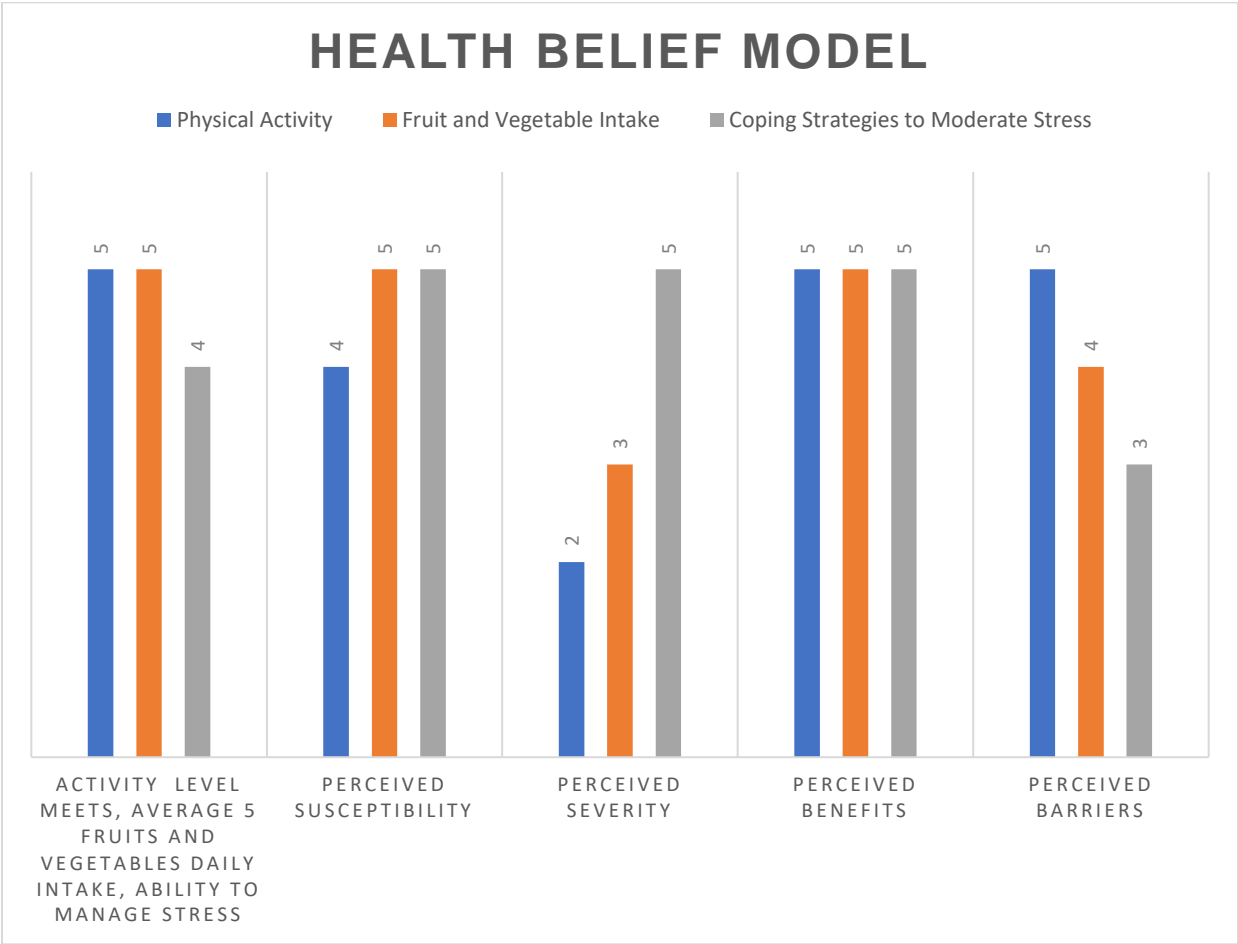


Health Belief Model

The Health Belief Model (HBM) was first developed in the 1950s by social psychologists to help us understand individuals’ health beliefs and their behaviors. The five variables questioned were behavior, perceived susceptibility, severity, benefits, and barriers. The HBM questionnaire contains three areas of assessment: physical activity, fruit and vegetable intake, and coping strategies for stress. I gave this questionnaire to one of my clients to better understand how it works.



Relationships among variables

Physical Activity

For the section on physical activity, the client's actions and beliefs seem to correlate with each other. For example, on the questionnaire, he states that he is physically active and also believes that doing exercise is key to staying healthy. He exercises regularly, even he is tired at the end of the day; however, his belief that inactivity does not increase risk of severe health problems poses potential room for future health issues to enter later in life.

Individual ratings

The first question that was asked is if he conducts 30 minutes of moderate intensity physical activity 5 times a week. If he meets this quantity fully, then he would circle 5. If he feels that he is a sedentary individual, then he would circle a score of 1. If he feels that he lies somewhere in between, he could circle another one of the values between 1 and 5. He marked his answer as 5 stating that he feels he meets the criteria. He said that he works out one hour a day for five days a week. The next question was about how he believes inactivity is related to the susceptibility of health problems. He would select 1 if he thinks inactivity would not increase his susceptibility to health problems, and 5 if he thinks it would. His answer was 4. When I asked why he picked 5 and not 4, the client told me that maintaining a healthy diet can maintain good health. The third question asks about the client's beliefs on the relationship between activity and severe health problems. Selecting 1 would indicate that he does not feel that inactivity would lead to severe health problems. Selecting 5 indicates that he perceives inactivity as a direct cause of severe health problems. He chose 2. He commented again that having a healthy diet can maintain good health.

The fourth and fifth questions ask about his perceived benefits and barriers of exercise. With 1 being no belief in the benefits of doing regular physical activity, and 5 as belief in multiple benefits of doing regular physical activity, the client chooses a value of 5 to answer question 4. His comment was that having a healthy body leads to having a healthy mind. A rating of perceived barriers to being regularly physically active as 1 indicates a feeling that there are multiple barriers to completing regular physical activity. A rating of, 5 however, indicates that the activities are outweighed by the benefits. His score was 5. This client does work out, even when very tired at the end of his job.

Fruit and Vegetable Intake

When reviewing the client's responses on fruit and vegetable intake, it became clear that there is a positive correlation with the data and his actions in daily life. He marked his belief that a lack of fruits and vegetables cause health problems. It seems that this belief influences his behaviors as he also marked that he eats 5 or more fruits and vegetables daily. He also believes there are benefits to eating fruits and vegetables, further reinforcing the relationship between his beliefs and actions. He did, however, mark a lower value for the barriers associated with this diet, which reflects how it can be difficult for him to fit in proper diet during his working schedule. While it appears that he does prioritize fruit and vegetable intake, his answer to how diet relates with severe health problems was lower than the others. This shows that while he may think that diet is important, he does not accredit it to prevention of severe health problems.

The first question assesses his average daily intake of fruits and vegetables. A rating of 1 correlates with an average daily intake of one fruit and vegetable, whereas a rating of 5 correlates with five or more fruits and vegetables a day. His answer was 5. I asked him what volume, in cups, of fruits and vegetables he eats total in a day. He said he has about 2 cups of vegetables and

one cup of fruits every day. The next criteria ask if a lack of fruits and vegetable in a diet would increase susceptibility to health problems. A rating of 1 state that it does not lead to health problems whereas 5 states that it does. The client chose a value of 5, meaning that he believes a lack of fruits and vegetables in a diet could lead to health problems. When I asked why he feels that he said that if we do not have enough nutrients from fruits and vegetables, then oxidation and inflammation will occur. I asked him if lack of fruits and vegetables in a diet would lead to severe health problems. In this next question, 1 means that it does not lead to severe health problems and 5 means that a lack of fruits and vegetables in a diet would lead to severe health problems. He chose a value of 3 and stated that the relationship between fruit and vegetable intake and health problems depends on the individual.

The next item questions the benefits of eating 5 fruits and vegetables daily, with 1 as having little benefit and 5 as there being multiple benefits. The client chose a value of 5. He said that having fruits and vegetables will provide fiber and antioxidants. The final item for fruit and vegetable intake asks if there are any barriers to eating 5 fruits and vegetables daily. A score of 1 state that there are multiple barriers and 5 means that barriers are outweighed by the benefits. He chose a value of 4. The client said that when he is on trips, the availability of healthy food is limited.

Coping Strategies to Moderate stress

The client highly rated the role of stress on the susceptibility to health problems of varying degrees and the benefits of managing stress. He believes that stress can cause problems, therefore he also believes that coping strategies to moderate stress are important. His perceived ability to cope with stress, however, was rated lower than his belief of its importance. So, while he may feel that it is important, he also feels that he cannot manage his stress all of the time. He

also feels that there are barriers associated with being able to cope with stress, indicated by his answer of 3. Using this questionnaire and furthering discussions can help to understand the client and his needs better.

The first question asks the client to rate his own ability to use coping strategies to manage stress. In this section, a value of 1 state that the client feels limited ability in coping strategies to manage stress. A value of 5 states that the client feels in control of using coping strategies to manage their stress. The client chose a value of 4. He said that doing a stressful job influences his stress levels. The next question reveals the perceived susceptibility associated with stress. A rating of perceived susceptibility value of 1 means that having stress does not increase personal susceptibility to health problems. A rating of 5 states that stress will increase personal susceptibility to health problems. He chose a value of 5. He said that stress can cause heart disease. The next question discusses health problems further by questioning stress and its relationship with severity of health issues. A value of 1 here state that stress does not lead to severe health problems and a value of 5 states that stress will lead to severe health problems. His answer was 5. He said that stress can increase inflammation and influence hormonal changes which can cause damage to the body. Item 4 asks the client to rate the perceived benefits of managing stress. A rating of 1 correlates with the idea that applying coping strategies to manage stress has little benefit whereas belief that there are multiple benefits of applying coping strategies to manage stress is rated at a value of 5. He chose a value of 5. He said that managing stress can decrease productions of stress hormones. The final question addresses any barriers the client feels are associated with coping with stress. A value of 1 in this case means that the client is experiencing multiple barriers when applying coping strategies to manage stress whereas a value of 5 means that the barriers to applying coping strategies are outweighed by the benefits.

The client circled 3. I asked why he made this choice and asked him to give some examples of barriers. He said that he chose to have a stressful job because he enjoys the fast-paced work. Because of this, he believes that his score had to be lower than a 5 since there are many barriers associated with his job of choice. However, he says he manages to exercise daily and meditates to help balance his stress levels, making him believe that his score should be higher than 1. Therefore, he decided to circle the value of 3.

Participant characteristics and HBM data implications

The participant was a 58-year-old male. Results from the physical activity section reveal that he believes that physical activity provides multiple benefits and that he is taking the time to exercises. However, he also believes that inactivity does not cause severe health problems. In my opinion, his age and sex does have a bearing on the results. He is past middle age and is concerned about his retirement. Being a father figure, he feels that he needs to take care of his children and pay for their college tuitions and housing. He says that he does not have much time for himself and feels stress because of this. I feel that he has built a mindset, over many years, of his relationship with stress; this might could possibly be altered by changing his beliefs about stress.

Believing that physical activity does not cause severe health problems may lead to implications on his future health. This belief coupled with believing that not many severe health problems will occur due to lack of fruit and vegetable intake may potentially lead to the development of chronic disease without his own awareness of it. Additionally, continuing to do a stressful job could lead to an unbalanced metabolism and may distort his body's equilibrium systems.

After reviewing the results for using coping strategies to moderate stress, it is shown that he believes high stress can cause health problems and does so to severe levels. He believes that the skill of coping with stress is important but feels that his stress is not fully managed all of the time. The client's belief that high stress leads to severe disease could be giving negative impacts on this client. I think that if I can talk to the client about the social stress test study conducted by Harvard University, presented by Kelly McGonigal on the TED website, "How to make stress your friend," that if we can think of stress as energizing and as an aid to meeting challenges, then the physical impact from the stress can be changed (McGonigal). McGonigal states that if one views stress as helpful rather than harmful, then the arterial walls do not contract. By thinking that stress is bad for the body, the client may be encouraging his arterial walls to contract more than necessary.

Another area that may cause negative outcomes to his health is his job selection and scheduling. I would ask him how long he would like to continue doing his stressful job or if he is thinking about changing or adjusting his job in the future. I would also ask if there is any other job that he might enjoy doing. I would also ask if he is aware that chronic stress can lead to adrenal hyperplasia.

To combat the potential downfalls associated with the client's beliefs, I would like to discuss with him and ask how likely certain chronic diseases potential have to occur. Also, it would be useful to discuss what kind of behaviors he knows might specifically cause chronic disease. Leading him to think deeper and be aware of what is likely to happen when repeating certain behaviors may bring new considerations to his beliefs on physical activity, diet, and stress.

Conclusion application

I would tell the client that overall, he is doing very well. I asked him if he has any concerns about his health and anything he would like to improve before suggesting any changes. I let him know that I can create an exercise program for him that may be easier to fit into his schedule than his current setup. Also, to add some coping skills for stress, I recommended him to continue his meditation daily for the next three weeks while trying to introduce positive ways to look at the stress physical response. If he shows further interest after the next three weeks, I can then introduce additional types of meditation techniques he can attempt.

After discussion, the client asked me for advice on losing weight. To address this, I would first conduct a physical fitness level test with him and measure his waist and blood pressure. I would then create an easy physical fitness program for him. To monitor progress, I suggested meeting once a month. I told him that creating good habits take time, so I would like him to visit me for next 6 months. I also recommended him to get a blood test and cholesterol test with his primary care physician so that he may communicate with his physician to find out if there are any improvements at the end of the 6 months. Throughout the 6 months, I will also remind the client that if something about the fitness program is not working, it can be adjusted as needed.

Doing the Health Belief Model questionnaire helped me to understand my client better, particularly after talking to him. The client has a goal of becoming more fit, but the questionnaire reveals other components in his life, relating to beliefs and behaviors, that might be holding him back. The beliefs that people have may be contributing to the development of unhealthy habits or inability to develop healthy ones. Opening up the possibility of the roles that beliefs about physical activity, diet, and stress have on their lives can bring awareness to demographic factors

and social influence that could have created these beliefs. I would recommend other wellness professionals to use this questionnaire as well, as it reveals the relationships between the client, their beliefs, and their behaviors.

Works cited

TED. (2013). *How to make stress your friend* / *Kelly McGonigal*. Retrieved from <https://www.youtube.com/watch?v=RcGyVTAoXEU&t=413s>