

APS Interest Group on Psychology Education

Resource Material Submission – Front Page Summary

Title of Material	Increasing self-control workshop
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Description/Aim	The workshop is designed to help individuals understand behaviour change principles. Students are guided through the process of identifying unwanted behaviours, and how these would be approached in applied behaviour analysis. This material is designed to help students see the links between the laboratory investigation of learning and its application in the real world. Students are encouraged to think about what the term “self-control” means from a behaviourist perspective.
Benefits of Resource	Tool to help students with everyday behaviours that are based on evidence.
Issues for Consideration	
Approximate Duration	Across 3 tutorials – approximately 3 hours
Primary Content/ Process Topic	Psychological literacy, self-development
Other Categories	Self-control, behaviour change, reinforcement, goal setting, self-development
Intended student level <i>(e.g. Secondary, Undergraduate Introductory, Undergraduate 4th Yr/ Honours, Post-graduate)</i>	Undergraduate
Type of Material <i>(e.g. classroom materials, assessment, lectures, teaching tips, articles, syllabi, simulated learning environments.)</i>	Workshop
Format of Material	Pdf file
Further Information Contact <i>(email only)</i>	steve.provost@scu.edu.au
Review Requested <i>(Nb: A ‘Yes’ response to this category indicates that you would like feedback/comments on the materials via email.)</i>	Yes
Evaluative Data Included <i>(E.g. Student evaluation, comments etc.)</i>	No

Learning Workshops

Developing Self-Control

Steve Provost¹

One of the reasons that the study of learning has been so important for psychology as a discipline and profession is that understanding some very basic principles can lead to immediate and effective methods for changing behaviour. The application of principles discovered from the study of instrumental learning used to be called “behaviour modification” but is now more often referred to as “applied behaviour analysis”. In these workshops we will be discussing the steps involved in the development of a self-control program from a behaviourist perspective. You will not actually be implementing this program (three weeks is too short a time), but we will take you through the steps involved, so that if you wished to, you could do this at some later stage. We will focus on organisational change rather than health or other behaviours. This is because you should not enter into a behaviour change program relating to your health without consulting a physician to ensure that you will not do any harm to yourself in the process, and we would hate to lose any students. The purpose here is to illustrate the link between the procedures of applied behaviour analysis and the principles you are hearing about in lectures and reading in the text book.

Week 1

Step 1: Specify your target behaviour

The first stage of a self-control program is problem definition and establishment of goals.

Self-control like any other response needs shaping. As such *start with something simple*. If your first attempt to use the technique is to try to stop smoking, you will almost certainly fail. If you can control behaviour that is not as strong, then perhaps you can move on to more difficult examples of self-control later.

It may help to make a list of dissatisfactions in your life (don't make this too long!). This could be something that you would really like to increase in frequency, for example making notes each time you read a chapter of the text-book, or something you would like to decrease, such as staying up late and not getting 8 hours sleep. It might also include behaviours such as procrastination in your work, annoyances at work which you never do anything about, feeling like you never have any time to yourself, and many others.

Some of you may have heard of a technique known as “goal setting”. This bears many similarities to applied behaviour analysis, but does not focus on reinforcement principles. Goal setting has a very useful heuristic for specifying target behaviours, in

¹ Based on a laboratory constructed by Nigel Bond at Macquarie University.

that the goal must be “SMART”, where smart stands for Specific, Measurable, Attainable, Realistic, and Timely.

IN-CLASS ACTIVITY:

- **Think about three things that you might like to change in your behaviour. (5 mins)**
- **Discuss these with three people around you in the classroom. Decide whether the behaviour you might wish to change is Specific and Measurable. (15 mins) (n.b., if you are an online student the you could maybe discuss this with somebody in your home, or post a message on the board and ask for some feedback from other students)**

Step 2: Gather baseline data

Gathering baseline data on the behaviour you wish to change is absolutely critical in applied behaviour analysis, because it allows you to set Attainable goals with Realistic consequences for change over a specified Timeframe. It is also very important because it allows you to identify those stimuli (which are called discriminative stimuli, or antecedents) that drive (or prevent) the behaviour. For example, an antecedent to not going to bed early might be that a particular show that you enjoy is on TV at that time. Knowing that you have a problem going to bed on the nights when that show is on, allows you to plan around it (e.g., setting the recorder, and reinforcing yourself for watching the show the next day at a more reasonable hour).

This is the first step in what is called “functional analysis”. Functional analysis is the process by which behavioural programmers working with very serious behavioural problems (such as self-abuse) seek to find out what the functional reinforcers are for that behaviour, in order to bring about change. The example we are working with is rather trivial, but the process is far from this.

HOMEWORK:

- **Over the next week measure one or more of the behaviours that you might like to change. Bring these results to next week’s class, where we will discuss some of the problems you might have encountered, and the next stage of a self-control program.**
- Read the section of Weiten on p267-269 about self-control procedures.

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Week 2

Your homework for last week was the following:

- Over the next week measure one or more of the behaviours that you might like to change. Bring these results to next week's class, where we will discuss some of the problems you might have encountered, and the next stage of a self-control program.
- Read the section of Weiten on p267-269 about self-control procedures.

IN-CLASS ACTIVITY:

- What did you think of the material in Weiten? Are there any questions you wish to ask about this? (5 mins)
- Discuss your results for the monitoring of a behaviour over the last week with two other students. Did they do things the same as you or differently? Is there a strategy for measuring behaviour that seems to work best? Discriminative stimuli are cues that precede reinforced behaviour that come to control this behaviour, as we discussed in last week's lecture. In a behaviour change program they are referred to as "antecedents". Did you identify antecedents to your behaviour that could be influencing its probability? For example, taking a break from study might occur when you hear somebody else in the house start the kettle, meaning that a cup of coffee and a chat is likely to be reinforced. (10 min)
- Plenary to discuss outcomes of this discussion, and how one might control the influence of antecedents. (10 min)
- In order to think about how to change contingencies and evaluate these changes you need to be able to "see" what effect they are having on behaviours. Start work on a chart showing the data you collected last week. (5 min)
- Share your chart with two other students. How similar, or different, are they? What are some of the problems with operationalizing behaviour in this way? (10 min)
- Plenary to discuss this. (10 min)

HOMEWORK:

- **Continue to monitor your behaviour over the next week. If you didn't start last week, do so now. While you are monitoring the behaviour, try to be conscious of the possible consequences of the behaviour. This will give you some idea of the potential sources of reinforcement which you may wish to change. We will be discussing how to formulate schedules of reinforcement for our behaviour change program next week.**

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Week 3

Your homework for last week was the following:

- **Continue to monitor your behaviour over the next week. If you didn't start last week, do so now. While you are monitoring the behaviour, try to be conscious of the possible consequences of the behaviour. This will give you some idea of the potential sources of reinforcement which you may wish to change. We will be discussing how to formulate schedules of reinforcement for our behaviour change program next week.**

Over the last two weeks we have been discussing the initial steps in a behavioural self-control program. The two steps we have discussed so far are:

Step 1: Specify your target behaviour

Step 2: Gather baseline data

This week we will move on to

Step 3: Select strategies to increase or decrease response strength

At this point you should now be able to specify your problem as some behaviour-in-a-situation that you either wish to increase or decrease. This will be your target behaviour. There are two basic principles discussed in the lecture today that you could employ. If you wish to increase the probability of a behaviour then we can use positive reinforcement. If we wish to decrease it, we could use punishment, but that's probably not very advisable, for reasons discussed in lectures. So the alternative is to reinforce an alternative behaviour which is incompatible with the target. Thus, if I wish to decrease watching youtube videos, I could reinforce taking the dog for a walk. The problem of reducing one behaviour thus becomes that of increasing another, and we can use positive reinforcement as well.

Choose a positive reinforcer. If you make this a consequence of your target behaviour, it will serve to increase its rate. Having selected what you think is a suitable reinforcer, ask yourself the following questions:

- Is it really a positive reinforcer for you?
- Do you have control over its occurrence?
- Is it potent? The bigger, the better!
- Would secondary reinforcers (tokens) be useful?

- **Remember Premack's principle.**

IN-CLASS ACTIVITY:

- **Think about what could be possible sources of reinforcement for your behaviour change program. Discuss this with three other students. (15 mins)**
- **Plenary session to discuss these comments (10 min)**

Now, **if** you are actually going to implement your program we come to the most critical component, and the one that most people fail to do **You MUST DRAW UP A CONTRACT**. It doesn't matter whether anybody else sees it or not, but it is **VITAL** that you create a written agreement with yourself that states what the target behaviour is and what positive reinforcer you will gain for performing it (or not as the case may be). Write it down, tuck it away, and **STICK TO IT**. In the language of behaviour analysis this is called being 'contingent' with yourself. **If you can't do it for yourself, what gives you the right to be contingent with your friends, children, business partners, and clients?**

Step 4: Execute and evaluate your program

The key to execution is to set up appropriate goals. To do this one finds the average response rate during the baseline phase. Next determine the largest number of responses for any given period during the baseline. The appropriate goal is a response rate higher than the former and equal to or less than the latter. (If you wish to decrease a behaviour then the reverse is the case.)

This is the stage where record-keeping and charting are critical. After you have been running your behaviour change program for a little while, you need to assess how it is going. You collected some baseline behaviour for target behaviour specification. Graph the results so far. When you implement your program consider what you see on this graph. Is the behaviour changing as it should? If not, look to see if other consequences might be affecting your target behaviour. Do you need to increase the size of the reinforcer? Re-write the contract.

If you implement the program, you might also like to keep a diary, in which you can describe 'critical events': occasions where everything seemed to go wrong. Analysing critical events in terms of antecedent conditions (stress, other people engaging in the behaviour you are trying to eliminate, etc.) and reinforcing events can help you to identify where you need to bolster your program in future. Keep a note of them.

Step 5: Bring your program to an end

Well, maybe not! If your program has been in operation for a time and is working successfully, you may wish to maintain your new-found 'will-power' without employing the elaborate program that you used to achieve it. You can do this in a number of ways:

- Use delayed reinforcement, eg., on a weekly basis when the desired response rate has been maintained for that period.

- Use graphing the rate of response as the only consequence.
- Check the response rate intermittently to see if the behaviour is being maintained.

If, on the other hand you have not had great success, then what's important is to try to see why, so that you could do better next time. The post-program analysis is important, regardless of whether it worked or not.

IN-CLASS ACTIVITY:

- **Graph your baseline data and set the first stage of contingencies that you *would* employ if you were to run the program. Remember the SMART idea in goal setting. Are your goals Attainable, Realistic and Timely? Discuss your plan with three other students. Do you think it would work? If you were successful in this stage how would you maintain the behaviour. Remember what we talked about in the first lecture (schedules of reinforcement, generalisation functions, and secondary reinforcement). How could you build these in? (15 mins)**
- **Plenary session to discuss these comments (10 min)**