

Reflections on Morgan and Bachrach's critique

*Icek Ajzen**

In their critique of the Theory of Planned Behaviour (TPB) as a model for human fertility, Morgan and Bachrach (2011) raise a number of concerns that reflect fundamental misconceptions regarding the nature of the theory and its objectives. Their points of criticism demand a response not only because they are misguided and misleading but also because Morgan and Bachrach are not alone to voice them. This criticism is raised with some regularity as a challenge to the TPB's reasoned-action approach (see Philipov 2011). In fact, in our recent book, Martin Fishbein and I (Fishbein and Ajzen 2010) devoted a whole chapter to these challenges. Some of the relevant issues are dealt with effectively in other contributions to the debate published in this volume. I focus my comments on the criticisms that challenge the basic assumptions underlying the TPB.

Although acknowledging certain qualifications, Morgan and Bachrach place the TPB squarely in a class of models that conceptualise fertility as a result of a rational decision-making process. I would first like to put this misconception to rest. It is true, of course, that the TPB emphasises the controlled aspects of human information processing and decision making. Its concern is primarily with behaviours that are goal-directed and steered by conscious self-regulatory processes. In my opinion, and evidently in the views of the other contributors to this volume, fertility-related behaviours are precisely of this kind. The decision to use or not use birth control pills or condoms, to have an abortion, or adopt a child, is neither automatic nor can it be characterised as capricious or thoughtless. Instead, we assume that these kinds of decisions are usually quite reasonable, relying on considerations about the likely consequences of the decision, about expectations of significant others and about possible obstacles. The focus on reasoned action should, however, not be misinterpreted to mean that the TPB posits an impassionate, rational actor who reviews all available information in an unbiased fashion to arrive at a behavioural decision. Importantly, there is no assumption in the TPB that behavioural, normative and control beliefs are formed in a rational, unbiased fashion or that they accurately represent reality. Beliefs reflect the information people have in relation to the performance of a given behaviour, but this information is often inaccurate and incomplete; it may rest on faulty or irrational premises and conclusions, it may be biased by selective

* Icek Ajzen, Department of Psychology, Tobin Hall – 135 Hicks Way, University of Massachusetts, Amherst, MA 01003-9271, USA. Email: ajzen@psych.umass.edu

memory, self-serving motives, fear, anger and other emotions, or otherwise fail to reflect reality. Clearly, this is a far cry from a rational actor. However, no matter how people arrive at their behavioural, normative and control beliefs, their attitudes toward the behaviour, their subjective norms and their perceptions of behavioural control follow automatically and consistently from their beliefs; and these processes ultimately result in an intention or readiness to perform the behaviour in question. It is only in this sense that behaviour is said to be reasoned or planned. Even if inaccurate, biased or otherwise irrational, our beliefs produce attitudes, intentions and behaviours consistent with these beliefs (see e.g. Geraerts et al. 2008).

The TPB, like Bandura's (1977, 1997) social cognitive theory and Morgan and Bachrach's (2011) theory of conjunctural action, is a content-free model of human social behaviour. The content is provided in the process of applying the theory to explain or influence a given behaviour or course of action. Thus, using the TPB, an investigator trying to understand the prevailing determinants of using birth control pills would elicit salient beliefs about the consequences of this behaviour, about the expectations of salient referent individuals or groups and about facilitating or inhibiting factors that may affect control over performance of the behaviour. Examination of the most frequently listed considerations provides a picture of the behaviour's important determinants.

This contrasts with attempts to build models specifically designed to explain fertility-related behaviours. Such models may include particular kinds of considerations deemed to be relevant to fertility, such as conflicting professional aspirations, desire for companionship, life values, demographic and personality characteristics as well as social institutions. Content-specific models of this kind have their advantages and disadvantages. On the positive side, such models carry more substantive information directly relevant to an understanding of fertility-related behaviour than does the content-free TPB which requires that the content be filled in as the model is applied to fertility. The disadvantage of taking a content-specific approach is that it requires construction of a different model for each domain of human social behaviour. In fact, we have witnessed a proliferation of content-specific models in such domains as health-related behaviour, voting behaviour, consumer behaviour, interracial behaviour, religious behaviour and so forth (see Fishbein and Ajzen 2010, Chapter 1). Each model incorporates a different set of constructs appropriate for its domain of application, with the implication that there are as many determinants of human behaviour as there are behavioural domains. The content-free TPB is more parsimonious in that it stipulates a small set of constructs that can be applied across behavioural domains. In contrast to content-specific models, it suggests that the types of considerations that motivate behaviour in one domain also motivate behaviour in other domains.

The fact that the TPB does not specify *a priori* contents to explain fertility-related behaviour should not be taken to mean that applications of the theory to

this domain fail to provide the required substantive information. As noted above, by eliciting and measuring readily accessible behavioural, normative and control beliefs we obtain a picture of the prevailing considerations that influence fertility-related decisions. Moreover, the theory's recognition that various background factors can influence behaviour indirectly by affecting the beliefs people hold (see Fishbein and Ajzen 2010, Chapter 7) refutes another of Morgan and Bachrach's basic criticisms, i.e. that the TPB does not provide for the influence of material aspects of the social context. Public policies, economic conditions, educational and employment systems, reproductive health services, etc., are all background factors in the TPB; such factors can and should be measured in any application of the theory to fertility (see Klobas as well as Liefbroer 2011). It is true, however, that the TPB does not specify in advance which beliefs will be important for a given fertility-related decision nor does it specify what background factors should be considered. To formulate hypotheses regarding these kinds of variables we can draw on other theories - such as the traits-desires-intentions-behaviour or T-D-I-B framework (Miller 2011) - or on past research conducted by demographers and other professionals (see Liefbroer 2011). Of course, the theory of conjunctural action proposed by Morgan and Bachrach as an alternative to the TPB is no different in this regard. As the authors recognise, theirs is a general meta-theoretical framework that suggests a certain approach to research, not any specific hypotheses regarding fertility. In fact, it contains no explanatory constructs other than intention and, in contrast to the TPB, it does not offer a set of proven methods and procedures nor a large body of supportive empirical evidence.

Some of Morgan and Bachrach's criticism reflects a basic misunderstanding of the difference between behaviours and the consequences or outcomes of those behaviours (see Philipov 2011). They take the fact that many pregnancies are unplanned as evidence that fertility behaviour cannot be considered intentional, reasoned or planned. A moment's reflection reveals the fallacy of this argument: it is like saying that traffic-related behaviour cannot be considered reasoned or intentional because traffic accidents are unplanned. The TPB is designed to explain human social behaviour, not the outcomes that such behaviour may or may not produce. If people fail to attain desired outcomes, or experience outcomes they did not intend, then they did not engage in the required behaviours or they performed behaviours that were ineffective. To be sure, the TPB can be used to predict *intentions* to obtain a given outcome, such as having a child, but there is nothing in the theory to say that the intentions will produce the desired outcome. Giving birth is the outcome of certain behaviours (mainly having unprotected sex), not a behaviour in itself, and an unplanned pregnancy is an unintended outcome. Thus, I agree with Morgan and Bachrach that "fertility can occur without a clear intent," that is, without a clear intent to become pregnant. It does not follow, however, that the behaviours leading up to becoming pregnant are therefore unintended. Take the example provided by Morgan and Bachrach:

“... a young woman has unprotected sex with a young man to show her devotion to him, decides not to have an abortion because her parents argue that abortion is immoral and equivalent to murder, and does not put the child up for adoption hoping that her possession of the child would tie the young man to her emotionally and financially.” This example illustrates precisely the kind of deliberations which, according to the TPB, often guide people’s behaviours: beliefs about likely consequences (showing her devotion by having unprotected sex, tying the young man to her emotionally and financially) as well as normative beliefs (parents are opposed to abortion on moral grounds). Although the pregnancy was unintended, there is no reason to believe that the *behaviours* in this example - unprotected sex, failure to obtain an abortion and failure to put the child up for adoption - were unintended or unplanned. Clearly, Morgan and Bachrach’s arguments reflect confusion between behaviours and outcomes.¹

This issue is related to another misconception regarding the TPB. There is no assumption in the theory that people carefully and systematically review all their beliefs each time they are about to perform a behaviour. On the contrary, the theory recognises that most behaviours in everyday life are performed without much cognitive effort. Consistent with contemporary dual-mode processing models in social psychology (see Carver and Scheier 1998; Chaiken and Trope 1999; Petty and Cacioppo 1986), it is assumed that the amount of information processing people engage in prior to performing a behaviour varies along a continuum, from shallow to deep (Ajzen and Sexton 1999). In-depth processing is reserved for important decisions and behaviours in novel situations that demand careful consideration of the behaviour’s likely consequences, the normative expectations of significant others and the obstacles that may be encountered. When it comes to routine, everyday behaviours like eating breakfast, taking one’s vitamin supplements, going to work, watching the news on TV, and so forth, no careful deliberation is required or postulated. Attitudes, subjective norms and perceptions of control as well as intentions in relation to these kinds of behaviours are assumed to guide behaviour implicitly without cognitive effort and often below conscious awareness (see Ajzen and Fishbein 2000 for a discussion of these issues).

The same is true, to take Morgan and Bachrach’s example, of performing well-practised behaviours, such as hitting the ball in a baseball game. I agree that the involvement of unconscious processes in human behaviour is undeniable. Our ability to exercise conscious, intentional control is constrained by limited information-processing capacity such that most moment-to-moment mental processes must occur below conscious awareness (Bargh and Chartrand 1999). The question of how much of our day-to-day behaviours is subject to automatic versus controlled processes is complicated by the fact that behaviour involves a complex sequence of events. Many attributes of behavioural performance are

¹ In light of these observations, it is surprising how well intentions to have (or not to have) a child are actually found to predict goal attainment.

outside conscious awareness. Thus, we do not pay much attention to how we move our legs and arms as we walk or how we produce sentences as we speak, nor do we as a rule consciously monitor our facial expressions, tone of voice, or body posture. Even more complex behaviours can become automatic with sufficient practice. When we learn to drive a car, for example, we initially pay close attention to various aspects of this behaviour, but once we have become skilled at the task, we can perform it more or less automatically as evidenced by the fact that we can at the same time engage in conversation or other activities that occupy our cognitive resources. At the same time, many aspects of a complex sequence of events in what we call 'behaviour' are intended and consciously monitored. Thus, to return to the example of the baseball batter, we can confidently assume that he intentionally set out to bat when his turn came and then took his bat, walked to the base and prepared for the pitch in a sequence of actions Abelson (1981) called a well-learned script. He also may have had to make a conscious decision as to how to position himself at the base, perhaps in response to the pitcher's left-handedness. In short, the act of batting actually involves a complex sequence of events some of which are completely automatic, such as swinging the bat to hit the ball, others semi-automatic, such as walking to the base, and still others controlled and performed in full awareness.

Now, it is also true that situational forces can overcome even well-formed intentions. For example, under the influence of alcohol people often have unprotected sex even though they may intend to use condoms in every sexual encounter. Alcohol intoxication tends to decrease cognitive capacity such that people attend only to the most salient situational cues, a phenomenon known as alcohol myopia (Steele and Josephs 1990). Sexual arousal and the anticipated pleasure of sexual intercourse may well tune out most other considerations. This is not 'rational' behaviour but perfectly consistent with a reasoned action approach. (See Barber 2011, for an insightful discussion of the ways in which sexual desires and other strong drives may prevent people from acting on their intentions.)

Finally, as my colleagues and I have pointed out repeatedly (e.g. Fishbein and Ajzen 2010, p. 23), for the sake of simplicity, the diagram of the TPB shown in the Morgan and Bachrach article is a simplified representation of the theory. Among other things, it fails to contain a time perspective or feedback loops from behaviour to beliefs. (Feedback loops are shown in Fishbein and Ajzen's (1975, Figure 1.2, p. 16) representation of the theory of reasoned action.) As noted earlier, in the TPB beliefs represent subjectively held information about a behaviour. Once people perform the behaviour, especially if it is performed for the first time, the experienced difficulties, observed consequences and reactions by others provide information that may well change some of the behavioural, normative and control beliefs, thereby producing a different intention in regard to future behaviour. Similarly, as Morgan and Bachrach note, "beliefs and attitudes are likely to shift as people get educated, married, or laid off from work." These

kinds of events also provide new information that can change people's existing beliefs. Changes in beliefs over time are an inherent aspect of the TPB and, as discussed by Klobas and by Liefbroer (2011), can be modelled with appropriate data. Although capturing longitudinal processes of this kind poses certain methodological challenges, it is not at all clear why they would be considered inconsistent with the Theory of Planned Behaviour.

Neither is the TPB, as claimed by Morgan and Bachrach, restricted to consideration of only one intention or behaviour at a time. The theory's constructs can and have been assessed with respect to two or more alternative courses of action (e.g. Ajzen and Fishbein 1969; Ajzen and Sheikh, forthcoming; Davidson and Morrison 1983; Jaccard 1981; see also Philipov 2011). When this is done, the prediction of intentions and behaviour tends to improve, but this of course comes at the expense of multiplying the amount of data that must be collected.

Conclusions

As the other commentators in the present volume have noted, there is nothing in the critique offered by Morgan and Bachrach to invalidate the TPB as an appropriate model for human fertility. Intentions regarding such fertility-related behaviours as using birth control or having an abortion can be validly assessed and they tend to predict corresponding behaviours quite well. Fertility-related behaviours should, however, not be confused with fertility-related goals. The TPB can be used to predict intentions to have a child as well as various behaviours that may be performed in pursuit of this goal, but the theory is not designed to predict the outcome of actually giving birth to a child. Going beyond prediction, the TPB explains fertility-related behaviours by reference to behavioural, normative and control beliefs. I would argue that, for the most part, people try to be reasonable in their fertility decisions by considering the likely consequences of their behaviour, taking into account the expectations of significant others and trying to anticipate possible obstacles. However, although the beliefs people hold can be quite accurate, it must be understood that these beliefs represent subjectively held information which may also be incomplete and distorted by various cognitive and motivational biases. Moreover, when we try to predict behaviour over an extended period of time, we must take into account the fact that beliefs can change as new information becomes available.

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