A Thesis Presented to

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The Interaction of Individual Differences and Fitspiration Media on Fitness Behavior

by

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Introduction

I am a senior honors student at Alfred University who is majoring in Clinical Psychology and minoring in Biology with a pre-med track. After witnessing many people I am close with struggle with significant mental illness and how much of an impact medication and therapy have had on their lives, my goal is to become a child psychiatrist. The psychology and biology programs have taught me a lot not only about the field I want to go into but have provided skills that I will apply in the real world as a professional. Some of the most influential classes I have taken were Clinical Procedures, where I received my own psychology client to counsel and the various science labs where I perform lab work that is the basis of techniques I will be using in the future. After conducting research for my thesis, I have also started a project that I plan to continue further into my career as a graduate student.

My honors thesis research was a study based on my hypothesis that people with higher levels of extrinsic motivations, concrete thoughts about their body type and overall attitudes towards their bodies and exercise in general will be more likely to have a higher intention to exercise in the future after viewing an Instagram feed containing fitspiration images. Fitspiration became a large part of my life throughout the last few years, especially since starting college, and sparked my interest due to its psychological nature and having specific firsthand experiences related to exercise, fitspiration and social media in general. By creating a thesis topic that I was passionate about both research wise and personally, I was able to easily put a lot of work into this process while remaining excited about it.

I began thinking about my thesis topic the summer before my senior year. I had spent time producing some vague ideas but had not gotten extremely far until I decided to do a 'digital detox'. Throughout this summer I spent most of my time in a treatment program for eating

disorders, due to a relapse that began the previous semester. One thing treatment made me realize was how attached to and obsessed I was with my phone, social media and other electronic apps. Because I could not use my phone throughout the program during the day, I would go home at night to many notifications that had added up as the day went on. I would be scrolling through Facebook, Instagram, and Snapchat for what only seemed like a few minutes, but would be hours at a time.

One of the biggest struggles I had during treatment was coping with not being able to exercise, which is something I had been obsessively doing since I began college and had worsened during my junior year. This was made exceedingly difficult for me because I followed various fitspiration pages on Instagram, and the exercise, weight loss and overall 'healthy lifestyle' posts were constantly appearing. These posts created a new unrealistic body ideal that I wanted to achieve. After witnessing what a toll social media was having on me, my boyfriend and I decided to do a challenge together, where we did not use any social media, internet websites or even watch Netflix on our phones or any other electronic device for two complete weeks. At first, I did not think this challenge would be that difficult but found realistically how much time I was actually spending being consumed by my phone rather than being a part of the world going on around me in each moment.

Throughout this detox, I was able to make a lot of progress and revelations within my treatment and just enjoying everyday life. One of the biggest discoveries I made, was the realization of how much these fitspiration posts were reinforcing my extreme behaviors during one of my lowest points, so I deleted all of them. I unfollowed all fitness and dieting pages I was subscribed to and started a discussion with other patients about their experiences with this topic, to find remarkably comparable stories with most of them.

The concept of fitspiration at its core is supposed to be beneficial to viewers and help promote healthy living in an increasingly unhealthy society. Fitspiration posts are popular on social media platforms on Instagram and Facebook, containing media posts that have repeating themes of weight loss, exercise, healthy living, self-control, strength, restricted calories, meal planning, and bodies with high muscle tone and a low body fat percentage (Boepple, Ata, & Thompson, 2016). From the conversations I have had with different people though, these posts can often actually discourage people from trying to exercise or adapt a healthier lifestyle. On the other hand, some others that I have spoken with have had the opposite experience where they really are more inspired to exercise after seeing posts online. Being a psychology major interested me in that everybody's perception of fitspiration is different, and I wanted to find out what about people makes them interpret these images differently.

I chose my committee carefully by selecting professionals at Alfred University that had specialties in each aspect of my thesis topic. I have had Dr. Johnson (my committee chair) for various psychology courses and knew she has a strong background in psychological research methods and social psychology, while Dr. Gagne has experience specifically in social media, as well as research and psychology. Dr. Schlegel's background in communications, understanding visual rhetoric and social media was a tremendous help while going through the process of creating a relevant Instagram feed for my study.

Meeting and communicating frequently with my committee was a very integral piece of successfully being able to work through my thesis, while also juggling a full course load, three jobs, being in clubs and everyday life obstacles that would arise. Not only were they helpful with the development of my thesis, but helped me obtain skills, such as undergoing research, collecting and analyzing data and being able to work as a team with other professional minds.

While this experience was extremely gratifying and rewarding, I ran into multiple obstacles along the way that I had to overcome with the assistance of my committee and other supports. One of the first difficulties I had to work through was specifying what aspect of social media and fitspiration I wanted to investigate. When I would have meetings with my committee at the beginning of this year I had a list of topics pertaining to fitspiration and wanted to focus on too many aspects within one study, which would have made my hypothesis too muddled and vague.

As I stated before, throughout my senior year I have had a full credit load both semesters, with noncredit labs added on top of that. Something I had to learn as this process went on was to balance working on my thesis and working on other school work. There were times where it would be very overwhelming thinking about all the tasks I had to complete with such a busy schedule and limited time. Sitting down and creating a schedule with Dr. Johnson that had specific deadlines throughout the semester helped keep me on track with my work and provided a more structured environment, which I tend to work better in.

Reflecting on what I could have improved on throughout this process was beneficial because I can use this insight and knowledge for future research projects and careers. These improvements include doing more research and other work earlier on in the semester so that later in the project, I would have more time to do collect data, rather than having to wait longer for approval from the HSRC. This also would have helped a lot because of how many more assignments and exams I had adding up throughout the semester.

With this being the first legitimate study I have conducted, I have gained a lot of knowledge and was able to implement research methods and techniques that I have learned about in different psychology courses I have taken at Alfred University. Dr. Schlegel invited me to his

social media and society class to present my work on my thesis, and Dr. Johnson helped me go through creating a presentation for my defense. Working closely with my committee, I was able to effectively prepare for my oral honors defense that was in front of the whole psychology department and director of the honors program. The research skills I have gained from this process will also be useful when I am applying for psychology and biology research positions this summer to gain experience for graduate school.

This process has been helpful in developing these necessary skills, as well as learning more about myself as an individual and society in a world of advancing technology. Being able to add to the developing pool of research regarding fitspiration, social media and its relation to psychology is quite significant because this is a topic that is becoming more relevant as our technology advances and people's identities become more tied to their social media personas. Being able to understand more fully what about people specifically makes them susceptible to certain social media posts could help improve health and wellness campaigns so they are more successful and well received by the general population. I also hope to extend this research in the future to help with eating disorder recovery of others, since societal aspects are a large contributor to these disorders.

Abstract

This study explores how motivation types, implicit theories and attitudes toward the body and exercise, and an external 'fitspiration' stimuli (Instagram feed) influences people's intention to exercise in the future. Participants from Alfred University, Facebook, Instagram and the Psi Chi website accessed this study on a secured website; eSurveysPro.com. Participants answered questions from scale measures, including; the Extrinsic Motivation Items scale, Intrinsic Motivation Items scale (Buckworth, Lee, Regan, Schneider, & DiClemente, 2007), the Implicit Theories of the Body Scale (Lyons, Kaufman, & Rima, 2015) and Social Desirability Scale (Stoeber, 2001), and scrolled through a 100 picture Instagram newsfeed and then answered follow up questions. extrinsic motivation and social desirability significantly predicted participants' intention to exercise A multiple regression revealed that both extrinsic motivation (0.142, $p < 0.01$) and social desirability (0.314, $p < 0.01$) were significant predictors of future exercise intention ($F_{(4, 46)} = 5.992$, $p < .001$, with an R-square value of 0.343), while intrinsic motivation (0.047, $p = 0.362$) and implicit theories (0.021, $p = 0.863$) were not significant predictors. These results partially supported my hypothesis, in that participants with higher extrinsic motivation scores had higher intention to exercise, compared to those who had lower extrinsic motivation. Contrary to my hypothesis, implicit theories did not have any significant influence on participants' intention. Unexpected results also showed that social desirability scores had a positive correlation with intention to exercise. Participants' intention to exercise did not differ much after viewing the Instagram feed. A small and local sample limited the power of this study. Even though some of the things I thought would matter did not, this study has brought more knowledge to the impact of social media on behavioral intentions.

The Interaction of Individual Differences and Fitspiration Media on Fitness Behavior Intentions

Social media has been a tool for communication, connection and entertainment on the rise for the past few decades. With that in mind, it is being widely and extensively used by the younger generation and has become a part of everyday society, with people being able to document their everyday activities live or make thousands of dollars a day by posting a picture on Instagram. With this increase in social media, internet use and obesity/disease in America, there has been a significant increase in the number of posts on social media that have to do with health and fitness. Media sources that are specifically designed to inspire fitness among its viewers are defined as 'fitspiration' posts. These media sources are typically images, videos, and text with repeating themes of weight loss, exercising, muscle gain, dietary planning, among others. (Deighton-Smith & Bell, 2017).

Boepple, Ata, and Thompson (2016) discussed the shift in society from encouraging a very thin body ideal to a fit (athletic or healthy) body type, with a common new slogan being "Strong is the new skinny." While fitspiration images are meant to encourage a healthy lifestyle, media sources including pictures of these athletic bodies with high muscle and low-fat percentages often impact the viewer's psychological health. This new 'fit' ideal can create an elevated level of body related anxiety, which could be considered like that of comparing oneself with the 'thin' body ideal (Boepple et al.,2016). It is easy to find many parallels between fitspiration and previously trending 'thinspiration' posts, with both media sources causing a significant level of body dissatisfaction. Boepple and colleagues analyzed fitspiration posts and found that they tend to objectify women in a sexual way, contain a lot of messages or pressure on the viewer to lose weight, with an abundant amount of before and after posts and weight loss tips

(2016). Their findings contradict the intention of fitspiration, but people still find these messages quite inspiring.

I sought to investigate what causes some people to be inspired to become fit after looking at these posts and others to be deterred from exercising. In contrast to Boepple, Ata and Thompson's position, I wanted to investigate the impact of images that did not contain pictures of human bodies in detail (2016). This was done to decrease the chance of other biases impacting the participants' motivation, rather than the fitspiration messages behind them.

There are various aspects that impact people's perception of stimuli, and their intention to make a change in their lifestyle, which include people's motivation and where that motivation comes from. Most people are motivated in some way to perform the tasks they do every day and make decisions, and typically fall into either two categories; being extrinsically motivated or intrinsically motivated. People can have diverse levels of both motivation types, but generally fall more under one category than the other. Both types of motivation help answer the question as to why we make the decisions we do. If people have a higher level of extrinsic motivation, they are more likely to make decisions and participate in tasks because of external forces/influencers. Extrinsic motivation usually promotes behavior to obtain benefits or avoid consequences. In Buckworth, Lee, Regan, Schneider and DiClemente's study (2007) on extrinsic and intrinsic motivation specifically applied to exercise, he stated that those who had more extrinsic motivation to exercise were doing so for reasons such as impressing other people, hoping to be accepted by others, media or other sources convinced them, and so on.

Intrinsic motivation is based on the concepts of self-determination and autonomy. Intrinsic motivators come from people's own personal wants, interests, enjoyment and goals (Buckworth, Lee, Regan, Schneider, & DiClemente, 2007). The scales that resulted from this

study were the Intrinsic Motivation Inventory (IMI) and the Extrinsic Motivation Inventory

(EMI). The use of these scales within this study helped show how motivation is a very crucial

cognitive component in the areas of beginning exercise and the continuation of exercise

(Buckworth et al., 2007). There has also been other research done on the motivation behind

exercise specifically, with another source creating the CET scale to understand the relationship

between intrinsic and extrinsic motivation, along with the influence of people's psychological

needs and social conditions (Wilson, Mack, & Grattan, 2008).

Implicit theories are strongly tied with motivation and attitudes because the belief has to

do with people's perception of different areas of their life and how much control they really have

over making changes (Dweck, Chiu, & Hong, 1995). Implicit theories are a central part of

people's core beliefs and assumptions about themselves, as well as others around them. Implicit

theories refer to the two assumptions people hold about their ability to change certain attributes

about themselves (Dweck et al., 1995). Seeing personal attributes as set in stone or nonmalleable

is considered the entity theory, while the belief that attributes can be changed, developed and are

malleable is known as the incremental theory. Like motivation, people tend to fall under one

category of implicit theories that fits their views, but this does not necessarily mean that this

specific perspective overarches all aspects of their life. People can have a more entity view on

their intelligence, while they are more incremental with their morals (Dweck et al., 1995).

Implicit theories scales usually have three questions that are all remarkably similar, but

differently worded to really understand people's perception. Dweck, Chiu and Hong created the

Implicit Theories of the Body Scale (ITB Scale) based off this basic model, but it contains six

statements about people's perception of their body (1995). Understanding how somebody views

their body image is particularly important to understand their motivation and if they will be more

inclined or deterred from exercising to begin with. If people believe that they are overweight because of their genetics and that nothing they do will change that, it seems highly unlikely that looking at fitspiration images on social media is going to change such a core belief they have of themselves. On the other hand, people are more open to the idea of being able to make a change to their body in a way they would like, these images may trigger that thought process and in turn help motivate them to exercise more to make a change to their bodies. People's attitudes about themselves and exercise can be determined by looking at their implicit theories. If somebody has a more negative attitude, this can have an impact on how they view a fitspiration media stimulus that may be different from those who have a more positive and flexible kind of thought process towards it.

While intentions are considered to reflect the underlying motivation of people's actions and behaviors, this intention may not be the most accurate measure. With analyzing possible behavioral changes after being exposed to a stimulus, both the concepts of willingness and intention need to be addressed. Behavioral intentions are people's plans of engaging in a certain behavior or considered the 'goal state' (Pomery, Gibbons, Reis-Bergan, & Gerrard, 2009). This includes how much effort they are planning to make to perform a certain behavior. Measuring intention can be done by assessing what period they intend on engaging in this behavior as well as how they plan to engage in that behavior within the given time frame. Expectations though, are only vague predictions of people's future behavior but measured similarly when compared to intentions and are often used as a substitute or supplement measure with behavioral intentions (Pomery et al., 2009). Measures can include when you expect to engage in this behavior as well as predicting how likely it is that you will engage in that behavior. Behavioral willingness is another factor that also needs to be considered because it refers to people's openness to

opportunities and to perform that specific behavior in certain situations that allow that behavior to occur. In other words, it is often easy for people to have a guess on how they would behave or respond in certain situations, while they usually have no intention or expectation of being put in that situation (Pomery et al., 2009).

This study investigated how certain aspects of people's personality impacted their ability to be influenced by an external stimulus. More specifically, this research evaluated participants' motivation, implicit theories and general attitudes towards their bodies and exercise, before they were exposed to an Instagram feed with fitspiration posts, and then measuring how their intention of exercising had or had not changed. I expected that participants who fell into the categories of high intrinsic motivation, concrete perceptions of their bodies and negative attitudes toward exercise would less likely be inspired to participate in physical activity after this study. The opposite of those predictions was also applied, in that this I believed that those with high extrinsic motivation, malleable perceptions of their bodies and more positive attitudes towards fitness would be more likely to be influenced by fitspiration images and want to exercise after viewing them.

Method

Participants

The participants that were used in this study were selected from a variety of different sources. Because this study was completely online, I posted a link on different social media platforms, including; Facebook and Instagram, as well as shared this link on the Psi Chi website where any members could participate. Lastly this study was made available to Alfred University's psychology 101 students that were participating to earn experiential credits required

for their class. The sample size of this study was 58 participants (N=58), including 35 women, 22

men and 1 person who had selected gender as other and specified. The age range of the

participants that were a part of this study was 18-55 years old, with there being a mean age ~ 24.

This sample was not remarkably diverse with there being participants from various ethnic

backgrounds, ranging from 3.12% of participants being Native American or American Indian to

78.12% participants being white.

Measures

This study was accessed through one link that included all the components that needed to

be completed by the participants. With that stated, the participants needed to have access to a

computer, tablet, phone, etc. that had internet capability which I did not specifically provide to

them, to open the URL link. Within this study, participants responded to 66 different statements/

questions that were categorized into the following sections: Informed Consent, Demographics,

Motivation, Instagram Feed, Current and Future Behaviors and Debriefing Statement. Questions

one-eight were part of the informed consent process and basic demographics, including age,

gender, ethnicity and how frequently the participant exercises, to establish a baseline. The

Motivation section of this questionnaire was made up of two different scales to measure the

participants' motivation level and if it was more intrinsic or extrinsic.

Questions 9-28 were taken from Lee and DiClemente's modified version of the Intrinsic

Motivation Items scale (IMI), made specifically for measuring intrinsic motivation toward

exercise and sport (2007). The participant answered these questions by using a 1-7 Likert Scale

that range from 1: strongly disagree to 7: strongly agree, with items; 15, 16, 17, 18, 20, 21, 24,

25 and 28 being reversed scored. Item 8 from the original scale; I feel very tense while

participating in physical activity was not included in this study, due to an error on my part while

creating the questionnaire. The modified possible range of scores for this scale (not including the excluded item) was from 20 to 140, as opposed to the original range being 21-147. Questions 29-41 were taken from Buckworth, Lee, Regan, Schneider and DiClemente's Extrinsic Motivation Items scale (EMI) and used as an instrument to measure the participants' level of extrinsic motivation specifically pertaining to exercise and sport (2007). Participants agreed or disagreed with these 13 given statements based on a 1-5 Likert scale, ranging from 1: strongly disagree to 5: strongly agree, with the total possible score ranging from 13 to 65.

The Perception part of the questionnaire contained 6 items from Lyons, Kauffman and Rima's Implicit Theory of the Body scale (ITB) that was developed to measure if participants had a more incremental or entity theory towards their body image (2015). This instrument was originally based off Carol Dweck's measures of implicit theories of intelligence, personality and morality. Items 42-47 were scored based on a 5 point Likert scale, ranging from 1: strongly disagree to 5: strongly agree with possible scores ranging from 6-30.

Another instrument created in this study was a pdf version of an Instagram news feed I created, that contained 100 total media posts. These posts were carefully selected, with 50 of them containing either quotes, pictures, cartoons or silhouettes that had a 'fitspirational' message, focusing on exercise. Images depicting actual bodies or people in real life exercising were not included, to avoid bias and narrow down the operational definition of 'fitspiration post' in this study. The other 50 images were 'filler' pictures that were intended to be neutral to the viewer, having nothing to do with fitspiration, food, physical health, etc. but could be considered realistic to see on an everyday Instagram feed. These filler images were divided into six categories including interior design, artwork, nature, animals and architecture, with each one of these specific categories containing five images of that subject. The last filler category contained

25 images that were inspirational quotes that did not pertain to fitness. This category was added because in the fitspiration category, there was an abundance of images containing quotes, so by adding quotes that did not relate to fitness, the objective of what this study was testing was made to be less obvious to the participant. All these images were randomly sorted into an easily accessible feed that was made into a pdf so those who did not have an Instagram account could still participate in this study. The filler images were chosen explicitly to be neutral in nature as to not provoke any intense emotion from the participants. This was based off the idea of visual rhetoric in that social media posts are symbolic and meant to communicate to an audience (Mooney, 2017). What each specific aspect of each image contributed (lighting, focus, audience, etc.) to the overall meaning was specifically analyzed and controlled (Mooney, 2017).

The last part of this questionnaire was named 'current and future behaviors' and questions 48-63 were items from Joachim Stoeber's Social Desirability Scale (SDS). These items were used to assess the degree of truthfulness the participants were answering in. The items within this scale were all statements that the participant selected either true or false for the answer. These statements included both desirable and undesirable behaviors that the participants either agreed or disagreed with (Stoeber, 2001). There was one item omitted from this measure; "I have tried illegal drugs" because like Stoeber's study, this item lacked relevance for this study. This scale was scored by awarding 1 point for each statement that the participant chose true for, including items 50, 51, 52, 55, 56, 57, 59, 60, 61, and 63, and awarding 1 point for each of the rest of the statements that the participant chose false on. The range of scores was from 0-16. The final three questions (64-66) in this section were measuring predictors of intention and willingness as to whether the participants were willing to participate in physical activity compared to the beginning with a two-week time frame in mind, as well as a question asking the

degree the participant believed they were going to be able to accomplish this. The range of possible scores for these three questions together was from 1-13, with question 64 being awarded 1 point for choosing True, question 5 being rewarded 1-7 possible points given the frequency the participant selected and question 66 being awarded 1-5 possible points since it was a 5-point Likert scale (1: not at all through 5: very likely).

Procedure

The participants in this study received the link to the survey either from a social media platform, email, psi chi's website, other. After obtaining this URL, they were asked to follow the instructions on the page that contained an informed consent that was electronically signed. The participants then answered 47 questions that were divided into the categories stated in the section previously. After answering these questions, the participants then clicked a link within this survey that opened a new window with a pdf version of a 100 item Instagram feed, which they were to scroll through fully. Once they finished going through this feed, participants were asked to return to the survey to finish answering one more question section and obtain the debriefing statement upon completion. Participants were told that this study could take up to 45 minutes to get through completely, and were able to access it through any tablet, phone, computer, other electronic device that had internet access.

Results

A multiple linear regression was calculated to predict intention to exercise in the future based on intrinsic motivation scores, extrinsic motivation scores, implicit theories of the body and social desirability scores. Table 1 is a table that represents the coefficients that were

presented in the multiple linear regression. A significant regression equation was found (F(4, 46)=5.992, p<.001), with an R-square value of 0.343. Participants' predicted Intention scores is equal to -4.05 + 0.047(IMI) +0.142 (EMI) +0.021(ITB) +0.341(SDS), where IMI and ITB are coded as 1=strongly disagree through 7= strongly agree with some being the opposite order for any reversed score questions. EMI is coded similarly, as 1=strongly disagree through 5= strongly agree. SDS was coded as 0= False, 1=True. Intention to exercise increased 0.051 units for every unit increase in IMI. For every unit increase in participant's EMI, their intention increased by 0.052 units. For each point increase in their ITB score, intention increased by 0.119 units, while as SDS scores increased by a point, intention increased by 0.120 units.

Both extrinsic motivation and social desirability were significant predictors of intention, with their p values being 0.009 and 0.012, while intrinsic motivation and implicit theories were not significant predictors of intention to exercise, showing p values of above 0.05 (0.362 and 0.863). This means that with an increase in extrinsic theories score, and social desirability score, the participants' intention to exercise in the future also increased, making a positive correlation between these variables.

Table 2 is a table of observed counts for current frequency of exercising vs intended frequency of exercising, along with the totals for each group within these two variables. After observing the total counts for each grouping within the current frequency and comparing them to the total counts for those groups within intended frequency there is not a significant change between these totals. The most noticeable difference in these totals is in the 3-5x a week current and intended groups, with the original number of participants in this category being 13, and then after viewing the Instagram feed the number of people who intended to exercise that often

decreased to ten people. Aside from this one notable difference, the Instagram feed did not appear to change intention to exercise in most participants.

The chi-square of independence could not be run because assumptions on expected counts were violated. Normally a Fisher exact test would have been conducted as an alternative, but the university did not have that capability in their SPSS package.

Discussion

My hypothesis for this study was that participants with higher levels of extrinsic motivation, changeable views of their bodies and positive views about exercising in general would be influenced by fitspiration posts, in that their intention to exercise in the future would increase as well. This hypothesis was partially supported when conducting a multiple regression to examine the relationship between participants' IMI, EMI, ITB SDS scores and their overall intention score.

Extrinsic motivation and social desirability were found to be the most significant predictors regarding intention to exercise in the future, meaning that people who had higher EMI and SDS scores appeared to have higher intention scores as well. Implicit theories of the body showed no significant impact on people's scores when also taking SDS, IMI and EMI into account. This was a part of my hypothesis that was not supported, which was interesting because implicit theories are usually an extraordinarily strong piece within people's overall dispositional characteristics and has been found to impact a lot of other aspects in their lives and decisions.

Looking at the observed count table (Table 2) gave insight as to the part of this study that was measuring if the Instagram feed has in fact had a significant impact on participants' intention exercise compared to the frequency they already were at. To me, the general findings

from this table showed that on an overall scale, the Instagram feed did not have a significant

impact on the participants intention to exercise in the future, with their original frequency being

similar if not the same as their future intention. This area of analysis was also not the most

accurate way of testing this theory due to not having access to more concrete tests (Fisher exact),

so I had to make descriptive observations of patterns of these frequency groups.

These groups were also condensed down from there being seven different possible

answers to only 4 frequencies (I do not, 1-3x as week, 3-5x a week and 5-7x a week. This could

be a source of inaccuracy when discussing if the Instagram feed impacted the participants'

intention to exercise, because originally, they were offered far more answers that were more

descriptive, instead of being clustered together into these more condensed and general groups.

Looking at these groups as they originally were presented could show more of a difference

between participants' current exercising behaviors and their intention to exercise in the future.

Social desirability being one of the main variables that impacted participants' intention to

exercise in the future was surprising, since I had not originally made any prediction about how

the results of this scale would impact people's intention but was using it as a measure to control

reliability of their answers. On the other hand, though this result logically makes sense because

people tend to make decisions based off what society will think is acceptable. This goes along

with extrinsic motivation in that if a person is highly extrinsically motivated, they are motivated

by what others think, which is related to wanting to feel accepted by the rest of society.

This may also explain why implicit theories showed no major significance as a predictor

of intention. Participants could have had any view of their body, but if they believed that there

was a more socially desirable way to answer the intention portion of the study, that may have

took precedent over in impacting their answer compared to what they want other people to think.

This is likely, because originally when the multiple regressions were run without the social

desirability variable, there was a higher significance shown in ITB scores.

Limitations within this study were data collection and analysis time, due to having to wait

for the proposal to be approved by the HSRC and only having a few weeks left in the semester.

Once the study was approved, I had to wait for participants to complete the study online until I

had a big enough sample size to analyze the collected data. Another limitation was the

accessibility to certain functions within the SPSS program. Alfred University did not have access

to the Fischer Exact test function in SPSS, which impacted data analysis. Instead of using that

test, I had to create a more descriptive table of observed counts to compare the frequency

variables of physical activity.

While the internal validity and experimental realism of this study appears strong, this

study is still limited due to the sample having a limited generalizability to a global population

(external validity). The measurement validity within this study was strong due to the measures

coming from already validated and accepted studies (Buckworth, Lyons and Stoeber).

The biggest confound within this study was that it was accessed online, therefore, there

was no supervision of the participants to make sure the instructions were being followed the

same way every time. Participants could have stopped in the middle of the study and started

doing something else, causing distractions or even skip over looking through the Instagram feed

all together. This study being offered online though was better since Alfred is an exceedingly

small community with every person having different availabilities, so being able to access this

study at the participants' convenience was beneficial and led to more participation than

originally expected. It also gave a larger variety to the pool of participants since anybody could access it from social media, email, etc.

In the future, I would like to continue this research with a bigger sample size that is more reflective of a universal population, as well as focusing on a more focused independent variable to see if everything I was investigating could have an impact by themselves. I would also conduct other data analyses (with the Fisher Exact test being one of them) providing I had access to those resources. Investigating how these results vary in diverse cultures around the world would also be interesting and help make this topic relevant on a global scale. Along with these ideas, I would create a management system that monitors when the participants access the Instagram feed to see how long they are viewing it for, how much of it they get through, as well as asking some questions to test how closely they were paying attention to the content. This is important as I believe this could have impacted the results of the study.

Another aspects I would change about this study to improve its validity and reliability is including base questions that question participants' social media use so that participants could be grouped into distinct categories and compared. This would be beneficial because participants would be compared on a more standardized basis among others have similar usage to them, eliminating the possibility that this is what is causing differences in participants' responses rather than their motivation and other predictors.

The findings from this study are relevant to the real world in that, social media is something that is very prevalent in society with its influence advancing as we speak. Social media platforms like Instagram and Facebook are accessible to a vast population, and not just exclusive to the American culture, showing a more worldwide impact. The posts that were accessed in the Instagram feed in this study were all posts that can be seen on any 'average'

social media newsfeed, mirroring real life experience significantly. Also, if people can understand what characteristics about them influence their receptiveness to external stimuli, society can use this to positively to promote different healthy living initiatives, hopefully increasing their success rate.

References

Boepple L., Ata R.N.,& Thompson J.K. (2016). Strong is the new skinny: A content analysis of fitspiration websites, *Body Image*, 17, 132-135. https://doi.org/10.1016/j.bodyim.2016.03.001

Buckworth, J., Lee, R. E., Regan, G., Schneider, L. K., & DiClemente, C. C. (2007). Decomposing intrinsic and extrinsic motivation for exercise: Application to stages of motivational readiness. *Psychology of Sport and Exercise*, 8(4), 441-461. DOI: 10.1016/j.psychsport.2006.06.007

Crawford S., & Eklund R. (1994). Social physique anxiety, reasons for exercise, and attitudes toward exercise settings, *Journal of Sport and Exercise Psychology*, 16(1),70-82.

Deighton-Smith, N., & Bell, B. T. (2017). Objectifying Fitness: A Content and Thematic Analysis of #Fitspiration Images on Social Media. *Psychology of Popular Media Culture*. Advance online publication. http://dx.doi.org/10.1037/ppm0000143

Dweck C.S., Chiu C.Y.,& Hong Y.Y.(1995). Implicit Theories and Their Role in Judgements and Reactions: A World from Two Perspectives. *Psychological Inquiry*, 6(4), 267-285. http://www.jstor.org/stable/1448940?seq=1#page_scan_tab_contents

Gillison F.B.,Standage M.,& Skevington S.M. (2006). Relationships among adolescents' weight perceptions, exercise goals, exercise motivation, quality of life and leisure-time exercise behavior: a self-determination theory approach. *Health Education Research*, 21(6), 836-847. https://doi.org/10.1093/her/cyl139

Lyons, C., Kaufman, A. R., & Rima, B. (2015). Implicit theories of the body among college women: Implications for physical activity. *Journal of Health Psychology*, *20*(9), 1142–1153. http://doi.org/10.1177/1359105313508997

Mooney, A, (2017). Teaching Social Media Ethics Using Visual Rhetoric. *The National Council of Teacher of English*. http://www2.ncte.org/blog/2017/10/teaching-social-media-ethics-using-visual-rhetoric/

Pomery, E. A., Gibbons, F. X., Reis-Bergan, M., & Gerrard, M. (2009). From Willingness to Intention: Experience Moderates the Shift From Reactive to Reasoned Behavior. *Personality & Social Psychology Bulletin*, 35(7), 894–908. http://doi.org/10.1177/0146167209335166

Stoeber, Joachim. (2001). The Social Desirability Scale-17 (SDS-17): Convergent validity, discriminant validity, and relationship with age. *European Journal of Psychological Assessment*. 17. 222-232. 10.1027//1015-5759.17.3.222.

Wilson, P. M., Mack, D. E., & Grattan, K. P. (2008). Understanding motivation for exercise: A self-determination theory perspective. *Canadian Psychology/Psychologie canadienne*, 49(3), 250-256. http://dx.doi.org/10.1037/a0012762

Appendix A

Table 1

Multiple Regression Model 4 Coefficients

	B	*SE B*	*Beta*	*p*
Constant (INT)	-4.051	3.901		0.304
IMI	0.047	0.051	.141	0.362
EMI	0.142	0.052	.435	0.009
ITB	0.021	0.119	.022	0.863
SDS	0.314	0.120	.321	0.012

*Note. Dependent Variable: Intention Score. A multiple regression was calculated and a significant regression equation was found ($F_{(4, 46)}=5.992$, $p<.001$), with an R-square value of 0.343.

Table 2

Observed Counts in Current Exercise Frequencies and Exercise Intention

Intended Frequency	I do not	1x-3x a week	3x-5x a week	5x-7x a week	Total row
Current Frequency					
I do not	3	1	1	0	5
1x-3x a week	3	15	0	0	18
3x-5x a week	0	3	9	1	13
5x-7x a week	0	1	0	13	14
Total column	6	20	10	14	