Planned behaviour- stagnation or evolution?

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There it was; I had it. To change behaviour one has to alter a person's intention. Yes, if an individual doesn't hold an intention to engage in a specific behaviour then the chances are they will not do it. Furthermore, to change these intentions, we have to 'motivate' them, perhaps by offering the advantages or convincing them that it is achievable. When you do this, given the right control conditions, it is likely that an individual will succeed in enacting their originally stated intention.

Okay, so perhaps it is not the most exciting of models but the Theory of Planned Behaviour (TPB; Ajzen, 1985) has contributed much to psychological advances, none more so than restoring the attitude-behaviour relation. The fact a behavioural scientist can easily highlight and attempt to alter the relevant underlying beliefs is a positive. As are its parsimonious variables.

Despite this, the criticisms have kept on coming. Although some are valid, others seem unfair. As Head and Noar (2014) suggest, it appears that the theory is stuck between issues concerning generability and utility. Gollwitzer and Oettingen (2015) offer the analogy of borrowing a newly invented race bike which the creator went to great lengths to produce. After taking it out on the mountains, it breaks. Hence, there is anger both on the side of the creator (for the damage) and the borrower (poor usability). But the creator stressed that it was a general bike, one of the first in fact. ''Why did you take it up there!'' he bellows. Likening this to health psychology, the theory has been applied to almost all behaviours, ranging from colonoscopy appointments to engaging in physical activity, and the results have been mixed. Surprised that a parsimonious model including only four determinants has failed to successfully change each and every behaviour? Perhaps not. The issue of generability and utility is not only an interesting one but has important implications for research. It appears theorists strive for the former and practitioners the latter. Nevertheless, accounting for various

moderating effects, the theory has proved efficient in explaining a wide range of behaviours (McEachan, Connrt, Taylor, & Lawton, 2012).

Although interventions based on the theory have shown limited success (Hardeman et al., 2002), it appears that the absence of strategies or techniques for change are attributed to a deficiency in the theory. That is, intervention ineffectiveness and null findings is a resultant of poor theoretical explanation. Attributing this as a fault of theory is incorrect. As a model of prediction and explanation rather than change, the theory may indeed lack sufficient belief alteration guidelines, but this evidence in itself isn't suffice to critique the theory but rather addresses a different concern altogether, that of intervention design. Furthermore, one cannot fail to not possess sympathy for those who utilise the TPB for intervention creation whilst failing to conduct the rigorous formative research, despite Ajzen's many calls to do so. As such, poor use of the theory rather than the theory being poor, leads to a large proportion of negative intervention findings.

With falsifiability an imperative of science (Popper, 1993), concerns regarding the TPB's exploration of analytic truths have been raised (Ogden, 2003). If it cannot be empirically disproved then weight is only going to prove it right and null hypotheses findings are attributed to methodological failures. This assumption is supported by Sniehotta (2014) however, rather contradictory, the author attempts to utilise experimental findings supporting the null hypothesis (Sniehotta, 2009) to justify these claims. However, similar to the problem highlighted above, there are many flaws in the application of the theory which subsequently led to ineffective interventions (Ajzen, 2015). Ajzen (1991) suggests that a determinant shouldn't be introduced unless it offers more variance than the others already included. Due to the issues concerning volitional control, the inclusion of perceived behavioural control from the theory of reasoned action (Ajzen & Fishbein, 1980) offers a fine example here. Moreover, an already included determinant failing to offer sufficient variance is also at risk.

Thus, falsifiability can be achieved by demonstrating a limited effect of a determinant on the outcome variable. Although a valid claim, the contribution of the determinants has indeed been mixed. For example, attitudes and perceived behavioural control have been found to influence intentions more than subjective norm (SN) in certain behaviours, whereas in others SN has been more salient. The issue of generability again raises its head. It appears that the TPB's main strength, its parsimony, is also its major limitation.

But where does that leave the health scientists? Although there has been an enormous amount of literature regarding health behaviours, it is questionable whether progression has been made (Noar & Zimmerman, 2005). It is possible, however, that literature simply gets lost in the plethora of published articles. Indeed, Head and Noar (2013) suggest that this may result in researchers struggling to keep up with relevant literature and to subsequently then conclude that rather than theoretical evolution, stagnation has occurred. It seems recent debates have offered a glimpse of 'excitement' back into health psychology. Perhaps there is more that can be done other than changing exogenous variables. Such theorising has been conducted in a variety of ways.

Approaches

Theoretical Integration

Models such as the Health Action Process Approach (HAPA; Schwarzer, 2008) and the Integrated Behavior Change Model for Physical Activity (Hagger, Chatzisarantis, & Biddle, 2002) involve the integration of theoretical ideas and/or determinants from various frameworks. For example, the latter incorporates ideas from Self-Determination Theory (Deci & Ryan, 1985) to understand how orgasmic approaches effect beliefs. For example,

behavioural beliefs can also be understood concerning their origin, specifically whether it is self or externally determined. Understanding whether beliefs are controlled or are internally influenced could prove fruitful and, as such, progress research. The HAPA encompasses self-efficacy from Bandura's (1998) theorising as well as planning strategies. The model explicitly states a motivational and volitional stage, with different interventions required for those not intending and intending to perform the behaviour. This hybrid approach also differentiates further between types of planning and types of self-efficacy which can act as both mediators and moderators. For example, action planning could transfer positive intentions to successful change if a high level of self-efficacy is present. Despite the benefits of distinguishing between intention formation and behavioural enactment, as it stands, specific applications of the model remain sparse, particularly concerning the development and implementation of practical interventions.

Ego-depletion

The strength model of self-control attempts to explain why individuals fail to overcome urges and impulses and subsequently engage in behaviours that are detrimental. Baumeister, Vohs and Tice (2007) liken one's inability to self-regulate to a muscle that has become worn out, resulting in ego depletion. During this state, individuals are less likely to perform more productive behaviours that they would have done with a fully resourced muscle. Not only is a muscle offered as a metaphor but a physiological explanation is also given, specifically by relating depletion to a decrease in glucose. As such, replenishing levels of glucose are vital, as are ensuring that the finite resource is not drained and desires are not supressed. This can be achieved in numerous ways such as using one's weaker hand, making fewer decisions, and engaging in simpler tasks. Despite initial support, the model has come under criticism. For

example, it has been suggested that a lack of self-control could be a resultant of other processes, aside from glucose depletion (Inzlicht & Schmeichel, 2012). Bringing behaviour back to the cognitive, it could be simply that a lack of efficacious beliefs results in the transfer failure of intentions into behaviour. Following a similar subjective perception-behaviour link as found in the theory of Locus of Control (Rotter, 1966), Job, Bernecker, Miketta and Friese (2015) suggest that rather than the depleted resource *itself* effecting behaviour, merely *believing* in a finite resource impairs performance. Nevertheless, the theory offers an alternative explanation for the intention-behaviour gap, one that is not cognitive. As such, this implicates different strategies for intervention aside from the strength and content of intentions. Despite being in its infancy, research should continue to examine the moderating variables that highlight the situations where ego depletion is affected.

Conscious and Nonconscious Pursuits

Motivational cognitive theories view behavioural failure as a resultant of beliefs, attitudes and conscious processes. However, others suggest that behaviour is a resultant of non-conscious processes, those that the individual is unaware of (Bargh, 2007). Thus the following question can be asked; is behaviour governed by conscious decision making or is it under the influence of nonconscious processes? Recent approaches have attempted to draw the two apparently separate processes together. Baumeister and Bargh (2014) suggest that the unconscious is the primary contributing factor to behaviour but, nevertheless, relies on consciousness to offer directions and to facilitate in regulation. For example, consciousness can be utilised to envision future thoughts and the unconscious to enact the behaviour. As such, the role played by consciousness is increased from that of being just a mere bystander. The work of Gollwitzer (1999) concerning Implementation Intentions can be offered as an

example. One could consciously envisage themselves to perform physical activity and subsequently plan to do so. Following this conscious process, the automated cue then transfers these positive intentions into behaviour. Thus, the activation of the unconscious via the external cue decreases the intention-behaviour gap. Although being the main driver in change, the unconscious cannot operate wholly independently and, as such, utilises the assistance of the conscious. The automatic effects of planning can also override the self-regulatory effects of ego-depletion (Webb & Sheeran, 2003). Under researched models following a similar trail of thought could prove fruitful in gaining a better understanding of health behaviour change. For example, interventions applying the recently developed Temporal Self-Regulation Theory (Hall & Fong, 2007) should examine the moderating effect of executive function and behavioural prepotency on intention.

Conclusion and future directions

In summary, intentional models such as the TPB have provided the groundwork for potentially more effective interventions. The TPB can and should be used if one is amotivated, specifically to 'kick-start' the change process. The model offers avenues to inform intervention design but it is crucial that the formative research is undertaken. Although a move away from cross-sectional studies to more experimental research should be encouraged, specifically utilising randomised control designs, this would only prove effective if the initial work is done. Despite this, postintentional models offer a further route of research, that which doesn't aim to alter the content of the intention nor strengthen the 'will'. Self-regulatory skills, planning strategies, unconscious pursuits, and phased-specific self-efficacy could all be utilised to foster change. With all of these different approaches, it is

unlikely that psychologists will sing from the same hymn sheet. But it is important to digress between different fields and appreciate new ideas. The process of research can be conducted both ‘slow’ and ‘fast’ simultaneously (Armitage, 2015); the former to ensure accuracy and the latter to ultimately reduce mortality and morbidity. Although the relationship between exciting and effectiveness isn’t one of causation, it is possible for research to have both.

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