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## CONSUMER BEHAVIOUR ANALYSIS:

### I. THE BEHAVIOURAL PERSPECTIVE MODEL

Gordon R. Foxall<sup>1</sup> *Cardiff University*

Jorge M. Oliveira-Castro *Universidade de Brasília*

Victoria K. James *Cardiff University*

Teresa C. Schrezenmaier *Prophet*

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<sup>1</sup> Please address correspondence to Gordon Foxall at Cardiff Business School, Cardiff University, Aberconway Building, Colum Drive, Cardiff CF10 3EU, Wales, UK (email: [foxall@cardiff.ac.uk](mailto:foxall@cardiff.ac.uk)) This paper is based on an earlier version which appeared in *Psicologia: Organizações e Trabalho* and is used by permission. It also forms an introduction to the authors' *Behavioural Economics of Brand Choice* (Palgrave Macmillan, 2007).

### Abstract

Cognitive theories have dominated the field of consumer behaviour for the last decades. However, the observed lack of consistency between attitudes and behaviour has suggested the need of investigating more thoroughly situational and behavioural variables. Consumer behaviour analysis can be viewed as an alternative theoretical approach that emphasizes situational variables and measures of behaviour. Within consumer behaviour analysis, the Behavioural Perspective Model (BPM) interprets consumer behaviour as occurring at the intersection of the individual's learning history and the consumer setting, which signals utilitarian and informational consequences associated with consumption-related responses. Utilitarian consequences are mediated by the product or service and are related to its functional benefits. Informational consequences are social, mediated by other people, and are related to feedback upon consumers' behaviour, such as social status and prestige. In the present paper, as an example of the type of research inspired by the BPM, investigations on consumers' patterns of brand choice are described, which have been able to identify, among other things, how consumers' brand repertoires are formed and how brands are selected within those repertoires. Taken together, results indicate that the BPM offers a useful conceptual framework for interpreting, investigating and explaining consumer behaviour.

**Key words:** Consumer behaviour, brand choice, marketing, behaviour analysis, buying behaviour.

The study of consumer behaviour has been given increasing attention in the context of the expansion of the study of marketing and marketing research over the past decades (e.g. Kotler, Armstrong, Saunders & Wong, 2001; Jobber, 2004; Keith, 1960). Today, consumer researchers account for almost half of all marketing faculty in business schools (Simonson, Carmon, Dhar, Drolet, & Nowlis, 2001) and is a growing area of research in other disciplines such as sociology, communication and anthropology (e.g., Miller, 1995). One of the reasons for the interest in the subject has been that markets and companies have been growing in size and hence there is no longer a great deal of proximity between sellers and buyers. Whereas selling for the most basic commodities like food used to be an everyday social experience, it largely has become an anonymous process with minimal personal interaction, possibly even without any face to face contact when shopping over the internet. Most purchases for food items and other products, at least in urbanized areas, are done in supermarkets where there is little interaction between staff and customers.

However, despite the rapid growth and development in the study of consumer behaviour, there are considerable disagreements about what consumer research is, what its objectives are, and how it differs from other disciplines (Simonson et al., 2001). Consequently, the field lacks a universally-accepted theoretical framework or model (Foxall, 2005). The disciplines of economics and psychology (especially cognitive and social) have traditionally provided the theoretical foundations of consumer behaviour and have lent their research towards more cognitive approaches (Jacoby, Johar & Morrin, 1998). Although several theoretical approaches have influenced consumer research, such as behaviourism, physiological psychology, psychoanalytic psychology, cognitive psychology and interpretative psychology (cf. O'Shaughnessy, 1992), social-cognitive theories and models have dominated the field with an increasing emphasis on cognition (e.g., decision making) rather than on social phenomena (e.g., reference groups) (cf. Simonson et al., 2001). Hence, many consumer choice models portray consumer behaviour as a process where thinking,

evaluating and deciding are prevailing (e.g., Engel, Blackwell, & Miniard, 1995; Howard & Sheth, 1969). Although the importance of emotions in buying behaviour has also received a growing share of attention in recent years (e.g. O'Shaughnessy & O'Shaughnessy, 2002; Bitner, 1992; Dawson, Bloch & Ridgway, 1990; Donovan & Rossiter, 1982), the large majority of studies are designed to investigate consumer decision-making processes, inspired by cognitive, information processing, theories (see Jacoby et al., 1998, and Simonson et al., 2001, for comprehensive reviews).

As an example, it has been widely assumed that measuring attitudes and beliefs will enable marketers to predict consumers' behaviour. The Theory of Reasoned Action (Ajzen & Fishbein, 1980) and the Theory of Planned Behaviour (Ajzen, 1985) have been very influential in this respect and have been used extensively to demonstrate the link between attitudes and action. According to this type of theory, psychological constructs, such as attitudes and beliefs, which are formed through direct or indirect experience with different object (e.g., a product's attribute), would influence the person's intention to act in relation to the object, which in turn would influence the person's behaviour (e.g., buying the product). Such constructs (e.g., attitudes) have been usually measured on the basis of consumers' responses to questionnaires, the results of which are then used to predict consumers' behaviour towards the object (e.g., purchasing). However, it has been repeatedly pointed out by scholars that this relationship is in fact much weaker than assumed (e.g. Wicker, 1969; Foxall 1997). Although such criticisms had some impact on the adoption of these theories, which declined in use afterwards (Simonson et al., 2001), the most commonly adopted solution to these weak relations between attitude and behaviour were to amend slightly the theory or the methodology. One way of doing this was to propose, for example, dual-process theories, according to which consistent relations between attitude and behaviour need not always occur for they would depend on other factors, such as level of consumer's involvement (e.g., Chaiken, 1980; Petty & Cacioppo, 1983) or level of correspondence between measures of attitude and measures of behaviour (e.g., Kraus, 1995). Since then an enormous amount of studies have attempted to identify the variables that influence attitude-behaviour consistency, which do not propose any substantial change in the basic theoretical and conceptual framework of the research and, consequently, multiply the number of psychological constructs related to the phenomena of interest (cf. Glasman & Albarracin, 2006). Considering that the field is very akin to marketing where prediction of what consumers will do is of paramount importance, empirical results showing inconsistency between attitudes and behaviour may discourage the adoption of cognitive models to explain consumer behaviour, or, at least, encourage the search for alternative types of explanation. In fact, a closer examination of the development of this tradition of research indicates that when more emphasis is given to possible effects of situational variables and to measures of behaviour, the level of prediction of behaviour increases substantially (cf. Foxall, 1997). These findings suggest that approaches of consumer behaviour that give more emphasis to situational variables and behavioural measures might be promising alternatives to the prevailing cognitive theories.

There is yet another reason to look for epistemologically different approaches of consumer behaviour, namely, the excessive dominance of the social-cognitive way of theorizing. According to some epistemologists, scientific development of a field depends on diversity of ideas, on opposing, incompatible views strongly held by different research groups. According to this position, the overwhelming predominance of one single theoretical perspective may impoverish the intellectual milieu and hinder scientific development of the field (cf. Feyerabend, 1993; for more details of this ideas applied to consumer behaviour and marketing, see Foxall, 1997).

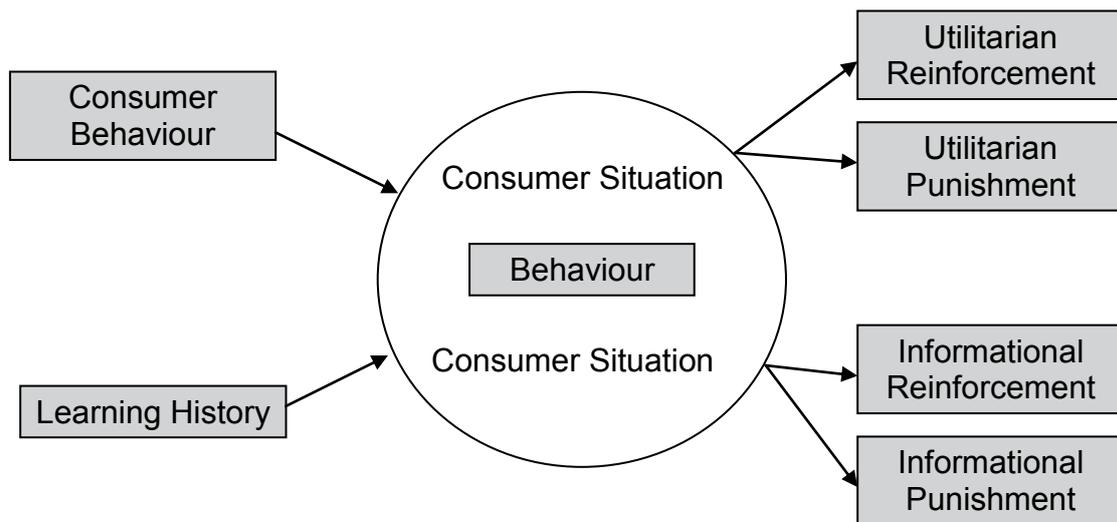
### Consumer Behaviour Analysis

An alternative approach to consumer behaviour that emphasizes the influence of situational variables and direct measures of behaviour might be found in behavioural psychology, particularly in Skinner's operant theory (cf. Skinner, 1953, 1969, 1974). Behaviour analysis, as this field is usually known, has developed a coherent and systematic set of theoretical concepts, derived from a long tradition of experimental and applied research. It has always emphasized the role of situational variables in the determination of behaviour, paying particular attention to events that antecede and follow individuals' responding, and defended the adoption of direct measures of behaviour, with little use of hypothetical constructs in their theories. One of the central concepts in operant theory is the three-term contingency ( $S^D - R - S^R$ ), which specifies what responses (R) are reinforced ( $S^R$ , or punished) in the presence of what situations or discriminative stimuli ( $S^D$ ). According to the three-term contingency, reinforcing and punishing consequences of responding increase and decrease, respectively, its future occurrence probability in similar situations. Events in the situation would acquire discriminative (or inhibiting) functions by signalling the probability and magnitude of reinforcement that would be contingent upon the emission of a given response. This conceptual framework has been used to analyse and interpret a very broad range of phenomena, including, for example, learning, verbal behaviour, clinical interventions, politics, and religion (e.g., Skinner, 1953, 1957). Behaviour analysis has also developed a strong tradition of experimental research on choice and consumption that could enrich the investigation of consumer behaviour. The field has developed systematic theoretical treatments of choice and consumption, based on results from laboratory experiments and institutional interventions, such as the matching law (Herrnstein, 1970) and laboratory analysis of demand (Hursh, 1984), which are now part of the interdisciplinary area usually known as *behavioural economics*.

Despite the fact that behaviour analysis has been heavily criticized since the cognitive revolution entered its ascendancy from the 1960s onwards, the characteristics mentioned above would in themselves justify the exploration of its usefulness in the field of consumer behaviour. Moreover, recent research developments in behaviour analysis have addressed some of the most common criticisms directed to it. Behaviour analysis was much criticized for its excessive use of animal experiments to the exclusion of investigating complex, typically human phenomena. In the last decades behaviour analysis has come to treat subject areas that lie at the very heart of cognitive psychology, among them thinking, decision making and language. The distinction between behaviour that is simply the result of the individual's direct contact with the environment ("contingency-shaped" behaviour) and that which is the result of verbal interventions from others or from the individual him/herself ("rule-governed" behaviour) is particularly relevant here. The advent of investigations of stimulus equivalence, and naming, to give two examples, have transformed behaviour analysis from a school of psychology that was once easily disparaged to an exciting intellectual and practical exploration of human complexity.

In order to integrate consumer research with behavioural principles, Foxall (1990, 1997) developed a model which has, since its emergence, proved a useful framework: the Behavioural Perspective Model (BPM). Foxall (2002, p.20) argues that the BPM is a "means of summarizing empirical regularities", in the same way as Skinner has been fundamentally inductive in their approach. Foxall (1998, p.337) summarizes the model as portraying "the rate at which consumer behaviours take place as a function of the relative openness of the setting in which they occur and the informational and utilitarian reinforcement available or promised by the setting".

The BPM represents an adaptation of the three-term contingency and locates consumer behaviour at the intersection of the consumer's learning history and the current behaviour setting, that is, at the consumer situation. Thus, the BPM provides an environmental perspective to consumer behaviour and hence includes situational influences into the analysis of purchase and consumption. In behavioural terms, consumer behaviour, the dependent variable, is a function of the individual's learning history related to a given type of consumption, the behaviour setting and the consequences the behaviour produces. Figure 1 combines all these variables to provide a general picture of the Behavioural Perspective Model.



**Figure 1: The Behavioural Perspective Model of Consumer Choice** (Adapted from Foxall, 1996)

The behaviour setting is defined as the social and physical environment in which the consumer is exposed to stimuli signalling a choice situation. A doctor surgery's waiting area, a supermarket or an open-air festival in a public park are all examples of behaviour settings, varying in their scope and capacity of evoking consumer responses. This scope translates into a continuum between an open and a closed setting, allowing consumers different degrees of control over their behaviour. The more open setting, like for instance the park festival, grants consumers to behave in a relatively free way with the option to wander around, talk, listen to music, eat, drink, smoke or even leave the scene. Towards the other end of the spectrum consumers are less free in their choice and are indeed expected to conform to a pattern of behaviour set by someone else. Schwartz and Lacey (1988, p. 40) describe a closed setting as where "only a few reinforcers are available, and usually, only one has special salience; the experimenter (behaviour modifier) has control over conditions of deprivation and access to reinforcers; there is only one, or at most a few, available means to the reinforcers; the performance of clearly defined, specific tasks is reinforced; [...]; the contingencies of reinforcement are imposed and varied by agents not themselves being subjected to the contingencies; and there are no effective alternatives to being in the situation".

For example, according to society's norms, patients in a surgery's waiting area are expected to sit quietly and wait in a patient manner until they are called for their treatment. Of course, they are free to read magazines, possibly chat with other waiting patients or walk out of the surgery if the waiting time is considered too long (in which case they will not receive treatment).

The other element of the consumer situation, the learning history, refers to the similar or related experiences a consumer has had before encountering the current behaviour setting. This previous experience helps the consumer to interpret the behaviour setting accurately by predicting the likely consequences her behaviour in this situation will incur. In other words, the otherwise neutral stimuli of the behaviour setting are transformed into discriminative stimuli, indicating the availability of three types of consequences contingent upon the consumer's behaviour. First, utilitarian reinforcement refers to the direct and functional benefits the purchase and/or consumption of a product (or service) involves. These are benefits mediated by the product or service. Secondly, informational reinforcement circumscribes the more indirect and symbolic consequences of behaviour, such as social consequences (e.g., social status and self-esteem). These are consequences mediated by other people and function as feedback to the consumer as how well he or she is performing as a consumer. The third type of consequence, costs to the consumer in monetary and non-monetary form, is the aversive outcome of behaviour.

As an example, the utilitarian consequence of buying a car is the benefit of owning and using the products afterwards, in a purely functional and hedonic sense, for it gives, for instance, door-to-door transportation, with minimum weather exposure and free time schedule. Conversely, the informational reinforcement of owning a car might be related to the social status and admiration of others, particularly if it is a prestigious and expensive car make (e.g., a Bentley or Mercedes). The aversive but unavoidable outcome of shopping is the surrendering of money at the cash point but also the time spent searching for an item. Foxall (1990) argues that all products or service contain an element of utilitarian, informational and aversive reinforcement. Additionally, like the behavioural scope, the reinforcement patterns of the BPM are arrayed as a continuum from high to low utilitarian reinforcement and from high to low informational reinforcement.

Thus, the probability of purchase and consumption depends on the relative weight of the reinforcing and aversive consequences that are signalled by the elements in the consumer behaviour setting (cf. Alhadeff, 1982). According to this view, product, brand, and service attributes, including price, may be interpreted as programmed reinforcing (i.e., benefits) and aversive events. Manufacturers, retailers, and brand managers direct all their efforts to modifying and shaping the reinforcing and aversive properties of the attributes of their products and brands, so as to make them more attractive to the consumer. Branding, promotional activities, new product development and product selection are just a few options open to the supply side. These endeavours may or may not work, and this is why they ought to be interpreted as programmed reinforcing (or aversive) events rather than actual reinforcing (or aversive) events. According to this theoretical perspective, one of the main tasks in marketing is to identify what events can function as benefits (or aversive stimuli), to what extent, for what consumers, and under what circumstances (Foxall, 1992).

This theoretical framework has adopted to investigate a wide range of phenomena, such as consumer brand choice (Foxall & James, 2001, 2003; Foxall, Oliveira-Castro & Schrezenmaier, 2004; Oliveira-Castro, Ferreira, Foxall & Schrezenmaier, 2005; Oliveira-Castro, Foxall, & Schrezenmaier, 2005, 2006; Foxall & Schrezenmaier, 2003), consumers reactions to shopping environments (Foxall & Greenley, 1999; Foxall & Yani-de-Soriano, 2005; Soriano & Foxall 2002), social responsible consumption (Davies, Foxall, & Pallister, 2002; Foxall, Oliveira-Castro, James, Yani-de-Soriano, & Sigurdsson, 2006), product search behaviour (Oliveira-Castro, 2003), among others. The model has also served as inspiration to philosophical research that attempts to reconcile, in an epistemologically coherent way, behaviourism and cognitive psychology (Foxall, 2004, 2005). As it is not possible to explore all these topics within the present paper, some of the research that has been carried out on

brand choice is presented in Part II, as an illustration of the kind of investigation based on this theoretical approach to consumer behaviour.

### References

- Alhadeff, D. A. (1982). *Microeconomics and Human Behaviour: Toward a New Synthesis of Economics and Psychology*. Berkeley, CA: University of California Press.
- Ajzen, I. (1985). "From intentions to actions: a theory of planned behaviour", In: Kuhl, J. & Beckman, J. (Eds.), *Action Control: From cognition to behaviour*, Berlin: Springer Verlag, pp. 11-39.
- Ajzen, I. & Fishbein, M. (1980). *Understanding attitudes and predicting social behaviour*, Englewood Cliffs, NJ: Prentice Hall.
- Bitner, M. J. (1992). "Servicescapes: the impact of physical surroundings on customers and employees", *Journal of Marketing*, 56 (2), pp. 57-71.
- Chaiken, S. (1980). Heuristic versus systematic information processing and the use of source versus message cues in persuasion. *Journal of Personality and Social Psychology*, 39, 752-766.
- Dawson, S., Bloch, P. H. & Ridgway, N.M. (1990). "Shopping motives, emotional states, and retail outlets", *Journal of Retailing*, 66 (4), pp. 408-427.
- Engel, J. F., Blackwell, R. D., & Miniard, P. W. (1995). *Consumer Behaviour*, 8<sup>th</sup> Ed. Chicago: Dryden Press.
- Donovan, R.J. & Rossiter, J. R. (1982). "Store atmosphere: an environmental psychology approach", *Journal of Retailing*, 58 (1), pp. 34-57.
- Feyerabend, P. (1993). *Against Method*. London and New York: Verso.
- Foxall, G. R. (1990) *Consumer Psychology in Behavioural Perspective*. London and New York: Routledge.
- Foxall, G. R. (1992). The Behavioural Perspective Model of purchase and consumption: from consumer theory to marketing practice. *Journal of the Academy of Marketing Science*, 20, 189-198.
- Foxall, G. R. (1996). *Consumers in Context: The BPM Research Program*. London and New York: International Thomson.
- Foxall, G. R. (1997). *Marketing Psychology: The Paradigm in the Wings*. London: Macmillan.
- Foxall, G. R. (1998). Radical Behaviorist Interpretation: generating and Evaluating an Account of Consumer Behaviour. *The Behaviour Analyst*, 21, 321-354.
- Foxall, G. R. (Ed.) (2002) *Consumer Behaviour Analysis: Critical Perspectives*. London and New York: Routledge.
- Foxall, G. R. (2004). *Context and Cognition: Interpreting Complex Behaviour*. Reno, NV: Context Press.
- Foxall, G. R. (2005) *Understanding Consumer Choice* London and New York: Palgrave Macmillan.
- Foxall, G. R. & Greenley, G. E. (1999). Consumers' emotional responses to service environments. *Journal of Business Research*, 46, 149-158.
- Foxall, G. R., & James, V. K. (2001). The behavioural basis of consumer choice: A preliminary analysis. *European Journal of Behaviour Analysis*, 2, 209-220.
- Foxall, G. R. & James, V. K. (2003). The behavioural ecology of brand choice: how and what do consumers maximise? *Psychology and marketing*, 20, 811-836.
- Foxall, G. R., Oliveira-Castro, J. M., James, V. K., Yani-de-Soriano, M. M., & Sigurdsson, V. (2006). *Consumer behaviour analysis and social marketing: The*

- case of environmental conservation. *Behaviour and Social Issues*, 15, 101-124.
- Foxall, G. R., Oliveira-Castro, J. M., & Schrezenmaier, T. C. (2004). The behavioural economics of consumer brand choice: Patterns of reinforcement and utility maximization. *Behavioural Processes*, 66 (3), 235-260.
- Foxall, G. R., & Schrezenmaier, T. C. (2003). The behavioural economics of consumer brand choice: Establishing a methodology. *Journal of Economic Psychology*, 24, 675-695.
- Foxall, G. R. & Yani-de-Soriano, M. M. (2005). Situational influences on consumers' attitudes and behaviour. *Journal of Business Research*, 58, 518-525.
- Glasman, L. R. & Albarracín, D. (2006). Forming attitudes that predict future behaviour: A meta-analysis of the attitude-behaviour relation. *Psychological Bulletin*, 132, 778-822.
- Herrnstein, R. J. (1970). On the law of effect. *Journal of the Experimental Analysis of Behaviour*, 13, 243-266.
- Howard, J. A. & Sheth, J. N. (1969). *The theory of buyer behaviour*. New York, NY: John Wiley & Sons.
- Hursh, S. R. (1984). Behavioural economics. *Journal of the Experimental Analysis of Behaviour*, 42, 435-452.
- Jacoby, J., Johar, G. V. & Morrin, M. (1998). Consumer behaviour: A quadrennium. *Annual Review of Psychology*, 49, 319-344.
- Jobber, D. (2004). *Principles and Practice of Marketing*, 4<sup>th</sup> Edition, London: McGraw-Hill
- Keith, R.J. (1960). "The marketing revolution", *Journal of Marketing*, 24 (January), pp. 35-38.
- Kotler, P., Armstrong, G., Saunders, J. & Wong, V. (2001). *Principles of Marketing*, 3<sup>rd</sup> European Edition, Harlow: Prentice Hall Europe.
- Kraus, S. J. (1995). Attitudes and the prediction of behaviour: A meta-analysis of the empirical literature. *Journal of Personality and Social Psychology Bulletin*, 21, 58-75.
- Miller, D. (1995). Consumption and commodities. *Annual Review of Anthropology*, 24, 141-161.
- Oliveira-Castro, J. M. (2003). Effects of base price upon search behaviour of consumers in a supermarket: An operant analysis. *Journal of Economic Psychology*, 24 (5), 637-652.
- Oliveira-Castro, J. M., Ferreira, D. C. S., Foxall, G. R. & Schrezenmaier, T. C. (2005). Dynamics of repeat buying for packaged food products. *Journal of Marketing Management*, 21, 37-61.
- Oliveira-Castro, J. M., Foxall, G. R., & Schrezenmaier, T. C. (2005). Patterns of consumer response to retail price differentials. *Service Industries Journal*, 25, 1-27.
- Oliveira-Castro, J. M., Foxall, G. R., & Schrezenmaier, T. C. (2006). Consumer brand choice: Individual and group analyses of demand elasticity. *Journal of the Experimental Analysis of Behavior*, 85 (2), 147-166.
- O'Shaughnessy, J. (1992) *Explaining buyer behaviour: Central concepts and philosophy of science issues*, New York: Oxford University Press.
- O'Shaughnessy, J. & O'Shaughnessy, N.J. (2002). *The Marketing Power of Emotion*, New York: Oxford University Press.
- Petty, R. E., & Cacioppo, J. T. (1983). Central and peripheral routes to persuasion: Application to advertising. In L. Percy and A. G. Woodside, *Advertising and Consumer Psychology*. Lexington: Lexington Books.
- Schwartz, B. & Lacey, H. (1988). What Applied Studies of Human Operant Conditioning Tell Us about Humans and About Operant Conditioning. In G. Davey & C. Cullen (eds.) *Human Operant Conditioning and Behaviour Modification*, pp 27-42. Chichester: John Wiley & Sons.
- Simonson, I., Carmon, Z., Dhar, R., Drolet, A. & Nowlis, S. M. (2001). Consumer research: In search of identity. *Annual Review of Psychology*, 52, 249-275.

- Skinner, B. F. (1953). *Science and Human Behaviour*. New York: The Macmillan Company.
- Skinner, B. F. (1957). *Verbal behaviour*. Englewood Cliffs, NJ: Prentice-Hall.
- Skinner, B. F. (1969). *Contingencies of Reinforcement: A Theoretical Interpretation*. Englewood Cliffs, NJ: Prentice-Hall.
- Skinner, B. F. (1974). *About Behaviourism*, New York: Knopf.
- Soriano, M.Y. and Foxall, G. R. (2002). Validation of a Spanish translation of Mehrabian and Russell's emotionality scales. *Journal of Consumer Behaviour*, 2, 23-36.
- Wicker, A. W. (1969). "Attitude versus actions: the relationship of verbal and overt behavioural responses to attitude objects", *Social Issues*, Vol 25, pp. 41-78.