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Abstract

When Paula asked me to be the keynote speaker at this conference, I naturally wanted to pick a big, important topic that was relevant to consumer researchers, you, the audience. I am working on three big topics at the moment, between editions of the Rossiter and Percy textbook. One topic is marketing knowledge what it is and how we can test it. I have a large ARC grant for that one. A second topic is a new procedure for the measurement of marketing constructs—a replacement for the narrow Churchill procedure that everyone seems to follow. Some of you have seen working paper versions of this and I hope it will be published in a major marketing journal soon. The third topic, the one I have chosen, is certainly a big topic and one that has been on my mind for some time, and that is: which theoretical perspective is best for studying and doing research in consumer behaviour? The title refers to three forms of behaviourism—cognitive, emotional, and hard-core. This is deliberate, because I think we are all behaviourists in some form or other in that the dependent variable that we try to describe, explain and predict is the behaviour or behaviours of consumers. Most of us are also philosophically behaviourists, although there might be a few relativists, existentialists, and even just plain hedonists out there. However, no consumer researcher whom I know, with the single exception of Gordon Foxall in England, is a hard-core behaviourist, or what is called in psychology a radical behaviourist. Radical behaviourism denies the existence of mental events, such as attitudes, or at least refuses to accord them explanatory status. B. F. Skinner was of course the ultimate radical behaviourist, describing thinking, a main part of what we would now call cognition, in behavioural terms as "inner speech," as had John B. Watson earlier. This is to be distinguished from methodological behaviourism, which allows mental events but prefers the recording of observable behaviour, rather than, say, the elicitation of self-reports, as the way of studying them. It is a pity that we don't have more radical behaviourists among consumer researchers, because this perspective, as we shall see, has certain advantages, one of them parsimony, which is a refreshing change from the "kitchen sink" approach favoured by many cognitive behaviourists.

Keywords

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KEYNOTE ADDRESS

Cognitive, Emotional, and Hard-Core Behaviourism as Theoretical Paradigms for Consumer Behaviour

John R. Rossiter, University of Wollongong, Australia

When Paula asked me to be the keynote speaker at this conference, I naturally wanted to pick a big, important topic that was relevant to consumer researchers, you, the audience. I am working on three big topics at the moment, between editions of the Rossiter and Percy textbook. One topic is marketing knowledge—what it is and how we can test it. I have a large ARC grant for that one. A second topic is a new procedure for the measurement of marketing constructs—a replacement for the narrow Churchill procedure that everyone seems to follow. Some of you have seen working paper versions of this and I hope it will be published in a major marketing journal soon. The third topic, the one I have chosen, is certainly a big topic and one that has been on my mind for some time, and that is: which theoretical perspective is best for studying and doing research in consumer behaviour?

The title refers to three forms of behaviourism—cognitive, emotional, and hard-core. This is deliberate, because I think we are all behaviourists in some form or other in that the dependent variable that we try to describe, explain and predict is the behaviour or behaviours of consumers. Most of us are also philosophically behaviourists, although there might be a few relativists, existentialists, and even just plain hedonists out there. However, no consumer researcher whom I know, with the single exception of Gordon Foxall in England, is a *hard-core* behaviourist, or what is called in psychology a radical behaviourist. Radical behaviourism denies the existence of mental events, such as attitudes, or at least refuses to accord them explanatory status. B. F. Skinner was of course the ultimate radical behaviourist, describing thinking, a main part of what we would now call cognition, in behavioural terms as “inner speech,” as had John B. Watson earlier. This is to be distinguished from *methodological* behaviourism, which allows mental events but prefers the recording of observable behaviour, rather than, say, the elicitation of self-reports, as the way of studying them. It is a pity that we don't have more radical behaviourists among consumer researchers, because this perspective, as we shall see, has certain advantages, one of them parsimony, which is a refreshing change from the “kitchen sink” approach favoured by many cognitive behaviourists.

What I propose to do in this talk is point out unique advantages of each perspective—cognitive, emotional, and behaviourist—but also their limitations as a total perspective. I will then argue the necessity of a combined perspective for the theoretical paradigm of consumer behaviour and show how this might be achieved.

THE COGNITIVE PERSPECTIVE

By “cognitive” I mean beliefs of various kinds. Some may think that this is too narrow a label for cognition but I would argue, following Bertrand Russell and, later, psychologists such as Robert Wyer, that all perceptions, attitudes, evaluations and the like are instances of beliefs. Moreover, as Rossiter and Bellman, in a 1999 paper in the *Journal of Current Issues and Research in Advertising*, pointed out, there are basically just two kinds of beliefs, IS A beliefs, as in brand awareness responses, such as “Coke is a cola,” and HAS beliefs, as in brand attribute responses, such as “Coke has caffeine.” I will further assume that beliefs are conscious responses, not subconscious, although they do not have to be covertly spoken as Skinner's inner speech would require; they just have to be “thought.”

This emphasis on people's beliefs as the main cause of their actions has been favoured widely. It is, of course, by far the dominant approach in consumer behaviour, and one type of belief, the HAS belief of “attitude,” has overwhelmed all others as an explanatory variable. The beliefs approach is reflected in the popular viewpoint in marketing that what counts is “customers' perceptions, not reality.” The beliefs approach is also the dominant one in health behaviour research, an important and growing field of consumer behaviour. Most researchers in that field uses Strecher and Rosenstock's 1997 Health Belief Model, or a version of it. And, as an example of the absolutely current influence of the beliefs approach, one has only to glance through the special issue of *Marketing Letters* in 1999 devoted to consumer choice behaviour. Every author in that issue, and every article, takes a beliefs perspective as the theoretical paradigm.

The unique advantage of the beliefs approach is that it is so obviously correct. Beliefs are the main causal variable in explaining most consumer behaviours. If our explanation of consumer behaviour had to be limited to one sufficient cause (which of course it doesn't), beliefs would be that cause. Not only are a high-involvement consumer decisions dependent on beliefs but so too are low-involvement consumer decisions because consumers' simplifying heuristics are, after all, beliefs.

The main limitation of the beliefs approach is that the proportion of consumer behaviours that are determined by beliefs *alone* is quite small. There are even some consumer behaviours in which beliefs do not appear to play a role at all. We will meet an important class of these, discussed below in the behaviourist perspective, when considering the question of whether behaviour 1 can directly cause behaviour 2.

There is also an important criticism of the entire cognitive perspective that I would like to express here (although I am certainly not the first to voice this criticism). It is actually two somewhat related criticisms. In the first place, cognitive theorists are too eager to invent extra and superfluous mental constructs. Jim Bettman's classic 1979 book on consumer information processing provides many examples of this. Almost every observable consumer behaviour had to have a mental counterpart, such as a “sensory input analyser” or a “choice subroutine.” Cognitive theorists in psychology are not immune from this criticism; one has only to pick up any issue of the *Journal of Experimental Psychology* over the past 10 years to find examples of complex models in which the observed behaviour is “explained” by some newly postulated internal mechanism. Skinner has long ridiculed this tendency in cognitive theory, suggesting that there must be, also inside, a little man, or *homunculus*, to push all the buttons to make these mechanisms work! I detect a similar tendency in contemporary models of consumer behaviour to simply throw extra variables into the “black box” because it is so easy to do so.

This sets up the second criticism. It is easy to draw arrows between variables or, worse, between boxes of variables and think that you therefore have a causal theory. Cognitive theorists are notoriously bad at providing functional explanations of the relationships between the variables and many theorists, consumer researchers especially, do not seem to think it necessary to do so. Symptomatic of this is the popularity of the verb “impact” to describe the hypothesised effect of one variable upon another.

Sounds great, and sounds pretty serious, as in an automobile collision, but what does it mean? Impact is an effect, not a cause, despite the deplorable tendency to turn the word into an active verb, and it masks any effort to come up with a causal explanation. It is tempting to lay the blame for the decline in truly functional theories of the causes of behaviour to the anti-mechanistic stance taken against learning theories, which ruled in psychology for several decades, by the leaders of the "cognitive revolution," notably Miller, Galanter and Pribram (1960) in *Plans and the Structure of Behavior*. In learning theories, some of which were decidedly cognitive, such as those of Kurt Lewin and Edward Tolman, it was imperative for the theorist to trace through the causal mechanism or mechanisms—Pavlovian conditioning and operant learning would be two well-known examples—showing them not just in a diagram but carefully explaining and defending them in words. Most of the cognitive theorists in consumer behaviour, and that's most of us here, have lost this skill, this discipline, or in the case of the younger ones, never acquired it.

THE EMOTIONAL PERSPECTIVE

By "emotional" I mean feeling-states of various types, positive and negative, often triggered by an abrupt stimulus change, that can interfere with or enhance behaviour. Emotions probably cannot occur without cognition, so there will inevitably be some overlap with the cognitive perspective which was just discussed. How this overlap takes place, functionally, I will address in the combined perspective that concludes this talk. There is no doubt though, that emotions contribute substantially to the explanation of behaviour and that a purely cognitive account would not be adequate to explain many consumer behaviours.

Most importantly, emotions energise behaviour. They usually do this in the service of motives, as Rossiter and Percy have pointed out in their grid theory. In contrast, emotions that occur "on their own" usually lead simply to emotional thoughts or short-term emotional behaviours, sometimes rash ones, that logically have little to do with consumer behaviour, not even with "impulse" purchasing. However, the residual *arousal* from these emotions can have very big effects on consumer behaviours. I think the emotion-produced arousal has much bigger, and more frequent, effects on consumer behaviours in the real world than can ever be observed in our student-subject academic laboratories. Zillmann's excitation-transfer model, which was based on laboratory experiments before ethics committees were invented, and then followed up with real-world field experiments, supports this claim. The main feature of excitation-transfer theory is that arousal persists after the event that caused it, leading the person to attribute the feeling of excitement to the next event, and thus to artificially energise it. For instance, Zillmann demonstrated that intercourse among couples who had that day or evening attended a sporting event, such as a football game or an ice-hockey game, was significantly more likely to take place if the teams' scores were close rather than one-sided and boring. In a neat "crossover" field experiment, he further showed that aggressive behaviour is more likely after watching an erotic movie and even after simply watching an exciting one. (He was careful in these experiments to select non-aggressive erotic movie sequences and scenes from action movies that were non-violent, such as James Bond-type daredevil stunts or car chases). Car chases are not so far removed from what happens on Sydney roads every day, including on the way to the supermarket. Reportedly, people are feeling increased stress from all sources. They often go shopping during or after the stressful event, and often to make major purchases. It is pretty likely that residual arousal changes the normal "rationality" that would be brought to these decisions and

perhaps makes the purchase more likely. These are serious types of impulse purchases!

Anyway, I think you can see from this example the unique contribution of the emotional perspective. Essentially, it forces us to focus on other factors besides awareness, beliefs, and attitudes that influence consumer decisions. These "other factors" are most likely to be emotions and motivation. The emotional perspective takes us out of laboratory or at least illuminates the limited environment of laboratory experiments.

Main problem with the emotional perspective is that academic researchers, and practitioners, especially advertising practitioners, have too readily and too sloppily embraced it. I should give some examples of this.

One example is the aggressive advocacy by advertising practitioners, advertising agencies particularly, of "emotional" ads as being obviously superior to "rational" ads. Listening to these people, it would appear that if your ad doesn't "bond" with every individual it is aimed at, then the campaign will fail. I think they mean slice-of-life TV commercials, not emotional ads. Slice-of-life commercials are the type that usually require huge production budgets. All ads have an emotional component. I would argue, for example, that a three-line classified ad for a used car can generate a lot of emotion if you are in the market for a used car and are therefore reading the ad. Accordingly to emotional advertising advocates, a purely emotional ad would presumably be the best of all and it would have to communicate without any cognitive content. The closest thing I have seen to this would be Lemon Ruski's one-second flash ads; you may have seen these on avant-garde TV programs such as *Sex and the City*. Ironically, these ads have a cognitive strategy behind them (specifically, the intended formation of beliefs, such as that Lemon Ruski is suitable for nightclubs, is Russian, is for drinkers of both genders, and so forth). However, a recent experiment that I conducted with these one-second ads suggests that they may only work via classical conditioning, that is, by affect transfer. Very few ads are as cognitively vacuous as these.

Academic researchers working in the "emotional" area have neglected to understand the dynamic nature of emotional states. When rating a TV commercial, for instance, researchers provide consumers with a list of the emotional adjectives that consumers can tick to represent emotions that they might have felt while watching and listening to the commercial. The inadequacy of this approach is that the order—the sequence—in which the emotions were experienced is critical. In a problem-solution commercial, to give an example of just one type of advertising format, it is important that the consumer experiences the negative emotion first, strongly (when the problem is dramatised), followed by a mild positive emotion (in conjunction with the solution demonstrated for the advertised product). This is a classic negative reinforcement or, more specifically, escape conditioning sequence, and it fits Rossiter and Percy's problem-removal motive. To give another example, this time employing positive emotion, the best emotional sequence for a product advertised on the basis of the sensory gratification motive is a neutral start, then a build-up to a crescendo finish; it is extremely important that there not be any emotional flattening at the end of the commercial as can happen with the insertion of a corporate comment or a dealer tag (see Baumgartner et al.'s study in the *Journal of Marketing Research*, 1997). If you ask good copywriters what they try to do in a TV commercial, or any form of ad, as did Art Kover a few years ago in an article in the *Journal of Consumer Research*, 1995, copywriters will say, in their own words, that they try to achieve an emotion shift. Academic researchers working in advertising, and also many advertising pre-test

practitioners, seem to miss this entirely, by having consumers rate the ad on isolated emotional adjectives. Emotions are inherently dynamic phenomena, and they often reflect the operation of an underlying motive. Our current models of emotions in marketing are far too static, and emotions are seen as almost trivial or peripheral affect rather than as drivers or energisers of behaviour.

THE BEHAVIOURIST PERSPECTIVE

By "behaviourist" I mean, in this section of the paper, hard-core, radical, behaviourism—with strict emphasis on external stimuli and external, observable responses. Nothing "inside" the consumer is allowed—no perceptions, no attitudes, no intentions—just measurable stimuli "out there" in the consumer's environment and measurable overt responses such as purchase. As I said, few consumer behaviour theorists—probably only one, Gordon Foxall—is a radical behaviourist, and even he may be coming around to my view, the mediationist S-R view, which I will outline in the final section of this talk.

The unique advantage of radical behaviourism is, of course, parsimony. B.F. Skinner's theoretical explanation of behaviour, apart from innately-released behaviour, has just three concepts: a discriminative stimulus, a response, and a consequential stimulus in the form of a reinforcer or punisher. There's a scary demonstration of overspending induced by credit cards, a study by Richard Feinberg published in the *Journal of Consumer Research* in 1986. This is recognisable as the operant learning or operant conditioning paradigm. It may be noted that classical conditioning also has essentially the same three concepts: the CS or "signalling" stimulus, the response or CR, and a reinforcing or punishing stimulus, the US, that, in classical conditioning, occurs *before* the response. The US elicits an unconditional response, the UR, a variant of which becomes the conditioned response. Both operant conditioning and classical conditioning are extremely parsimonious as theories go.

I would like to take a few minutes to examine an apparently even more parsimonious theory: that behaviour 1 can directly cause behaviour 2, that is, that response 1 can cause response 2 without a stimulus intervening. Those familiar with learning theory will know that the fundamental unit is an S-R or R-S connection; you can have chains of S-Rs but not two Ss or two Rs occurring together, such as one response causing another response. However, in an important study, which was in fact a meta-analysis of a large number of previous studies, Ouellette and Wood, in the *Psychological Review*, 1998, found that the best predictor of behaviours that occur daily or weekly in much the same context was the past frequency of the behaviour, not intention to perform the behaviour. In contrast, the best predictor of infrequent behaviours that occur every six months or so in varying contexts was indeed behavioural intention, with past behaviour playing very little role. The obviously important take-away from the study is that it identifies the conditions under which intentions are not a good predictor of future behaviour. This has been an issue that has perplexed consumer researchers and indeed market researchers for a long time. However, the other implication of the study is just as intriguing: how can past behaviour directly cause future behaviour? In their analysis, the authors ruled out attitude and also attitude accessibility as the intervening cause. That is, for regular, frequently-performed behaviours, the next instance of that behaviour occurs without recourse to attitude and without forming an intention to perform the behaviour—it just occurs "automatically." Nevertheless, and herein lies the explanation, I think, there *is* one event that occurs between the past behaviour and the next occurrence of the behaviour, and that is the stimulus context. All the regular behaviours take place in much the same context, and this context is, of course, a stimulus.

Thus, I would argue, we have not broken the stimulus-response chain. This is not two responses occurring sequentially, one being the cause of the other. In fact, the authors label the past behaviour effect as "habit," and a learning theorists would know that habit carries both a stimulus subscript and a response subscript. It is an S-R concept, not simply an R concept.

There are two main reasons why the hard-core behaviourist perspective has not been influential in consumer research. Whereas it may be true that the explanation of an individual's current behaviour can be found in his or her learning or conditioning history, this history, for consumers, unlike, say, for a pigeon or a rat (or Skinner's daughter!) raised in a laboratory, is simply impractical or impossible to observe. Note, for instance, that the studies reviewed by Ouellette and Wood asked people to *report* the frequency of their past behaviour—they did not actually observe those past behaviours. Similarly, in consumer research, it is much easier to ask people about their current attitude than to observe and measure all the experiences that may have led to it and then infer what that attitude must be.

A second problem with the behaviourist approach, not unrelated to the first, is that different people so often have different responses to the same stimulus situation. For instance, as Rich Yalch reported in a study in the *Journal of Consumer Research* in 1978, obese and normal-weight people respond differently to food stimuli, with obese people responding positively if they have eaten recently and normal-weight people responding neutrally or even negatively; so, if you want to resist impulse purchases when food shopping, watch when you eat! Pokemon card characters that fascinate children are pretty boring and meaningless to most adults. Clothing styles that interest women are rather uninteresting to (most) men. And so it goes with the many response differences across cultures as well. One can appeal to differential learning histories in an attempt to explain these differences, although it is likely that biology also plays a part, but it is much easier to posit internal events such as perceptions (the beliefs perspective) to account for them.

In the latter connection, even though internal events seem conceptually useful and certainly efficient, there is a salutary caution of Occam's razor that the behaviourist perspective imposes: and that is to not invent constructs beyond necessity. We want explanatory models containing the minimum number of constructs to do the job.

COMBINED PERSPECTIVE: S-R MEDIATIONIST

My own perspective, and the one I think that is most valid for consumer behaviour, is the *S-R mediationist* perspective (see especially Charles Osgood's version, based on Hull-Spence behaviour theory). Most consumer behaviour theorists, judging from their published work, are "would-be" mediationists, in that they allow mental events to intervene between external stimuli and observable responses. However, they are not *S-R* mediationists. It is not enough to put variables in the black box and draw boxes around them and perhaps arrows between them. What is needed is an operational specification of the functional relationship between the variables. (Interestingly, the best way of determining the nature of the functional relationship is through qualitative research, but that's another talk in itself.) In *S-R* mediationism, the basic functional unit is $S \rightarrow r_g \rightarrow s_g \rightarrow R$. The little r_g and the little s_g are internal events. The little r_g is a fractional antedating goal response. It is an internal representation of the final response, the big R. The fractional antedating goal response can be an attention response, an emotional response, a perception or belief response, and so forth (thus this model incorporates the beliefs perspective and the

emotional perspective that I talked about earlier). The little s_g is the really neat mechanism. It is a response-produced stimulus, produced automatically by the r_g . This might be, for instance, a sensation, an image, or a thought. It is this second, internal stimulus that serves as the discriminative stimulus, in the operant paradigm, or the signalling stimulus, in the Pavlovian paradigm, for the external response (R) to be made. There is a functional relationship identifiable between each stimulus and response in the chain, and the model allows us to explain how different individuals can have different external responses to the same external stimulus. That is, people learn different little r_g 's to the external stimulus; these have their own internal stimulus consequences, the little s_g 's, which are also correspondingly different; and thereby different external responses are observed.

A much more elaborate version of S-R mediationist theory is required to account for most types of consumer behaviour. Essentially, the little internal r 's and s 's are elaborated into several constructs or intervening variables. A powerful and parsimonious yet comprehensive model can be derived from Hull-Spence behaviour theory. It is totally functional; it allows for beliefs and emotions; and it still remains true to the behaviourist, though not the hard-core behaviourist, aim in that it is an S-R theory.

A simplified equation from Hull-Spence theory is $E=(D+K)H$, where E is behaviour potential, D is drive, K is incentive, and H is habit strength, the learned internal response in the situation (an r_g in effect). The important aspect of this model, which differs from the outdated versions of the original Hullian model that one sometimes sees in consumer behaviour textbooks, is the additive term ($D+K$). This says that learned habits (response tendencies) can be energised either by a preexisting drive state, such as hunger or, more cognitively, need for achievement, or with no drive operating but when an incentive is presented. This is why, to give a simple example, a chocolate éclair looks tempting even when you're not hungry. It is actually a very clever way to account for a phenomenon that was a big dilemma for learning theorists, that of latent learning. How could, for instance, a satiated rat learn a maze, if the normal food or water reinforcement wasn't working? Yet they do learn. There is enough aversion in the maze to provide the drive function (the rat wants to get out). This causes exploratory behaviour without reinforcement. When the same rat is put back in the maze, this time hungry, it will run the maze speedily and correctly, showing that it did indeed learn the habit on the earlier occasion. This type of experiment demonstrates that reinforcement is not necessary for learning, which greatly pleased the cognitive theorists, but on the other hand it rapidly improves performance, which I think fits our observations of work behaviour as well as consumer behaviour.

The full version of the Hull-Spence model has several other internal constructs (not too many, as we want it to remain parsimonious). These constructs were behind the communication effects that were proposed by Rossiter and Percy, which have been quite widely adopted. There are five of these. Category need corresponds to the Hullian drive construct, D . Brand awareness corresponds to a construct called stimulus intensity, S . Brand attitude corresponds to habit strength, H . Brand purchase intention corresponds approximately to incentive motivation, K . And purchase facilitation corresponds to (the absence of) conditioned inhibition, I , which subtracts from drive.

The details of particular S-R mediationist models, and particular versions can be built, are less important than the discipline that they bring to our thinking about how to explain and predict consumer behaviour. They do two main things, in summary. Firstly, they permit a combined account of the causality of consumer behaviour with both cognitive and emotional explanatory variables (for

example, Zillmann's excitation-transfer theory that I talked about is based on the generalised drive variable, D ; and cognitive response theory, originated by the Ohio State psychologists, then made famous by Petty and Cacioppo, and amazingly invented again without attribution by the research company Research International, who patented the name, is based on little r_g , the fractional antecedent goal response). Secondly, S-R mediationist models force us to become functional theorists rather than wishy-washy box and arrow or correlational theorists that the hard sciences look down upon. I am hopeful that we can raise our game.

Thank you very much.