



Tools Training Strategy Facilitation

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The voluntary adoption of new practices

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ABSTRACT

The author used story analysis to explore the experiences of 93 adults who had adopted personal lifestyle changes over the previous 12 months.

The findings suggested seven propositions about the voluntary adoption of new behaviours by individuals.

- 1) Individual voluntary changes result from personal dissatisfaction or frustration driven by dissonance between a persons self-image and life's arrows.
- 2) The triggers for change are usually social interactions with family, workmates and friends.
- 3) People need confidence in their ability to change (self-efficacy).
- 4) Many changes are stimulated by major life events or breaks in routine.
- 5) Beliefs about the change - such as reasons, causes and effects, costs and benefits, and consequences - tend to have a rationalising role rather than a triggering role (ie. they allow people to justify the change to themselves and others).
- 6) Sustained behaviours depend on supportive people, products, services, or infrastructure which make the new behaviours convenient.
- 7) Sustained behaviours are those which provide sustained satisfactions, (including unexpected satisfactions).

Based on these propositions, the author proposed a psychological model of voluntary change with four factors:

Predisposing factors (dissatisfactions);

Enabling factors (rationalisations, self-efficacy, and convenience);

Triggering factors (social interactions); and

Satisfying factors.

The model has similarities to a number of social science theories, although there are also significant divergences.

The implications for designers of behaviour change programs are discussed.

Key words: social change, social marketing, social psychology, behaviour change, voluntary change, change model.

1) Introduction

Why do people adopt voluntary behaviour changes? Given the scale of challenges facing society, including global warming and water shortages, this is an important question which is of interest to many professionals including natural resource managers, environmental educators, health promoters and emergency managers.

The social psychology of change has been the subject of considerable research in recent decades. Most empirical research in this field, however, is closed, in the sense that it depends upon testing a specific hypothesis proposed by the researcher. The researcher makes a prediction based on the hypothesis, carries out a survey or interviews, and analyses the results using statistical methods. A weakness of this method is that the conclusion is limited by the hypothesis, in other words, by the researchers assumptions. But, what if the researcher began with no assumptions and instead relied on making sense of open-ended of stories told by the participants?

This paper describes the results of such a study, carried out with 93 professional educators who were participants in the authors training workshops in 2003 and 2004.

2) Methodology

This study formally collected data on 93 stories told by participants in the authors training workshops. Most of the participants were environmental educators, or educators from health or related sectors.

The workshop participants were asked to recall a discrete, voluntary change they had made to their lives over the last 12 months: something which might have been the subject of a social marketing campaign.

Participants were then asked to close their eyes and relax. The author led them through a structured process of remembering the feelings and thoughts associated the old and new behaviours, as well their memories of the time of change.

Participants then wrote down their recollections in the following format:

What was the change?
What feelings were associated with the old behaviour?
What stories and inner narratives were used to justify the old behaviour?
What triggered the change?
What knowledge, skills, ideas, services helped make the change possible?
How do you feel about the change now?

Table 1. Questions used for prompting the stories.

A number of participants were then asked to tell their stories. During this stage the participants were questioned to bring out additional factors in their recollections of the change experience.

This paper is based primarily on the 93 written stories. In addition, some conclusions suggested by the conversations but not well captured by the written story format were later confirmed in four workshops with approximately 150 participants.

In interpreting the results, it's important to keep in mind that the statistical results are based on what people wrote down, in a few minutes, in response to general questions. Much was left out. No single response, for instance, could possibly set out all the triggering factors affecting an individual. Also, many people, favouring the fashion of the day, tended to write in abstractions or education-speak which concealed the deeper story. Hence the statistical results should be seen as erring on the conservative side.

3) The stories

When asked, the participants readily identified voluntary personal changes - often quite impressive and life-altering.

Some changes were about health, lifestyle or work. For instance:

stopping smoking; starting jogging; regular swimming; joining a gym, starting long walks after work; changing jobs; starting teacher training; starting yoga; not drinking coffee or chocolate; making own pizza on Friday nights; getting rid of the television; going back to uni; starting a receipts box; wearing shoes for safety when driving; learning to accept their husbands committed but low income employment; learning to delegate, changing the way they coached their kids soccer team; working part-time to spend more time with family.

Most of the others were pro-environmental changes. For instance:

not flushing the toilet after every wee; shifting from driving to cycling (and vice versa); selling the car, buying a dishwasher; composting food scraps at work; planting native trees in the front yard; using calico bags for shopping, reusing grey water from the shower; doing a home energy audit; using refillable containers in the kitchen; using a worm farm; installing an AAA shower head; avoiding household chemicals.

4) Findings and discussion

Here is a summary of what emerged from the stories.

i) Change was often driven by personal dissatisfaction

The most consistent single finding was that voluntary changes tended to be driven by personal frustration; dissatisfaction; unhappiness or guilt.

Not using my life well - need to do something worthwhile (volunteered for Barnados)

A lot of conflict, unhappy, doing my head in, grief, sense of loss (let go of control over teenager)

not in control or confident, unfit, lazy (started exercising)

guilty, lost control (greened my lifestyle)

My family were tired of only seeing me on weekends. (changed to a less demanding job)

Partner unhappy because I was so stressed and tired. (learnt to delegate at work)

I dislocated my shoulder for the 8th time. (started yoga)

I lacked energy, felt dizzy, confused. (changed to a low G.I. diet)

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I felt negative about how I was coaching the soccer team, and raising my own kids. (So I read a book about motivational coaching, and took it on).

I hated the costs and stresses of running a car. (sold it)

I felt frustrated and guilty that I couldn't change. (started home composting)

Found excess plastic bags ugly and a storage problem. (used a reusable trolley bag)

Feelings of frustration and dissatisfaction appeared unprompted in 47 out of 93 (51%) written responses to the What triggered the change? question. But these feelings became noticeably more common as stories were verbally explored. I therefore realised it would be useful to have a specific question designed to reveal the extent of dissatisfaction as a factor in personal change.

In four subsequent workshops I asked participants to form pairs and select one person's recent voluntary change to explore. One answered the question: What feelings were associated with the old behaviour? The other probed the answer, and together they decided if the feelings were about dissatisfaction or frustration. Here are the results: ¹

	Negative feelings e.g. Dissatisfaction	No negative feelings
78 school teachers in Victoria	90%	10%
26 environmental activists and interested residents in the Blue Mountains	73%	27%
20 agency environmental educators, Landcare coordinators in WA	95%	5%
13 agency transport planners and marketers in WA	92%	8%

Table 2.

The average was 86%. Personal inner dissatisfaction, often expressed as frustration or guilt, appeared to form the emotional background to the majority of voluntary change stories.

When exploring the causes of personal dissatisfactions, two aspects stood out.

¹ Figures collected by poll at the end of a session where participants worked in pairs. One partner used the six questions as a way of exploring the others experience of voluntary change. Excludes those who provided no answer to the poll question.

Firstly - the dissatisfactions were not just objective thoughts or observations. They were linked to strongly negative emotions. For instance, she was not only stuck in a job I didn't like...but on exploration felt lost and unhappy about it.

Secondly - the role of identity or self-expectation was vital. Commonly, just below the surface of the dissatisfaction, was a sense of frustrated self-image - me not being me.

After having a child I felt and looked flabby. (...but her self-image was of a fit and energetic person)

My family were tired of only seeing me on weekends. (...but his self-image was being good parent)

Felt guilty that I wasn't composting, frustrated that change could not occur, guilty about my laziness. (...but this person saw herself as a good environmentalist)

Discussion: dissatisfaction

Interestingly, frustrated self-identity is exactly how Elliot Aronson interpreted Festinger's idea of cognitive dissonance: 'If dissonance exists, it is because the individual's behaviour is inconsistent with his self-concept.'² Aronson said we are rationalising creatures, and he proposed that we rationalise ourselves into new attitudes when we find ourselves doing behaviours which are dissonant with our existing attitudes.³

The responses from the participants in this experiment, however, suggest that there is a limit to this rationalising process. In every case, the participants could point to rationalising stories they used to justify actions they felt uncomfortable about: *Too tired, not enough time to go to gym, Cant justify the expense of a dish washer, It's convenient to use plastic bags, Too hard to go to university, others said no. Me and my mother always disposed waste in the bin.*

It seems that in these cases of successful, sustained personal change the rationalising process was no longer enough to plaster over the dissonance with deeply-held values or identities. The inner frustration continued to generate unpleasant feelings, and, when the right external factors came along, significant personal changes occurred.

What were these external factors? Some of these factors clearly acted as triggers, while others acted as resources which made the change feasible and convenient.

² Aronson, E., 1973, The Rationalising Animal, *Psychology Today*, May, 46-51

³ There is an obvious link between self image and the idea of social norms - widely acknowledged in a number of theories (e.g. the work of Ajzen and Fishbein) as primary drivers of behaviour.

ii) The triggers were usually people

Other people seemed to feature very commonly (though not universally) in the change moment. A conversation occurred. Important words - sometimes negative, sometimes supportive - were spoken by significant others, mostly family, friends or work colleagues. Occasionally the interaction was with doctors and professionals. It was never with neighbours.

Interactions with significant people were mentioned without prompting in 44 out of 93 written stories (47%). However the number appeared to be higher on probing. So I asked this question as a poll to participants in the four subsequent workshops: How many of your stories involved interactions with other people as the triggers for change.

Here is the result.

	Other people in the change moment	No other people
87 school teachers in Victoria	75%	25%
25 environmental activists and interested residents in the Blue Mountains	64%	36%
21 agency environmental educators, Landcare coordinators in WA	76%	24%
23 agency transport planners and marketers in WA	87%	13%

Table 3.

The average was 75%.

It was notable that the other people mentioned were not passive bystanders. They were central actors in the process of change.

I had a terrible moment with the deputy principal. (changing jobs)

A friend said Ill do it with you. (walking after work)

I talked to a friend who was into body building. (going to the gym)

My wife talked to me about the pesticides we use in the home.

A friend motivated me. (took up sport)

The trigger was - my mum.

A friend invited me to attend club meetings. (joined service club)

A friend purchased a worm farm and gave it to me.

A friend introduced me to a book on coaching.

Relationships were getting worse at home. (accepting of husband's work choice)

During conflict with another it became blindingly clear what I had to do. (left her husband)

Strong critique of the way I go about my life by a close friend. (focused more on her son)

Friends joined and invited us to take our children. (joined surf club)

My partner calculated how many times we had used the car this month, and what it cost. (sold car)

A friend said Just go. (started yoga)

Discussion: significant others

None of these significant others were strangers, they all had an existing, sustained relationship with the actor. They were people the actor had to go on living with.

The importance of social interaction suggests that voluntary change may be an inherently social process. Unlike passive information tools, human beings have a habit of actively intruding into each other's comfort zones:

Change happened when I was talking to a friend [about Yoga] and another friend said Just go Thursday. I felt grumpy but it was a good idea.

Significant others may point out hypocrisies (*the need to practice what I preached*), may confront (*the family were tired of not seeing me except on weekends*), may create obligations (*gift of Enjo cloths from Mother for birthday then felt I had to use them*), or inspire.

It is interesting to compare the relative role of people and abstract information in the change stories. As noted below, information sources or abstract rational knowledge appeared to play surprisingly small roles as triggers of change.

iii) People need to believe in their own abilities

The answers included some 31 unprompted responses (33%) which were suggestive of Albert Bandura's idea of Self-Efficacy - the idea that personal change depends on believing we have the capabilities to achieve our goals.

Perceived self-efficacy is concerned with judgements of how well one can execute courses of action required to deal with prospective situations.⁴

Getting organised, having lists, doing stuff today, not tomorrow...

An awareness I can do anything but I just had to breach the threshold.

Realising I had the power to make a change and show others how easy it is.

I was the one that needed to change my destiny

(I found) I could stop it if I wanted to

Shift in the idea of delivering my goals

Capacity to ask for help - and not feel bad about it

Knowledge that I was creative enough to think of a range of (pizza) toppings

Realising that the ability to claim time for myself is necessary and OK

Realisation

My own reflection

I got better at the job

Knowing when to keep physically challenging myself during exercises

Realising I had more to contribute in another role

Finally allowed myself to make the choice

Didn't need to have approval

Realising it was as simple as removing the telly

It was often a realisation or discovery of self-efficacy which allowed the change to go ahead. And in many cases this realisation immediately preceded the change.

Discussion: self-efficacy

The stories don't tell us whether the realisations were a cause or a consequence of other change factors. However it shows that, even for these highly competent individuals, feelings of futility, helplessness or incapacity often had to be defeated before change could occur.

⁴ Bandura, A. (1982) Self-Efficacy Mechanism in Human Agency, *American Psychologist* 37 (2) 122-147

Bandura wrote ‘...people register notable increases in self-efficacy when their experiences disconfirm beliefs about what they fear and when they gain new skills to manage threatening activities.’⁵ It’s possible that major life changes and interactions with other people allowed the participants to rediscover capacities they had ignored or which had been suppressed by circumstances.

For program designers, there is a message that an audience’s self-confidence is important. People must believe they have the ability to change. Successful programs may therefore depend on choreographing experiences that gently allow people to discover new or hidden capacities.

It’s a sobering thought that many of these professional educators had to overcome considerable inner obstacles to adopt the very lifestyles they were daily prescribing to the public!

Incidentally, it is surprising that only one person said they changed because of a long term plan they had formed (they had set a personal target for 2 years). It appears that rational planning played a surprisingly small role in the voluntary life changes of these rational professionals.

iv) Information products were rarely triggers for change

The search for persuasive communications underlies much of the practice of social marketing. The cognitive models which dominate thinking about health promotion are primarily concerned with altering people’s beliefs, and hence tend to rely information tools such as advertising and leaflets, dominated by rational messages.

For instance, a typical cognitive model, The Health Belief Model, holds that, to adopt healthy lifestyle practices, an individual must (a) believe they are personally threatened by a disease, (b) believe that the disease is serious, and (c) believe that the advantages of action outweigh the costs.⁶

Yet the efficacy of information in behaviour change campaigns remains controversial. President George Bush Snr famously refused to eat his broccoli even though he knew its health benefits.

In the initial stories 32 people (34%) mentioned some kind of information or knowledge as a factor in the change process.

These kinds of information could be divided into 4 categories:

⁵ *ibid*, p125

⁶ Rosenstock, I.M., Strecher, V.J., Becker, M.H. (1988) Social Learning Theory and the Health Belief Model, *Health Education Quarterly*, 15(2), 175-183

- 1) Unique personal information, sometimes of a confronting nature (n=6, or 6%)

For example: *a bone density test; visiting doctor; I exceeded my weight threshold; partner counted how many times [car] had been used in past month and what it cost per drive; reinforcement from water bills of amount of water saved; seeing how much water our household was consuming on the water bill.*

- 3) Universal information, from specific sources (n=7, or 7.5%)

For example: *TV campaign Use Water Wisely; Smoking cessation group; a book on coaching given by a friend, participated in home energy action training for the community; composting and worm farming course, Peter Rutherford [an eco-gardening trainer].*

- 3) Universal information; from non-stated sources (n=12, or 13%)

For example: *I knew there was a community garden; I heard about a 2 drawer dishwasher, knowing where to find a draught stopper; water restrictions and drought, access to supporting info about operating worm farm; awareness of where I could get bulk products, did some research on water usage; internet info on composting, internet pizza recipes; stories in media about whole countries stopping use (of plastic bags).*

- 4) Common sense and zeitgeist ⁷ (n=7, or 7.5%)

For example: *I already know Yoga makes an enormous difference; the cost of parking and petrol, knowing what services are in my community; buses are cheaper than driving, Just a general awareness/information that increased use of muscles equals improved bones;*

Sometimes it was cumulative information:

information on pesticides from many sources,

slowly increased raising of awareness that plastic bags are actually bad.

One person simply remembered a fact they had forgotten:

I just remembered one day that the library was open after 5pm (she started borrowing books again)

Sometimes information was no use at all:

I collected lots of information about adopting a healthy life style but didn't read most of it!

⁷ By zeitgeist I mean the ideas we absorb automatically from the surrounding culture.

Interestingly, and contrary to accepted belief amongst communicators, there were relatively few instances of people actively *seeking* information or skills. A few used the internet to get information on composting, cooking recipes. One or two went to workshops. For the great majority, however, it appears they already had the necessary information well before the time of change, either because they had already accumulated it from many sources, or because it was common sense.⁸

Discussion: the role of information

Information tools such as media campaigns, brochures, training courses, websites, advertisements etc... are the stock-in-trade of social marketers and community educators. Yet the efficacy of such rational information is by no means assured. Road safety, anti-smoking and HIV campaigners all have plentiful reason to doubt the capacity of rational arguments to promote new behaviours.

This experiment adds a little refinement to the debate about the useful role of information tools.

The findings suggest that information may not be a triggering factor in its own right. Most people, it seems, already had the necessary information long before their change moment.

The notable exception was confronting, highly personalised information, such as medical reports. These certainly proved to be powerful change tools, triggering strong responses.⁹

Universal, generalised information tools, such as media campaigns, are therefore important in laying down a cumulative groundwork of basic knowledge. Their role is to move an audience from precontemplation to contemplation in the well-known scheme of Prochaska and DiClemente.¹⁰

Significantly, however, there is little evidence that information tools aid the step from contemplation to trial, in other words, they rarely act as triggers in themselves.

⁸ The experiment may be somewhat biased in these findings about the limited role of information. For a start, lifestyle and health information is so ubiquitous in our society that it can be taken for granted. It's not likely that the participants would have felt the need to mention obvious common knowledge in their stories. Secondly, many of the participants, being professional educators, would be highly aware of the costs, benefits and methods of personal actions so this knowledge might also have been considered too obvious to mention.

⁹ One could argue that the power of medical reports comes not from their rationality but from their ability to create existential terror. In this sense they may not be rational tools at all.

¹⁰ Prochaska, J.O. and DiClemente, C.C. (1984) Stages and process of self-change of smoking: Towards an integrative model of change, *Journal of Consulting and Clinical Psychology* 51: 390-95

An implication for program designers is that information tools should not be evaluated on their ability to elicit behavioural change.

What then is the role of information in a change project? Cognitive Dissonance theorists point out that human beings are social creatures who need to present consistent appearances to their peers or risk social humiliation or rejection. In particular people need to demonstrate consistency between their beliefs and their actions. People therefore need a stock of arguments for or against new behaviours in order to present a consistent face to society. In this view rational arguments may be more important as after-the-event rationalising tools, rather than triggers in themselves.

In fact workshop participants had no trouble thinking of rationalisations both for and against new behaviours. Here is a typical example. Before the change: No money to buy a bike, quicker to drive, may be dangerous. After the change: It will save me money. I can take precautions for my safety. It will only take a few minutes longer. I will get fit! It appears this person had a plentiful stock of arguments both for and against cycling.

Perhaps the purpose of rational information is to provide people with believable arguments so that when they adopt a new behaviour they can present a consistent social identity. In this view, information tools may be of secondary importance in the delivery of a change program. Once people adopt a new behaviour they will naturally seek out rationalising arguments from whatever sources are available.

To make the point clearer, here is a story:

Predisposition or desire:

Participant A dislikes the pizzas he consumes with his girlfriend on a Friday night.

Enabling factors:

- He knows that homemade pizzas could taste better (positive rationalisation);
- Cooking is messy and a lot of trouble (negative rationalisation)
- He is a confident cook (self-efficacy);
- He knows how to find pizza recipes on the internet (self-efficacy, convenient resource);
- He has access to a kitchen (convenient resource).

Triggering factors:

An interaction with his girlfriend sparks him to try cooking pizzas himself.

Satisfying factors:

- The pizzas taste great (expected satisfaction);
- Cooking pizzas together turns out to be a wonderful bonding time with his girlfriend (unexpected satisfaction).

In this example there are two kinds of information:

- general knowledge collected from many sources, that home made pizzas could taste better;
- pizza recipes on the internet.

In this case information was part of the process of change, but information alone did not have create the lovely Friday night courtship ritual. It neither acted as a predisposing force, nor as a trigger. It assisted change, but did not cause it.

Although this example was quite typical of the change stories in the experiment, there was one clear exception: confronting, undeniable, highly personalised information, such as medical reports, or finding a dress that no longer fits. This kind of forensic information was certainly powerful change agents in its own right, acting simultaneously as predisposition, rationalisation AND trigger! ¹¹

v) Change needs special times and spaces

It seems that voluntary changes are often inhibited by the repetitive grind of daily life. Instead they await their opportunity and appear to cascade from major life events or breaks in routine. ¹²

There appeared to be two categories here.

Firstly, 23 stories (25%) referred to major life events like having a baby, changing jobs, moving home or having a health crisis.

Examples:

I got like-minded housemates and a new boyfriend (made house eco-friendly)

I moved to a new country

¹¹ I should point out that there are obvious biases in these findings about the limited role of information. For a start, lifestyle and health information is so ubiquitous in our society that it can be taken for granted. Its not likely that the participants would have felt the need to mention obvious common knowledge in their stories. Secondly, many of the participants, being professional educators, would be highly aware of the costs, benefits and methods of personal actions so this knowledge might also have been considered too obvious to mention.

¹² Note that, although the majority of participants could identify a pivotal change moment, a small minority could not. Their decision seemed to build up over time.

I was sick - in hospital

I spent a night in the emergency ward

It was a low point (change of relationship) - I was ready for a new adventure. (took up distance cycling)

The children were moving out - it made space

moved to a new smaller office building [that] gave staff a feeling of power

A new job - a new way of thinking (stopped driving to work)

I was expecting a child (bought a car)

I had a close call driving (started wearing shoes instead of slippers)

Work slowed down a little - I got better at the job

Secondly, 9 stories (10%) referred to holidays or unusual recreational events that took people out of their usual routines and opened new perspectives.

Friends inviting me to a National Canoeing Competition

A long weekend happened - just one extra day felt so much longer. (started going on weekend camping trips)

A week away in a telly free household (got rid of TV)

I went overseas for 8-9 weeks...good thinking time.

I was walking with friends in the Blue Mountains and realised how unfit I was. (long walks after work).

It was a public holiday so it was time to do it. (planted natives)

A trip to Vietnam enforced dietary change. (started low GI diet)

Discussion: breaking the routine of life

It seems that the busy-ness of life often restricts the ability to see new possibilities and forecloses the capacity to act. Novel experiences, both good and bad, can shake up fixed perspectives, creating a new sense of possibility. Interruptions of routine, even quite brief, can supply the expansive sense of time and space that people need to initiate change.

The implication for program designers is that change programs are likely to be more effective when they extract participants from the routines of daily life and place them in stimulating spaces where new perspectives can form and there is time to think and interact with others. Adult educators have long argued the importance of experiential learning and this experiment lends support to that principle.

vi) People need resources for change

The stories revealed that inner drive and external opportunity were not enough - a diverse range of supports and resources were pivotal in these successful stories of change.

46 of 93 stories (49%) mentioned infrastructure, products, services or human support.

Examples included:

Accessible social infrastructure:

- an attractive walking route
- a pool 5 minutes from work
- a traffic-free bicycle track
- a nearby Bushcare group
- a crèche
- a nearby Yoga class
- a smoking cessation group
- a naturopath
- a singing teacher to help set goals and get started
- Radio National (as an alternative to TV)
- gym close, spare finance ¹³

¹³ Interestingly, this was the only reference to financial cost made by any participant. A fact that may suggest that cost is not a major issue when it comes to life-enhancing change - although an exploration of non-change might have revealed a greater role for financial barriers.

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Convenient, available products:

- a bread-maker (for the Friday night home pizzas)
- a worm farm
- AAA shower heads
- trolley bags
- bulk cooking oil and soap power

People:

- *my brother is a personal trainer - and I could use his motivational services*
- *a friend to go to the workshop with me and create the first garden bed*
- *Peter Rutherford, Kimbriki*
- *the staff at Barnados call every fortnight to see how things were going.*

The poll in the subsequent workshops showed:

	External support needed	No external support needed
94 school teachers in Victoria	85%	15%
24 environmental activists and interested residents in the Blue Mountains	75%	25%
17 agency environmental educators, Landcare coordinators in WA	82%	18%

Table 4.

The average was 83%.

It appears that services, products, advice and supportive people - accessible and timely - are important contributors to the process of change.

vii) Sustained change delivered the hoped-for benefits, and more

People were asked how they felt about themselves having successfully adopted the new change in their lives. The responses show that the experience of voluntary change is exciting, pleasurable and life-affirming. It

also suggests that sustained changes are likely to be those that generate sustained satisfactions for individuals.

Feelings of satisfaction or descriptions of satisfactory outcomes appeared unprompted in 62 out of 92 stories (67%).

Participants made statements like:

- *It felt wonderful*
- *I felt in control*
- *I feel better!*
- *I like the variety!*
- *I feel connected to my passions*
- *I've got a lot of freedom!*
- *I'm more centred...a new spiritual life!*
- *I feel a lot better.*
- *I feel energised.*
- *More positive. It's my decision.*
- *I see the changes*
- *Incredible*
- *I've taken control*
- *My time with mum.*
- *I can touch my toes!*
- *Feel really great*

Notable was the passion, energy and happiness that so often accompanied these emphatic statements. Participants faces visibly lightened, their voices became more lively.

Like the preceding feelings of dissatisfaction, the later feelings of satisfaction were not given as clinical descriptions - they were coloured by feelings of pleasure and happiness.

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I designed the following question and put it to participants in the four subsequent workshops: How many of your changes involved sustained feelings of satisfaction?

The results were:

	Sustained satisfaction	No such feelings
96 school teachers in Victoria	100%	0%
28 environmental activists and interested residents in the Blue Mountains	100%	0%
20 agency environmental educators, Landcare coordinators in WA	95%	5%
13 agency transport planners and marketers in WA	85%	15%

Table 5.

The average was 98%.

Discussion: satisfaction

This finding suggests that the voluntary change is not simply a rational act, but a fundamentally human one, driven by the imagination and emotion rather than utility-maximising calculations of advantage and disadvantage.

The participants had been asked to tell stories of successful changes. In other words, they were changes that *sustained* over time. This result shows that in virtually every case the satisfaction was sustained over time as well. The correlation between sustained change with sustained satisfaction appears to be strong and almost universal. There is an unavoidable implication for those who design voluntary change programs: If the new behaviour does not, of itself, deliver sustained satisfaction to those who adopt it, it is unlikely to be sustained.

Exploring these satisfactions may provide some insight into the holy grail question: What makes sustained change?

Firstly, the participants believed the changes provided the expected benefits.

After changing his soccer coaching style B says I tell myself that I can communicate better with children and adolescents - including my own children.

After ditching the TV to connect with more with her kids, C says I have a more powerful feeling over my home time. My 16 year old daughter's

friends brought her a TV for her birthday. It just sits in the back room unused - Yahoo!!

But, just as often, the changes provided unexpected benefits - opening up new possibilities which provided continuing pleasure, pride and sense of self-worth.

D started exercising to look and feel good for her wedding. Now she says: *I feel and look better. I am more energised*
...PLUS *this has permeated into other areas of my life.*

E resisted exercising because she feared it would cut into her relaxation time. She was driven by feeling unhealthy, wanting to be strong and active. Exercise provided these benefits
...PLUS it allowed her to feel more relaxed by being active.

F sold her car to save money. It worked. She has less parking tickets, more \$ less stress.
...PLUS more lifts from partner which provides more conversational time.

G started swimming to get me-time. Now she feels: *more in control of my time, health and fitness*
....PLUS she found that being relaxed is good for her new baby.

H changed jobs to spend less time commuting and increase family time. He say: *Now I have a happier family environment*
....PLUS *a much more fulfilling job!*

J started making his own pizzas because of dissatisfaction with the quality of pizzas, given the expense. He found that: *I can make a much better pizza than most of the local pizza joints*
....PLUS he discovered that cooking pizza with his partner has become an important bonding ritual in their relationship.

Program designers may benefit from exploring the unexpected benefits discovered by their audiences. It is possible that such unexpected benefits may contain the secrets to better matching their messages (and products) to the audiences lives and aspirations in future.

5) Conclusions

These findings suggest seven propositions, and allow the author to propose a voluntary change model with four elements. This has significant implications for those who design behaviour change programs.

Seven propositions

The propositions are:

- 1) The basic cause of voluntary behaviour change is personal dissatisfaction or frustration. This dissatisfaction appears to be driven by dissonance between imagined hopes or desired self-image on one hand and the uncomfortable indignities of life on the other.
- 2) The triggers for change are usually social interactions with family, friends and workmates.
- 3) People need to believe in their personal ability to change (self-efficacy).
- 4) Change often occurs at the same time as major life events such as moving home, changing jobs, illness, entering or leaving relationships, having children or being on holidays.
- 5) Formal information or rational knowledge is rarely a trigger for voluntary change, although knowledge is important to help rationalise or assist changes already made. An exception to this is vivid personalised information such as medical diagnoses: it is a strong driver of change.
- 6) Sustained adoption of new behaviours depends on access to supportive people, products, services, or infrastructure which make the new behaviours convenient.
- 7) Sustained behaviours provide sustained satisfactions, including unexpected satisfactions. The obverse principle may apply - if a change does not provide sustained satisfactions, it may not sustain,

A model of voluntary change

These propositions suggest a model of voluntary change based on Predisposing, Enabling, Triggering, and Satisfying factors.

1) Predisposing factors

The roots of personal change appear to be feelings of frustration, dissatisfaction, humiliation or indignity at life's arrows. The sense of indignity arises, however, not because of the inherent discomfort of events, but because of dissonance with personal hopes, dreams, values, visions for the future, or social norms which we desire to emulate (collectively, our self-image).

Implications for program designers: change projects are more likely to be successful if they seek to discover and solve the genuine dissatisfactions and indignities of participants, rather than simply push the policy needs of an agency.

In practice, the best way to achieve this may be through credible role models or visions which demonstrate that how others have solved the same dissatisfactions.

2) Enabling factors

A number of barriers may have to be overcome before participants can act on their predispositions. There are at least three kinds:

- a) Rationalisations. People need rational arguments to justify new behaviours to themselves and others (although people appear to be exceptionally good at developing rationalisations and may therefore need little such assistance).
- b) Confidence. People need to believe in their own capabilities or skills to successfully initiate and maintain the new behaviour.
- c) Convenience. People need external supports which lower the costs of acting (advisors, products, services, infrastructure which make the new behaviour easy).

Implications for program designers: Ensure that the specific barriers affecting the adoption of a behaviour by each group of participants are identified and realistically addressed. For instance it is vital to ensure that the desired practice is convenient, accessible and well priced.

People also need to believe in their personal capacity to act. Experiential (hands-on) learning may be the best way to build this sense of personal confidence.

3) Triggering factors

Change moments mostly seem to occur during interactions with family, workmates and friends.

Change also appears to be encouraged by times and spaces which are outside peoples' daily routine, where they may be more open to new possibilities.

Implications for program designers: the program staff may need to shift their role from being educators, to being choreographers of change events in which peers interact with each other and with role models, where the experiential learning occurs, and where convenient products and services are made available.

4) Satisfactions

Sustained changes are those which generate sustained satisfactions. These satisfactions may be unexpected and impossible to predict in

advance (hence it's important for program designers to learn from the experiences of early adopters). The converse applies: changes which do not provide satisfaction are unlikely to be sustained.

Implications for program designers: the proposed new behaviour must genuinely meet or exceed the expectations of the participants. It must be fit for its practical purpose but that alone may not be sufficient. It must also fit the participants' emotional landscapes: providing a sense of self-mastery, new relationships, and a closer fit to self-image.

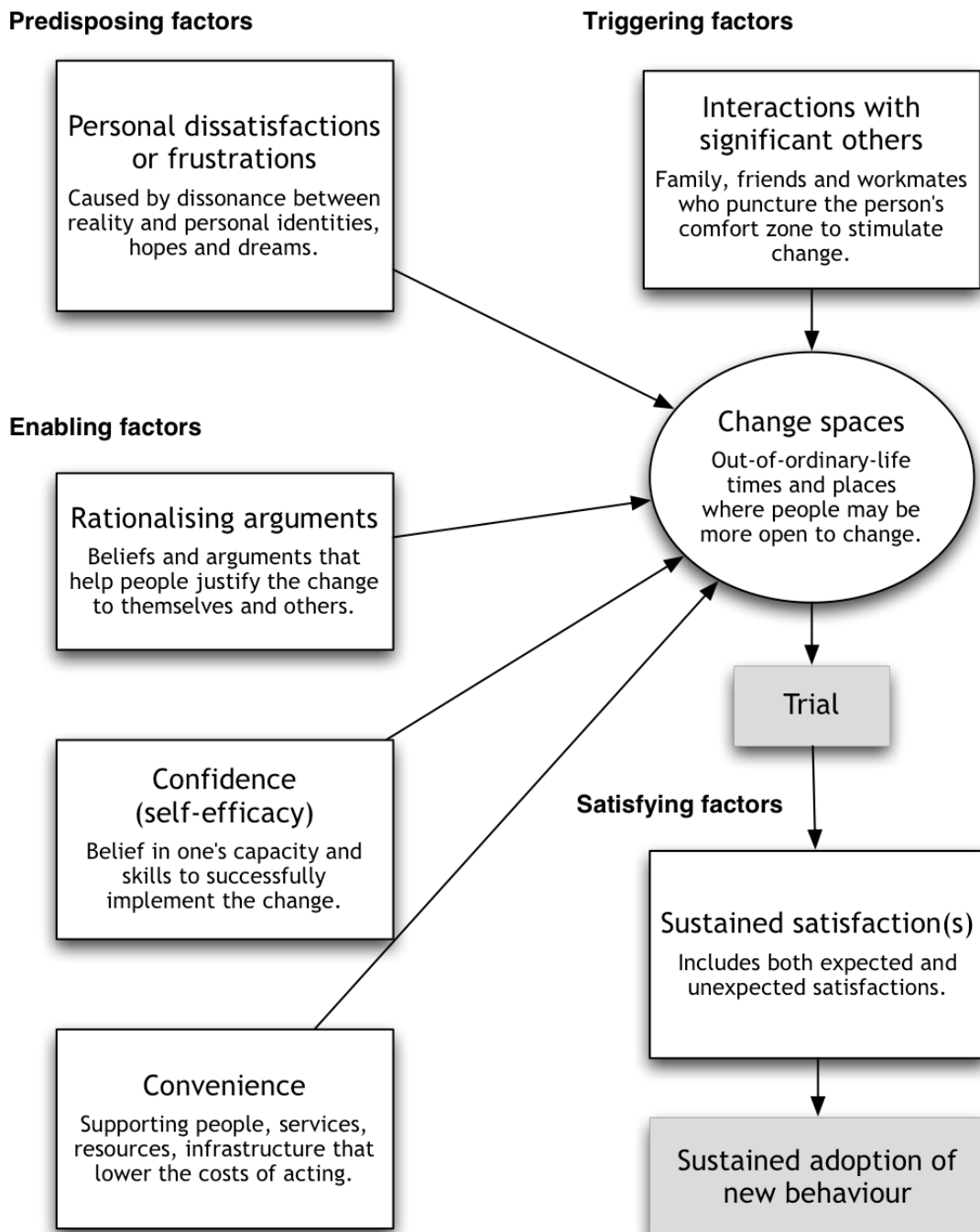


Figure 1. The voluntary change model based on the four factors.

Reassuringly, this model includes elements found in a number of models which are mainstays of social science theory. Predisposing factors resemble Ajzen and Fishbein's ideas of attitude towards the innovation, and perceived social norm.¹⁴ Confidence mirrors Bandura's concept of self-efficacy.¹⁵ There is also a superficial similarity to Green and Kreuter's PRECEDE model¹⁶ (although their focus was largely limited to the factors defined as enabling here). The idea of satisfaction adds some colour to the important but inherently fuzzy concept of 'perceived relative advantage' in the Diffusion of Innovations.¹⁷

There are also significant departures from these models, notably the central role proposed for frustration or dissatisfaction, the importance of self-image, the downplayed role of rational information, the importance of peer interactions as trigger moments, and the connection between sustained satisfaction and sustained behaviour change.

Final comment

This experiment demonstrates the effectiveness of open-ended story analysis as a tool for exploring social psychology.

The result is a holistic change model which integrates a number of concepts which are treated discretely in other theories. The model may act as a checklist of elements which ought to be found in an effective voluntary change program.

Note: The model proved useful as an evaluation tool. It has been used to evaluate Landcare programs in the Philippines¹⁸, as a framework for Landcare support in Victoria,¹⁹ and to evaluate a sustainable grazing program in NSW.²⁰

Acknowledgments

I am grateful to all those who shared their personal stories and participated in discussions about the nature of change. Thank you for your candour and keen insights.

¹⁴ Ajzen, I. (1991) The theory of planned behaviour, *Organisational Behaviour and Human Design Processes*, 50, 179-211

¹⁵ Bandura, A. (1982) Self-Efficacy Mechanism in Human Agency, *American Psychologist* 37 (2) 122-147

¹⁶ Green L.W. & Kreuter, M.W. (1991) *Health Promotion Planning - An Educational and Environmental Approach*, 2nd edition, Mayfield Publishing Co., Palo Alto, p.36

¹⁷ Rogers, E. (1995) *The Diffusion of Innovations*, The Free Press, New York, 4th edition

¹⁸ Metcalfe, J., Boy, G., Laotoco, A., Ruiz E (2003) Changing lives and landscapes in the Philippines, unpublished conference article

¹⁹ Corangamite Catchment Management Authority (2004) *Landcare Support Strategy 2004-2009*.

²⁰ Les Robinson (2005) *Engaging Stakeholders in Regional NRM Practice Change*, *Southern Rivers Final report*, National Heritage Trust and Land and Water Australia.