

# 'A' Grade Marking Sheet for Folio

## Planning

- P1 – **Thorough** consideration and refinement of a research question:
- ◇ Relevance/usefulness/manageability of topic choice (e.g. PMI/SWOT)
  - ◇ Multiple refinement steps with *reasons* each
  - ◇ Preliminary research
- A+
- P2 – **Thorough** planning of research processes appropriate to the research question:
- ◇ A range of processes planned, including specifics e.g. *who* to interview
  - ◇ Analysis of how processes are appropriate in answering question
  - ◇ Ethical considerations – specific steps to be taken, not just vague statements
  - ◇ Timeline
  - ◇ Planning for individual processes e.g. interview/survey questions
- A#

## Development

- D1 – **Thorough** and **resourceful** development of the research:
- ◇ Effort evident e.g. multiple interviews
  - ◇ Challenges, opportunities etc
  - ◇ Leads recognised and followed
  - ◇ Unusual sources or a wide range used or experiments done
  - ◇ Processes used in variety of ways
- A
- D2 – **In-depth** analysis of information and exploration of ideas to develop the research:
- ◇ Links to question
  - ◇ Reflection on source's content *and* how it develops research
  - ◇ Cross-referencing or use of table etc to compare or combine sources
  - ◇ Use of source to identify findings, follow leads, redirect research, support other sources and recognise reliability
- A+
- D3 – **Highly effective** development of knowledge and skills specific to the research question:
- ◇ Development of knowledge and skills documented
  - ◇ New knowledge used to build on or support other sources
  - ◇ Change in direction/leads
- A#
- D4 – **Thorough** and **informed** understanding and development of one or more capabilities:
- ◇ Comments to show deeper grasp in ways unique to project
  - ◇ Facets of capability clearly linked as relevant to project
  - ◇ Evidence of capability being developed over time throughout project
  - ◇ Concrete/specific examples from project (not just generic statements)
- A+

A+

awesome U  
job

P1

**Consideration and refinement of a research question:**

My original idea for the Research Project was to explore the benefits of hobbies, as I had been interested in the subject for a long time. I started my brainstorming in a general to specific fashion, which gave me the idea of looking at the benefits of hobbies for people who suffer from depression. I had this idea as I have known various people who suffer from depression and would like to help them to the best of my abilities. ✓

Next, a mind map with 'Hobbies and Depression' as the starting point was used to find some potential questions, as the topic was much too general. Some original questions I thought of were; "To what extent does having a hobby help people with depression?" and "What is the most effective hobby for alleviating the symptoms of depression?" Merging these questions, I came up with the question "What hobbies are best at alleviating the symptoms of depression and to what extent do they do so?" However, this question was too general and could not be properly researched in the time given. I needed to refine this question further. ✓

To refine my question, I decided to choose a specific hobby, rather than having to do out line many hobbies in the outcome. After some preliminary research, I decided to choose exercise, as the subject was mentioned as a good way for reducing depressive symptoms in almost all of the sources I had found about hobbies and depression. My final question became "How are the benefits of exercise maximised for sufferers of depression?", as I would like my research to be as helpful to others as possible. ✓

There are various benefits that can be considered by choosing this question. ✓

Firstly, having the general topic of Exercise and Depression gives me a focused topic to write about in my outcome. ✓

Secondly, there is an abundance of professionally written, credible information on this topic. While there is some information on the general topic of hobbies and depression, most of the reliable information focuses on exercise as a hobby. ✓

Thirdly, choosing exercise and depression means that I can help those who I know are depressed to a greater extent. For example, instead of telling the people that they should get a hobby, I can suggest that they should start exercising and volunteer to exercise with them. ✓

Lastly, like all mental illnesses the topic of depression is incredibly varied, as every case is different. By choosing "How are the benefits of exercise maximised for sufferers of depression?" as my question, instead of one of my previous ideas, such as "To what extent does exercise help alleviate the symptoms of depression?" I can pay attention to the fact that depression is incredibly varied. ✓

There are several disadvantages to my subject. One of the most noticeable disadvantages is that, since depression is a taboo subject, it may be hard to find interviews on the subject. ✓

Another noticeable disadvantage to this topic is that I would not be able to perform any useful experiments for this project in the time given. Also, the ethics of an untrained student conducting experiments concerning mental health are questionable at best. ✓

However, despite these disadvantages, I believe that this topic is researchable and manageable as there are two specific topic focusses, exercise and depression. My question allows me to show a depth of both knowledge and understanding in matters concerning depression and how to help those who suffer from it. Finally, this question requires considerable judgments to be made, as I will need to decide what is ethically acceptable and what exercise techniques are effective and which ones are not. ✓

Capabilities D4

I plan to develop the Literacy Capability, especially since I am usually uncomfortable in social situations. By communicating clearly with various people at different situations, for example; parents and counsellors; accessing, analysing and selecting appropriate primary sources, e.g.: Textbooks, websites, interviews and experiment reports, I will also develop the Critical and Creative thinking capability. As I will be thinking critically, logically, ethically and reflectively, accessing, organizing, using and evaluating information, as well as developing knowledge and understanding of a range of research processes. As I will be interviewing others and talking to others about this project, I hope to develop the Personal and Social Understanding Capability, by developing empathy for others and making responsible decisions based on evidence. Overall, I hope that any knowledge and skills learnt by doing this project will be able to help me later on in life. ✓ understanding

Safety and Ethical Considerations P2

As I will be interviewing people with depression and psychologists, issues of confidentiality may come up, as some may not want the fact that they are, or were, depressed common knowledge. To circumvent this, I will be asking anyone suffering from depression that I interview if they would prefer to remain anonymous and what details they want kept private. Also, I will leave my contact details to any interviewees in case they would like to ask anything about the project. ✓

I will reference all sources used in order to avoid plagiarism issues, and behave in a courteous and respectful manner. ✓

P2

Research Topic Mind Map

Topic

How are the benefits of exercise maximised for sufferers of depression?

How does exercise alleviate the symptoms of depression?

What is the definition of depression? What are the symptoms? Does exercise alleviate the symptoms? Which symptoms does it alleviate?

Sources to use:  
Secondary sources such as internet websites and textbooks to explain in detail.  
Some information may be gained during interviews.

Capability  
Literacy Capability.  
I will analyse information for each website and take note of any important information. This will increase my reading and analytical skills, as I will be skimming the sources.

What types of depression does exercise treat effectively?

Are some types of depression treated more effectively than others? If so, why? Is this related with how exercise treats depression?

Sources to use:  
I will use secondary sources, such as internet articles, to find some of this information. I will also be using some primary sources such as research reports. An interview with a lifeline councillor will be conducted to get a better answer and more information on what types of depression exercise treats effectively.

Capability  
Personal and Social Understanding Capability, as well as the Critical and Creative Thinking capability  
By conducting interviews, I will have to organise questions, increasing the creative thinking capability.

What types of exercise are most beneficial to those who suffer from depression?

Is there much important difference between different types of exercise? Will exercising with others help more or less than exercising by yourself? Does different types of exercise work better for different types of depression?

Sources to use:  
Internet research will be used to find general information on the effectiveness of different exercises. Primary sources such as experiment reports will also be used. Interviews with a councillor from lifeline and a Health and Wellness councillor will yield relevant information.

Capability  
Creative and critical thinking capability  
I will have to reflect on which exercises are better, by organizing and critically reading each source, in order to logically come to a developed conclusion.

What Exercise schedule is most beneficial to those with depression?

Does having different types of exercise in the schedule improve the effects? What is the maximum or a minimum amount of exercise? Does the schedule change with different people? Why? Is there a way to estimate a proper schedule using different age groups and fitness levels?

Sources to use:  
Interviews will be used to find the main body of information, with internet research to confirm the validity of the sources.

Capability  
Personal and Social understanding Capability  
The main source of information for this question is interviews. By talking to interviewees I will have to develop a certain sense of empathy to better communicate with them, and I will have to make responsible decisions when creating questions and choosing what information given by the interview is credible.

Interviews:

The intended interviewees are Ellen Nobbs, Kim Letton and Karena Clark. Ellen, while not necessarily reliable for the depression side of my project, is very qualified from the perspective of exercise, as she is a personal trainer. Kim is an accredited exercise physiologist, and as such has been acknowledged by Exercise & Sports Science Australia to show that she is an experienced and qualified EP. Since an exercise physiologist prescribes exercise to things such as depression, she can be seen as reliable. Karena is a senior lifeline counsellor. She has had a large amount of personal experience with depressed people and as such can be seen as reliable.

Timothy Penn

P2

**Planning of Research Processes Appropriate to the Research Question:**Internet Research – Term 1- Weeks 6-9

I plan to use an advanced 'Google' search to find some relevant websites. Also, a member of my family has access to the database of the Charles' Darwin University, and so I plan to use some of its distributed material. I plan to print the information in order to make handwritten notes and to highlight relevant information. Then I plan to analyze and annotate the information, making judgments of the sources' relevance, reliabilities and usefulness. ✓

This information will form a basis of research for questions in the interviews and topics in Literature review. Due to the abundance of credible and reliable information, this research will also be a basis of information for my outcome as well. The research will be done at this time as it is easy to access quickly, so I can do it while waiting for books to review. ✓

Literature Review – Term 1- Week 10 and Holidays

As my school's library has very limited resources relating to exercise and depression, I plan to go to the State library and take photocopies or photographs of any relevant books I find. As well as this, I have several psychology textbooks at my disposal, and so I plan to find relevant information by scanning through these textbooks. Any information found will be analyzed for its relevance, usefulness and reliability. ✓

This information will provide confirmation for the internet sources. Also, it will give variety to my research. The literature review will be done at this time as the internet research will be finished, and I would have found several books to read at this time. ✓

Interview-Term 1-Holidays

I have had friends and family contact several counsellors. Also, I have contacted a gym owner and a university student who researched the topic previously, so I can have a broad range of information. The interview questions are the main guiding questions extended from my topic question. ✓

I hope to gain professional opinions- primary source information- on exercise's effects on depression. This information will also confirm previous research and provide new leads for any extra topics. The interviews will be held during the holidays in order to make the interviews much easier to organize, as I will be free during most of the holidays, and so I can perform interviews at the times between 9:00 and 3:20. ✓

Internet Research Holidays and Term 2 Week 2:

I plan to use multiple 'Google advanced' searches in order to follow up on leads given to me during the interviews. Also, I will find various sources that provide cross references to other sources and confirm those sources. ✓

This information will finish the research stage of the project. It will be done at this time as it is after the interviews and so I have new leads to follow up on. Unfortunately I am on a camp at Term 2 Week 1 and as such cannot work during that time, which is why information will be found during week two. ✓

**Cross References of Sources:**

D2

Almost all of the information found on this topic in any source was also given in various other sources. For example, for internet source 3 had almost all of the information of source 1, though in greater detail. As such, it proves the reliability of source 1. Also, sources 2 and 4, experiments held on a different topic by different organizations, both state that exercise can reduce depressive symptoms. ✓

Also, the literature sources and interviews state that exercise can reduce depression. These sources also correlate with the information given by the internet sources. Summarized, almost all of the sources have various cross references to each other. ✓

**Links of sources to questions:**

P2

As seen on the previous page, various questions about the topic 'exercise and depression' were asked. The question "How does exercise alleviate the symptoms of depression" will be able to be answered by the interview as I will be asking my interviewees the question. Also, I will be performing google advanced searches on the subject. ✓

The question "What types of depression does exercise treat effectively" will be answered is through internet research. I will also ask the interviewees about this topic as a source of confirmation and as a backup plan in case I do not find much information on this subject. ✓

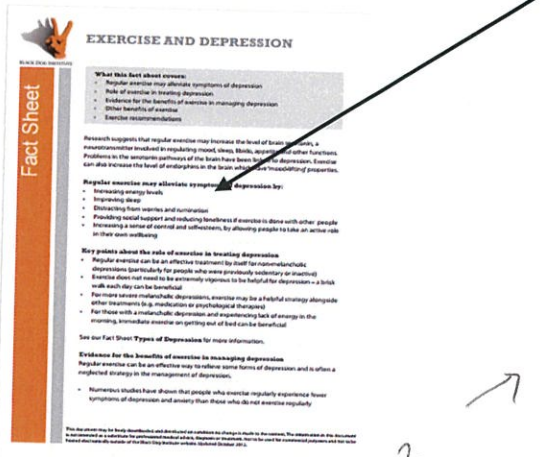
The question "What types of exercise are most beneficial to those who suffer from depression?" will be answered mostly by my interviews. Kim especially should have a large amount of knowledge on this topic, as she prescribes exercise for mental problems. ✓

The question "What exercise schedule is most beneficial to those with depression." Will mainly be answered by Ellen. As she is a personal trainer, she would have a large amount of knowledge on exercise schedules. Kim may also provide some useful information on this topic. ✓

Internet Research Examples – Page 1

Source 1:

Black Dog Institute. 2012. Exercise and Depression. [ONLINE] Available at: http://www.blackdoginstitute.org.au/docs/.pdf. [Accessed 29 March 15].



Key Findings:

D3

This website was the first website I had found which clearly states that exercise can have a positive effect on depression.

Also, this source has outlined different effects exercise can have on symptoms of depression, such as improving sleep, as well as giving various points of what sorts of exercises are beneficial. For example, immediate exercise after getting out of bed is beneficial for those with melancholic depression. The information of this source also has been found in almost all the other sources I have reviewed on this topic. As the source can be seen as very reliable, this source provides a very good confirmation for the rest of my research.

Reliability:

The black dog institute is a world leader in diagnosis, treatment and prevention in depression. Also, as a non-profit institution, the sources will not be biased for profit based reasons. It was also published recently, in 2012. Because of this, the information can be seen as very reliable.

Capabilities developed:

D4

My capability for Literacy was developed, as the black dog institute source introduced me to the term melancholic depression, and the report used very formal language, which has helped me to familiarise myself with that sort of language.. Also, in order to find this source I performed a google advanced search, which was the first time I had ever done so. This site was a good start to my research giving me confirmation that my chosen topic had credible information.

Validity:

This information is very relevant, as the source is based on exercise and depression, the same general topic as my research project. Also the source provides a base information to look for in other

Source 2:

Davidson, C., Babson, K., Bonn-Miller, M., Souter, T. and Vannoy, S. (2013). The Impact of Exercise on Suicide Risk: Examining Pathways through Depression, PTSD, and Sleep in an Inpatient Sample of Veterans. 1st ed. [PDF] Denver, US: The American Association of Suicidology, pp.284-286.



Key Findings:

D3

This source gave me evidence that exercise reduces suicide risk through the lowering of depressive symptoms. This statement correlates with the previous source's information, as well as information found on other sources. This was also the first experimental report which I had read on the topic of exercise and mental health, and thereby it taught me that exercise and mental health is a topic that is researched professionally.

Validity:

This article, while it is focusing on the topic of exercise and suicide risk rather than the topic of exercise and depression, is still a relevant topic as it is examining pathways through depression. Also, the report directly states that exercise lowers depressive symptoms, which gives me some concrete evidence to state that exercise lowers the symptoms of depression.

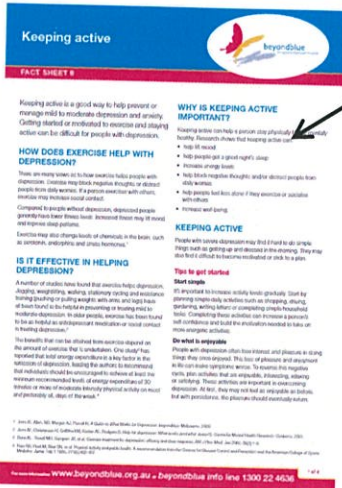
Reliability:

The source is an article written by multiple PhD owners, and backed by the extremely credible American Association of Suicidology. The methods of experimentation are up to date and a great amount of referencing is used. The source was also published recently, in 2013. As such, this source can be seen as reliable.

Internet Research Examples – Page 2

Source 3:

beyondblue. 2010. Keeping Active. [ONLINE] Available at: http://www.headspace.org.au/media/152767/exercise%20and%20mh%20bb.pdf. [Accessed 09 May 15].



Key Findings:

D3

The basic information of this source is the same as source 1. However, this article has given more detailed information on the subject of exercise and depression. For example, this article not only states that exercise is helpful for the reduction of depressive symptoms, it goes on to explain possible reasons why an active lifestyle can help depression, what sorts of exercise and how much exercise one should do in order to maximise the benefits. This article also gives tips on how to get started with an exercise schedule, even if you are depressed and therefore suffering from a lack of motivation.

Validity:

This article is extremely valid for my topic as the topic of this article, exercise/being active, is also the topic of my research project. Also, this article will prove a valuable reference for details such as the various uses of exercise and professionals who help with exercise plans.

Reliability:

The fact sheet is fairly old, as it was published in 2010. However, the source is not old enough for the knowledge to be outdated, and so age is not an issue. BeyondBlue is a nationally recognised source on mental health issues such as depression and anxiety. It is also one of the largest research organisations for these issues in Australia. As such, it can be taken as a reliable source.

Capabilities developed:

D4

My capability for literacy has been developed in the reading of the different styles of writing, as the BeyondBlue source is aimed towards the general public, while the study is aimed more toward the medical community. Also, in having to analyse each source – the study especially – I have developed my critical and creative thinking capability. The study has especially developed my critical and creative thinking capability as it contains a great amount of logical process, which acts as a guide to help me become better at logical thoughts.

Key Findings:

D3

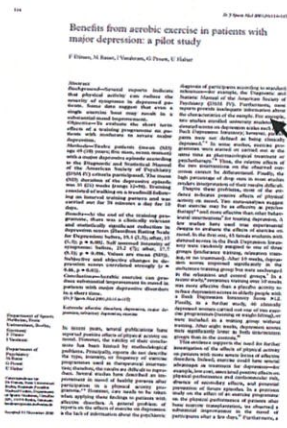
This report gives reliable findings by giving research-backed statements instead of unsubstantiated claims. This article gives other details on how exercise is able to help depression. This article also gives statistics on the percentage of patients helped, and how much they were helped by exercise. Perhaps most importantly, this article sums up all of its findings in a statement that exercise may help those suffering from moderate to severe depression. The findings support the findings given by the previous investigation reviewed.

Validity:

This article is related to my topic, as it encompasses the same topic. However, the study only focuses on aerobic exercise, whereas my research is on the general topic of exercise. This source is still a valid source as the claims correlate with all of my other sources.

Source 4:

Dimeo, F., Bauer, M., Varahram, I., Proest, G. and Halter, U. (2001). Benefits from aerobic exercise in patients with major depression: a pilot study. [online] ncbi. Available at: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1724301/pdf/v035p00114.pdf [Accessed 9 May 2015].



Reliability:

While this experiment was carried out in 2001, this source is reliable, as it is a properly funded medical study. There is a chance of bias, however since the main results match up with every source I have found, that is unlikely. Also, this source consistently references any claims it makes.

Timothy Penn

D2

D2

✓

✓

✓

✓

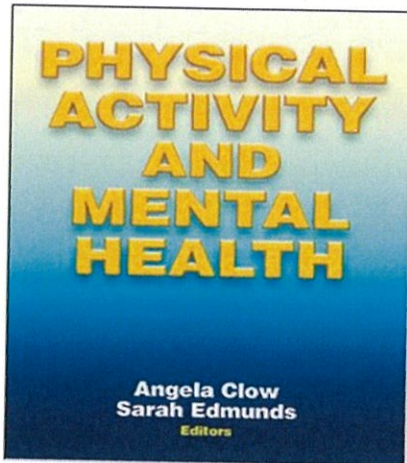
✓

✓

Literature research examples: Page 1

Source 1:

Clow, A. and Edmunds, S. (2014). *Physical activity and mental health*. Champaign, IL: Human Kinetics.



Key Findings: D3

This source gives more information on depression as a mental illness. Also, this source gives information on the biological foundations of exercise and depression and exercise as a treatment compared to other conventional anti-depressants. This site also details on various types of depression and the effects of exercise on them. For example, the subject of post-natal depression has several paragraphs devoted to it. ✓

Validity:

While most of this source is not valid to my topic, as this source covers the relationship between physical activity and mental health as a general topic, not just depression, as my research is doing. However, as the source is more general, it still encompasses the topic of exercise and depression, therefore there is a suitable amount of valid information from the source. ✓

Reliability

The authors of this book had several internationally renowned experts on the topic assisting the writing of this book. The book also gives a large amount of references to any claims it makes. This means that this book may act as a reliable source. Also, the information of this source correlates with the information found in all the previous sources are viewed. And as such it can be seen as a reliable source. ✓

Key Findings: D3

This source states that a promising therapy for depression is a program of regular, non-strenuous exercise. This source also states that many studies show that active people are less likely than sedentary people to develop depression, but it also goes on to say that these studies are correlational in nature and do not support a cause-and-effect conclusion. However, this source also states that exercise increases blood flow to the brain and provides other benefits, without the cost or risk of other antidepressant treatments. ✓

Validity:

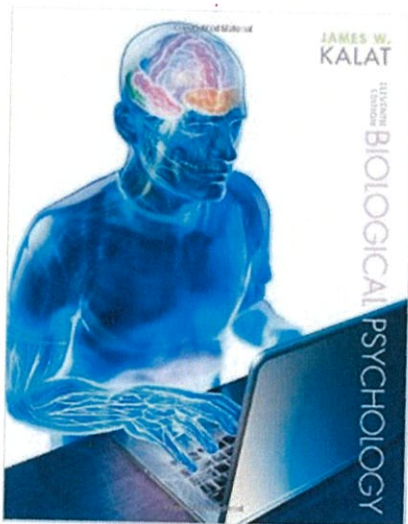
This source has little valid information for the topic of exercise and depression, and most of the valid information acts as confirmation to other sources. However, the relevant information still may be used as a general source. ✓

Reliability:

This source is the most widely used text in the course area of Biological Psychology. It is often used by psychology students as a learning material. However, this is not the newest edition of Biological Psychology, and so it may be prone to inaccuracies. The section which I am using gives both sides of the argument, mentioning that there are studies which show that exercise can prevent depression as well as flaws that can be found in the studies, so bias does not appear to be an issue. ✓

Source 2:

Kalat, J. (2009). *Biological Psychology*. 11th ed. North Carolina: Jon David Hague, pp.468-469.



D2

D2

Capabilities developed: D4

The use of book sources developed my critical and creative thinking capability, as I had to use the index pages of multiple books to access information fitting my subject, as well as library catalogues, which I did not understand how to use before this project. The reading of the sources helped develop my literacy capability, as I had to analyse these sources to determine whether or not they were appropriate. ✓

**Written interview analysis:**

Interviewee: Ellen Nobbs – A personal trainer and Franchisee of EFM Angas St and EFM North Terrace.

**Topic 1: Does exercise eliminate the symptoms of depression?**

**What is your definition of a depressed state?**

A depressed state is an overwhelming feeling of sadness that the individual feels that they can't escape from. Person may show signs of: moody, lack of motivation, shut people out, substance abuse, severely upset etc.

**Have you witnessed any cases or instances where exercise has had an effect on the level of depression?**

We have a number of members that suffer from various levels of depression, and exercise has proven to be extremely beneficial in their treatment.

It helps with their self-esteem and sense of self-worth while also assisting in reducing stress and anxiety levels

**Topic 2: What types of depression does exercise treat effectively?**

Please discuss the reasons why exercise is generally beneficial to your clients' mental and physical health. Exercise has been scientifically proven to release endorphins, which are commonly known for providing a 'natural high'

As mentioned above, it also helps increase self-esteem (which is often low in people suffering depression) as well as improving motivation and helping them to set goals.

**Topic 3: What types of exercise are most beneficial to those who suffer depression?**

**Are different types of exercise more effective in treating those with depression? If so, which exercises are more beneficial?**

It is important to speak to the individual involved before prescribing any exercise regime.

While a combination of cardio and weights training is the best type of training for improved health and fitness for anyone, if you don't find out the goals of the individual, you might be doing more harm than good.

An example of this is perhaps a young man has body image issues due to being quite lean and wants to bulk up and feel better about himself. If you gave him a cardio based program and didn't focus on weights, he wouldn't get the results that he was after and this could have a negative effect on his treatment. Whereas if you focus on a weight based program and help him achieve the results that he is after then it is going to have a far more beneficial effect.

Timothy Penn

**Does the setting of the exercise regime effect the level of improvement that could be experienced by sufferers of depression?**

This can vary from one individual to the next. If the person suffering from depression is extremely introverted then they may find a group setting rather intimidating and could therefore have a negative effect. By the same token, others may thrive in a group setting etc.

**Topic 4:**

**What exercise schedule is most beneficial to those with depression?**

Consistency is the key and other activities that the individual might be involved such as sporting commitments etc. need to be considered. However, I would recommend some form of exercise every day. Not necessarily in the gym every day, one day might be a walk and the next a gym session, the next a bike ride etc. But a gym session every other day or at least with no more than 2 days between sessions

**Sufferers of depression sometimes lack motivation to start and stick to a new program. How do you help your clients to commit to an exercise program so that they can benefit from it?**

We are constantly in contact with our members and follow up members that have not been in the club to help keep them on track.

One-on-one PT sessions are also a very good way to help keep people motivated and stay on track.

Setting short, medium and long term goals are a great way to help keep people motivated as well.

**Interview Analyses: D2**

This interview helped me answer my guiding questions. My final question is "To what extent does exercise help reduce the symptoms of depression?" While my guiding questions were; how does exercise help alleviate the symptoms of depression, what types of depression does exercise treat effectively, what types of exercise are most beneficial to those who suffer from depression, and what exercise schedule is most beneficial to those with depression. I broke the interview up into four topics with these topics as the themes, and based my questions off them. ✓

**Capabilities developed: D4**

With the planning and writing of various questions, my literacy capability has been developed quite substantially. By thinking critically and logically about what questions to write, for example, asking more questions about exercise, as the interviewee is a personal trainer, I have also developed my critical and creative thinking capability. ✓



**Spoken Interview analysis:**

Name: Kim Letton – an accredited exercise physiologist

**1) Have you witnessed any cases or instances where exercise has had an effect on the level of depression?**

- Yes, exercise works as a great treatment for depression.
- Exercise has been proven to release endorphins and balance hormones.
- Endorphins have been proven to be the main reason why exercise is good for depression.
- Exercise can work in conjunction with medicine as well as an alternative treatment.
- Exercise also gets people in group settings, which can satisfy the need for social inclusion.
- Regular exercise reduces the risk of depression and increases the chance of being able to cope with it.

**2) Are some types of depression treated more effectively with exercise than others?**

- Exercise alone can replace the need for medication in most cases of short term depression.
- Exercise works well as a treatment for longer term and more chronic terms of depression, though it generally needs to be used in conjunction with other treatments.
- This is most likely because longer terms of depression are a lot more complicated, and the problems, such as hormonal imbalances, become ingrained, becoming a lot more serious than problems in short term depression.

- Not only is exercise great for the endorphins, it also has many other health benefits. As depressed people are typically inactive, exercise helps stop other comorbidities for them.

**3) Are different types of exercise more effective in treating those with depression?**

- There is very limited research on this topic
- It is generally agreed that one should work their way up to the Australian Physical activity guidelines for maximum benefit. Single large sessions or many small session may be used.
- Any exercise is better than no exercise.

**4) Does the setting of the exercise regime affect the level of improvement that can be experienced by sufferers of depression?**

- A large amount of evidence supports a group setting as the best environment for exercise.
- A group setting helps people with compliance. It can make the exercise comforting, and provide opportunities for the patient to make friends.

**5) What exercise schedule would you recommend for sufferers of depression?**

- Having a schedule with different types of exercises in it makes the exercise more interesting and gives the body a constant workout. It helps to keep the patient exercising.
- Rest days, days with low intensity workouts that focus on using different parts of the body, are generally used.
- For figuring out rest days, three things are considered, frequency, intensity and time.
- The Borg scale and heart rate are typical intensity measures.

- As mental diseases change for every person, there are not many rules concerning schedules for those suffering with depression.

**6) How do you help your clients to commit to an exercise program, and keep them motivated to do it?**

- Getting the client to bring a friend is a good motivational strategy.
- If you have the flexibility, the first session should be somewhere comfortable and safe for the client.
- It is best to use small steps to accomplish a larger goal.
- Another effective strategy is to get the client to make a commitment to themselves. This gives the client intrinsic motivation, so they motivate themselves to exercise.

**Interview analysis:**

(D2 overall)

The guiding questions for this interview were the same questions that the written interview included, as this was based of that interview's questions

**Key findings:**

D3

The purpose of this interview was to obtain a comprehensive, primary source information about exercise and depression. The key findings were put into dot-point form and are intended to be used in my outcome as an alternative source. The findings in this interview mostly acted as confirmation for previously gathered sources, however a great deal of information, such as the term 'intrinsic motivation' was found. However, as Kim is not a psychiatrist, some of the information was opinions, though they can be seen as reliable as the opinions have been formed through years of experience in a similar field to what questions I had asked her.

**Effectiveness:**

D1

A major challenge I faced when preparing interviews was finding willing participants. Fortunately, my father knew Kim in person, and so we were able to arrange an interview. While the interview was face to face, I was in school holidays at the time of the interview, so the organising of a time was fairly easy, as all I had to do was find when Kim was available. We arranged to meet at a café, as both of us knew where it was and the café was close to Kim's workplace. Another major challenge faced was putting the interview onto paper. This problem was reduced as the interview was recorded, with Kim's permission to do so. Also I took notes during the interview, and listened to the interview multiple times in order to summarize the interview into dot points.

**Knowledge, and skills developed:**

D3/1

During this process, I learned how to properly design interview questions. Also, I learnt how to carry out interviews, as this was the first interview that I had performed. I based my questions on the several guiding questions I had formed. The responses given gave me several new perspectives on exercise and depression, as well as information that could be researched further to make the outcome as best as possible.

Research Processes:

Leads Followed, Opportunities and Direction Changes

D1

Various leads were followed in this project. The largest of which were the interviews performed. Other leads include the literature source; "Physical activity and mental health", which was found at the state library. I followed the lead by photographing the book and using the images as a source. The interviews were great opportunities followed, as members of my family knew all the interviewees by person. Unfortunately, one opportunity missed was the interview with lifeline councillor Karena Clark, who was out of office for the several weeks I had to contact her. The largest direction change of my project was that initially I intended the question to be "To what extent does exercise help alleviate the symptoms of depression?" However, after the interviews I realised that most of the information I had found was about how to maximise the benefits, of exercise, rather than to what extent does the exercise help alleviate the symptoms of depression. So, I changed the question to "How are the benefits of exercise maximised for sufferers of depression?"

Internet Research

Effectiveness:

D1

While time consuming, finding and evaluating internet sources was an extremely good way to find reliable sources with some degree of variety. It seems that a majority of information on the topic of exercise and depression is located on the internet.

Knowledge and Skills Developed:

D3

During the research, I learned how to perform google advanced searches. Also, I became much more proficient at using key words in order to properly find relevant sources. Also I had to skim read and quickly analyse a large amount of sources to decide if they were worth using. This improved my skim reading and analytical skills by a great amount. These skills were developed further by comparing the sources with each other and noting any differences between each source.

Literature Review:

Effectiveness:

D1

A major challenge faced while reviewing literature is that Depression and Exercise is not a topic commonly found in many books. Even psychology textbooks had next to no information on the subject. I went to the state library and found a book and took photographs of the needed pages, as I could not borrow the book. Also, I found a book at home which had some information on the topic. The sources had some good information, though the internet articles had more detailed and comprehensive information.

Knowledge and Skills Developed:

D3

During the process of finding information I learned how to use an index and a library catalogue. The books had some hard-to understand language in them, which managed to develop my critical reading skills, as I had to really think about what the book was trying to say. Analytical skills were also developed during this process due to me having to analyse what the sources were saying.

Spoken Interview Analysis:

Capabilities:

D4

The Literacy Capability

I developed my Literacy capability throughout the interview. I used relatively simple language and made sure that the questions did not branch off topic. Also, the interview required me to take notes, which needs fast-paced analytical decisions about what to write down and what to leave. It also helped increase my typing speed.

Capabilities:

D4

The Personal and Social Understanding Capability

I developed my personal and social understanding capability by speaking to Kim, whom I had never seen before the interview. The interview helped me to develop an empathy with Kim, and the summarisation process of the interview developed my personal and social understanding capability by choosing what information to leave out based on the evidence - of what information given by an experienced exercise physiologist would be the most reliable.

Written Interview Analysis:

Key Findings:

D3

Most of the information given by this interview acted as confirmation for other sources. However, as expected, the information given for the exercise side of the survey was very detailed, giving information on topics such as body image issues and finding the goals of an individual.

Effectiveness:

D1

As members of my family owned memberships at the gym and knew Ellen personally, it was somewhat easy to get her to agree to fill out this interview. Originally the written interview was intended to be a spoken interview, but Ellen had no time available to meet, so a survey was filled out instead. A benefit of this is that I do not have to transcribe the interview.

Knowledge and Skills developed:

D3

As the change of view from a psychologically-based source to an exercise-based source yielded a large amount of information on exercise, my knowledge on exercise was developed immensely. This survey has also increased my knowledge on things such as self-esteem and goal setting. The making of this survey improved my skills at developing questions for a specific group of people. In this case, personal trainers. Also, analytical skills were developed as I had to decide what information was the most valid.

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