

To what extent does exercise affect mental health?

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Capstone

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Abstract

The main purpose of this study was to find out whether exercising affects your mental health to a certain extent. Using Instagram through grounded theory and content analysis, I found that exercising affects one physical transformation, their motivation, and their mental health. Finding these themes, I found that when people are exercising, they are trying to transform into a better self. They have found it to be their escape which helped them with their challenges. People have seen nothing but positive effects when it comes to exercising. Quitting was never an option that is how dedicated these people are. This study is a good example to those that think nothing is possible and that whatever they are going through mentally and physically can progress for the better. Building a strong and healthy mind proves that you can overcome your weaknesses.

Introduction to Study

Going into college, I had no idea what I wanted to major in or do after I graduate. Throughout my college years I probably changed my major at least three times. At first, I wanted to do biology but then realized I did not like it as much then, I changed to psychology, but I just could not get into it and now my current major is liberal studies. The reason why I picked liberal studies is because it is such a broad major and especially because I did not know what I wanted to do I thought it was a safe way to go. The reason why I am in college is to make my family proud and to get my degree. Being it my last year and looking back it is been a long journey, but I am proud I made it this far. In between classes I realized how much free time I had on my hands, so I started going to the gym at purchase which kept me busy in between classes. I have always loved working out, specifically going to the gym and lifting weights is what I enjoy. Not only does it help you get into shape, but it is also great for you mentally. Taking care of yourself and your mental health is very important, and therefore I chose this specific topic for my research paper.

We all know that exercising and staying fit is great for our health, but have we ever thought about what ways it improves our mental health. After doing some research I found out that exercising has so many benefits such as helping with depression, anxiety and it even lifts your mood. As we are exercising, we are releasing positive energy which are endorphins which is why we usually feel great after a workout. Aerobic exercises for example, are known to reduce depressive symptoms significantly. Those who prefer walking, doing yoga, jog etc. is just as effective as doing heavy and extreme exercises. Doing regular exercises helps with anxiety and panic disorders. When exercising it's a time where you are mainly focusing on yourself, kind

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of like an escape zone from reality. I know people who have insecurities or who are stressed that exercise and set goals for themselves and they mentally become stronger because of it. Exercising has changed people's lives for the better.

The reason why I'm so interested in this topic and why I think it's so valuable is because each and every single one of us go through difficult times and we often forget to check up on ourselves and ask "how am I doing mentally?" Personally, to me, if you are not strong mentally then you are weak physically. Mental health is just as important as your physical health and it is important that we take care of it. I do have my days where I feel unmotivated, yet I still force myself to go to the gym because I know it is going to be worth the after feeling. It is always great to get your body moving and blood flow going but you must be in the zone and remain focused, wondering and thinking about something else won't help. Whenever I am under stress, I can feel my muscles being tense, but I realized after exercising my muscles feel relaxed because our body and mind are closely connected.

Overall, the main thing that I want to know for my research paper is to what extent does exercise affect mental health? Writing this research paper, I am looking forward to finding a lot of valuable information. I want to know the difference on how it affects males vs. females or does gender not even matter? I also would like to know how long the exercise must be. My guess is at least 30 min. I am curious about how consistent one must be. I feel like if someone has never exercised before then it might be a challenge but maybe if they see results it will get easier for them. When you start to exercise it eventually becomes a part of your lifestyle so does our eating habit play a role on how we mentally feel as well? There are foods that make us feel good and foods that do not, plus they say you are what you eat. I would like to know when exercising does the environment matter? I prefer working out more in the gym because it makes me feel

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more motivated, but some like to exercise straight from their home. I think the surroundings around us impacts on how we feel within that very moment.

Literature Review

Research has shown to a certain extent how exercising can improve mental health. It can have an effect towards gender, improves your motivation and it can also help with anxiety and depression. Many different exercises are now known to help reduce those who suffer with anxiety and depression. The general finding is that state anxiety is significantly reduced following bouts of exercise, both for subjects with normal and elevated levels of anxiety (Martinsen, E., 2009). Aerobic exercises, including jogging, swimming, cycling, walking, gardening, and dancing, have been proved to reduce anxiety and depression (Madaan,V., Petty, F., Sharma, A., 2006). Symptoms of anxiety and panic attacks can be improved by physical fitness training, meditation or relaxation (Stanescu, M., Vasile, L., 2014).

Gender

Similarly, men show higher self-esteem and psychological wellbeing with higher levels of exercise, while women, especially young women (mean age was 18 years), report lower levels of self-esteem the more they report exercising (Craft, B. B., Carroll, H. A., & Lustyk 2014). To date, recommended levels of physical activity in many countries are the same for male and female children and adults (Parker, H., Larkin, D., Cantell, M., & Rose, E. 2016). For example, Australian recommendations are 60 minutes of moderate to vigorous physical activity/day for children and 30 minutes/day for adults, but there is no further refinement related to gender (Parker, H., Larkin, D., Cantell, M., & Rose, E. 2016). "In effect, a closer examination of all the

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studies that explored gender differences with respect to the association between exercise regulations and behavior suggests that introjected regulation may be more positively associated with exercise among females, whereas among males the association is negative or zero.”

(Craft, L. L., & Perna, F. M. 2004)

Motivation

Over 90% stated that they would like to be more active, and participants across PA level displayed high scores of a motivation reflecting that they valued the benefits of PA. (Martinsen, E., 2009). For example, for someone with depression, exercise may help to improve sleep quality or help provide motivation to get out of bed, while for someone experiencing anxiety symptoms, exercise may act as a distraction from constant worry. (Sharma, A., Madaan, V., & Petty, F. D. 2006). In addition to those who are unmotivated, another source of short-lived persistence in exercise behaviors comes from people who do express personal motivation to exercise regularly, yet initiate exercise behaviors with little follow through (Sharma, A., Madaan, V., & Petty, F. D. 2006). Self-perception plays a major role in whether people will start exercising, and it may impede some individuals from beginning a program even if exercise has been recommended for medical reasons (Kravitz, L., 2010).

Helps with anxiety and depression

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been proved to reduce anxiety and depression.” (Sharma, A., Madaan, V., & Petty, F. D. 2006). “The most widely studied area of physical activity and mental health is that concerning depression.” (Parker, H., Larkin, D., Cantell, M., & Rose, E. 2016). “Generally, acute anxiety responds 20 better to general forms of exercise than chronic anxiety.” (Parker, H., Larkin, D., Cantell, M., & Rose, E. 2016). “From a national survey of over 6000 24 to 65-year-old adults Asztalos et al. found that for men, participation in vigorous intensity physical activity lowered feelings of depression, anxiety and physical symptoms of such mental stress (somatisation).” (Teixeira, P. J., Carraça, E. V., Markland, D., Silva, M. N., & Ryan, R. M. 2012).

Method

Materials

The materials that are being used for this study is an iPhone, pen, a notebook, and using the Instagram app to examine pictures of fitness influencers pages. It required going through 15 male and 20 female accounts who were in their 20's and early 30's. Most of them lived overseas and a few lived in America. Instagram is a social media app that allows you to post pictures and videos. It also allows you to follow people. This study was recorded April 3rd- April 6th. Captions were used that were under fitness influencers photos.

Design and Procedure

This study was done by using grounded theory and content analysis to show to what extent how exercising affects mental health. Grounded theory is an inductive technique of interpreting recorded data about a social phenomenon to build theories about that phenomenon. (“Qualitative Research: Grounded Theory” n.d). The second method, content analysis; focuses on who says what, why and to who etc. in a quantitative manner. When using this method, you

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are looking at the data and taking a good close at words then breaking it down to themes. The research begins by sampling a selected set of texts from the population of texts for analysis. ("Qualitative Research: Grounded Theory" n.d). Then the researcher identifies and applies rules to divide each text into segments or "chunks" that can be treated as separate units of analysis ("Qualitative Research: Grounded Theory" n.d).

Once I began my data, I wrote down many captions then highlighted terms that stood out and thought were important. I then began to start coding and put terms that were either the same or relevant into its own category. These codes now have three of its own themes which are transformation, motivation, and mental health. Using content analysis through Instagram was helpful and the right method for my study because it gave me a better look at how exercising affects people.

Results

Transformation

This theme shows fitness influencers sharing and expressing how they stay motivated through social media. These people would post a picture of themselves while wearing workout clothing with a written caption. One girl who has been into fitness for many years posted an old photo of herself saying how she is motivated to get back into shape after her pregnancy. Another who has been working out for 5 years posted a before and after picture of herself with a sentimental caption. In her before picture she was overweight at 18 years old, compared to her photo now she is very slim and fit. You can tell that she is dedicated by putting in the hard work. In her caption she mentioned "my physical and mental health was being damaged by my lifestyle and the poor choices I was making". When scrolling through the comments not only are people encouraging them, but these influencers have inspired so many people to a healthy and better lifestyle. One of her followers commented "This just motivated me so much!!! And can

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relate to this as I feel I am the girl on the left! Hope to feel as beautiful as you on the right soon". Another girl commented "Damn if she could do it so can I". A male trainer posted a shirtless photo of himself sharing how he stays motivated. He captioned it saying, "staying motivated isn't always easy but having a solid workout plan to follow can really help keep you on track".

Motivation

In this theme it shows how working out motivates men and women. One guy who is a British trainer posted a photo of himself shirtless at the gym, captioned his picture saying, "my goal at the moment is to maintain a healthy lifestyle whilst getting fitter and stronger". When going through the male accounts, I found that most of them were shirtless and felt comfortable with their body. A male athlete also posted a shirtless picture saying, "take care of your health first and let your physique reflect your internal well-being". When scrolling through the comments there were men and women who agreed with him. A guy commented saying "and this is why I follow you man. You're not just about external fitness but you're actually healthy too!!" Another guy commented "Preach! I absolutely look forward to your posts and wisdom. You've taught me over and over again that slow and steady wins the race". When it came to the females, a lot of them posted before and after pictures expressing how they felt before working out vs how they feel today. A 22-year-old female posted three photos in one at the age 12, 16 and 21. She had written "weight training has truly changed my life, it has given me more confidence as a woman and has tested my limits. Do not ever be afraid to pick up weights because it'll make you look more "bulky". There were so many women who commented agreeing with her and felt inspired.

Mental health

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This theme explains how being active can really impact you mentally. One girl posted a photo of herself saying “I’m not apologizing for putting my mental health and self-worth first”. She reminds her followers that putting yourself first is not selfish and it is something that you shouldn't feel guilty about. She had also mentioned that we do not need to be going to the gym 5 times a week and to stop beating ourselves up. Start off with going 3 times a week and just enjoy the balance of life. Another female fitness trainer who is a cancer survivor shares her motivation and how important it is to stay healthy not just with our bodies but with our minds. She always felt so weak and fragile due to chemo, radiation, and several surgeries. Once she joined the gym, she felt like she survived so many hardships and feels a lot stronger physically and mentally. Another female is constantly posting and talking about motivation and how she built a strong mind. She posted a workout video captioning it “I want to get more involved in helping you construct a mindset that will allow you to push through challenges and achieve your life goals”. She is honest with her followers and even has a highlight on her page where she shares her tips and gives positive pep talks to having a better and healthier mindset.

Discussion

As I was researching, I realized that my data strengthened most of the information in my literature review and proved that exercising does affect mental health to a certain extent. The photos and captions correlated to two themes that were in the literature review motivation and mental health. Gender was the theme that I did not find in my data.

In the literature review it shows Martinsen mentioning that, over 90% stated that they would like to be more active and participants across PA level displayed hiscores of motivation

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reflecting that they valued the benefits of PA (Martinsen, E., 2009). My data showed that staying motivated helped with exercising and being healthy. These fitness influencers became more confident in their own skin and made better eating choices. The literature review also states that someone who has depression, exercise may help to improve sleep quality or help provide motivation to get out of bed, while for someone experiencing anxiety symptoms, exercise may act as a distraction from constant worry (Sharma , A., Madaan, V., & Petty, F.D. 2006). When scrolling through the comment section, followers felt inspired not only just to workout but to focus more on their health. Kravitz has mentioned self-perception plays a major role in whether people will start exercising, and it may impede some individuals from beginning a program even if exercise has been recommended for medical reasons (Kravitz, L., 2010). The data has shown that self-perception does have an effect on exercising. Fitness influencers were posting before and after pictures of themselves showing their progress and it's what kept them motivated.

Parker, Larkin, Cantell and Rose mentioned that the most widely studied area of physical activity and mental health is that concerning depression (Parker, H., Larkin, D., Cantell, M., & Rose, E. 2016). In my data, when someone would go through something, working out was their escape out. It helped with their hardships that they were going through, and it made them stronger mentally and physically. Sharma, Madaan and Petty says, aerobic exercises, including jogging, swimming, cycling, walking, gardening, and dancing, have been proven to reduce anxiety and depression (Sharma, A., Madaan, V., & Petty, F.D. 2006). One of the female fitness influencers preached about putting your mental health and self-worth first. She reminds her followers to enjoy the balance of life and that it is okay to not go to the gym 5 times a week. There are many types of workouts that we can all do, it doesn't necessarily have to involve weights or even going to the gym. Martinsen states that the general finding is that state of anxiety if significantly reduced following bouts of exercise, both for subjects with normal or

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elevated levels of anxiety (Martinsen, E., 2009). In my data I found that those would share their advice and tips to construct a healthier mindset when going through challenges.

One of the themes that I did not find in my literature review was gender. As I was researching, I realized that gender does not play a role in the fitness industry and that anything is possible. Whether it is wanting to transform your body or training your mind towards a healthier mindset. In fact, when it came to transformation the females in my data spoke out and encouraged their female followers to never feel discouraged and misled when it comes to working out. The more females would exercise the more confidence grew within them.

Conclusion

Using grounded theory and content analysis I was able to look through Instagram pictures and captions to get a better look at how exercising affects mental health to a certain extent. What was understood from the data was how exercising transformed people's bodies, how they stayed motivated and how it affected their mental health. It is been proven that exercising does have an effect on your mental health. Looking back at old photos and seeing progress is what helped fitness influencers stay dedicated. Once they saw change they stuck with a healthy lifestyle and kept working out. Not only did it change people physically, but it had improved a better and stronger mindset for them. They proved that once you start to work out you come to realize the importance that it is not just how you look but more of how it makes you feel.

Sharma, Madaan and Petty mentioned that those who are unmotivated, another source of short lived persistence in exercise behaviors comes from people who do express personal motivation to exercise regularly, yet initiate exercise behaviors with little follow through (Sharma, A., Madaan, V., & Petty, F. D. 2006). There was not one person who worked out then stopped, there was never a motivation loss. If anything, these fitness influencers have gained motivation

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and were ambitious because of their struggles. When they would look through older photos of themselves and compare it to their progress now it made them proud, confident and even more motivated. Instead of letting their challenges and insecurities get to their head they set their goals and achieved them through fitness. They simply just wanted to get better, stronger, and healthier. Random people that were following their Instagram accounts felt persuaded themselves, just by reading, hearing what they had to say and looking at their pictures.

I believe that this study was significant and showed that fitness is the tool to help you condition your mind and develop confidence. I follow so many fitness influencers and they are always posting something new every day. If this topic were to be done again in the future, I would be intrigued to apply it with a different method such as qualitative analysis. I would interview people at my gym and ask them questions relating towards their mental health. Teixeira, Carraca, Markland, Silva and Ryan had stated that a national survey of over 6000 24 to 65 year old adults Asztalos et al. found that for men, participation in vigorous intensity physical activity lowered feelings for depression, anxiety and physical symptoms of such mental stress. (Teixeira, P. J., Carraça, E. V., Markland, D., Silva, M. N., & Ryan, R. M. 2012). It would be interesting to find out how long it has taken them to prioritize their mental health.

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