experience has occurred. Our results suggest that information input during the anticipation period persists post-consumption in the memory of participants who had been assigned to the Information condition, and on which they relied when evaluating the salsa dance. Such information was not available to No Information condition participants. However, we do not find support for our view that this learning process is mediated by how intensively participants have anticipated the forthcoming salsa class.

Our findings may be linked to our experimental settings: in the No Information condition, as well as not providing information to participants, we also kept them mentally engaged in an unrelated task. Consequently, it may be argued that we compared an anticipation condition, in which anticipation was encouraged with provision of information and a non-anticipation condition in which the anticipation process was blocked by preventing participants from dedicating thoughts to the forthcoming experience. This may explain why the effect of CAI and of information provision are still observed post-consumption, though CAI is not mediating the effect of provision of information on attitude increase during the anticipation period.

6. Experiment 2

6.1. Research Approach

In Experiment 2, we investigated provision of information as a driver of CAI, and the moderating effect of novelty of consumption. As in Experiment 1, we compared an "Information" condition with a "No information" condition.

Similar to the previous studies, the experiment comprised two phases. The first phase corresponds to the anticipation period and involved participants taking part in pre-consumption activities in either the Information or No Information conditions. Unlike Experiment 1, however, the pre-consumption activities in the two conditions were the same. The second phase (consumption and post-consumption periods) involved taking part in a jam tasting session. We chose jam as a stimulus because jam is typically a liked product, available in different flavors, some of them being more familiar than others. We specifically selected elderberry and strawberry flavors, assuming that elderberry jam would be novel to most participants while strawberry jam would be familiar. These different assumptions were checked in a pre-test of 48 participants demographically similar to those participating in the main study ($M_{att\_jam} = 5.19$, SD = 1.24, t (47) = 6.66, $p < 0.001$; $N_{prior\ experience\ with\ strawberry\ jam} = 43$ [89.6 %]; $N_{prior\ experience\ with\ elderberry\ jam} = 4$ [8.3 %]). We also used stimuli from the same jam producer to control for differences in quality. For the main study, participants were 171 postgraduate students attending a French business school.

In Phase 1, participants were randomly assigned to one of the 2 (information: yes versus no) x 2 (Consumption: novel versus familiar) full factorial conditions**.** Initially, all participants were told that they would take part in a jam tasting session some time later, and attitude (ATT1) toward the tasted jam was assessed ($\alpha = 0.80$; see Table 2 for descriptive statistics). Then, they provided demographic information (gender: 71.3 % female), and whether they liked jam ($M = 4.90$, SD = 1.35). As expected, elderberry jam was novel to all participants while strawberry jam was familiar to all. No effect of gender on

Table 2
Descriptive statistics for attitudinal scores in the four experimental conditions.

	Novel				Known			
	No Information N = 40		Information N = 44		No Information N = 40		Information N = 47	
	M	SD	M	SD	M	SD	M	SD
ATT1	4.15	0.90	3.95	0.84	4.44	1.13	4.39	0.91
ATT2	4.17	0.96	4.25	0.87	4.60	1.01	4.43	0.98
ATT3-1	4.44	1.20	4.69	1.32	5.20	1.06	4.99	1.43
ATT3-2	4.43	1.09	4.67	1.06	4.73	1.02	4.90	1.29
CAI	3.11	1.40	3.92	1.04	3.07	1.28	3.47	1.24

M: Mean; SD: Standard Deviation

our dependent variables was noted. However, a significant effect of attitude towards jam was observed, and this variable was therefore entered as a covariate in our analyses.

Participants in the Information condition were then provided with information about strawberry/elderberry jam. Information about strawberry jam and elderberry jam was very similar in content and length (See description in Web Appendix 3-2). In the No Information condition, participants were not provided with any information. Participants were then invited to take part in a pre-consumption activity by discussing a short case study. The pre-consumption activity lasted about one hour. Then, attitude toward the jam they would taste was assessed again (ATT2: α = 0.84; see Table 2 for descriptive statistics). Additionally, participants answered questions aimed at measuring CAI (see Table 2 for descriptive statistics). We used the procedure replicated from previous studies to check the reliability of CAI. Details are provided in Web Appendix 1. In Preliminary Studies 1 and 2, participants were given the opportunity to access external information but we did not directly check whether this was done. So, we added one question asking participants whether they looked for information about the jam they would taste later. Twenty-six participants (out of 171) looked for external information (strawberry Information condition = 6; strawberry No Information condition = 6; elderberry Information condition = 7; elderberry No Information condition = 7).

In Phase 2, participants tasted the jam. Post-consumption attitudes were assessed immediately post-activity (ATT3-1: α = 0.91; see Table 2 for descriptive statistics). Post-consumption attitudes were assessed again two weeks later (ATT3-2: α = 0.88; see Table 2 for descriptive statistics). Fig. 8 describes how attitude toward jam changes over time in the four experimental conditions. Observation of the attitudinal scores show that (1) ATT2 is higher than ATT1 in both experimental conditions, suggesting an anticipation effect and (2) ATT3 is higher than ATT2 in both experimental conditions, suggesting that the jam tasting session was an enjoyable experience. ATT3-2 is lower that ATT3-1, suggesting that the effect of direct experience declines as time goes by.

6.2. Results

Similar to previous studies, we first computed DIF1 (No Information: M =- 0.09, SD = 0.67; Information: M = 0.16, SD = 0.72), DIF2 (No Information: M = 0.55, SD = 1.30; Information: M = 0.64, SD = 1.35), DIF3 (No Information: M = 0.30, SD = 1.24; Information: M = 0.58, SD = 1.16) and $DIF_{experience}$ (No Information: M = 0.46, SD = 1.16; Information: M = 0.48, SD = 1.23). Results from an ANOVA also show absence of a performative anticipation effect as there is no difference in $DIF_{experience}$ between the four experimental conditions ($F(3, 167) = 0.592$, $p = 0.621$).

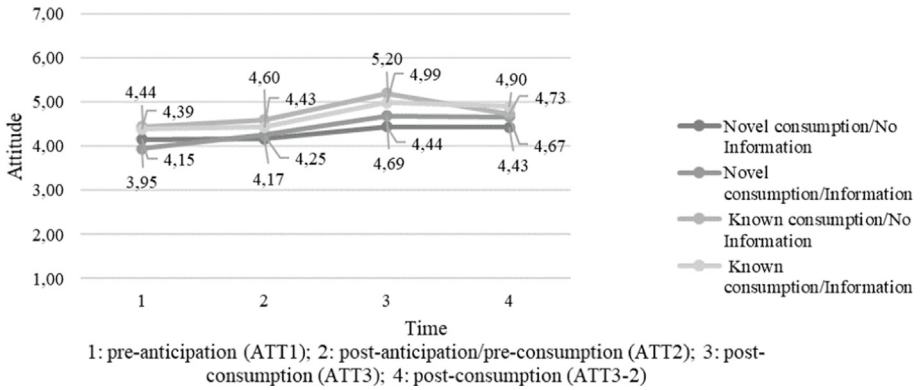

Fig. 8. Experiment 2 - Evolution of attitude toward jam over time in the four experimental conditions.

Consistent with our expectations, a linear regression shows that CAI has a positive significant effect on DIF1 (β= 0.163, t = 2.131, p = 0.035). Additionally, results from an interaction analysis using Hayes's (2013) PROCESS macro show that CAI has a positive effect on DIF2 (coeff = 0.09, p = 0.045, 95 % CI [0.0022;0.1730]), and this effect is independent of the effect of direct experience ($coeff_{interaction\ term}$ = -0.01, p = 0.733, 95 % CI [-0.0773;0.0545]). The effect of CAI on DIF3 is only marginally significant (coeff = 0.12, p = 0.058, 95 % CI [-0.0041;0.2352]), this effect being independent of the effect of direct experience ($coeff_{interaction\ term}$ = -0.04, p = 0.441, 95 % CI [-0.1283;0.0562]).

We then conducted a mediation analysis with the experimental condition as the independent variable, DIF1 as the dependent variable, and CAI as the mediator. As expected, the experimental condition has a positive effect on CAI (coeff = 0.49, p = 0.011, 95 % CI [0.1158;0.8741]): CAI is significantly higher in the Information condition (M = 3.62, SD = 1.21) than in the No Information condition (M = 3.13, SD = 1.32). Additionally, the effect of the experimental condition on DIF1 through CAI is significant (coeff. = 0.04, 95 % CI [0.0000;0.1099]).

Finally, we conducted a moderated mediation analysis with the experimental condition as the independent variable, DIF1 as the dependent variable, CAI as the mediator, and novelty of consumption as the moderator of the effect of provision of information on CAI. The index of moderated mediation is not significant (95 % CI [-0.0286;0.1434]). Results of the interaction, mediation and moderated mediation analyses are shown in Table 1.

To further explore the effect of information provision on how attitude evolves over time, we conducted two interaction analyses to investigate whether the effect of provision of information on respectively DIF2 and DIF3 is informed by $DIF_{experience}$. Provision of information has no significant effect on DIF2 (coeff = 0.08, p = 0.483, 95 % CI [-0.1468;0.3088]) and a marginally significant positive effect on DIF3 (coeff = 0.29, p = 0.075, 95 % CI [-0.0299;0.6151]), this effect being independent of the effect of direct consumption (DIF2: $coeff_{interaction\ term}$ = -0.03, p = 0.778, 95 % CI [-0.2048;0.1536]; DIF3: $coeff_{interaction\ term}$ = -0.05, p = 0.693, 95 % [-0.3045;0.2029]).

6.3. Discussion

As expected, our results confirm that CAI has a positive effect on the increase in attitude observed during the anticipation period, thus supporting H1. We also observe that DIF2 is increased with increased CAI, the effect of CAI on DIF3 being only marginally significant. Given that DIF 2 and DIF3 are positive, and as illustrated in Web Appendix 2, this suggests that attitude increase over time is stronger when participants have intensively anticipated the forthcoming jam tasting session, in support of H2. Also, the positive effect of information provision on DIF1 is mediated by CAI. Thus, H3 is supported. Finally, novelty of consumption does not inform this mediation effect, thus H4 is rejected.

Overall, these results support our view that provision of information results in increased CAI, which in turn results in an increased anticipation effect. They also provide further support for our view that attitude increase over time is informed by how intensively participants have anticipated prior to direct experience.

7. Experiment 3

7.1. Research Approach

In Experiment 3, we investigated provision and novelty of information as a driver of Consumer Anticipation Intensity, and the moderating effect of novelty of consumption. We compared a "No Information" condition with a "Known Information" condition (participants were provided with information about the product likely to be already known by them) and a "Novel Information" condition (participants were provided with information about the product likely to be novel to them).

Similar to the previous studies, the experiment comprised two phases. The first phase – the anticipation period - involved participants taking part in pre-consumption activities in one of the three conditions. The pre-consumption activities were replicated from Experiment 2. The second phase corresponds to the consumption and post-consumption periods and involved taking part in a Sea Salt Flower (SSF) chocolate tasting session. We used the same SSF chocolate as used in Preliminary Study 2. Unlike Preliminary Study 2, we expected prior experience of SFF chocolate to be equally distributed among our participants (because data collection took place in France where SFF chocolate is better known than in Thailand), therefore enabling us to check for novelty of consumption. This assumption was checked among Experiment 2 pre-test participants (N = 48, $N_{prior\ experience\ with\ SSF\ chocolate}$ = 27 [56.3 %]). We developed two product descriptions for SSF chocolate: the two descriptions were similar in length and in structure but differed in terms of likely novelty to the respondents (See description in Web Appendix 3-3). This was checked in a pre-test of 107 participants demographically similar to participants in the main study ($M_{Known\ Information}$ = 4.03, SD = 1.54, $M_{Novel\ Information}$ = 4.99, SD = 1.62, t (105) = 3.118, p = 0.002). For the main study, participants were 145 postgraduate students attending a French business school.

In Phase 1, participants were randomly assigned to one of the three conditions. Initially, all participants were told that they would take part in a SSF chocolate tasting session some time later, and attitude (ATT1) toward SSF chocolate was assessed (α = 0.83; see Table 3 for descriptive statistics). We collected demographic information (gender: 65.5 % female), and whether participants liked chocolate (M = 5.75, SD = 1.44). As expected, 74 participants had never tasted SSF chocolate while 71 already had. No effect of gender and attitude towards chocolate on our dependent variables was noted, therefore are not discussed further.

Table 3
Descriptive statistics for attitudinal scores in the three experimental conditions.

	No Information $N = 50$		Known Information $N = 50$		Novel Information $N = 45$	
	M	SD	M	SD	M	SD
ATT1	4.42	1.18	4.45	0.98	4.32	1.13
ATT2	4.66	1.20	4.83	1.06	4.93	1.06
ATT3-1	5.64	1.46	5.57	1.46	5.70	1.18
ATT3-2	5.37	1.26	5.30	1.31	5.52	1.02
CAI	3.68	1.44	4.45	1.15	4.12	1.71

M: Mean; SD: Standard Deviation

Participants in the two Information conditions were then provided with information about SSF chocolate. In the No Information condition, participants were not provided with any information. Participants were then invited to take part in a pre-consumption activity of discussing a short case study, lasting about one hour. Then, attitude toward SSF chocolate was assessed again (ATT2: $\alpha = 0.91$; see Table 3 for descriptive statistics). Additionally, participants answered questions to measure CAI (see Table 3 for descriptive statistics). We replicated the procedure from previous studies to assess reliability of CAI (see Web Appendix 1). Similar to Experiment 2, we added one question asking participants whether they looked for information about SSF chocolate on the internet. 19 participants (out of 145) looked for external information (6 in the No Information, 6 in the Known Information and 7 in the Novel Information conditions).

In Phase 2, participants tasted SSF chocolate. Post-consumption attitudes were assessed immediately post-activity (ATT3-1: $\alpha = 0.95$; see Table 3 for descriptive statistics). Post-consumption attitudes were assessed again two weeks later (ATT3-2: $\alpha = 0.90$; see Table 3 for descriptive statistics).

Fig. 9 describes how attitude toward SSF chocolate changes over time in the three experimental conditions. Observation of the attitudinal scores show that (1) ATT2 is higher than ATT1 in all experimental conditions, suggesting an anticipation effect and (2) ATT3-1 is higher than ATT2 in all experimental conditions, suggesting that the SSF chocolate tasting session was an enjoyable experience. ATT3-2 is lower that ATT3-1, suggesting that the effect of direct experience declines as time goes by.

7.2. Results

Similar to previous studies, we first computed DIF1 (No Information: M = 0.24, SD = 0.71; Known Information: M = 0.38, SD = 0.59; Novel Information: M = 0.61, SD = 1.07), DIF2 (No Information: M = 1.22, SD = 1.32; Known Information: M = 1.12, SD = 1.45; Novel Information: M = 1.38, SD = 1.48), DIF3 (No Information: M = 0.95, SD = 1.15; Known Information: M = 0.85, SD = 1.35; Novel Information: M = 1.20, SD = 1.37) and $DIF_{experience}$ (No Information: M = 0.98, SD = 1.20; Known Information: M = 0.74, SD = 1.38; Novel Information: M = 0.77, SD = 1.12). Results from an ANOVA show absence of a performative anticipation effect as there is no difference in $DIF_{experience}$ between the three experimental conditions ($F(2, 142) = 0.545$, $p = 0.581$).

As expected, results from a linear regression show that CAI has a positive significant effect on DIF1 ($\beta = 0.221$, $t = 2.712$, $p = 0.008$). Additionally, results from an interaction analysis using Hayes's (2013) PROCESS macro show that CAI has a positive effect on DIF2 (coeff = 0.20, $p < 0.001$, 95 % CI [0.0941;0.3078]), and this effect is informed by the effect of direct experience ($coeff_{interaction\ term} = -0.10$, $p = 0.009$, 95 % CI [-0.1714;-0.0246]), so the effect of CAI on DIF2 increases as the effect of direct experience decreases. We used the Johnson–Neyman technique to look for the turning points for where, in the absolute value of $DIF_{experience}$, the effect of CAI on DIF2 turns from positive to negative (Hayes, 2013). $DIF_{experience}$ at a value of 2.13

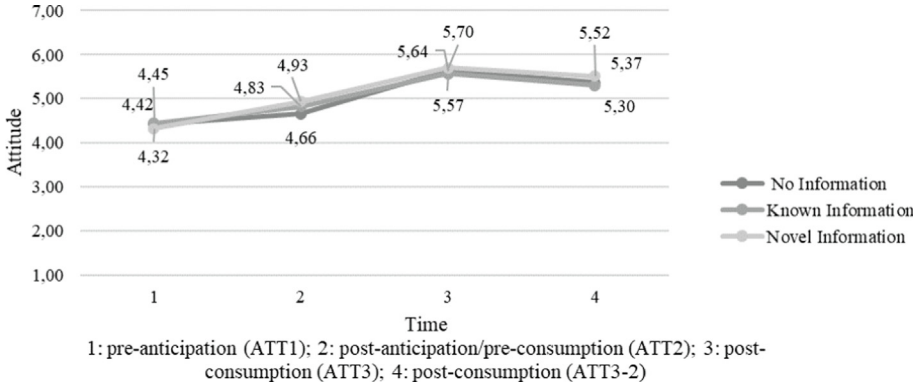

Fig. 9. Experiment 3 - Evolution of attitude toward SSF chocolate over time in the three experimental conditions.

is the turning point: the effect of CAI on DIF2 is positive when $DIF_{experience}$ is below 2.13 while it is negative when $DIF_{experience}$ is above 2.13. However, the effect of CAI on DIF 3 is not significant (coeff = 0.07, p = 0.330, 95 % CI [-0.0676;0.2002]), this effect being independent of the effect of direct experience ($coeff_{interaction\ term}$ = -0.07, p = 0.110, 95 % CI [-0.1669;0.0171]).

We then conducted a mediation analysis with provision of information as the independent variable, DIF1 as the dependent variable, and CAI as the mediator. As expected, provision of information has a positive effect on CAI (coeff = 0.61, p = 0.016, 95 % CI [0.1162;1.1133]): CAI is significantly higher when information is provided (M = 4.29, SD = 1.45) than in the No Information condition (M = 3.68; SD = 1.44). In addition, the effect of provision of information on DIF1 through CAI is significant (coeff. = 0.07, 95 % CI [0.0035;0.1740]).

Next, we conducted a moderated mediation analysis with provision of information as the independent variable, DIF1 as the dependent variable, CAI as the mediator, and novelty of consumption as the moderator of the effect of provision of information on CAI. The index of moderated mediation is not significant (95 % CI [-0.0061;0.2942]).

Finally, we conducted a mediation analysis with the type of information provided (Known Information versus Novel Information) as the independent variable, DIF1 as the dependent variable, and CAI as the mediator. The type of information provided has no effect on CAI (coeff = -0.33, p = 0.262, 95 % CI [-0.9241;0.2545]). There is no significant difference in CAI between the two experimental conditions (Known Information: M = 4.45, SD = 1.15; Novel Information: M = 4.11, SD = 1.71). Consequently, no mediation effect is observed (coeff = -0.05, 95 % CI [-0.1810;0.0449]. Results of the interaction, mediation and moderated mediation analyses are shown in Table 1.

To further explore the effect of provision of information on how attitude evolves over time, we conducted two interaction analyses to investigate whether the effect provision of information on respectively DIF2 and DIF3 is informed by $DIF_{experience}$. The experimental condition has no significant effect on DIF2 (coeff = 0.22, p = 0.217, 95 % CI [-0.1310;0.5714]) and DIF3 (coeff = 0.21, p = 0.320, 95 % CI [-0.2105;0.6394]), this effect being independent of the effect of direct consumption (DIF2: $coeff_{interaction\ term}$ = 0.02, p = 0.874, 95 % CI [-0.2130;0.2502]; DIF3: $coeff_{interaction\ term}$ = -0.01, p = 0.925, 95 % [-0.2670;.02935]).

7.3. Discussion

As expected, we found that CAI has a positive effect on the increase in attitude observed during the anticipation period, thus H1 is supported. We also observe that DIF2 is increased with increased CAI. Given that DIF2 is positive, this suggests that attitude increase over time is stronger when participants have intensively anticipated the forthcoming SSF chocolate tasting session, in support of H2. However, no effect of CAI on DIF3 is observed, thus H2 is only partially supported. (Web Appendix 2 illustrates how CAI informs DIF2 and DIF3). Additionally, the positive effect of provision of information on DIF1 is mediated by CAI. Thus, H3 is supported. Finally, novelty of consumption does not inform this mediation effect, thus H4 is rejected. Novelty of information has no effect on CAI, thus H5 is rejected.

8. Overview of empirical findings

Table 4 summarizes the results of the different studies. Except for Experiment 1, results from all studies show that anticipation intensity is the driver of the anticipation effect, (an increase in attitude during the anticipation period), thus providing support for H1. As previously explained, we suggest that the lack of support for H1 in Experiment 1 may be due to our experimental settings which strengthened the effect of information provision: the huge amount of information provided in

Table 4
Overview of our results over the different studies.

	Preliminary Studies		Experiments		
Study #	1	2	1	2	3
Context of consumption	*LC Chocolate*	*SSF Chocolate*	*Salsa*	*Jam*	*SSF Chocolate*
Sample	*N* = 80 *France*	*N = 150 Thailand*	*N = 77 France*	*N = 171 France*	*N = 145 France*
H1: Attitude increase observed at the end of the anticipation period is driven by consumer anticipation intensity.	✓	✓	✗	✓	✓
H2: Attitude increase over time is increased with increased consumer anticipation intensity, independently of how positive the direct experience is.					
Immediately after consumption	✓	✓	✓	✓	✓
Two weeks later	NA	✗	NA	✓*	✗
H3: The anticipation effect is triggered by provision of information, this effect being mediated by consumer anticipation intensity.	NA	NA	✗	✓	✓
H4: Novelty of consumption moderates the effect hypothesized with H3 so that the anticipation effect triggered by provision of information is stronger when consumption is novel than when it is not.	NA	NA	NA	✗	✗
H5: Novelty of information moderates the effect hypothesized with H3 so that the anticipation effect triggered by provision of information is stronger when information is novel than when it is not.	NA	NA	NA	NA	✗

✓: supported; ✗: rejected; NA: not applicable; *: marginally significant.

one of the experimental conditions resulted in attitude increase, somehow independently of how intensively participants had anticipated the forthcoming experience. Results also show that the effect of consumer anticipation intensity is still observed after direct experience has taken place, independently of how positive the direct experience was. We also observe that this effect fades over time, so that attitude change two weeks after experience has taken place is mostly driven by the effect of direct experience. Thus, H2 is partially supported.

Results from Experiments 2 and 3 show that the anticipation effect is triggered by information provision, this effect being mediated by consumer anticipation intensity, providing support for H3. Such mediation effect is not observed in Experiment 1, likely due to the reasons noted above. Finally, results from Experiments 2 and 3 also show that novelty, either novelty of consumption or novelty of provided information, does not inform the effect of information provision on consumer anticipation intensity. Thus, H4 and H5 are rejected.

Overall, our results show that (1) consumer anticipation intensity results in attitude increase prior to experience, (2) the effect of consumer anticipation intensity is still observed post- consumption, (3) this effect fades over time, and (4) consumer anticipation intensity is increased with provision of information, (5) this effect being independent of whether the consumption and/or the information is novel to consumers.

9. General discussion and conclusion

This paper sought to fill a gap in knowledge about the effects of pre-consumption thoughts on post-consumption attitudes. We started with an observation that previous anticipation research had produced ambiguous evidence about how evocation of pre-consumption thoughts impacts post-consumption attitudes. We have proposed an alternative perspective for addressing this issue by investigating the long-term effect of consumer anticipation on product evaluation. We were particularly interested in exploring the conditions in which the effect of consumer anticipation observed pre-consumption is still present post-consumption.

Our approach built on the attitude literature to suggest that previously observed increase in attitude toward the object of anticipated consumption is due to incremental information input. This is made possible by delayed consumption and is still observable post-consumption because of an additive effect. We specifically hypothesized provision of information results in increased intensity of anticipation, which in turn results in an increased anticipation effect. To summarize, we build on the anticipation and attitude formation and change literatures to show that anticipation is a mental process contingent on consumers having an opportunity to use the time between purchase/purchase commitment, and consumption to access information related to the object of consumption, thereby triggering mental processes that result in an anticipation effect (an increase in product evaluation). This anticipation effect is long-lasting, and still observable post-consumption.

9.1. Contribution to Theory

We began with a suggestion that attitude formation and change theory could help to understand increases in product evaluations reported in previous consumer anticipation research. More specifically, we were interested in understanding the drivers of consumer anticipation. From this perspective, our research builds on the important work of Chan and Mukhopadhyay (2010) who explored how differences in provision of choice available to a consumer, resulting in intrinsic motivation, and length of delay between product choice and consumption, result in differences in (1) intentions to consume, (2) pre- and (3) post-consumption evaluations.

Previous research had explored motivation and opportunity as contingent drivers of consumer anticipation: intrinsic motivation has been identified as a trigger of the anticipation effect; regarding opportunity, much attention has been paid to the effects of passage of time (Chan & Mukhopadhyay, 2010; Loewenstein, 1987). From this foundation, the first important contribution of our research is the proposition that provision of information is another important opportunity driver of consumer anticipation. Information should be available and facilitated by accessible knowledge structures in memory which underpin the mental processes involved in consumer anticipation. Our results suggest that providing information is sufficient to make the object of forthcoming consumption vivid in consumers' minds, therefore encouraging consideration of the forthcoming consumption experience. In doing so, anticipation processes are activated, which results in attitude increase. We were interested in investigating whether the nature of the information provided would strengthen this effect, and we identified novelty of information as a potentially important factor. Interestingly, we did not find that novelty of information had an effect on how intensively consumers would anticipate: this suggests that providing information triggers anticipation, independently from the nature of the information which is processed. So, merely providing information is sufficient to increase attention devoted to the object of future consumption, and to trigger anticipation. In the same way of thinking, we also hypothesized that novelty of consumption would strengthen the anticipation effect because a new product would imply an absence of a knowledge base in memory on which to elaborate and/or imagine. Our results suggest that, even though the new product (elderberry jam in Experiment 2 and SSF chocolate in Experiment 3) were new to all (Experiment 2)/half of our (Experiment 3) participants, participants were able to relate the new product to a familiar product category (red berries jam and chocolate) and to use the knowledge structure in memory associated with this product category to elaborate on and to imagine their future consumption.

Our results suggest an additive effect by which attitude increase due to anticipation persists over time. In a context of pleasant, delayed consumption, attitude change over time is a process whereby (1) initial attitude (before anticipation starts) is the initial internal information, (2) consumer anticipation provides the opportunity for attitude update, this update being positively biased, and thus explaining the anticipation effect, and (3) direct experience with the attitude object provides incremental information input. Over all our studies, we observe an additive effect by which attitude decrease (Preliminary Study 1)/increase (all other studies) is decreased (Preliminary Study 1)/increased (other studies) when consumers have intensively anticipated their future consumption experience than when they have not. Independently of the effect of the direct experience, attitudes are higher when there has been anticipation than when there has not. However, this effect fades over time, attitude change observed two weeks after direct experience being mostly driven by the effect of direct experience. Our proposition of an additive effect by which attitude increase due to consumer anticipation is not overridden by direct experience is a second important contribution of this research.

Our finding contradicts Chan and Mukhopadhyay (2010) who found post-consumption evaluations to be lower than pre-consumption evaluations in conditions of varying time delay between choice and consumption, suggesting that encouraging consumers to anticipate may result in dissatisfaction. Results from our studies contradict this view, as they show that the effect of direct experience on attitude change does not depend on how intensively participants had anticipated the forthcoming consumption experience: as illustrated in Table 1 (H2), the interaction between $DIF_{experience}$ and CAI does not inform the effect of direct experience on DIF2/DIF3, showing that the effect of direct experience on DIF2/DIF3 is not informed by consumer anticipation intensity. A close look at Chan and Mukhopadhyay's (2010) results shows that direct experience, in the context of their study, resulted in attitude decrease, even when there was no anticipation, suggesting the experience was not necessarily pleasant. From this perspective, their results are similar to those observed in Preliminary Study 1. Thus, a third important contribution of our research is that anticipation does not in itself necessarily lead to dissatisfaction. Anticipation does not necessarily trigger the formation of unrealistic expectations, that may lead to dissatisfaction.

Attitudes have been considered as stable object-related associations stored and evoked in memory (Fazio et al., 1982). Therefore, understanding how they evolve as a result of consumer anticipation is an important theoretical contribution. Our research highlights the positive effect of consumer anticipation on attitude towards the object of consumption. Our research answers a call by contemporary attitude researchers for investigation of patterns of delayed attitude change (Albarracín & Shavitt, 2018). Most attention has been paid to the sleeper effect observed in the context of political campaigns, whereby an increase in evaluation follows a delay after a message is presented by a noncredible source or after a non-compelling message is presented by a credible source (Kumkale & Albarracín, 2004; Albarracín, Kumkale, & Poyner-Del Vento, 2017). Overall, the sleeper effect suggests that any type of information can be processed thoroughly, and effects of thoroughly processed information persist over time (Albarracín & Shavitt, 2018). By highlighting the positive effect of anticipation on attitude towards the object of consumption, our research identifies consumer anticipation as an efficient attitude change mechanism.

9.2. Managerial implications

Our findings have implications for marketers of products which are considered pleasant, and where there is temporal separation between choice and actual consumption (e.g., online ordering or advance booking of leisure services). Increasing delivery efficiency has become a major strategic challenge, especially the reduction of waiting times that can facilitate rapid satisfaction of needs and reduce anxiety and stress. A cursory glance at our results would suggest the opposite, as anticipation can have a positive effect on attitudes toward the object of consumption, pre- and post-consumption. However, this value in waiting is contingent on consumers intensively engaging in anticipation of their forthcoming consumption.

The time between purchase/commitment can be an opportunity for firms to encourage anticipation. In many consumption contexts, delay is not imposed by the company but chosen by the consumer, typical of advance reservations for travel and leisure services. Here, the challenge is not to reduce delivery time, but to take advantage of the delay between decision and consumption to influence attitudes toward the object of consumption. Strategies and tactics might induce anticipation by providing information through word of mouth, pre-release "buzz" or marketing communication. For example, pre-release consumer buzz can be contagious and prompt search activities, such as watching movie trailers (in anticipation of a new movie release) or reading books (in anticipation of the release of a movie adaption) (Houston, Kupfer, Hennig-Thurau, & Spann, 2018). For marketing communications, our results show that provision of information is sufficient to trigger anticipation, independently of how new the product and the provided information are to consumers. This suggests that marketers can seek to manipulate anticipation not only for new products but also for familiar products. It also suggests that any type of positive information can trigger consumer anticipation, independently of how new its content is.

Following the seminal work of Oliver (Expectancy Disconfirmation Theory, 1980), according to which dis-satisfaction arises from discrepancy between pre-consumption expectations and subsequent perceptions of performance, there is uncertainty among marketers about whether it is wise to encourage consumers to anticipate forthcoming consumption. We do not question the merit of Expectancy Disconfirmation Theory (Oliver, 1980) and recognize that encouraging consumers to develop unrealistic expectations may be both unethical and managerially irrelevant. However, our proposed additive effect suggests that encouraging consumer anticipation is not problematic *per se*. Consumer anticipation not only increases pre-consumption attitude toward the object of consumption, but it also results in more positive attitudes post-consumption

and the effect of direct experience is independent of how intensively consumers had anticipated the forthcoming consumption.

9.3. Limitations and future research

Although data were collected in two different cultural contexts, for different types of products (goods and services), and our results over the five studies converge, thereby providing external validity, we recognize that generalizability of our results could be limited by narrow demographic sampling. However, the behaviors observed in this research are cognitive processes on which social variables such as occupation, incomes or marital status have limited influence (Wu & Lin, 2006). Also, the products we studied - salsa dance, chocolate and jam - are relevant to this population. Thus, the nature of our samples should not substantially reduce the validity of our results, but future research could consider different consumer populations. In addition, it has been noted that the distinct characteristics of attitudes in non-Western culture deserve attention, thus attitude change strategies should be systematically tested across cultures (Albarracín & Shavitt, 2018). Our data were collected in a Western context (France) and an Eastern context (Thailand) and results over the two cultural contexts converge. However, an important element explaining differences in attitude change between Western and Eastern cultures is normative social pressure (Riemer et al., 2014). Future research may investigate the extent of consumers' ability to consider social expectations and norms during anticipation in different cultural contexts.

Chan and Mukhopadhyay (2010) suggest that there is an optimal time delay for consumer anticipation to occur with an inverted U-shape effect by which evaluation is first increased and then decreased with the passage of time. Future research should investigate the interaction between CAI and the length of the anticipation period, and whether the additive effect noted in our research is affected by variance in delay between decision and consumption. With a longer period of time between decision and consumption, anticipation may be more elaborated, thus resulting in a longer lasting anticipation effect. Also, future research may explore whether sending reminder messages and/or providing extra information during the anticipation period informs the strength of the anticipation effect. We noted that the effect of anticipation fades over time. Future research may investigate whether this fading effect is affected by variance in delay between decision and consumption.

Our research emphasized the importance of external information as a driver of consumer anticipation. Unexpectedly, we found novelty of either the product or the provided information does not inform the anticipation effect. Future research may further investigate this intriguing result by manipulating the level of novelty associated with the product, i.e. incremental versus radical/really new products (Hoeffler, 2003). Future research may also investigate in which conditions provision of information may decrease anticipation intensity or result in attitude decrease. For instance, if the information provided was alarming, the anticipation process may be blocked because consumers avoid potentially alarming thoughts; or anticipation may be increased, resulting in a decrease in evaluation of the attitude object. Future research may also investigate internal information already available in memory: even in situations where access to external information is not possible, individuals differ in how they are knowledgeable about the object of future consumption because of past broadly similar consumption experiences (for example, a consumer may never have attended a salsa dance class but may have attended a rock'n'roll class). Such individuals may therefore be more able to anticipate the forthcoming consumption experience because knowledge already available in memory provides foundation for anticipation.

Our research investigated information provision as an opportunity driver of consumer anticipation. Past research has noted that there may also be motivational drivers of anticipation (Vichiengior et al., 2019). Future research could empirically explore the effect of motivational drivers, such as the effect of personal involvement in the product category. The principle of cognitive economy suggests that consumers dedicate time and effort to mental activities only if they are motivated to do so (Rosch, 1987). Thus, we may expect anticipation to be more intense among highly involved consumers than among less involved consumers, because the processes involved in anticipation require cognitive efforts.

So far, the literature has mostly focused on anticipation of pleasant hedonic consumption experiences (chocolate, Chan & Mukhopadhya, 2010; Nowlis et al., 2004/city tour, Dixon et al., 2017/theatrical drama and music concert, Chan & Mukhopadhyay, 2010/vacation, Krishnamurthy & Sujan, 1999; MacInnis & Price, 1987), except for recent research by Hardisty and Weber (2020) into anticipatory utility of negative versus positive events. Many products purchased online are utilitarian. However, because of their price and importance, they may temporarily raise involvement in the product category. Future research may investigate whether our findings are replicated for utilitarian products when involvement is high. We identify two potential scenarios: once the decision is made, consumers do not consider the utilitarian product anymore because of its lack of appeal, and no anticipation effect is likely to occur; or, even though the utilitarian product is not inherently appealing, time provides the opportunity to develop additional expectations and enter into imagery processing, leading to an anticipation effect. Future research may investigate whether, and when, these two scenarios materialize. More generally, future research is needed to investigate the effect of consumer anticipation on attitudes when the anticipated consumption experience is not pleasant.

Finally, individuals differ in their propensity to anticipate forthcoming consumption. Elster and Loewenstein (1992) noted that individuals' likelihood of anticipating a forthcoming event depends not only on the event itself (in their study, the capacity of the future event to evoke anticipatory emotions), but also on individuals' propensity to experience anticipatory emotions. In the same way of thinking, individuals may differ in their time orientation. One possibility is that future-oriented

people (Bergadaà, 1990) may be more prone to anticipate forthcoming events than those who are present- or past-oriented. Thus, an individual's time orientation may moderate the results reported in this research.

CRediT authorship contribution statement

Tunyaporn Vichiengior: Writing – review & editing, Writing – original draft, Resources, Project administration, Methodology, Investigation, Formal analysis, Conceptualization. **Claire-Lise Ackermann:** Writing – review & editing, Writing – original draft, Resources, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Adrian Palmer:** Writing – review & editing, Writing – original draft, Resources, Project administration, Methodology, Investigation, Formal analysis, Conceptualization.

Data availability

Data will be made available on request.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.ijresmar.2024.06.001.

References

Albarracín, D., Kumkale, G.T., Poyner-Del Vento, P., 2017. How people can become persuaded by weak messages presented by credible communicators: Not all sleeper effects are created equal. Journal of Experimental Social Psychology 68, 171–180.
Albarracín, D., Sunderrajan, A., Lohmann, S., Chan, M.P.S., Jiang, D., 2018. The psychology of attitudes, motivation, and persuasion. In: Albarracín, D., Johnson, B.T. (Eds.), The handbook of attitudes. Routledge, New York, pp. 3–44.
Albarracín, D., Shavitt, S., 2018. Attitudes and attitude change. Annual Review of Psychology 69, 299–327.
Baucells, M., Bellezza, S., 2017. Temporal profiles of instant utility during anticipation, event, and recall. Management Science 63 (3), 729–748.
Bergadaà, M., 1990. The role of time in the action of the consumer. Journal of Consumer Research 17 (3), 289–302.
Briñol, P., Petty, R.E., 2012. The history of attitudes and persuasion research. In: Kruglanski, A., Stroebe, W. (Eds.), Handbook of the history of social psychology. Psychology Press, New York, pp. 285–320.
Chan, E., Mukhopadhyay, A., 2010. When choosing makes a good thing better: Temporal variations in the valuation of hedonic consumption. Journal of Marketing Research 47 (3), 497–507.
Chun, H.H., Diehl, K., MacInnis, D.J., 2017. Savoring an upcoming experience affects ongoing and remembered consumption enjoyment. Journal of Marketing 81 (3), 96–110.
Dixon, M.J., Victorino, L., Kwortnik, R.J., Verma, R., 2017. Surprise, anticipation, and sequence effects in the design of experiential services. Production and Operations Management 26 (5), 945–960.
Dubé, L., Cervellon, M.C., Jingyuan, H., 2003. Should consumer attitudes be reduced to their affective and cognitive bases? Validation of a hierarchical model. International Journal of Research in Marketing 20 (3), 259–272.
Elster, J., Loewenstein, G., 1992. Utility from memory and anticipation. In: Loewenstein, G., Elster, J. (Eds.), Choice over time. Russell Sage Foundation, New York, pp. 213–234.
Fazio, R.H., 2007. Attitudes as object-evaluation associations of varying strength. Social Cognition 25 (5), 603–637.
Fazio, R.H., Chen, J.M., McDonel, E.C., Sherman, S.J., 1982. Attitude accessibility, attitude-behavior consistency, and the strength of the object-evaluation association. Journal of Experimental Social Psychology 18 (4), 339–357.
Festinger, L., 1957. Theory of cognitive dissonance. Stanford University Press. .
Frederick, S., Loewenstein, G., O'Donoghue, T., 2002. Time discounting and time preference: A critical review. Journal of Economic Literature 40 (2), 351–401.
Hardisty, D.J., Weber, E.U., 2020. Impatience and savoring vs. dread: Asymmetries in anticipation explain consumer time preferences for positive vs. negative events. Journal of Consumer Psychology 30 (4), 598–613.
Harrison, M.P., Beatty, S.E., 2011. Anticipating a service experience. Journal of Business Research 64 (6), 579–585.
Hayes, A.F., 2013. Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. The Guilford Press. .
Hoeffler, S., 2003. Measuring preferences for really new products. Journal of Marketing Research 40 (4), 406–420.
Houston, M.B., Kupfer, A.K., Hennig-Thurau, T., Spann, M., 2018. Pre-release consumer buzz. Journal of the Academy of Marketing Science 46, 33.
Koenig-Lewis, N., Palmer, A., 2014. The effects of anticipatory emotions on service satisfaction and behavioral intention. Journal of Services Marketing 28 (6), 437–451.
Kopalle, P.K., Lehmann, D.R., 2001. Strategic management of expectations: The role of disconfirmation sensitivity and perfectionism. Journal of Marketing Research 38 (3), 386–394.
Krishnamurthy, P., Sujan, M., 1999. Retrospection versus anticipation: The role of the ad under retrospective and anticipatory self-referencing. Journal of Consumer Research 26 (June), 55–69.
Kumkale, G.T., Albarracín, D., 2004. The sleeper effect in persuasion: A meta-analytic review. Psychological Bulletin. 130 (1), 143–172.
Kwortnik Jr, R.J., Ross Jr, W.T., 2007. The role of positive emotions in experiential decisions. International Journal of Research in Marketing 24 (4), 324–335.
Lasarov, W., Mai, R., de Frutos, N.G., Egea, J.M.O., Hoffmann, S., 2019. Counter-arguing as barriers to environmentally motivated consumption reduction: A multi-country study. International Journal of Research in Marketing 36 (2), 281–305.
Le Bel, J.L., Dubé, L., 1998. Understanding pleasures: Source, experience, and remembrances. In: Alba, W., Hutchinson, J.W. (Eds.), Adv*ances in Consumer Research*. Association for Consumer Research, Provo, UT, pp. 176–180.
Lemon, K.N., Verhoef, P.C., 2016. Understanding customer experience throughout the customer journey. Journal of Marketing 80 (6), 69–96.
Litt, A., Tormala, Z.L., 2010. Fragile enhancement of attitudes and intentions following difficult decisions. Journal of Consumer Research 37 (4), 584–598.

Loewenstein, G., 1987. Anticipation and the valuation of delayed consumption". The Economic Journal. 97 (387), 666–684.
Loewenstein, G., 1994. The psychology of curiosity: A review and reinterpretation. Psychological Bulletin. 116 (1), 75.
MacInnis, D.J., Price, L.L., 1987. The role of imagery in information processing: Review and extensions. Journal of Consumer Research. 13 (March), 473–491.
MacInnis, D.J., Price, L.L., 1990. An exploratory study of the effects of imagery processing and consumer experience on expectations and satisfaction. In: Goldberg, M.E.G., Pollay, R.W. (Eds.), Advances in consumer research. Association for Consumer Research, Provo, UT, pp. 41–47.
Menon, S., Soman, D., 2002. Managing the power of curiosity for effective web advertising strategies. Journal of Advertising 31 (3), 1–14.
Noseworthy, T.J., Di Muro, F., Murray, K.B., 2014. The role of arousal in congruity-based product evaluation. Journal of Consumer Research 41 (4), 1108–1126.
Nowlis, S.M., Mandel, N., Brown, D., 2004. The effect of a delay between choice and consumption on consumption enjoyment. Journal of Consumer Research 31 (December), 502–510.
Oliver, R.L., 1980. A cognitive model of the antecedents and consequences of satisfaction decisions. Journal of Marketing Research 17 (November), 460–469.
Petty, R.E., Ostrom, T.M., Brock, T.C., 2014. Historical foundations of the cognitive response approach to attitude and persuasion. In: Petty, R.E., Ostrom, T.M., Brock, T.C. (Eds.), Cognitive Responses in persuasion. Psychology Press, New York, pp. 5–30.
Riemer, H., Shavitt, S., Koo, M., Markus, H.R., 2014. Preferences don't have to be personal: Expanding attitude theorizing with a cross-cultural perspective. Psychological Review 121 (4), 619–648.
Rosch, E., 1987. Principles of categorization. In: Rosch, E., Lloyd, B.B. (Eds.), Cognition and categorization. Hillsdale, NJ, pp. 27–48.
Sela, A., Berger, J., Kim, J., 2017. How self-control shapes the meaning of choice. Journal of Consumer Research 44 (4), 724–737.
Shafir, E., Thaler, R.H., 2006. Invest now, drink later, spend never: On the mental accounting of delayed consumption. Journal of Economic Psychology 27 (5), 694–712.
Vichiengior, T., Ackermann, C.-L., Palmer, A., 2019. Consumer anticipation: Antecedents, processes and outcomes. Journal of Marketing Management 35 (1–2), 130–159.
Vichiengior, T., Ackermann, C.L., Palmer, A., 2023. Consumer anticipation as a performative experience. European Journal of Marketing 57 (11), 3005–3039.
Wegener, D.T., Clark, J.K., Petty, R.E., 2018. Cognitive and metacognitive processes in attitude formation and change. In: Albarracín, D., Johnson, B.T. (Eds.), The handbook of attitudes. Routledge, New York, pp. 291–332.
Wilson, T.D., Lindsey, S., Schooler, T.Y., 2000. A model of dual attitudes. Psychological Review 107 (1), 101–126.
Wu, L.-L., Lin, J.-Y., 2006. The quality of consumers' decision-making in the environment of e-commerce. Psychology & Marketing 23 (4), 297–311.
Zeithaml, V.A., Berry, L.L., Parasuraman, A., 1993. The nature and determinants of customer expectations of service. Journal of the academy of Marketing Science 21 (1), 1–12.
Zhang, J., Mao, E., 2016. From online motivations to ad clicks and to behavioral intentions: An empirical study of consumer response to social media advertising. Psychology & Marketing 33 (3), 155–164.