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Social Comparison Theory: The Effects Athletic Influencers Have on an Appalachian Generation Z Men Audience

Aaron David Dickens

College of Media, add0015@mix.wvu.edu

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Social Comparison Theory: The Effects Athletic Influencers Have on an
Appalachian Generation Z Men Audience

Aaron Dickens

Thesis submitted to the Reed College of Media at West Virginia University

In partial fulfillment of the requirement for the degree of Masters of Science in Journalism

Geah Pressgrove, Ph.D., Chair
Julia Fraustino, Ph.D.
Elizabeth Oppe, Ph.D.
Dr. Daniel Totzkay, Ph.D
Matthew Shin, M.A.

Department of Journalism

Morgantown, West Virginia
2023

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Abstract

Social Comparison Theory: The Effects Athletic Influencers Have on an Appalachian Generation

Z Men Audience

Aaron Dickens

Many studies have highlighted how social comparison can influence self-efficacy for exercise, body dissatisfaction, and motivation to exercise, especially on social media; in addition, several studies have supported how attitude toward exercise and confidence toward exercise correlate with one another. However, these dependent variables have not been examined in the context of Generation Z men in Appalachia. Despite the lack of literature on this demographic, it is important to study Generation Z Appalachian men because of the frequent health problems this demographic faces, such as obesity. Therefore, this pretest-posttest between-subjects lab experiment investigated how an athletic influencer on social media related to Generation Z Appalachian men's self-efficacy, body dissatisfaction, and likelihood to participate in exercise behaviors (motivation) through the lens of social comparison theory. In addition, this study also explored how attitude toward exercise and self-efficacy toward exercise related with each other.

Findings indicate that upward social comparison had a significant association with body dissatisfaction increasing. This indicated that when someone from this demographic negatively compares their own body to an athletic influencer, the more body dissatisfied they are. In contrast, when participants upward compared, a significant association showed that self-efficacy and motivation dwindled. Furthermore, self-efficacy had a significant association with positive and negative attitudes toward exercise. The results support that the higher the self-efficacy toward exercise, the more positive their attitude was toward exercise; in contrast, the lower the self-efficacy, the more negative their attitude was toward exercise. This study offered advances in social comparison theory regarding influenced Generation Z Appalachian men's body dissatisfaction, while also supporting that athletic influencers have the capability to shift those perceptions and behaviors based on how this demographic compared themselves to them. This study also offered how this demographics' attitude can shift based on how much self-efficacy they have after viewing an athletic influencer. Future limitations and implications are discussed.

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Introduction

According to Quittkat et al. (2019), up to 30 percent of men of all ages and up to 69 percent of adolescent men exhibit body dissatisfaction. While many scholars attribute body dissatisfaction to individuals seeing their idealized bodies scattered throughout the media across magazines, television, and cinema (e.g., Ferguson et al., 2014; Rousseau & Eggermont, 2018); a somewhat recent focus of this phenomenon is the role of social networking sites (Lewallen & Behm-Morawitz, 2016). Literature states that other individuals posting about their workout routines and their physical fitness on social networking sites create a space of envy and comparison of one's own body to the person on the screen (Bruyer, 2020). This research indicates that a comparison could happen from a friend they follow, a relative, a celebrity, or, for the purpose of this study: a social media influencer.

Social networking sites, and especially Instagram – a photo and video-sharing SNS – have led to the rise of what is called a “social media influencer” (Dewey, 2014). A social media influencer is someone with a niche following who posts photos and videos to be influential toward their audience; the influencer is a self-made, social media-based celebrity who is known solely for their Instagram account (Dewey, 2014). Social media influencers often have a singular focus for their content and often include areas such as fashion, cooking, or makeup (de Perthuis & Findlay, 2019). For example, a type of social media influencer, known as athletic influencers or fitness influencers, utilize their account to post motivational videos, workout videos, and photos that show off their body to try to motivate their audience to participate in physical activity. Research has shown that these athletic influencers can have an impact on their audiences' body ideals and perceptions (Bruyer, 2020).

Social comparison is a key factor when it comes to social networking sites and social well-being (Verduyn et al., 2020), leading some scholars to employ social comparison theory to explore the phenomenon (Kim, 2022). This theory claims that people use downward comparison, where they compare themselves to someone they think is worse than themselves, and upward comparison when they think they are worse than the individual they are comparing themselves to (Kim, 2022). While this growing body of literature has employed the social comparison theory on diverse contexts, one understudied area is the impact on young men residing in rural areas of the United States.

To fill this gap in the literature, this study sought to better understand the social influence of athletic influencers on Appalachian men in the Generation Z cohort. The significance of this work is underpinned by research that indicates that social media can negatively affect a man's self-esteem and increase body concern (Piatowski et al., 2021), which is a particularly problematic concern for this young age group. Further, the predominantly rural population of Appalachia faces myriad health concerns. For example, approximately 31% of the Appalachian population is considered obese (*Issue brief: Health disparities related to obesity in Appalachia*), a factor that is compounded by the link between obesity and body dissatisfaction (Weinberger et al., 2016).

To summarize, past studies using social comparison theory have shown that social media can lead to self-efficacy, body dissatisfaction, and exercise behavior; however, it has not been properly examined how young Appalachian men are affected. Thus, this study filled the gap in how young men from Appalachia participate in social comparisons with athletic influencers. To accomplish these aims, the study used an experiment that closely resembles an experiment conducted by Robinson et al. (2017) by using a convenience sample of young adult men

participants who are students at West Virginia University (WVU) and used social comparison theory to measure the before and after effects of DVs when viewing the athletic influencer.

Literature Review

Social Media Influencer

Before delving into the possible effects of social comparison created by influencers, it is important to first understand what a social media influencer. Though there are a multitude of definitions of what constitutes a social media influencer, such as someone who has a large number of followers and persuades audiences to buy products (Kirwan, 2021), or someone who has gained popularity through online followers (*What is a social media influencer?*, 2021); this study employed the definition that derives from Freberg et al. (2011) that states “social media influencers (SMIs) represent a new type of independent third party endorser who shape audience attitudes through blogs, tweets, and the use of other social media” (p. 90).

Influencers tend to present themselves as ordinary individuals with authentic personalities to establish an identity similar to their audience (Chapple & Cownie, 2017), which promotes effectiveness through identification and credibility (Schouten et al., 2020). Influencers will also commonly address their followers in their posts which helps build a close connection with their audience (Erz & Christensen, 2018). Furthermore, influencers try to appear approachable and relatable as though they are an everyday person rather than someone who is put on a pedestal like a celebrity (Djafarova & Rushworth, 2017). As a result, many brands lean towards social media influencers to endorse their product to leverage their close relationships with their audiences, so that endorsing a product could result in their audiences liking the product given the similarity with/draw to the influencer (Schouten et al., 2020). This has diversified the influencer space to include categories such as cooking, fashion, lifestyle and, for the purposes of this study,

athletic influencers. Athletic influencers are endorsers who use their own charisma and experience in the athletic industry on social media to convince their audience to perform athletic actions (*Athletic Influencer Marketing: The Influence Agency*, 2022).

Elucidating the power of athletic influencers, in an experiment with two groups of individuals who participated in a week-long exercise routine with one of the groups viewing #fitness posts on Instagram every day before and after exercising, and the other group exercising without viewing the posts, findings indicate that the experimental group produced a higher amount of self-efficacy to exercise than the control group (Chaudhary & Dhillon, 2021). Another study, which involved tennis player athletic influencers, showed they had a strong impact on social media activity relating to their performance during tennis matches (Chmait et al., 2020). Lastly, another study found that pictures of athletes' bodies can influence their audience to want body modifications (Smith et al., 2021). These studies show that athletic influencers can have an influence on their audience; therefore, this study was used as leverage to improve health outcomes in Appalachian men populations.

Health Disparities in Appalachia

To understand how health communication experts might harness the power of athletic influencers, this study focused on how athletic influencers influence Generation Z men who are students in an Appalachian city known as Morgantown, West Virginia. The significance of West Virginia is underscored by decades of research illustrating the area suffers from higher rates of heart disease, diabetes, strokes and suicides (Marshall et al., 2017; Griffith, 2011). To this end, the potential for any intervention that might improve health outcomes is a worthy endeavor. Suicide attempts and ideations have also been linked to high levels of body dissatisfaction, which further emphasizes the importance of understanding interventions that might decrease such

mental states (Rufino et al., 2018). Further, given the high rates of suicide in the region, it would be important to understand if an athletic influencer could influence those behaviors (Weinberger et al., 2016).

Social Media Use and Affects.

Several studies have looked through the intricacies of body image sprawled throughout social media. For example, Kim (2021) states that social media comments can either reinforce that ideal-enhancing or ideal-derogating effects depending on whether the comments are positive or negative. Pointing to the importance of exploring body dissatisfaction with reference to social media use, one study found that increased use of social media among teenagers and young adults could cause an increase in body dissatisfaction as well as a drive for thinness (Jiotsa et al., 2021). However, other researchers have found that social media and influencers have the power to decrease body dissatisfaction (Aparicio-Martinez et al., 2019). Self-efficacy, conceptualized by Bandura (1986), is “people’s judgments of their capabilities to organize and execute courses of action required to attain designated types of performances” (p. 391), has also been linked with the usage of social media apps; however, there is limited literature that has been examined on this DV, which further highlights the importance of this study (Lim & Noh, 2017; Vinnikovva et al., 2020). Further research has also shown that men are motivated to influence their body image through social media usage (Bell et al., 2019). These studies have adequately shown the linkage between social media use/fitness content with self-efficacy, body dissatisfaction, and likelihood to participate in exercise activities, which gives allowance to the author to test the DVs through an athletic influencer. To further underscore the relevance and importance of the current study, sources have shown that 60% of the Gen Z population regularly checks Instagram and 80% of them follow at least one influencer (Wise, 2022), however to date, scholarship has yet to focus

on this specific social media channel and the influencers who could impact Appalachian men perceptions of body dissatisfaction, self-efficacy, and likelihood to participate in exercise behaviors.

Social Comparison Theory

Social Comparison Theory posits that most people compare their abilities, attitudes, and status to one another (Festinger, 1954). This can occur in one of two ways: one may participate in either upward social comparison or downward social comparison (Festinger, 1954). *Upward social comparison* states that people compare themselves with those whose abilities and attributes are better than their own; whereas *downward social comparison* states that people compare themselves to others whose attributes are worse than their own (Kim, 2022). An example of upward social comparison is when one envies another person based on their physical appearance, while downward social comparison is when one boosts their self-confidence after comparing themselves to a person they deem as less attractive than themselves.

This theory is highly relevant in the world of social media. For example, a study done by Kim (2022), dives into the depths of how fitness apps influence self-efficacy. More specifically, it states that individuals who participate in upward social comparison of someone who is more fit than him or her tended to enhance self-efficacy; however, downward comparisons of someone less fit than him or her dwindled self-efficacy (Kim, 2022). Further literature has also indicated that upward social comparison can inspire one to take action and make them believe they can achieve the same status as the person they are comparing themselves to (Vrugt & Koenis, 2002). The research above indicates that upward social comparison has driven individuals to higher self-efficacy and downward comparison has dwindled self-efficacy. Although this has not been

adequately tested on Generation Z Appalachian men, the literature indicates that the author has justification to make the following hypothesis:

H1: Generation Z men who participate in upward social comparison will lead to higher self-efficacy (a) and Generation Z men who participate in downward social comparison will lead to lower self-efficacy (b).

In addition, social media users have a higher chance to participate in social comparison; for example, several studies have found that upward social comparison on social media has led to others having a high sense of body dissatisfaction, (Perloff, 2014; Powell et al., 2018, Hendrickse et al., 2017). Body dissatisfaction is conceptualized as the negative evaluation of one's body shape, size, tone, and fitness (Campbell & Hausenblas, 2009). Though this has not been properly explored with Appalachian Generation Z men, the prior research indicates that body dissatisfaction is heightened through upward social comparison among many participants. Body dissatisfaction is also a leading cause of eating disorders, low self-esteem, and poor psychological well-being (Stice & Shaw, 2002; Paxton et al., 2006; Cruz-Sáez et al., 2018). Research related to body dissatisfaction and social media has linked women body dissatisfaction to liking and commenting on each other's posts due to the heightening of idealized body images they see when liking or commenting (Makwana et al., 2018). Therefore, this gives an incentive for the author to make the following hypothesis:

H2: Generation Z Appalachian men who participate in upward social comparison will increase body dissatisfaction (a) and Generation Z Appalachian men who participate in downward social comparison will experience a decrease in body dissatisfaction (b).

Despite these negative outcomes, however, there are positive outcomes to social comparison theory. For example, Burke and Rains (2019) found that upward social comparison

regarding fitness can yield people to produce positive attitudes toward exercises (motivation) which implies a stronger likelihood of participating in fitness-related activities. Motivation will be used as a proxy for “likelihood to participate in exercise activities” due to it being conceptualized as the amount of likeliness to participate in exercise activities (Waehner, 2021). Pertaining to fitness, upward social comparison has led people to produce positive feelings toward exercise (Burke and Rains, 2019). It has also been studied that upward social comparison can help individuals to participate in frequent exercise routines so they can see their bodies more positively (Rheu et al., 2021). Kim (2022) additionally states that when upward social comparison is used on the fitness of others, it can help with motivation. Indeed, another study also found that downward social comparison can lead to greater exercise behavior (Wasilenko et al., 2007). Thus, downward comparison could also allude to greater motivation to participate in exercise activities. Though there is a disparity between some of the literature, a majority of literature states that upward social comparison can help an individual become more motivated to work out. As a result, the author can make the following hypothesis:

H3: Generation Z Appalachian men who participate in upward social comparison will increase motivation to participate in exercise (a) and Generation Z Appalachian men who participate in downward social comparison decrease motivation to participate in exercise (b).

The Theory of Planned Behavior

To fully encompass how an athletic influencer may influence an Appalachian Generation Z men audience to participate in the exercise, the theory of planned behavior (TPB) will also be explored in this study. TPB essentially proposes that the perceived behavioral control of a person affects their behavioral intentions when making decisions (Chiou, 1998). Furthermore, the model

states that behavior control can be carried out based on two factors: resources and self-confidence (Ajzen, 1985). In other words, resources and self-confidence affect their attitudes on whether they intend to engage in behaviors (Ajzen, 1991; Taylor & Todd, 1985). An example of this theory would be that someone's behavioral control to go exercise would depend on if he/she has access to a gym and how self-confident they are to go exercise. In this case, the higher the self-confidence and more resources, the more likely they will have a better attitude in engaging in exercising. Although this theory has not been explored in the context of social comparison theory, TPB goes hand-in-hand with the previously-mentioned self-efficacy theory; the more confident someone is, the more likely self-efficacy rises (Bandura, 1986). In the present study, all students who participated had access to a WVU student gym membership, so lack of resources was not a deterrent to their behavioral intentions; however, self-confidence might be. As such, an attitude measure was implemented to this study. Due to self-efficacy and self-confidence being linked, and with the lack of research on social comparison theory have connections to TPB, the author hypothesizes the following:

H4: Higher self-efficacy will have a significant effect on increasing positive attitudes towards exercising (a) lower self-efficacy will have a significant effect on decreasing attitudes towards exercising (b).

Methodology

To test the study's hypotheses, the author employed a pretest-posttest between-subjects experiment. The between-subjects experimental design was modeled after similar studies (Robinson et al., 2017; Euser, 2022; Tiggemann & Anderberg, 2020; Brown & Tiggemann, 2016). For this experiment, data was collected via Qualtrics web-based survey software. The pretest was administered online through emails and class announcements while the posttest was

administered in person (See Appendix A). The study sample was a convenience sample composed of WVU students who are Generation Z Appalachian men. During the pretest, participants measured their body dissatisfaction, motivation, self-efficacy and attitude. Participants also went through screeners which ensured they met the required criteria for this study. During the posttest, participants were assigned to watch videos that showed a workout for the following muscle groups: legs, arms, chest, and back. Participants then stated their social comparison and measured body dissatisfaction, motivation, self-efficacy and motivation. Manipulation, quality and attention checks were also used throughout the posttest. Additional details related to the sample, stimuli, study design and measures follow.

Participants

To prevent time waste, participants took the pretest through email and selected the time they want to come in to view stimuli and take the posttest once they completed the pretest. To incentivize participation, participants in the study were entered into a drawing to win a \$50 Amazon gift card. As applicable, select faculty were solicited to provide extra credit for participation. All participants were of any gender (though only men were used for data analyses), aged 18-26, and were situated in the heart of Appalachia. Following the precedent set by Robinson et al. (2017) and Brown & Tiggemann (2016), the author hoped to reach at least 100 participants; however, this was not possible due to a lack of participants willing to take the posttest. To reach a desired number and to accommodate participants' class schedules, there were 10 different sessions for the experiment during February and March of the Spring 2023 semester. The experiment was held in Think Tank (study room) at the Media Innovation Center on West Virginia University's Evansdale Campus.

To ensure participants were eligible for this study, a screener was used during the pretest to ask the participant's biological sex, age, and if they were from West Virginia. In order to be eligible for the study, participants had to be biologically men at least 18 years of age, not over the age of 26, and currently reside and/or from the Appalachian region (specifically West Virginia). The author estimated that most participants would be White due to West Virginia having 93.1% of its population as White (*United States Census Bureau Quick Facts: West Virginia, 2021*). The author also estimated that most students would originally be from West Virginia as 46% of West Virginia University's students are West Virginia residents; however, the author also estimated some might be originally from neighboring states such as Kentucky, Pennsylvania, or Virginia (West Virginia University, 2021). Regarding exercise, the author expected most people to not frequently participate in exercise because of the health disparities mentioned in the literature review.

To meet IRB approval standards, participants' harm were minimized by allowing them to withdraw from the experiment at any time. Informed consent was also outlined in a manner in which confidentiality/privacy will be protected for each participant (See Appendix B). Safeguards such as a public and protected classroom environment ensured that participants were protected during data collection. All data were stored on a password-protected computer and data would only be reported in the aggregate.

Stimuli

For the purpose of this study, "athletic influencers" was selected from Instagram based on their content being aimed at lifting, running, and calisthenics. As previously mentioned, athletic Instagram influencers are ones with a large following by posting photos and videos of running, lifting, or calisthenics, using hashtags, and engaging with followers on Instagram. The individual

was a self-made, social media-based celebrity who was known solely for their Instagram account.

Following a similar format to Tiggeman and Anderberg (2020), the author did a Google search of highly followed online bodybuilding coaches based on the following criteria: had over 500,000 Instagram followers, the athletic influencer was a certified athletic trainer, the athletic influencer had to be from an area of Appalachia, the athletic influencer was lifting-based, and was still actively posting within the last month. The athletic influencer chosen is known as Brian DeCosta (@briandecosta) (See Appendix C). DeCosta was also chosen due to his strong physique and epitomizing the ideal body many men would strive for if following an athletic influencer. The content (Instagram posts) was chosen based on the following criteria: videos of DeCosta performing all the exercises of the workout he created for his audience, the workout focused on every muscle group: arms, back, chest, and legs, a caption which explained the workout, and a brand was not endorsed.

A typical post from DeCosta contains about five to eight, 20-second clips, adding up to approximately five minutes of video footage. Instead of participants having to watch different posts of each muscle group, which would take over ten minutes and potentially cause participants to opt out of the study or to speed through the questions, participants watched one post that has ten 20-30 second videos showing exercises of each muscle group. For example, some videos in the post showed an exercise that works arm muscles, some videos in the post showed leg muscles, some videos in the post showed back muscles, and some videos in the post showed chest muscles. That way, participants viewed every muscle group being exercised in a timely manner. These controlled assignments eliminated a selection bias to choose a muscle group they like/dislike. To avoid any potential bias that may come with prior knowledge, the

posttest asked if participants have seen this influencer before. If the participant selected yes, then their results will not be included due to preconceived notions and biases they might already have with this influencer.

Measures

As discussed in the literature review, the dependent variables for this study were body dissatisfaction, social comparison, self-efficacy, attitude and motivation.

Screeners, Physical traits and Demographic Information: Participants were asked during the pretest about their age, race, gender, social media use, athlete identification and geographic location. Specifically, the questions measured: How would you classify yourself (check all that apply), “What is your age,” “What is your gender,” “How often do you check social media,” “Do you identify yourself as an athlete,” and “Do you currently reside in WV? If not, state where you are from.” The question “Do you identify yourself as an athlete” was asked due to the concept of Social Identity Theory. Social Identity Theory states that individuals tend to gravitate toward groups that have values and concepts which align with their own self-concept (Fink et al., 2009), which could unknowingly affect results.

Body Dissatisfaction: Following research that used the Adolescent Body Image Satisfaction Scale (Blomeley et al., 2018; Leone et al., 2014), this study used segments of this scale to measure body dissatisfaction, which was measured before and after viewing the athletic influencers. This was done by using a 7-point Likert scale and measured the following: satisfaction with physical attractiveness, satisfaction with body shape, and satisfaction with body size. Specifically, participants responded to the following using the Likert scale (1 being extremely disagree, 7 being extremely agree): “I am satisfied with my body,” “I am critical of the physical traits of my body,” “My body makes me feel confident,” “I want the perfect body,” “I

feel connected with my body,” “I am physically attractive,” “My body is strong,” “I am comfortable in my body physique,” and “My body makes me feel secure.”

Social Comparison: Following a similar format to Tiggemann & McGill (2004) and Robinson et al. (2017), participants were asked about social comparison which used a segment of the State Appearance Comparison Scale, on a 7-point Likert scale, participants were asked what they thought about their appearance in comparison to the athletic influencer when viewing their content, and whether they compared their specific body parts to the influencers (1 = no comparison; 7 = a lot of comparisons). This measurement was calculated by averaging the participant’s answers to the items. Participants were asked the following on Likert scale: “How much did you think about your appearance when viewing the athletic influencer,” “How much did you compare your overall appearance to that of the athletic influencer,” and “How much did you compare your specific body parts to those of the athletic influencer.”

Likelihood to participate in exercise behaviors after viewing the images (motivation): Following Tiggeman & Zaccardo (2015) and Robinson et al. (2017), before and after viewing the images, participants were asked on a 7-point Likert scale their inspiration to work out after viewing the images and likelihood to be more physically active (1 = not inspired; 7 = very inspired). The questions asked: “How inspired do you feel to improve your fitness,” and “How inspired do you feel to be physically active.”

Self-Efficacy: Self-efficacy was measured through a self-efficacy scale that derives from Sherer et al. (1982) and Euser (2022). The scale consisted of 14 different items while being measured on a 7-point Likert scale. The scale was adjusted to fit the present study. The scale asked the following: “When I watched the athletic influencer, I was certain I can perform the workout as well,” “One of my qualities is that I can exercise when I need to,” “If I cannot do the

workout's exercise the first time, I would keep trying until I can," "If I set a goal to exercise, I believe I can achieve it," "I do not want to give up on exercises until I complete them," "If I go to exercise, I would want to push myself," "If the workout looks difficult, I would want to try it even more," "If a workout exercise is unpleasant to do, I would push through it until I finish it," "If I go to work out, I would waste no time on getting right to it," "If I want to learn a new workout exercise, I would not give up until I successfully know how to do it," "If a problem occurs during a workout, I am confident that I would handle it well," "If I were to fail an exercise, I would retry again until I succeed," "I feel confident in my abilities to work out," and "I will not give up easily with workout exercises."

Attitude: Attitude was measured using a 7-point Bipolar scale that stems from Fishbein & Ajzen (2010), though the questions were tailored to fit the context of this study. The scale asked the following: "Exercise is... Very Bad (1) to Very Good (7)," "Exercise is... Very Harmful (1) to Very Beneficial (7)," "Exercise... Very Foolish (1) to Very Wise (7)," "Exercise is... Very Risky (1) to Very Safe (7)," "Very Unenjoyable (1) to Very Enjoyable (7)," "Exercise is... Very Unpleasant (1) to Very Pleasant (7)," "Exercise is... Very Miserable (1) to Very Fun (7)," "Exercise is... Very Boring (1) to Very Exciting."

Quality, Attention, and Manipulation Checks

This study asked several questions to assure quality responses from participants and that manipulation was perceived as intended. The first question, reassuring the quality of participants' responses, asked what type of influencer they were viewing. Answers to this question included "Athletic influencer," "Fashion influencer," "Cooking influencer," and "Celebrity influencer." If the participant answered anything but "Athletic influencer," their answer was not accounted for in the analysis. Next, an attention check was incorporated. For the attention check, participants

were given a simple question in the posttest. The question will ask “If you go to the gym, what are you most likely going to be doing?” Answers were the following: “Exercising,” “Eating,” “Reading,” and “Sleeping.” Anyone who did not select “Exercising” was not incorporated into the analysis. This simple question ensured that the participant was paying attention and adequately answering the questions they were given. Lastly, the posttest used a manipulation check by asking participants to rate their level of agreement with: I watched a video of a social media athletic influencer.

Analysis

Before analyzing the data and formulating the results, the author removed all data from participants who did not complete both pretests and posttests. Participants who took 90% faster than the overall average time it took all participants to complete the survey were also deleted. Anyone who did not pass the quality, manipulation, or attention checks were also deleted. Therefore, these unaccounted results did not skew the legitimacy of the internal validity of this study and the overall results.

During the pretest and posttest, participants filled out the self-report of exercise self-efficacy scale, attitude scale, body dissatisfaction scale, and motivation scale. A between samples t-test was used to measure the dependent variables for the pretest and post-test and whether the stimuli were related to the changes from the pretest to post-test scores. In addition, the author also used Pearson’s correlation coefficient to measure the strength and correlation social comparison had on the post-test dependent variables. Frequencies were also calculated to further contextualize each dependent variable and how participants socially compared.

Findings

Sample Demographics

Data from 10 participants who failed the attention, quality checks, or were 90% faster than the average time were removed from the pool of participants. As a result, for this study, $N = 44$ (See Table 1). Of the 44 participants, three participants classified as White and Hispanic (6.8%), one classified as Arabic American (2.2%), one classified as Arabic American (2.2%), one classified as Asian and White (2.2%), two identified as Black (4.5%), and 36 identified (81.8%) as White. All of the data included in this study were men; those who identified as anything other than a man were discarded from this study. Regarding age, four of them were 18 years old (9.1%), six of them were 19 (13.6%), eight of them were 20 years old (18.2%), five of them were 21 years old (11.4%), six of them were 22 years old (13.6%), eight of them were 23 years old (18.2%), two of them were 24 years old (4.5%), two of them were 25 years old (4.5%), three of the participants were 26 years old (6.8%). Two participants claimed they check social media two to five times a week (4.5%), Four participants claimed they check social media once a day (9.1%), and 38 participants claimed to check social media more than once a day (86.4%). Of the 44 participants, 26 of them identified themselves as an athlete (59.1%) and 18 of them did not identify themselves as an athlete (40.9%). All of the participants live in West Virginia.

Table 1. Sample Demographics

	<i>N</i>	%
Race		
White	36	81.8
White/Arabic	1	2.2
White/Hispanic	3	6.8
Asian/White	1	2.2

Arabic American	1	2.2
Black	2	4.5
Age		
18	4	9.1
19	6	13.6
20	8	18.2
21	5	11.4
22	6	13.6
23	8	18.2
24	2	4.5
25	2	4.5
26	3	6.8
Social Media Usage		
2-5 times a week	2	4.5
Once a day	4	9.1
More than once a day	38	86.4
Are you an Athlete?		
Yes	26	59.1
No	18	40.9
Do You Live in West Virginia?		
Yes	44	100
No	0	0

The author conducted a reliability analysis on the Body Dissatisfaction Scale, Self-Efficacy Scale, Attitude Scale, Motivation Scale, and the Appearance Comparison Scale. The author only accepted the previously mentioned scales if Cronbach's alpha was above the

minimum .70, as this is the standard for accepted validity when it comes to survey measures (Nunnally, 1978). Cronbach's alpha indicated that the Body Dissatisfaction Scale was acceptable ($\alpha = .79$), Self-Efficacy Scale was acceptable ($\alpha = .96$), Motivation Scale was acceptable ($\alpha = .78$), and the Attitude Scale was acceptable ($\alpha = .79$). As a result, none of these scales were changed due to reliability issues. However, the Appearance Comparison Scale was originally at a low .44. This was due to the item "If you compared yourself to the influencer, did you:" having a -.32 corrected item-total correlation. As a result, the item was eliminated from the study. Once the item was eliminated, Cronbach's alpha for the Appearance Comparison Scale was acceptable ($\alpha = .83$).

Descriptive Statistics and Between Samples T-Test

A between samples T-Test was run for body dissatisfaction, self-efficacy, motivation, and attitude (See Table 2). There was not a relation for pretest body dissatisfaction ($M = 4.9$, $SD = .93$) and posttest body dissatisfaction ($M = 4.95$, $SD = .97$); $t(43) = -.845$, $p = .403$. For self-efficacy, there was no relation between pretest self-efficacy ($M = 5.45$, $SD = 1.18$) and posttest self-efficacy ($M = 5.46$, $SD = 1.23$); $t(43) = -.186$, $p = .853$. For motivation, there was no relationship between pretest motivation ($M = 6.01$, $SD = 1.18$) and posttest ($M = 5.93$, $SD = 1.2$); $t(43) = .692$, $p = .492$. Lastly, there was no relation for pretest attitudes ($M = 5.7$, $SD = .88$) and posttest attitudes ($M = 5.69$, $SD = .83$); $t(43) = .107$, $p = .915$. Social comparison was also measured ($M = 5.15$, $SD = 1.14$). In other words, participants on average used upward social comparison (negatively evaluating themselves while positively evaluating another person) while viewing the athletic influencer.

Table 2*Means, SDs, and correlations for pretest and posttest dependent variables*

Variable	Pretest <i>M</i> and <i>SD</i>	Posttest <i>M</i> and <i>SD</i>	Paired Samples Correlation	t(df), <i>p</i>
Body Dissatisfaction	<i>M</i> = 4.9 <i>SD</i> = .93	<i>M</i> = 4.95 <i>SD</i> = .97	.892	-.845(43), .403
Self-Efficacy	<i>M</i> = 5.45 <i>SD</i> = 1.18	<i>M</i> = 5.46 <i>SD</i> = 1.23	.953	-.186(43), .853
Motivation	<i>M</i> = 6.01 <i>SD</i> = 1.18	<i>M</i> = 5.93 <i>SD</i> = 1.20	.797	.692(43), .492
Attitude	<i>M</i> = 5.7 <i>SD</i> = .88	<i>M</i> = 5.69 <i>SD</i> = .83	.664	.107(43), .492
Social Comparison	N/A	<i>M</i> = 5.15 <i>SD</i> = 1.14	N/A	N/A

Social Comparison Relationship with Dependent Variables

Given the low number of participants in the sample and especially those who appeared to participate in downward social comparison ($N = 5$, 9.09%), hypotheses one through 3 were tested by examining the correlation between social comparison and (H1) self-efficacy, (H2) body dissatisfaction, and motivation (H3) (See Table 3). As can be seen, social comparison had a negative association with self-efficacy, $r = -.315$, $p < .05$. This means that self-efficacy decreased as participants socially compared more upwardly than downward. Therefore, hypothesis one was not supported. Then, there was another negative association between social comparison and body dissatisfaction. Body dissatisfaction went down as participants socially compared more upward than downward, $r = -.434$, $p < .05$. In other words, these numbers indicate they were more body dissatisfied after upwardly comparing, since the lower number on body satisfaction scale, the more body dissatisfied they were; therefore, hypothesis two was supported. Finally, there was a

negative association between social comparison and motivation, $r = -.049$, $p < .05$. This means that participants reported lower motivation as the socially compared more upward than downward. Therefore, hypothesis three was not supported.

Finally, hypothesis four was tested by examining the correlation between self-efficacy and attitude. Table 3 shows that there was a positive relationship between self-efficacy and attitude, $r = .722$, $p < .05$. This means that as participants felt more self-efficacy, they also reported a more positive attitude toward exercise. Therefore, hypothesis four was supported.

Table 3

Pearson Correlations for social comparison to self-efficacy, motivation and body dissatisfaction

Variable	Self-Efficacy	Motivation	Body Dissatisfaction	Attitude	Social Comparison
Body Dissatisfaction					
Self-Efficacy	.522*				
Motivation	.422*	.368*			
Attitude	.722*	.528*	.327*		
Social Comparison	-.315*	-.049*	-.434*	-.007	

**Correlation is significant at the 0.05 level (2-tailed)*

Discussion

The aim of this study was to see how Festinger's social comparison theory (1954) associated with participants' body dissatisfaction, motivation, and self-efficacy based on an athletic influencer. This discussion was not focused on how the stimuli changed the dependent variables from pretest to posttest. Rather, most of these discussions were focused on upward social comparison (N = 33, 75%) and its relationship with the dependent variables. This was also due to upward comparison having substantially more data than downward comparison's relation with the dependent variables (N = 5, 11.4%). Participants who did not compare (N = 6, 13.6%) will also be discussed. In addition, following Ajzen (1991) and Taylor & Todd (1985), another aim of this study was to see how participants' self-efficacy for exercise was associated with attitudes toward exercise. In doing so, this study expanded on similar prior research by expanding the demographic to Generation Z Appalachian men. This is of significance because this is an under-studied demographic and is also relevant due to the high amount of social media usage within this demographic (Wise, 2022).

Social Comparison/Theoretical Implication

This study replicated similar methods that examined body dissatisfaction, self-efficacy, attitude, and motivation and their relation with upward comparison and downward comparison (Kim, 2022; Pedalino & Camerini, 2022; Burke and Rains, 2019). This study replicated some of the results as well, with body satisfaction decreasing with upward comparison and increasing with downward comparison (Perloff, 2014; Powell et al, 2018, Hendrickse et al, 2017) and downward comparison relating with increasing motivation (Kim, 2022). However, those studies have not researched these dependent variables on the demographic of Generation Z Appalachian men. A theoretical implication is that this study used social comparison on an athletic influencer,

whereas previous research has not necessarily used social comparison theory on an accredited athletic influencer who posts fitness workouts. This will allow future researchers to reference this theoretical implication if a similar pretest-posttest, between-subjects experiment is used to determine how an athletic influencer and social comparison relates with a certain demographic audience.

In addition to that, this study combined different dependent variables than other studies. For example, Robinson et al. (2017) used a combination of social comparison, body dissatisfaction, and motivation; however, they did not incorporate self-efficacy and attitude into their study. The present study expanded theoretical implications by combining self-efficacy and attitude with the dependent variables. The present study also expanded Tiggemann's & Anderberg's (2020) study. Their study used the appearance comparison scale and measured how body satisfaction was affected through fitspiration; however, they did not measure body dissatisfaction, attitude, or self-efficacy. Though Tiggemann & Anderberg did measure motivation, they did not measure it the same way the present study. As a result, this study enhanced theoretical implications by semi-replicating Tiggemann and Anderberg's study by using the same social comparison scale (appearance comparison scale) while also combining different dependent variables that were not measured prior to this study. It also enhanced Tiggemann and Anderberg's study by further supporting their results by producing results to their study. Researchers who are looking for how these dependent variables are influenced via fitness content will also be able to find them in one research study rather than having to find them in different studies.

Body Dissatisfaction

The findings of this study are somewhat what the author expected. In the current study, body dissatisfaction showed significant differences between groups who used different types of comparison. Though this has not happened in studies prior, such as Tiggemann & Anderberg's (2020) study which examined how men react to fit images on Instagram, many other studies have shown a significant correlation with body dissatisfaction increasing or decreasing based on their social comparison (Perloff, 2014; Powell et al, 2018, Hendrickse et al, 2017). These studies showed how upward social comparison can relate with body dissatisfaction by increasing it. Like these studies, this study showed re-occurring results: body dissatisfaction went up after upward comparison and decreased when downward social comparison was used.

For upward comparison, this could partly be due to the athletic influencer having an abnormally, strong body. Many participants caught onto this idea. The last question of the posttest had participants leave any potential thoughts or comments that were not addressed in this study. As such, several participants listed that the athletic influencer could be on supplements that gave him an abnormal build; therefore, giving him an unrealistic body compared to the average person. If the participants had this preconceived notion in mind while upwardly comparing, then it might affect the relationship with body dissatisfaction more so than if they compared to someone who was more average-looking. An interesting point the author found that correlates with Scully et al. (2020), was that those who checked social media more often, tended to be more body dissatisfied than those who did not check social media as often. The author speculates that this could be due to social media being apt to cause stress, depression, and a lower state of self-esteem, all of which can be related to body dissatisfaction (He et al., 2020; Wang et al., 2020; Alfasi, 2019; Schmuck, 2019). However, this was not adequately tested in the experiment.

Self-Efficacy

Though not predicted the way the author thought, social comparison negatively associated with posttest self-efficacy. Several past studies have shown that there was self-efficacy increased for exercise when participants upwardly compared to a fitness content producer they wish to be like or admire (Hoffner & Buchanan, 2005; Burke & Rains, 2019). As such, it was very surprising to see that the same results were not produced in the present study. Participants who stated they were not an athlete during the pretest tended to show lower levels of self-efficacy than participants who claimed they were an athlete. This could be due to them not having the same values, concepts, and group affiliation as the influencer, therefore this could have deteriorated their self-efficacy to perform similar exercises as him. This idea parallels social identity theory (Fink et al., 2009), which states that people who examine others who hold similar values and same group affiliation, can cause higher self-confidence which is linked with self-efficacy. This also correlates with wish identification posed by Hoffner & Buchanan (2005), where people want to be more like those that are similar yet superior to their own selves and see those superior as role models.

Although the data was small for downward social comparison, self-efficacy showed to increase. This result comes as a surprise, as another recent study, similar to this one, found that self-efficacy decreased with downward social comparison (Kim, 2022). This could derive from several factors. One of them is those comparers who downward compared may have a sense of superiority which could potentially inflate self-confidence; therefore, according to Park & Baek, (2018); Wills (1981), this can cause people to feel better about their abilities and positively increase their self-assessments.

Motivation

As stated above, the results did not support H3a and H3b due to upward social comparison decreasing motivation. Upward social comparison was expected to have an association with increasing motivation while downward social comparison was expected to do the opposite; however, the opposite happened in the present study. Moreover, those who used upward social comparison could have led to lower motivation because some of them thought the athletic influencer could have used supplements to acquire his body physique. This could have laid the foundation for audiences to be unmotivated to work out because they would not want to take additional supplements to acquire a similar physique that the athletic influencer has. This also could have affected the wishful identification theory (Hoffner & Boffner, 2005); since a handful of people believed DeCosta (the influencer) could be using additional supplements, this could negate their positive attitudes toward him and not perceive him as a role model. Interestingly, those who did not compare upward or downward ended up having the least amount of motivation. This could be due to a lack of interest in gym culture and gym-related activities, as results in health disparities in Appalachia have shown people to have a lackadaisical attitude towards fitness (Marshall et al., 2017; Griffith, 2011).

Attitude

As seen above, self-efficacy had an association with attitudes toward exercise. Higher self-efficacy was associated with increasing positive attitudes and lower self-efficacy was associated with decreasing positive attitudes. This comes as no surprise, as prior research has highlighted that one of the ways behaviors is carried out is through self-confidence, which is parallel with self-efficacy (Ajzen, 1985) which can yield to people to shift their attitude towards engaging their behavior in something or not (Ajzen, 1991; Taylor & Todd, 1985). In other higher self-efficacy is associated with a greater chance that their behavior/attitude toward exercise is

positive rather than negative. In contrast, lower self-efficacy is associated with decreasing in positive attitude/behavior toward exercise (Annesi, 2012; McAuley & Blissmer, 2000). Another discovery that the author found interesting is that, more often than not, attitudes toward exercise tended to be higher in positivity when participants had identified themselves as an athlete compared to those who did not identify as an athlete. This could be due to the wishful identification theory (Hoffner & Boffner, 2005) that has been previously mentioned. Participants who saw someone superior having a positive attitude toward exercise tended to have an increase in a positive attitude. However, this is just pure speculation and was not adequately analyzed through the lens of wishful identification theory.

Practical Implications

Influencers

This study supported that Appalachian Generation Z men who used upward comparisons associated with increasing body dissatisfaction while also decreasing self-efficacy and motivation. This is of significance regarding practical implications because fitness-related posts on Instagram are becoming more prominent (Gültzow et al., 2020); therefore, this type of content has easy ability to reach Appalachian Generation Z men. Furthermore, this study used an athletic influencer with over 500,000 followers, insinuating the notion that he reaches a broad audience that includes the studied men demographic. As such, influencers should consider what types of content they should release on Instagram before uploading it. Influencers could also use the results of this study to see which types of content increase self-efficacy and motivation.

Diversifying Influencers

Furthermore, a takeaway from this study is that athletic influencers do not necessarily have to have a strong physique in order to motivate others. As previously mentioned, some

people did not feel motivation to be like this athletic influencer because they deemed his build to be unnatural. Since upward comparison is associated with decreasing motivation, this could mean that someone with an average body, or at the very least, a less-physique body than DeCosta could have the ability to motivate others if their physique is similar to a lot of their audience. Results from this study imply that the pool of athletic influencers could diversify on social media.

Health Communicators in Appalachia

This is of practical significance for health communicators trying to overcome health problems in Appalachia as well. Due to obesity being an epidemic problem in Appalachia, health communicators can use the results of this study by having their clients watch specific videos of athletic influencers to help them with their motivation to participate in exercise, which would help them pursue workout endeavors. This could potentially pave a way for health communicators to cut away at the obesity rate in Appalachia, which could potentially cut down body dissatisfaction and suicide ideations caused by obesity (Marshall et al., 2017; Griffith, 2011; Rufino et al., 2018; Weinberger et al., 2016).

Obesity Intervention

The obesity rate of the region among Gen Z men is seven percent higher than the remainder of the country with the mean body fat percentage for this group of adolescent men ranging from 21.3% to 23.2% (Smith et al., 2018). High rates of obesity were also reported in "80 percent of counties in the Appalachian region that includes Kentucky, Tennessee and West Virginia" (*Obesity highest in Southeast, Appalachia*, 2009). A practical implication of this study

would be to use athletic influencers as an intervention to help decline the obesity rate within Appalachia as well as among Generation Z men. Since motivation decreased with upward social comparison, an athletic influencer who has a below-average physique could capitalize on these results by motivating others to work out since many people would potentially not upwardly compare.

Limitations and Future Research

As with all research, this study has its limitations. While this study focused on internal validity by focusing on Generation Z Appalachian men, there are certain things that can affect or limit the accuracy of the internal validity. First, it is important to consider outside factors that might have affected the dependent variables during the experiment. For example, a participant could have exercised that day which could yield to a lower amount of body dissatisfaction and an increase in self-efficacy, or a participant could have had a lack of sleep the night prior to the experiment which could have affected their motivation. Also, this study used one specific athletic influencer in the experimental stimuli. Therefore, this study could have different results if it used a different athletic influencer. Even though the chosen athletic influencer for this study might have had certain relations on his/her audience, it would be false to say all athletic influencers influence Appalachian Generation Z men the same way. Therefore, it would be of interest to enhance this study by using different types of athletic influencers such as running, a specific sports influencer such as football, swimming, soccer, or a calisthenics influencer, or even a famous athlete/influencer such as Eliud Kipchoge or Dwayne "The Rock" Johnson to see if these different types of influencers could affect the DVs in a similar or contrasting way.

Different exercises could evoke different outcomes in this experiment as well. For example, if this study used only arm workouts or leg workouts, then this could easily influence

the dependent variables depending on the participants' self-esteem or confidence within that muscle group. Future research could capitalize on this by using very specific muscle group exercises as the stimuli rather than showcasing a variety of exercises for different muscle groups.

Another limitation is that most of the participants were to be White; 36 (81%) of the participants identified themselves as White. Several others also identified as a mix of White and other races such as Arabic, Hispanic, or Asian. Therefore, the author encourages future research to conduct this in a better-diverse Appalachian region.

Another limitation is that only several participants only used downward social comparison or did not compare, while 33 participants used upward comparison. This significantly affected the validity of the data for downward comparison and no comparison. As such, the author had to focus solely on upward comparison rather than all forms of social comparison. An obvious solution is to acquire more time to gather more participants; however, another interesting solution to overcome this problem is to use a fitness content producer or athletic influencer who has an average build compared to the demographic a researcher is doing an experiment on. The likelihood of using downward comparison or no comparison increases and would balance how participants compared.

The last limitation is that the author did not acquire a lot of participants. As mentioned, the author set out to garner 100 participants, however, the author only gathered 44, which is not even half of the original desired standard. The author found it difficult to motivate participants to come in person to the posttest, despite the incentive of food, extra credit, and the Amazon gift card. As a result, the author had to cancel his proposed analysis which involved using an ANOVA to measure the dependent variables' relation with social comparison. Instead, he had to use a between-subjects test to measure the relationship to the stimuli had on the pretest and

posttest dependent variables and a Pearson Correlation to measure the relation between social comparison between the dependent variables, as well as the relation between self-efficacy and attitude. As such, future researchers could capitalize on this limitation by doing a field experiment rather than a lab experiment. The author anticipates that a field experiment will increase participants. This is due to the pretest having over 200 participants, and about 90 of those participants taking the posttest in person.

Though this study does have its limitations, it is important to understand that this is the first study to conduct how an athletic influencer related with self-efficacy, body dissatisfaction, attitude and motivation of Generation Z Appalachian men through the scope of social comparison theory, which is a study that has never been done before. Findings and measurements from this study add literature to social comparison theory in a fitness content aspect and provide a quality framework for future researchers to explore.

Conclusion

Despite its limitations, this study provides insight on how an athletic influencer relates with their men audiences' body dissatisfaction, self-efficacy, attitude and their motivation to participate in exercise activities, through the lens of social comparison theory. This study highlighted whether men use downward comparison, no comparison or upward social comparison and investigated how that related to the increase/decrease of the previously mentioned dependent variables. This study showed that engaging in upward social comparison through an athletic influencer is associated with heightened body dissatisfaction, while also associated with dwindled self-efficacy and motivation.

The small amount of data for downward comparison stated that engaging in downward social comparison is associated with lower someone's body dissatisfaction. Hence, this study

suggests that in order to decrease body dissatisfaction, it is better to have people not upwardly compare. This significant result also contributes as to how athletic influencer makes specific demographics feel when they view their exercise content. Likewise, higher self-efficacy is associated with increasing positive attitudes toward exercise and lowering exercise self-efficacy increases negative attitudes toward exercise. Therefore, this study suggests that if someone in this demographic wants to have better attitudes toward exercise, they should also account for a high amount of self-efficacy. This contributes to athletic influencers as well. If an athletic influencer seeks to promote their audience to have a positive attitude toward exercise, they should also promote their audiences to have high self-efficacy as well. These findings set forth implications of how athletic influencers should consider the potential effects their content has on certain audience members. The findings of this research also add to the theory of social comparison because it is applied to a specified, unstudied group of Generation Z men from Appalachia. Moving forward, fitness content creators, athletic influencers, and anything regarding fitness media online should consider a greater emphasis on how their audience members react to their fitness content.

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Appendices

Appendix A: Recruitment Letter (sample)

Hello students,

If you are between the ages of 18 and 24 and are male, this email is for you. A Master's student from the College of Media is currently conducting an experiment to see how an Instagram athletic influencer might affect Appalachian Generation Z males' attitudes toward exercise, self-efficacy, body dissatisfaction, and motivation to workout.

In order to participate, you must fill out the pretest questionnaire which can be accessed here:

Once you finish the pretest, you may assign yourself a date to come to the Media Innovation Center on Monday through Friday on the week of February 6-10, 2023 at 5:00 PM in room 407 (Evansdale Campus) and take the pretest. There students will watch two minutes of videos from a specified athletic influencer, then fill out another questionnaire afterwards. The entire process should take about ten minutes.

More importantly, if you participate in this experiment, YOU could win a \$50 Amazon gift card!

Thank you in advance!

Aaron Dickens
West Virginia University
Graduate Student

Appendix B: Consent Form

Athletic Influencers' Effects on an Appalachian Generation Z Male Audience

Thank you for your willingness to participate in this study. The study is being conducted by researchers for the College of Media at West Virginia University. The purpose of this research is to understand how athletic Instagram influencers affect university male audiences' perceptions of their own body.

Consent: Before beginning, please carefully read the information below and state whether you agree to participate in this study.

Purpose(s) of the Study: The purpose of this study is to understand how athletic Instagram influencers affect university male audiences' perceptions of their own body.

Description of Procedures: This study involves answering questions about one's body perceptions before and after looking at one of three athletic influencers. The total amount of time for participation in this study is estimated at 15 minutes.

Benefits & Financial Considerations: Compensation will be awarded through Amazon Mechanical Turk. There will also be snacks and beverages provided for giving up 15 minutes of your time.

Confidentiality: All information will be kept confidential, even if the study is published.

Voluntary Participation: Participation in this study is voluntary. If you do not want to complete this experiment, you may withdraw from it at any time.

For additional information, contact the Office of Research Integrity & Compliance at (304) 293-7073.

By proceeding you are indicating that you have read this statement and agree to participate in this study.

Appendix C: Stimuli

Stimuli:

<https://www.instagram.com/p/CcdTdCjrIfF/?igshid=YmMyMTA2M2Y=>

Appendix D: Pretest/Posttest

PRETEST

Screener

Please enter the last six digits of your WVU ID number below.

Please enter your WVU email address.

Q1: How would you classify yourself (check all that apply)?

- a) American Indian / Native American
- b) Asian
- c) Black
- d) Hispanic
- e) Arabic
- f) White
- g) Other

Q2: What is your age?

Q3: What is your gender?

- A) Man
- B) Woman
- C) Nonbinary
- D) Do not wish to disclose

Q4: Do you currently reside in WV?

- A) Yes
- B) No

Q5: If not, state where you are from?

Q6: How often do you check social media?

- a) Never
- b) Once a month
- c) Once a week
- d) Two to five times a week
- e) Once a day
- f) More than once a day

Q7: Do you identify yourself as an athlete?

- A) Yes
- B) No

Body Dissatisfaction

Body Dissatisfaction Scale (Blomeley et al., 2018; Leone et al., 2014)

For the following questions, please respond to the following statements: (1) strongly disagree – strongly agree (5)

Q7: I am satisfied with my body

(1) Strongly Disagree – Strongly Agree (7)

Q8: I am critical of the physical traits of my body

(1) Strongly Disagree – Strongly Agree (7)

Q9: My body makes me feel confident

(1) Strongly Disagree – Strongly Agree (7)

Q10: I want the perfect body

(1) Strongly Disagree – Strongly Agree (7)

Q11: I feel connected with my body

(1) Strongly Disagree – Strongly Agree (7)

Q12: I am physically attractive

(1) Strongly Disagree – Strongly Agree (7)

Q13: My body is strong

(1) Strongly Disagree – Strongly Agree (7)

Q14: I am not intimidated by others because of their physical attributes
(1) Strongly Disagree – Strongly Agree (7)

Q15: I am comfortable with body physique
(1) Strongly Disagree – Strongly Agree (7)

Q16: My body makes me feel insecure
(1) Strongly Disagree – Strongly Agree (7)

Self-Efficacy

Self-Efficacy Exercise Scale (Sherer et al., 1982; Euser, 2022)

Survey Questionnaire: For the following questions, please respond to the following statements using a 5-point Likert scale: (1) Strongly Disagree - Strongly Agree (5)

Q17: When I watched the athletic influencer, I was certain I could perform the workout as well.
(1) Strongly Disagree – Strongly Agree (7)

Q18: One of my qualities is that I can exercise when I need to.
(1) Strongly Disagree – Strongly Agree (7)

Q19: If I cannot do the workout's exercise the first time, I keep trying until I can.
(1) Strongly Disagree – Strongly Agree (7)

Q20: If I set a goal to exercise, I believe I can achieve it.
(1) Strongly Disagree – Strongly Agree (7)

Q21: I do not want to give up on exercises until I complete them.
(1) Strongly Disagree – Strongly Agree (7)

Q22: If I go to exercise, I would want to push myself.
(1) Strongly Disagree – Strongly Agree (7)

Q23: If the workout looks difficult, I want to try it even more.
(1) Strongly Disagree – Strongly Agree (7)

Q24: If a workout exercise is unpleasant to do, I will push through it until I finish it.
(1) Strongly Disagree – Strongly Agree (7)

Q25: If I go to workout, I waste no time on getting right to it.
(1) Strongly Disagree – Strongly Agree (7)

Q26: If I want to learn a new workout exercise, I will not give up until I successfully know how to do it.

(1) Strongly Disagree – Strongly Agree (7)

Q27: If a problem occurs during a workout, I am confident that I will handle it well.

(1) Strongly Disagree – Strongly Agree (7)

Q28: If I were to fail an exercise, I would retry it again until I succeed.

(1) Strongly Disagree – Strongly Agree (7)

Q29: I feel confident in my abilities to workout.

(1) Strongly Disagree – Strongly Agree (7)

Q30: I will not give up easily with workout exercises.

(1) Strongly Disagree – Strongly Agree (7)

Motivation

Motivation Scale

(Tiggeman & Zaccardo, 2015; Robinson et al., 2017)

Survey Questionnaire: For the following questions, please respond to the following statements:

(1) Not Inspired – Very Inspired (7)

Motivation Scale

Q31: : How inspired do you feel to improve your fitness?

(1) Not Inspired – Very Inspired (7)

Q32: How inspired do you feel to be physically active?

(1) Not Inspired – Very Inspired (7)

Attitude Measure

(Fishbein & Ajzen, 2010)

Survey Questionnaire: For the following questions, please respond to the following statements your attitude on exercise using a 7-point Likert scale.

Q33: Exercise is

(1) Very Bad – Very Good (7)

Q34: Exercise is

(1) Very Harmful – Very Beneficial (7)

Q35: Exercise is
(1) Very Foolish – Very Wise (7)

Q36: Exercise is
(1) Very Risky – Very Safe (7)

Q37: Exercise is
(1) Very unenjoyable – Very Enjoyable (7)

Q38: Exercise is
(1) Very unpleasant – Very Pleasant (7)

Q39: Exercise is
(1) Not fun at all – Very Fun (7)

Q40: Exercise is
(1) Very boring – Very Exciting (7)

The Viewing of the Athletic Influencer Will Happen at this Point: Each Participant will Interact with two posts from the Athletic Influencer

POSTTEST

Q41: Have you ever seen this influencer before?

- A. Yes
- B. No

Quality Check

Q42: What type of influencer did you watch?

- A. Athletic Influencer
- B. Fashion Influencer
- C. Cooking Influencer
- D. Celebrity Influencer

Manipulation Check

Q43: Please indicate whether you agree or disagree that this athletic influencer influences his audience to workout.

- A. Agree
- B. Disagree

Social Comparison

Appearance Comparison Scale
(Tiggemann & McGill, 2004; Robinson et al., 2017)

Survey Questionnaire: Please rate the extent to which you thought about appearances during the viewing of the athletic influencer.

Q44: How much did you think about your appearance when viewing the athletic influencer?
 (1) No thought about appearance – Thought about appearance the entire time (7)

Q45: If you compared yourself to the influencer, did you:

- A. Compare yourself in a negative manner as if they were physically more appealing than you? (Upward social comparison)
- B. Compare yourself in a positive manner as if you were physically more appealing than them? (Downward social comparison)
- C. Both A and B.
- D. I did not compare.

Q46: How much did you compare your overall appearance to that of the athletic influencer?
 (1) No Comparison – Comparison Throughout the Entire Viewing (7)

Q47: How much did you compare your specific body parts to those of the athletic influencer?
 (1) No Comparison – Comparison Throughout the Entire Viewing (7)

Body Dissatisfaction

Body Dissatisfaction Scale
(Blomeley et al., 2018; Leone et al., 2014)

Survey Questionnaire: For the following questions, please respond to the following statements: (1) strongly disagree – strongly agree (7)

Q48: I am satisfied with my body
 (1) Strongly Disagree – Strongly Agree (7)

Q49: I am critical of the physical traits of my body
 (1) Strongly Disagree – Strongly Agree (7)

Q50: My body makes me feel confident
 (1) Strongly Disagree – Strongly Agree (7)

Q51: I want the perfect body
 (1) Strongly Disagree – Strongly Agree (7)

Q52: I feel connected with my body
 (1) Strongly Disagree – Strongly Agree (7)

Q53: I am physically attractive
(1) Strongly Disagree – Strongly Agree (7)

Q54: My body is strong
(1) Strongly Disagree – Strongly Agree (7)

Q55: I am not intimidated by others because of their physical attributes
(1) Strongly Disagree – Strongly Agree (7)

Q56: I am comfortable with body physique
(1) Strongly Disagree – Strongly Agree (7)

Q57: My body makes me feel insecure
(1) Strongly Disagree – Strongly Agree (7)

Self-Efficacy

Self-Efficacy Exercise Scale **(Sherer et al., 1982; Euser, 2022)**

Survey Questionnaire: For the following questions, please respond to the following statements using a 5-point Likert scale: (1) Strongly Disagree - Strongly Agree (7)

Q58: When I watched the athletic influencer, I was certain I could perform the workout as well.
(1) Strongly Disagree – Strongly Agree (7)

Q59: One of my qualities is that I can exercise when I need to.
(1) Strongly Disagree – Strongly Agree (7)

Q60: If I cannot do the workout's exercise the first time, I keep trying until I can.
(1) Strongly Disagree – Strongly Agree (7)

Q61: If I set a goal to exercise, I believe I can achieve it.
(1) Strongly Disagree – Strongly Agree (7)

Q62: I do not want to give up on exercises until I complete them.
(1) Strongly Disagree – Strongly Agree (7)

Q63: If I go to exercise, I would want to push myself.
(1) Strongly Disagree – Strongly Agree (7)

Q64: If the workout looks difficult, I want to try it even more.
(1) Strongly Disagree – Strongly Agree (7)

Q65: If a workout exercise is unpleasant to do, I will push through it until I finish it.
(1) Strongly Disagree – Strongly Agree (7)

Q66: If I go to workout, I waste no time on getting right to it.

(1) Strongly Disagree – Strongly Agree (7)

Q67: If I want to learn a new workout exercise, I will not give up until I successfully know how to do it.

(1) Strongly Disagree – Strongly Agree (7)

Q68: If a problem occurs during a workout, I am confident that I will handle it well.

(1) Strongly Disagree – Strongly Agree (7)

Q69: If I were to fail an exercise, I would retry it again until I succeed.

(1) Strongly Disagree – Strongly Agree (7)

Q70: I feel confident in my abilities to workout.

(1) Strongly Disagree – Strongly Agree (7)

Q71: I will not give up easily with workout exercises.

(1) Strongly Disagree – Strongly Agree (7)

Attention Check

Q72: If you go to the gym, what are you most likely going to be doing?

- A. Exercising
- B. Reading
- C. Eating
- D. Sleeping

Motivation

Motivation Scale

(Tiggeman & Zaccardo, 2015; Robinson et al., 2017)

Survey Questionnaire: For the following questions, please respond to the following statements: (1) Not Inspired – Very Inspired (7)

Q73: How inspired do you feel to improve your fitness?

(1) Not Inspired – Very Inspired (7)

Q74: How inspired do you feel to be physically active?

(1) Not Inspired – Very Inspired (7)

Attitude Measure

(Fishbein & Ajzen, 2010)

Survey Questionnaire: For the following questions, please respond to the following statements about your attitude on exercise using a 7-point Likert scale.

Q75: Exercise is

(1) Very Bad – Very Good (7)

Q76: Exercise is

(2) Very Harmful – Very Beneficial (7)

Q77: Exercise is

(1) Very Foolish – Very Wise (7)

Q78: Exercise is

(1) Very Risky – Very Safe (7)

Q79: Exercise is

(1) Very unenjoyable – Very Enjoyable (7)

Q80: Exercise is

(1) Very unpleasant – Very Pleasant (7)

Q81: Exercise is

(1) Not fun at all – Very Fun (7)

Q82: Exercise is

(1) Very boring – Very Exciting (7)

Q83: What other thoughts did you have while viewing the influencer video that was not captured in the questions we asked?

Q84: Please enter the last six digits of your WVU ID number below.

Q85: Please enter your WVU email address.

Thank you for taking the time to participate in this study.

