

PSYCH 282

BEHAVIOUR MODIFICATION

Self-Management Project

Project Learning Outcomes

In completing the self-management project, you will:

- Apply the procedures of self-management, which will help you learn and remember the foundational knowledge that is essential to the practice of [behaviour analysis](#).
- Develop your information literacy, scientific research, data visualization, and written communication skills, which are [important abilities](#) that are highly valued by employers and post-graduate schools.
- Engage in a unique [experiential learning](#) activity that is beyond the scope of the lectures.
- Improve your life by changing a behaviour that is important to you.

Submitting

Each part of the project must be submitted online using [eClass](#). Answers to each part of the project must not exceed **400 words** (approximately the equivalent of one double-spaced page), or you will be penalized 1 mark. Use complete sentences; do not use point form. It is your responsibility to ensure that your assignment has been properly submitted. You should receive a confirmation email from eClass as soon as your submission is successful. Assignments submitted without appropriate data (when required) will be considered incomplete, and will be penalized for lateness if not submitted with data on time. Keep a copy of your answers to each part of the project on your computer: in the final part, you will be asked to submit your answers to all five parts.

Marks

Each part consists of a number of questions. For some parts, you will also have to make a line graph, which is worth additional marks. Marks are awarded based on the completeness, relevance, and specificity of your answers. If your answer is incomplete, irrelevant, vague, or is lacking detail, marks will be deducted. Half-marks are given at the discretion of the teaching assistant. A scoring rubric is attached to the end of this document. Each part of the project is not equally weighted towards your final grade.

- ⊘ **Do not copy and paste** your answers to the questions from any other source (e.g., journal article, textbook, lecture notes, website, etc.). This is plagiarism; you will receive a mark of zero, and you will be prosecuted under the terms of the [Code of Student Behaviour](#).

Due Dates & Late Policy

Each part of the project must be submitted by the **end of the day** (i.e., 11:59pm) on the day in which it is due, or it will be considered late. Late submissions will lose 1 mark per 24-hour period, starting immediately after the deadline (e.g., if you submit your assignment 1 minute after the deadline, you will lose 1 mark). If you submit it 23 hours and 59 minutes after the deadline, you will still lose only 1 mark. But if you submit it 24 hours and 1 minute after the deadline, you will lose 2 marks.

- ⚠ If you edit or make any changes to your eClass submission after the due date, you will receive a **late penalty**.

Do **not** email assignments to the instructor or TAs. Late (or early) assignments may be submitted via eClass. However, after 7 days past the due date, you will no longer be able to submit your assignment. If you have exceptional extenuating circumstances (e.g., your arms fell off), contact the instructor.

Exit Protocol

Should you begin, but be unable to complete the self-management project (e.g., your target behaviour is exercise and you injure your knee), or if you have ethical concerns about your project, stop your treatment plan immediately and contact the instructor. If you have a compelling reason not to do this self-management project, an alternate assignment may be provided. You must make arrangements with the instructor **before** Part I of the project is due.

Research

Parts II and IV of this project involve doing secondary research; that is, finding, evaluating, and briefly summarizing primary research articles that support your position. Do not take this lightly--doing research is an important scientific skill (also, marks are awarded based on the quality of evidence that you provide). A powerful tool that can help you find appropriate research is the [PSYCIInfo](#)[®] database (here is a [library guide](#)); however, many behaviour modification-specific articles are indexed by [PubMed](#)[®] and [PubMed Central](#)[®]. To help guide you through the research process, the University of Alberta Library's [Psychology subject guide](#) is recommended. The research process will also be explained in more detail in lectures.

APA Style

You may be familiar with Modern Language Association (MLA) style, often used for high school or English papers. Style guides are about the design of documents, and the mechanics of writing, such as punctuation, quotation, and documentation of sources. However, many psychology papers and scientific journals are formatted in American Psychological Association (APA) style. APA style specifies things like fonts, spacing, margins, etc., but more importantly explains how to support claims with evidence, and how to clearly differentiate between your ideas and those of others--this helps to prevent plagiarism.

If you have drawn on an outside source of information (e.g., an article in a scientific journal) to support a claim you make, you must cite it and provide a complete APA style reference. This is an example of an APA style in-text citation: (Achterberg et al., 1981). This is an example of an APA style reference:

Achterberg, J., McGraw, P., & Lawlis, G. F. (1981). Rheumatoid arthritis: A study of relaxation and temperature biofeedback training as an adjunctive therapy. *Biofeedback and Self-Regulation*, 6(2), 207-223.
<https://doi.org/10.1007/bf00998870>

Some elements of APA style will be covered in lectures. Here are some more APA style resources:

- American Psychological Association's [APA style website](#) (including [Handouts and Guides](#) and their [blog](#))
- Purdue Online Writing Lab's overview and information on [APA formatting and style](#)
- University of Alberta Library's [APA Citation Style subject guide](#)

⚠ Not all parts of the project need supporting sources. Also, to submit some parts, you will use a text box in eClass, which does not permit certain kinds of APA formatting (e.g., fonts, double-spacing, margins, hanging indents, title page, etc.) so these are **not** needed. APA style will only apply to citations and references.

Technical Support

"Technical problems" will not be accepted as an excuse for a late or incomplete assignment. eClass Support has [eClass for Students](#) tutorials, ranging from System Setup, to Submitting Assignments. For help with eClass, see the [IST eClass support knowledgebase](#) or contact [IST eClass support](#). For other IT problems, [contact IST](#).

It is strongly recommended that you make **backups** of your answers to each part (and your data). "My computer crashed" is not an acceptable excuse for a missing, incomplete, or late submission.

Target Behaviour

In this project, you must decide on the behaviour you wish to change. (For the purposes of this self-management project, it is assumed that you will be managing your own behaviour, and that you will be using direct assessment and continuous recording.) There are two kinds of behaviour change: Decreasing an undesirable behaviour, and increasing a desirable behaviour.


Below are some examples of undesirable behaviours that you may wish to extinguish or weaken. You do not have to choose one of these; you are encouraged to come up with a unique, personally relevant target behaviour! Choose a behaviour that you typically perform on a **daily** (not weekly) basis.

- eating junk food
- smoking
- being a shopaholic (however, [Compulsive Buying Disorder](#) is a psychological disorder--see below)
- watching television, web surfing, or checking social media
- biting your nails or pulling your hair
- avoiding social situations

Here are some examples of desirable behaviours that you may wish to establish or strengthen:

- studying
- exercising
- eating healthy food
- being punctual
- saving money
- talking to new people

For example, you may wish to spend less time on your Xbox (decreasing an undesirable behaviour) and spend more time studying (increasing a desirable behaviour). For the purposes of this assignment, you must designate **one** of these as your target behaviour--not both. Choose the behaviour that is most important to you to change.

 **Blacklist:** For ethical reasons, you may **not** choose a target behaviour dealing with any of the following:

- another person's behaviours (this is a **self**-management project)
- animals (e.g., an [assistance dog](#), [therapy animal](#), pet orangutan, etc.)
- anything that contravenes the [Code of Student Behaviour](#) or the [Student Conduct Policy](#)
- any illegal activity, or any behaviour involving illegal substances (e.g., illicit drugs, plutonium, etc.)
- illicit drugs, alcohol, herbal remedies, or prescription medications
- behaviours of a sexual nature
- abuse or neglect
- infringing on another's [human rights](#)
- time travel
- weight loss (this is not a behaviour; neither is "getting rich" or "being an Instagram influencer")
- any dental, medical, or psychological treatments
- phobias or psychological disorders (e.g., anxiety, depression, [eating disorders](#), etc.)
- medical conditions (e.g., heart disease, diabetes, [happy puppet syndrome](#), etc.)

(If you believe that you have a serious medical or psychological problem, please seek appropriate help in addressing it. Resources on campus include [University Health Centre](#), [Counselling & Clinical Services](#), and the [Peer Support Centre](#).)

 Be careful to choose voluntary behaviours (e.g., going to bed), not autonomic responses (e.g., sleeping).

Behavioural Treatment Program

Your behavioural treatment program must be based on the principles and procedures that you learn in this course. Essentially, self-management can be done using two kinds of manipulations. You can change the antecedents that evoke a behaviour, or change the consequences that follow a behaviour. These procedures can be applied either to increase a desired behaviour, or to decrease an undesired behaviour. (Some, more complex procedures, do both.)

The following examples of behaviour change procedures are explained in the textbook (Miltenberger, 2016). These procedures may not necessarily be covered in the lectures or the assigned readings by the time your treatment plan is due to be submitted, but you are **strongly** encouraged to read ahead:

Antecedent manipulations:

- Present discriminative stimulus (S^D) or cues for the desirable behaviour
- Eliminate S^D or cues for the undesirable behaviour
- Arrange establishing operations (EOs) for the desirable behaviour
- Present abolishing operations (AOs) for the undesirable behaviour
- Decrease response effort for the desirable behaviour
- Increase response effort for the undesirable behavior

Consequence manipulations:

- Provide reinforcement for the desirable behaviour
- Eliminate reinforcement for the undesirable behaviour
- Eliminate punishment for the desirable behaviour
- Provide punishment for the undesirable behaviour

Although you may use more than one of these manipulations at the same time to increase effectiveness, this can result in a more complex behavioural treatment program.

You are not have to perform a functional analysis of your behaviour in this project.

⚠ You may **not** apply formal psychotherapy (e.g., flooding, CBT, etc.).

Finding Research Evidence

Parts II and IV of this project ask you to find appropriate published evidence to support your choice of behaviour and behavioural treatment program. Resources to help support you in finding, evaluating, and understanding primary research articles will be presented in the Finding Research & APA Style lecture.

The Fine Print

The University of Alberta is committed to the highest standards of [academic integrity](#) and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect. Students are particularly urged to familiarize themselves with the provisions of the [Code of Student Behaviour](#) and avoid any behaviour which could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offence.

Academic dishonesty is a serious offence and can result in suspension or expulsion from the University. These resources from Student Conduct and Accountability, and the University of Alberta Library can help:

- [Academic Integrity: Introduction to Academic Culture](#) - videos on citing, quoting, summarizing, and paraphrasing
- [How to Avoid Plagiarism](#) - plagiarism definition, and tips for avoiding plagiarism
- [Foundational Research Tutorial: Plagiarism](#) - video on plagiarism with examples
- [Citing, Quoting, Paraphrasing & Summarizing](#) - how-to document that compares and contrasts them
- [Don't Do It \(Cheating & Plagiarism\)](#) - Faculty of Science document on academic misconduct and resulting penalties

Assignments

Part I: Target Behaviour (6 marks) -- due Monday, January 22

Learning Outcomes

- Decide on a personal behaviour that you would like to change.
- Develop a definition for your target behaviour.
- Apply your understanding of target behaviour, dimensions of behaviour, and operational definition.

Data

You do not have to submit data for this part.

Questions

1. What is your target behaviour? Be sure that it is clearly and fully defined, and that there are no loopholes. Is this a) an undesirable behaviour that you wish to decrease, or b) a desirable behaviour that you wish to increase? Do **not** justify your choice of behaviour yet; you will do this in Part II: Ethics. Do **not** give your behavioural goal yet; you will provide this in Part IV: Treatment Plan. **(3 marks)**
2. What dimension of your target behaviour are you going to record (e.g., frequency, latency, duration, etc.)? Note that some behaviours need more than one dimension to be fully captured. Briefly explain why you chose your dimension. Provide an operational definition: How will you measure and/or record the dimension of your target behaviour? Keep in mind that you will have to record and graph each dimension in Part III: Baseline Phase and Part V: Treatment Phase. **(3 marks)**

Submitting

Submit this part of the project using the text box in eClass. Clearly indicate (and separate) your answers to questions 1 and 2. (Keep a copy of your answers; you will need them in subsequent parts.) The text box will accept a maximum of **400 words**.

Part II: Ethics (7 marks) -- due Monday, February 5

Learning Outcomes

- Evaluate and summarize a primary research study of behaviour.
- Justify your choice of target behaviour by citing supporting evidence.
- Learn and apply the format for APA style citing and referencing of sources.
- Apply your critical thinking to analyzing your target behaviour.

Data


You do not have to submit data for this part.

Questions

1. Provide evidence from research on humans that changing your target behaviour is beneficial. Cite and briefly summarize **one** research article supporting your choice of target behaviour (what they did, why, what they found, how this relates to your behaviour). Do not use direct quotes. Provide one properly formatted APA style reference to a primary source (a peer-reviewed empirical research article) or high-quality secondary source (a [systematic literature review](#) or [meta-analysis](#)), **not** a random website, magazine article, or something else that Google barfed up. If you cannot find evidence that your target behaviour is beneficial (e.g., “exercise is good”), then you may provide evidence that *not* doing your target behaviour is harmful (e.g., “not exercising is bad”). **(6 marks)**
2. What is the downside to changing your target behaviour? That is, what is the potential harm to you--or to other people--in doing a) an undesirable behaviour that you wish to decrease, or b) a desirable behaviour that you wish to increase? If you are planning substantial changes to your exercise or diet, have you consulted with and received approval from your physician? Consider potential unintended consequences or perverse incentives. You do not have to provide sources for this question. **(1 mark)**

Submitting

Submit this part of the project using the text box in eClass. Include your answers to Part I of your self-management project when submitting Part II, making any changes to Part I if needed. It is not possible to apply certain aspects of APA style in the text box (e.g., fonts, spacing, margins, hanging indents, title page, etc.), and are thus **not** needed. The text box will accept a maximum of **800 words** (i.e., up to 400 words for your answers to Part I, plus up to 400 words for your answers to Part II).

 If you are copying and pasting your answers from your word processing app into the eClass text box, be aware that eClass may **remove** your formatting. You are responsible for ensuring that all APA style formatting is correct (e.g., journal title and volume number are italicized, etc.).


Part III: Baseline Phase (8 marks) -- due Monday, March 4

Learning Outcomes

- Create and complete an ABC observation data sheet, recording Antecedents, dimensions of Behaviour, and Consequences in real time. ABC charts should not be filled out *after* the 14-day baseline phase but rather *during* it.
- Construct a line graph of your data using software, applying the components of a graph.
- Apply your understanding of antecedents and behaviour to your data.

Data

- Collect and record baseline data in an ABC observation data sheet for 14 consecutive days. Do **not** fill out your data sheets at the end of the observation period; each response should be recorded as soon as possible after it occurs. You may customize the [data sheet template](#) as needed; you may also use an ABC observation checklist (see textbook chapter 13); also see the [online links](#) (there are links to help with graphing, as well). Along with your answers to the questions below, include a one-page sample of your completed data sheets. (You can use as many pages of data sheets as you need, but only submit **one page maximum**.) You **must** include this, or your submission will be considered incomplete and will not be marked until you submit it; late penalties will apply.
- Create a line graph of your target behaviour. For each target behaviour dimension that you are recording, you must make a separate graph. Do not include a phase line or phase label in your baseline graph. Do not graph your substitute behaviour (see below). (2 marks)

 If your target behaviour *never* occurs during baseline, choose **one** substitute behaviour that occurs instead of it and track that behaviour on your ABC observation data sheet. For example, you never practice the harp, but instead you perform the substitute behaviour of checking social media. Answer the questions below based on the substitute behaviour. You must still create a line graph of your target (not substitute) behaviour.

Questions

1. What is the **one** most important antecedent of your behaviour, in general? For example, what stimulus, situation, location, or time of day evokes your behaviour? You must fully categorize the antecedent into its types, as described in lectures. (3 marks)
2. What is the **one** most important consequence of your behaviour, in general? That is, what is the function of your behaviour? For example, what consequence is maintaining your undesirable behaviour? You must fully categorize the consequence into its types/subtypes and forms as described in lectures. (3 marks)

Submitting

Submit this part of the project by uploading a single file in eClass. eClass will only accept these document file types: Microsoft Word (.docx), Adobe Acrobat Portable Document Format (.pdf), or OpenDocument Text/LibreOffice (.odt). Note: Apple Pages (.pages) files are **not** accepted. Remember to include your answers to Part I again as well. Your answers to Part III must not exceed **400 words**.

Part IV: Treatment Plan (8 marks) -- due Monday, March 18

Learning Outcomes

- Choose a single behaviour change procedure to apply to your target behaviour.
- Evaluate and summarize a primary research study of a behaviour change procedure.
- Justify your choice of behaviour change procedure by citing supporting evidence.
- Apply APA style citing and referencing of sources.
- Apply your understanding of behavioural goal.

Data

You do not have to submit data for this part.

Questions

1. What one specific treatment or behaviour change procedure (e.g., which antecedent intervention, subtype of reinforcement, etc.) do you plan to apply to your target behaviour? Be sure to fully categorize the treatment you choose. Describe how you will apply this in general to your target behaviour, and explain why you chose this procedure. **(3 marks)**
2. Provide support for your decision by briefly summarizing, citing, and referencing (in APA style) a primary source (i.e., a research paper on humans) or secondary source (i.e., a [systematic literature review](#) or [meta-analysis](#)) that supports your choice of treatment. It would be **ideal** to find a published study applying the specific behaviour change procedure you selected to your specific target behaviour, but this may be difficult to find. The next best thing would be to find a published study that has successfully applied the behaviour change procedure that you will be using (e.g., increasing response effort for an undesirable behaviour) to some other target behaviour. Do not use direct quotes. **(4 marks)**
3. What is your behavioural goal for your target behaviour? That is, describe what level you would realistically like your behaviour to reach by the end of the treatment phase. **(1 mark)**

Submitting

Submit this part of the project using the text box in eClass. Include your answers to Part I again. The text box will accept a maximum of **800 words** (400 words for Part I, and 400 words for Part IV).

Part V: Treatment Phase (9 marks) -- due Monday, April 8

Learning Outcomes

- Implement the behaviour change procedure that you chose in Part IV.
- Record behavioural data on a data sheet.
- Construct a line graph of your data using software, applying the components of a graph.
- Apply your understanding of generalization and maintenance of behaviour.

Data

- Collect and record treatment phase data on your behaviour and its dimensions for 14 consecutive days. Include a one-page sample of this data. You **must** include this, or your submission will be considered incomplete and will not be marked until you submit it; late penalties will apply.
- Create a line graph of your behaviour, including baseline and treatment phases. For each target behaviour dimension that you are recording, you must make a separate graph. **(3 marks)**

Questions

1. Was your self-management successful? That is, did you meet the behavioural goal you described in Part IV? Was there a clear change in your target behaviour from the baseline to the treatment phase? Explain what changed. (If there was no change, discuss a possible reason why.) **(3 marks)**
2. How would you change your treatment if you were to continue this self-management project, and why? For example, would you implement an A-B-A-B design, or changing criterion design, and why? Or, how would you promote generalization or maintenance? Or fading? Just give **one** proposed change. Briefly explain your rationale for the procedure you chose. **(3 marks)**

Submitting

Submit this part of the project by uploading a single file in eClass. Also, include all your answers to Parts I-IV. Do **not** resubmit your baseline data sheet. Do not resubmit your graph from Part III. Your answers to Part V must not exceed **400 words**.

Scoring Rubric

This rubric is intended to provide a general sense of how student answers are differentiated, scored, and resulting marks awarded. Due to the huge variability of project topics and approaches, it is impossible to provide specific guidelines for how each question is marked. Therefore, this rubric is provided not as the final word on marks, but for information purposes. If there is any discrepancy between this rubric and the marking guide, the marking guide will supersede this rubric.

Part I: Target Behaviour (3+3 marks)

If your behaviour is on the not-permitted list, your mark for this part will be zero.

1. Complete, precise behavioural definition at an appropriate level of detail: 1 mark.
 - Target behaviour definition has no loopholes: 1 mark.
 - Nature of behaviour and direction of behaviour change is explicitly specified: 1 mark.
 - Not a daily behaviour: -1 mark.
 - Behavioural goal is included: -1 mark.
2. Appropriate dimension(s) of target behaviour, correctly applied: 1 mark.
 - Appropriate terminology, correctly applied: 1 mark.
 - Appropriate operational definition, correctly applied: 1 mark.

Part II: Ethics (4+2+1 marks)

If answers to Part I are not included: -1 mark.

1. Providing and summarizing one article of high-quality empirical evidence (primary source, review, or meta-analysis) that appropriately justifies the target behaviour.
 - Source is inadequately or not appropriately summarized: -1 mark.
 - Using a direct quote: -1 mark.
 - Providing weak or poor quality evidence (e.g., secondary source, or conclusion is made about cause and effect from a correlational study): -1 mark.
 - Source does not support target behaviour: -1 mark.
 - Providing irrelevant or inappropriate evidence: 0 marks.Source is cited in correctly formatted APA style: 1 mark
Source is provided in correctly formatted APA style reference: 2 marks. (Deductions will be applied for violations of APA style.)
2. Fully considering downsides, unintended consequences, and/or perverse incentives: 1 mark.
 - Incomplete assessment of downsides or risks: 0 marks.
 - Lack of consultation with physician, and/or lack of healthcare assessment (if applicable): 0 marks.

Part III: Baseline Phase (2+3+3 marks)

No data provided: 0 marks for all of Part III.

All appropriate components of line graph are included: 2 marks.

Components of graph missing: -½ mark each.

Exceeding 400 words in your answers to the following questions: -1 mark.

1. Clear description of antecedent, using all appropriate terminology: 3 marks.
 - General description of antecedent lacking: -1 mark.
 - Types of antecedent not specified: -1 mark each.
 - Vague, incomplete, or inappropriate descriptions of antecedent: 0 marks.
2. Clear description of consequence; type and form specified using appropriate terminology: 3 marks.
 - General description of consequence lacking: -1 mark.
 - Type/subtype of consequence not specified: -1 mark.
 - Form of consequence not specified: -1 mark.
 - Vague, incomplete, or inappropriate descriptions of consequence: 0 marks.

Part IV: Treatment Plan (3+2+2+1 marks)

1. Describing specific treatment plan applied correctly using appropriate terminology, with supporting explanation: 3 marks.
Inappropriate behaviour change procedure, or incorrectly applied: -1 mark.
No terminology provided, or incorrectly used: -1 mark.
No explanation or rationalization of treatment plan: -1 mark.
Vague, incomplete, inappropriate, or incorrect description of treatment plan: 0 marks.
2. Appropriate application of behaviour change procedures to target behaviour, supported by description of relevant source cited in APA style: 2 marks.
Source is inadequately or not appropriately described: -1 mark.
Source is not a primary research article, or is not a systematic review or meta-analysis: -1 mark.
Using a direct quote: -1 mark.
Source is not cited in APA style: -1 mark.
Providing irrelevant or inappropriate evidence: 0 marks.
Source is provided in correctly formatted APA style reference: 2 marks. (Deductions will be applied for violations of APA style.)
3. Description of achievable behavioural goal stated in terms of the target behaviour and measure: 1 mark
Goal is lacking quantitative measure: -½ mark.
Goal is inappropriate, not measurable, or does not match dimension(s) of target behaviour: -1 mark.

Part V: Treatment Phase (3+3+3 marks)

- No data provided: 0 marks for all of Part V.
All appropriate components of line graph are included: 3 marks.
Components of graph missing: -½ mark each.
Exceeding 400 words in your answers to the following questions: -1 mark.
1. Correct and appropriate assessment of goal and behavioural change: 3 marks.
Lack of appropriate assessment of behavioural change: -2 marks.
Lack of correct assessment of goal: -1 mark.
Incorrect or missing assessments of goal and behavioural change: 0 marks.
 2. Correct, specific application of procedures of generalization or maintenance, or other appropriate principle of behaviour modification: 3 marks.
Application of behaviour modification procedures, but lacking appropriate terminology: -1 mark.
Incorrect, vague, or incomplete application of behaviour modification procedures: -2 marks.
Lack of appropriate application of behaviour modification: 0 marks.