Motivation and behaviour change

If you're interested in the process of how behaviour changes (whether in one person or in millions), you'll be interested in the core issue of motivation. The following paper was written as a resource for Bright's own staff, to inform our work, much of which involves motivating people. Including ourselves! The paper was funded by the Allen Lane Foundation and written by Ben Clark, a forensic psychologist whose expertise includes working with sex offenders in prison. Examples given here therefore include motivational work with sex offenders, Producing behaviour change in people whose crimes are so damaging illustrates the extreme end of the spectrum. The challenges for the rest of us seem much less daunting in comparison!

Introduction

The starting point for this study, the intuitive belief in the likely importance of motivation to behaviour change, was centred on the every-day usage of the term. Often, it is used in the context of whether or not someone is 'motivated' to 'do something', and this process of movement to action and potential change is captured by the following definition¹,

"The study of motivation is the study of all those pushes and prods – biological, social and psychological – that defeat our laziness and move us, either eagerly or reluctantly, to action".

WHAT IS MOTIVATION?

Before setting out to answer this question, it would be useful to clarify our understanding of the relevant terms, i.e., 'motivation' and the '*Easy Does it* Process'.

Motivation: the number and types of definitions of motivation that are found in psychology textbooks reinforce the belief that motivation is a nebulous concept. The nature of each definition and its proposed link to behaviour usually depends on the theoretical approach being advocated, for example a behaviourist will relate motives to reinforcement schedules while a cognitive psychologist will prefer to explain behaviour with reference to a person's thinking.

Motivated behaviour (where behaviour is understood as "anything a person does, typically in response to internal or external events"²) is goal-directed and purposeful

¹ Quote by George Miller, (1967) in Gross, R. D., (1987). *Psychology: The Science of Mind and Behaviour* Edward Arnold

² Sarafino, E. P. (1996). *Principles of Behaviour Change*. Hodder & Staughton.

and it is therefore "difficult to think of any behaviour which is not motivated in this sense" ³.

So, it would appear that motivation is certainly very important to the performance of behaviour and therefore to a goal of behaviour change.

That is not to say, however, that the presence of motivation is sufficient to ensure behaviour change and sometimes it may not even be necessary at all.

Social Marketing practitioners remind us that not all of the determinants of behaviour, and therefore of behaviour change, are within the compass of the individual. For instance, Hastings, MacFadyen & Anderson ⁴state that "decades of research have shown that the decision to take up smoking is influenced by many factors: gender; the smoking behaviour and attitudes of young people's friends and family; and media portrayals of smoking", to list a few.

Similarly, Nedra Kline Weinreich⁵ suggests that "you might be able to avoid the need to convince your target audience to change its behaviour altogether if you can create structural changes that bring about the same result". Kline Weinreich illustrates this view with the idea that passing a law that requires all residential pools to have childproof safety fences would be more effective at combating drowning than attempting to change the pool behaviour of parents and their children.

So, if the likelihood of taking up certain behaviours depends on a number of factors not all of which are under the individual's control, it follows that to increase the likelihood of changing such behaviours requires a focus on a number of areas both within and without of the individual's sphere of influence or control.

What Behaviour Do We Want to Change?

In order to effectively change behaviour, both psychology and common sense (and it has been argued that they are at times one and the same thing!) tell us that it is useful to know first of all the difference between the nature of the desired behaviour change and the intended outcome of the adoptive behaviour. For example, using the example of losing weight cited in Sarafino's text, "the behaviour involves i) what and how much people eat and ii) how much physical exercise they get – not how much they weigh, which is the outcome of their behaviour". He warns that focussing on the outcome may lead an engineer of change to miss or misuse a behaviour that he or she wants to address.

Additionally, one of the central tenets of social marketing is that of consumer orientation, part of this process necessitating a focus on what type of behaviour change (increase or decrease) should be targeted and to what extent.⁶

An attempt at comparing and amalgamating key theories will follow, along with a synthesis of several models already produced by Kline Weinreich in the social marketing literature.

It must be borne in mind that although common themes in the literature can be identified, which suggest that there are core elements to motivation and behaviour change, it is entirely possible that the information I have included is not representative of all that is known in the area.

³ Gross, R.D., (1987). Psychology: The science of mind and behaviour. Edward Arnold

⁴ See Hastings, G., MacFadyen, L. & Anderson, S. (2000). Whose Behaviour is it Anyway? *SMQ*, *VI*, 2, 2000 for further refs.

⁵ In N.K. Weinreich (1999). *Hands-on Social Marketing*. Sage Publishers.

⁶ Smith, B. (1998). What's the Big Idea? Social Marketing Quarterly, Winter 1998

Theories of Motivation – the 'why'

1. Cognitive

Cognitive approaches to motivation theories focus on the role of people's thoughts in relation to their behaviour.

Festinger's Cognitive Dissonance Theory⁷

This has been very influential in understanding a major dynamic in thought, behaviour and behaviour change. The theory describes how when there is a discrepancy between two beliefs or between a belief and an action, a person will feel uncomfortable and will act to resolve conflict and discrepancies in order to achieve consistency and feel comfortable again. This is achieved by the person a) justifying their behaviour by changing their cognitions (thoughts), or b) by adding new cognitions to alter their view of themselves. Recent research has suggested that the dissonance affect is at its most powerful when individuals behave in ways that threaten their image of themselves.

This 'consistency' model is central to most attempts to change attitudes and by implication, at least in the cognitive behavioural tradition, behaviour. But is this implication borne out by research?

Motivational Interviewing is a behaviour change tool developed in the addictions field⁸ and adapted by Rollnick, Heather and Bell in 1992 to help negotiate behaviour change in a medical setting. Since then, its efficacy as a strategy has been supported by research in a number of domains, as diverse as work with sex offenders⁹ and diabetics¹⁰. One of the principles of motivational interviewing is 'developing discrepancy', which is based on the concept of cognitive dissonance and related to behaviour change in that "the need to reduce dissonance is thought to become the incentive to contemplate change".¹¹

Functional theories of attitude formation state that attitudes serve individual needs and/or facilitate planning and goal accomplishment¹². Such theories assume that the likelihood of attitude change is low unless an individual learns that their current attitudes are no longer helping them to fulfil their needs. The results of work by Snyder and DeBono¹³ into attitude change were consistent with this premise that "functionally relevant appealsare likely to be much more persuasive than other similar messages that are irrelevant to the functions attitudes serve".

⁷ Festinger, L. (1957). *A Theory of Cognitive Dissonance*, New York: Harper and Row.

⁸ e.g., Miller, W. R. (1983) Motivational Interviewing with Problem Drinkers: ii. The drinker's checkup as a preventative intervention. *Behavioural Psychotherapy* 16:251-268

⁹ Mann R.E. and Rollnick, S. (1996) Motivational interviewing with a sex offender who believed he was innocent. *Behavioural and Cognitive Psychotherapy* 24:127-134

¹⁰ Stott N.C.H., Rees, M., Rollnick, S., Pill, R. & Hackett, P. (1996) Professional responses to innovation in clinical method: diabetes care and negotiation skills. *Patient Education and Counselling* 29:67-73

¹¹ Tierney, D.W. & McCabe, M.P. (2001). The Validity of the Trans-Theoretical Model of Behaviour Change to Investigate Motivation to Change Amongst Child Molesters. *Clinical Psychology and Psychotherapy*, 8, 176-190.

¹² Katz, D. (1960). The functional approach to the study of attitudes. *Public Opinion Quarterly*, 24, 163-204

¹³ Snyder, M. & DeBono, K.G. (1985). Appeals to images and claims about quality: Understanding the psychology of advertising. *Journal of Persoanlity and Social Psychology*, 49, 586-597

Self-Monitoring' – refers to the extent to which people normally attend to external, social situations as guides for their behaviour, as opposed to their own, internal states. High self-monitors tend to be more concerned with behaving in a socially appropriate manner and so are more likely to monitor the situation (rather than themselves) when deciding how to behave. Low self-monitors tend to be truer to themselves rather than try and fit in with social norms.¹⁴

In 1985, Bazzini and Shaffer supported Snyder and DeBono's work with a study of well-established, robust attitudes, but found that the extent to which attitude change impacted on behaviour depended upon whether an individual was assessed as being high or low self-monitoring¹⁵.

Low self-monitoring individuals did seem to behave in accordance with their changed attitudes whereas high self-monitors did not. The authors point to research that suggests that low self-monitors focus more on their natural tendencies as opposed to being situationally focussed. They are consequently more likely to use their attitudes to guide their behaviour, rather than looking to fit in chameleon-like, with their social surroundings.

Heider's Attribution theory ¹⁶

Attribution theory has played an extremely important role in helping us to better understand interpersonal behaviour, particularly within relationships.¹⁷ It proposes that an individual can offer one of two 'attributions' to try to explain the behaviour of others. That is, we will try to explain behaviour by making inferences about the cause of the behaviour; "in particular, was it something to do with the person, for instance, their motives, intentions or personality (an internal cause) or was it something to do with the situation, including some other person or some physical feature of the environment (an external cause)".¹⁸ These internal or external attributions can also be determined by whether they are seen as being under our control or not. Attribution theory has played an extremely important role in helping us to better understand interpersonal behaviour, particularly within relationships.

The following chart shows the four attributions that can result from a combination of (perceived) internal or external causes and whether or not control is (perceived as) being possible.

	Internal cause	External cause
No Control	Ability	Luck
Control	Effort	Task Difficulty

Table 1 – Attributions as a product of perceived cause and control

Glossary of relevant terms:

¹⁵ Bazzini, D.G. & Shaffer, D.R. (1995). Investigating the Social-Adjustive and Value-Expressive Functions of Well-Grounded Attitudes: Implications for Change and for Subsequent Behaviour. *Motivation and Emotion*, Vol. 19, No.4

¹⁴ Gross, R.D. (1987). *Psychology: The science of mind and behaviour*. Edward Arnold

¹⁶ Heider, F. (1958). *The Psychology of Interpersonal Relationships*. New York: Wiley.

¹⁷ Bradbury & Fincham, F.D. (1991). A contextual model for advancing the study of marital

relationships. In G.S.O. Fletcher & F.D. Fincham (Eds.) Cognition in close relationships. Hilsside & NJ: Erlbaum

¹⁸ Gross, R.D. (1987). As in '16'.

Internal cause (or attribution) – behaviour is perceived as the product of the individual (internal locus of control)

External Attribution – behaviour is perceived as the product of the situation (external locus of control)

No Control – behaviour is perceived as being beyond the control of the individual Control – behaviour is perceived as being within the control of the individual

Attribution explanation of 'Ability' – individual believes task success depends on innate, immutable personal qualities over which he or she has no control.

Attribution explanation of 'Effort' – individual believes task success depends on the effort that he or she puts into completing the task.

Attribution explanation of 'Luck' – individual believes task success depends upon luck, and is therefore not within the individual's control and dependent upon the situation.

Attribution explanation of 'Task Difficulty' – individual believes that success depends upon the nature of the situational factors impacting upon the difficulty of the task. These factors are perceived as being within the individual's control.

An example using the 'task' of composting may make the possible attributions and their likely impact on behaviour, clearer.

	Internal	External
No Control	Ability – the extent to which	Luck – the extent to which the
	would-be gardener sees	elements may play a part e.g.,
	themselves as naturally 'green-	getting the right mix of sunshine
	fingered'	and rain
Control	Effort – would-be Gardner	Task Difficulty – extent to which
	believes all the idioms, 'if at first	the task is complicated by
	you don't succeed' etc.	situational factors such as size of
		the garden

Table 2 – An attribution theory explanation of composting

In terms of motivation towards the behaviour change of composting organic waste, it is advantageous for an individual to have an attribution explanation of 'effort' (internal, control). This would be most likely to lead to optimism about an individual's self-efficacy (itself a very important construct in many theories of motivation and behaviour change) and therefore promote persistence in the face of problems.

If the person has an attribution of ability (internal, no control) as soon as the individual experiences some difficulties in the composting process, their motivation will decrease and he or she will reduce appropriate composting behaviours (thinking 'I'm not good at this').

If a person has an external attribution, then nothing the person can do will help them become a master composter, as they will see the responsibility for achieving change as lying completely outside of their control.

It could be argued that an individual with a tendency toward external attributions would change their behaviour more readily as a result of changes in the environment i.e., policy, media, special offers on composting bins etc.

It must be borne in mind before extrapolating too much from this introduction, that research points to a number of other variables that further complicate the attribution theory, such as cultural factors. One interesting bit of information from the literature relates to the likelihood of making internal attributions to explain behaviour. Research suggests that we, being human, make errors in attributions and tend underestimate the influence of the social environment. Consequently, we tend to attribute behaviour to dispositional factors rather than situational factors, a potential 'bias' towards seeing ourselves as in control of our environment.¹⁹ (Bearing in mind of course, the 'self-serving Attributional Bias' phenomenon, which holds that people will take responsibility for their successes whilst blaming others or the situation for their failures!)

2. Behavioural

Major figures in the behaviourist tradition such as B.F Skinner²⁰, believed that there was no need to study thoughts and feelings as all behaviour could be understood by evaluating the rewards and punishers in the organism's environment. Although Skinner was not the founder of Behaviourism, he made the distinction between behaviours that are automatically triggered by environmental stimuli and behaviours that are not linked to stimuli in this way. This is the main distinction between 'classical' and 'operant' conditioning:

Classical Conditioning

Also known as 'Pavlovian Conditioning', after the man whose experiments on the salivating of dogs led to the study of the relationship between a biological response and an associated stimulus. This relationship can be viewed as a type of knee-jerk reaction in which the inevitability of the learnt response to the stimuli serves to energize and direct behaviour.

Operant Conditioning

States that the individual is much more active in the process of learning and behaving, in that behaviour is not elicited by the stimuli but emitted by the individual and is therefore essentially voluntary. The likelihood of the behaviour being repeated depends upon the consequences of the behaviour for the individual. Put simply, consequences that are rewarding ('positive reinforcers') provide incentives to increase behaviour while punishers provide disincentives that lead to a decrease in behaviour.

The concept of reward and punishment, and specifically the desire to gain reward and avoid loss is fundamental to some theorists' understanding of what motivates us to act.²¹ The use of persuasion as a behaviour change tool relies on the ability of the persuader to promote the gains to be had or benefits of the new behaviour for the persuadee.

The idea that people will naturally tend to gravitate towards actions that have high benefits and few costs (or 'barriers') are also a key principle of community-based social marketing.²²

3. Cognitive-Behavioural

¹⁹ Aronson, E., Wilson, T.D. & Ahert, R.M. (2002). Social Psychology (4th Ed.). Prentice Hall Int.

²⁰ Skinner, B.F. (1938). The Behaviour of Organsisms, New York: Appleton – Century – Crofts.

²¹ Bob Stone in H. Mill's (2000). Artful Persuasion. Amacom., and Vroom, (1964). in Gross, as in 16.

²² McKenzie-Mohr, D. & Smith, W. (1999). *Fostering Sustainable Behaviour*, New Society Publishers.

The application of the cognitive-behavioural principle that behaviour is mediated through cognitions and that cognitions can be changed is most commonly found in cognitive-behavioural therapies. Such therapies also share the proposition that behaviour change may be affected via cognitive change²³.

Interventions based on the cognitive-behavioural paradigm are often inherently motivational. For example, the Sex Offender Treatment Programme (SOTP) run in many HM Prison Service establishments has a number of components that aim not only to change the way an offender thinks and behaves, but also to make it more likely that he will engage in the behaviour in the future.

One such component is the setting of 'approach goals' as part of a relapse prevention plan. The thinking behind approach goals is that they are likely to be more motivational than the traditional focus on defining risk factors that offenders should avoid or fear. Initial research has so far supported this hypothesis, with an approach oriented intervention appearing to have led to greater engagement in treatment²⁴. The skill development role-plays included in the approach-oriented intervention allow offenders to practice their skills and obtain the reward of successfully achieving their goals. Further research and re-conviction studies will hopefully show that increased levels of motivation to change in the group translate to pro-social behaviour in the community.

4. Social Learning

Social learning theory as conducted notably by Bandura in the 1960's and 1970's, suggests that we learn social behaviour by observing others and imitating them, and that such 'modelling' is an important motivator of behaviour.

²³ Dobson, K.S. & Dozois, D.J.A. (2001). Historical and Philosophical Bases of the Cognitive-Behavioural Therapies. In K.S. Dobson (Ed.) Handbook of Cognitive-Behavioural Therapies, The Guilford Press.

²⁴ Mann, R.E., Webster, S.D. & Schofield, C. (1999). Approach versus Avoidance Goals in Relapse Prevention with Sex offenders. In *Supporting Research for Core 2000*, Offending Behaviour Programmes Unit, HM Prison Service.

Theories of Behaviour Change – the 'how'

Kline Weinreich details the 5 most common theories used to explain health and social behaviours in 'Hands-on Social Marketing', so I do not intend to do more then briefly summarise them here. Instead, I will reproduce her synthesis of the models and will then go into more detail about the 'Trans-Theoretical Model of Behaviour Change', which I think is the most useful way to think about behaviour change (quotes indicate text reproduced directly from Kline Weinreich).

1. Health Belief Model²⁵

"This model attempts to explain the factors that are necessary for behaviour change to occur. Individual will take action based on the following factors:

- 1) Perceived susceptibility to the health condition e.g., skin cancer
- 2) Perceived severity of consequences of condition
- 3) Perceived benefits of engaging in preventative behaviour
 4) Perceived barriers costs of preventative behaviour less than benefits i.e., to what extent are the barriers actually barriers to the preventative behaviour?
- 5) Cues to action encounter trigger to perform
- 6) Self-efficacy belief that he/she can take action".

2. Theory of Planned Behaviour ²⁶

"States that behavioural intention is the most important determinant of behaviour. Intention is influenced by three main factors:

- 1) Attitude toward the behaviour belief about positive/negative consequences and their relative importance
- 2) Subjective norms associated with the behaviour individual's views about what significant others might think
- 3) Perceived behavioural control strength of external (barriers or promoting) factors".

3. Social Cognitive Learning Theory²⁷

States that behaviour change is influenced by factors within the individual and the environment. The individual is more likely to perform the behaviour if:

- 1) If the model is observed to obtain a reward for the behaviour, and if the individual has a sense of self-efficacy
- 2) If expected positive outcomes outweigh negative
- 3) If individual can first observe novel behaviour being performed by other people, particularly those the individual values.

4. Diffusion of Innovations ²⁸

²⁵ Strecher, V. & Rosentock, I. (1997). The Health Belief Model, in K. Glanz, F.M.Lewis & B.Rimer (Eds). Health behaviour and Health Education: Theory, Research and Practice, 2nd Ed. SanFransico: Jossey-Bass, 1997.

²⁶ Ajzen, I. (1991). The Theory of Planned Behaviour, Organizational Behaviour and Human Decsiion Processes, 50: 179-211.

²⁷ Bandura, A. (1986). Social Foundations of Thought and Action: a Social Cognitive Theory Englewood Cliffs: Prentice Hall.

²⁸ Rogers, E. (1983). Diffusion of Innovations, 3rd Ed. New York: Free Press.

"Describes a particular innovation moving through a population over time. Individuals fall into one of the following groups based on when they accept the new idea or practice: Innovators, early adopters, early majority adopters, late majority adopters and laggards.

According to this model, the most effective communication channels for disseminating information about a new idea or practice are opinion leaders and peerto-peer social networks. An individual's decision to accept or reject an innovation encompasses the following issues:

- 1) Is the innovation better than what the individual currently is using or doing?
- 2) Is the innovation easy to use or understand?
- 3) Are other people in the peer group using the innovation? If so, what has been their experience with it?
- 4) Does the innovation fit in with the person's value system and self-image?
- 5) Is it possible to try the innovation first before committing to it?
- 6) How much of a commitment is necessary to use the innovation?
- 7) How much risk (monetary or emotional) is involved with adopting the innovation?"

As can be seen, the process described is rather like a goal-oriented social epidemic of the kind that is described in 'The Tipping Point'.²⁹

The Diffusion of Innovations model can also be deconstructed in a manner that renders it easier to compare to other behaviour change factors and the social marketing process:

- 1) cost/benefits of adopting new behaviour (relative advantage)
- 2) what are barriers to use? (complexity)
- 3) subjective norms significant others (observability)
- 4) fit with values and self-image? (compatability)
- 5) practice first (trialability)
- 6) commitment
- 7) level of risk (ongoing cost/benefit analysis)

Although the Diffusion of Innovations model does not directly mention self-efficacy, factors 2-6 in particular can be seen to be part of a process of assessing whether an individual feels confident in their own ability to perform the new behaviour.

The model is also the only one to explicitly refer to the importance of an individual's values and self-image in changing behaviour. This more moral aspect of behaviour change will be considered at the end of this section.

5. Transtheoretical Model (Stages of Change Theory) ³⁰

In my opinion, this model is the most insightful and illuminating about behaviour change as it incorporates the concept of 'readiness to change' and it is then possible to equate motivation to a person's expressed degree of readiness to change³¹, based in part on the importance they attach to change and their confidence in their ability to achieve it.

²⁹ Gladwell, M. (2000). *The Tipping Point*. Abacus

³⁰ Prochaska, J.O. & DiClememnte, C.C. (1983). Transtheoretical therapy: Towards a more integrative model of change. *Psychotherapy: Theory, Research and Practice* 19: 276-288

³¹ Rollnick, Mason and Butler (2000). *Health Behaviour Change*. A guide for practitioners. Churchill Livingstone.

The model also describes the behavioural and cognitive processes that assist people in considering or actually changing their behaviour, and it can be seen that people at different stages use different processes or strategies to achieve change.

The model has helped practitioners, initially mainly from a clinical background, to understand behaviour change as a dynamic process rather than an event and to better evaluate why treatment programmes have not worked. For example, Ryder³² states that while the majority of treatment programmes in the addictions field are geared towards people ready to take action, the majority of people with alcohol and drug related problems are in the 'contemplation' stage. He suggests that, rather than assuming that a client is ready to take action, practitioners have to assume that the client first needs to contemplate behaviour change. In other words, we should tailor the behaviour change intervention to the identified stage of the client (see Table 1 on next page).

Analysis of Table 3

The integration of the constructs of the Trans-Theoretical Model of Behaviour Change seen in the table was designed for use with child offenders and some elements were adapted from McMurran's³³ description of interventions with offenders with alcohol and drug problems. As discussed earlier, the 'problem behaviour' in these cases is likely to be perceived differently by the individual and wider society.

Table 3 – Determining components of intervention appropriate to different	
stages of change ³⁴	

Stages of Change	Intervention Decision	nal Balance
Pre-contemplation : Denial or minimisation of problem behaviour and impact	Motivating individual to change: information and help to engage in self-evaluative process; -Help assess impact of behaviour -Express feelings about one's problems	The cons of change are felt to outweigh the pros
Contemplation: Considers behaviour to be a problem and considers change	Self re-evaluation: Change beliefs and attitudes by creating cognitive dissonance (highlight difference between values and behaviour)	Some shifting of the decisional balance, but the cons of change are still felt to outweigh the pros)
Preparation: Prepare to take action to alter behaviour	Start to identify choices and responsibilities in relation to existing behaviour. Choose and commit to act.	The pros of change clearly outweigh the cons
Action: Active engaged in new behaviour	Substituting alternatives for problem behaviour -Avoiding stimuli that trigger problem -Being rewarded for making changes	The pros of change clearly outweigh the cons

³² Ryder, D. (1999). Deciding to Change: Enhancing Client Motivation to Change Behaviour. Behaviour Change, Vol 16, No. 3, 165-174

³³ McMurran, M. (2000). Offenders with Drink and Drug Problems. In C.R.Hollin (Ed.) Handbook of Offender Assessment and Treatment, John Wiley & Sons Ltd.

³⁴ Adapted from Tierney, D.W &McCabe, M.P. (2001) The Validity of the Trans-theoretical Model of Behaviour Change to Investigate Motivation to Change Among Child Molesters. *Clinical Psychology* and Psychotherapy, 8, 176-190.

Maintenance:	Lifestyle change	As in action
Of new behaviour	Relapse Prevention	

Relapse prevention, trying to minimise likelihood of movement from lapse to relapse, can be an important part of the 'Maintenance' stage. As discussed in the section on cognitive-behavioural approaches, sex offender treatment work indicates that for relapse prevention to succeed, the creation of new appealing life goals and behaviours that inspire are important.

The Oxford dictionary definition of 'inspiration' is, "creative force or influence" and 'to inspire' is to, "stimulate (a person) to especially creative activity" or "animate (a person) with feeling".

Contrast this with the more purposeful, goal directed definitions of motivation and it would appear that if a person is inspired to act in some way they must be motivated to achieve their goal, whereas it is possible to think of a situation where a person is motivated to achieve a goal but does not feel particularly inspired. For example, an individual may be motivated to buy and then use Sainsbury's 'bags for life'. On being interviewed as to the driving force behind this behaviour they suggest that they are not inspired by the idea of saving the environment, but are simply motivated by the financial incentive offered to use the bags during their shopping trips i.e., a few pence reimbursed by the cashier on payment. The reward is small but tangible and it also has an incremental effect.

To feel inspired (a state like all cognitions and feelings that must be inferred from behaviour or else must be gleaned from subjective self-report) may be a pre-cursor of feeling motivated to act, for example images of poverty in the developing world inspiring an individual to sponsor a child. Or it may be the useful by-product of motivated behaviour (a successful dieter feeling inspired to help others lose weight). But it is of little benefit to behaviour change unless it is transformed into tangible, goal directed behaviour. In both cases, the potential utility of the 'feelings' element of inspiration is most likely to be realised as action if there are easily achievable steps that a person can take to seize the moment and 'do something'. The question remains how to inspire and how best to channel that inspiration. In other words, to convert inspiration to motivation.

Synthesis of Behaviour Change Theories ³⁵

Kline Weinreich provided a very useful synthesis of the key behaviour change theories, showing how to ensure that the following elements are addressed in a behaviour change program's messages and interventions.

"To achieve behaviour change, a target audience must possess the following traits:

- Believe that it is at risk for the problem and that the consequences are severe
- Believe that the proposed behaviour will lower its risk or prevent the problem
- Believe that the advantages of performing the behaviour (benefits) outweigh the disadvantages (costs)
- Intend to perform the behaviour
- Possess the skills to perform the behaviour
- Believe that it can perform the behaviour (self-efficacy)
- Believe that the performance of the behaviour is consistent with its self-image
- Perceive greater social pressure to perform the behaviour than not to perform it (social norms)
- Experience fewer barriers to perform a behaviour than not to perform it

³⁵ N. K. WeinReich (1999). As in 5.

'Top Ten Factors for smoother behaviour change

I recommend the following as the most important factors for EDI to consider in relation to individuals' processes of being motivated to behave in more socially beneficial ways:

1	Knowledge	Aha – got it!
2	Relevance	Does it affect me?
3	Costs and benefits of	What's in it for me? Is it worth it?
	change	
4	Barriers to change	Will it be a hassle?
5	Self-efficacy	Do I have what it takes?
6	Self-image	Does it fit with who I am and who I want to be?
7	Norms	Does it fit with what others like me are doing?
8	Commitment	Now I've started, why not do more?
9	Prompts	That reminds me
10	Incentives	That makes it rather more attractive a proposition

The ten tips are not necessarily in chronological order because people do not necessarily alter their behaviour in a stepwise fashion; self-efficacy is multi-faceted and can play a part at every stage of the behaviour change process. If an individual thinks that they are unable to achieve much of anything, they may not attend to awareness raising information about the new behaviour in the first place. Neither are the tips completely distinct from one another; the barriers to change may be identified as part of weighing up the costs and benefits of change.

Nonetheless, the model does help illustrate the 'Stages of Change' premise that people can increase their knowledge and change their behaviour incrementally.

Moral Motivation

A complex factor in the process of behaviour change is the extent to which an individual's self-image contributes to their adoption of a new behaviour. We have discussed the fact that certain attitudes may drive behaviour and McKenzie Mohr³⁶ advocates helping people to view themselves as 'environmentally concerned' with the belief that they will then be more likely to act in accordance with this view of themselves. A meta-analysis of 67 studies into consumer re-cycling behaviour³⁷ supported the belief that consumer commitment to behaviour is the one of the best predictors of performance of that behaviour.

Similarly, Brekke, Kverndokk and Nyborg³⁸ state that voluntary contributions to public goods are motivated by the preference of consumers to view themselves as socially responsible individuals. They go on to comment "the self-image as socially responsible is determined by a comparison of one's actual behaviour against an endogenous morally ideal behaviour". As we know from the work on cognitive

³⁶ McKenzie-Mohr and William Smith (1999). *Fostering Sustainable Behaviour*. New Society Publishers

³⁷ Hornik, Cherian, Madansky & Narayana (1995). Article on community based social marketing website, 'www.toolsofchange.com'

³⁸ Brekke, K.A., Kverndokk, S. & Nyborg, K. (2002) An economic model of moral motivation. *Journal of Public Economics*, in press.

dissonance, an increase in dissonance between preferred self-image and actual behaviour is a route to moving behaviour towards the ideal. However, Brekke et al. warn that public policy can have an unintentionally negative effect on the morally ideal contribution to voluntary work or recycling behaviour for example. Their 'economic model of moral motivation' predicts that economic incentives may have an adverse effect on contributions because they can reduce people's intrinsic motivation to the right thing.

The logical progression of self-image as agent of change for the good is the phenomenon of altruism, if there truly is such a thing. If all else falters, we can rely on a little of this continuing to prosper (in spite of it being contra to the evolutionary imperative of survival of the fittest as the books remind you).

Conclusion

As away of pulling together, and illustrating, these different theories of motivation and behaviour change, it would be interesting to see how they could inform a specific campaign.

We are going to use the theme of water as the basis on which to apply the theory. Water has a number of advantages as a theme. For example, it has cross-cause appeal and is applicable to each of the levels of activity; individual, community and global.

Although there are a number of different objectives that a water campaign could work towards, for ease of understanding and applicability of the theory, there will be only one objective of this behaviour change campaign:

'To increase the amount of water that young people drink on a daily basis'

and the outcome: 'That they become healthier'.

This objective assumes that the majority of the population of the UK don't drink enough water and/or drink too much fizzy drinks and sweetened juices. Regular medical advice states that this is indeed the case.

Before setting out to design a campaign, the social marketing literature recommends that we ask ourselves a few preliminary questions;

Questions:

- What are we offering people?
- Who is our audience?
- Does a health benefit matter?

Answers:

- We are offering young people a readily achievable, healthy alternative to their normal behaviour
- Our target audience are children under 16, with an affiliated audience of parents, older friends and other 'significant others'.
- Objectively from a health perspective, the possible benefits are important to the individual and wider society.

Question: Next, we need to decide which behaviour we need to increase or decrease the most.

Answer: Firstly, We need to increase the amount of tap water that young people drink, as it is accessible and free (at least to them). Secondly, we need to increase the frequency that young people buy a bottle of water in a shop, rather than a can or bottle of fizzy drink (they will hopefully then go onto recycle the bottle when finished, but that is another story).

We could also concentrate on decreasing competing behaviours such as buying fizzy drinks, but we shall stick with 'approach goals' that young people can do as opposed to focussing on what they can't for the moment.

The Stages of Change model prompts us to ask:

Question: Who is ready to change?

Answer: We can find out where to target our campaign via focus groups, surveys and other research.

Finally, in order to hone our campaign, we need to look at the characteristic differences between 2 groups with regards to the behaviour of drinking water from the tap at home or buying water on a regular basis from stores i.e., those who do drink and those who don't.

This is known as the '**Doer-Non-doer' analysis**³⁹, and helps to determine what the behaviour we are looking at is dependent on – is it knowledge about the importance of water to health that's important, the perception that bottled water is an expensive luxury, or attitudes about the safety of water in the home, or some outside structure such as the water supply being especially 'hard' and therefore unpleasant to drink? Or other factors, such as social norms?

Assuming that the behaviour is dependent on knowledge, amongst other things, we could follow the 'top ten tips' and link each with an objective for that stage as well as a possible component of a campaign strategy (see table 5).

³⁹ From Bill Smith's paper, What's the Big Idea? (see '6').

Tip for Change	Objectives	Examples of Campaign Components
Knowledge	Need to raise awareness about the safety of drinking water from tap and in bottled form	Media coverage
Relevance	Need to raise awareness of the relevance of the issue to young people. That we are <i>all</i> affected	Internet
Costs and Benefits	Need to raise awareness of the benefits of change. Keep it simple	Endorse message in schools that drinking water is a 'good thing' e.g., through sports
Barriers to change	Need to look at obstacles, such as the taste of the water, as well as the benefits of the competing behaviour and to lower them	Focus groups/surveys/ observational studies. May overcome health concerns by showing how easy it is to purchase a water filter, for example
Self-efficacy	Highlighting the skills needed and fact that everyone can achieve change. Making young people feel that they can do it	Providing ideas about making water more palatable e.g., keeping it in fridge. Media and school packs/credible others modelling behaviour to show that it's achievable
Norms	Having found out which 'significant others' are important in influencing young people's behaviour, use these people to create normative pressure. Plus belief that we can <i>all</i> do something.	Media – using significant others to 'model' behaviour, to help young people regard drinking more water as popular and something they 'should' be doing
Self-image	If being healthy is not important to young person's self image, need to find out what is	Tailor a consequence of the behaviour to relevant part of self-image e.g., it is efficient, healthy and better for appearance, friendly, thrifty, mature etc.
Commitment	Need to gain small commitment first, ideally in writing and in public	Asking young person to test new 'branded water, volunteer to encourage others etc.
Prompts	Need to remind young people what they are trying to change and how	Noticeable, explicit, appealing signs or slogans
Incentives	Need to reward positive behaviours and be careful not to damage intrinsic motivation	Recycling 'reward' for water bottles

 Table 5 – The relevance of the theory to a campaign to drink more water

There are other points to bear in mind when devising a campaign to encourage behaviour change, particularly with young people, such as making it fun and interactive where possible e.g., with a website. However, the above table gives a taste of how the design of a campaign strategy (without really touching on how the media would best be used) could be informed by the most important points in the literature on motivation and behaviour change.

Summary

We have seen that motivation is indeed important to achieving a goal of behavioural change but that in many cases it is not by itself, sufficient to ensure such change.

We have also reviewed a number of different theories of motivation and related theories of behaviour change, some of which have been incorporated into strategies focussed at an individual or community level, such as motivational interviewing and social marketing.

What the proliferation of theories suggest, and this is a belief borne out by many of the introductory chapters on motivation and behaviour change found in textbooks, is that behaviour is notoriously difficult to change and that no one approach guarantees success.

However, before we despair and down our behaviour change tools, it is worth remembering that people do change their behaviour and for many different reasons. By using strategies that have been shown to increase the chances of change, our approach will become more rigorous and we will be better able to evaluate where we are and where we want to be at each stage of the process.

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