TikTok Use and Body Dissatisfaction: Examining Direct, Indirect, and Moderated Relations

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Danielle Bissonette Mink

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Dedication

This dissertation is dedicated to my grandparents, Ardith and Ben Castruccio and Janice and Richard Bissonette, who always encouraged my education and supported my dreams. They were never shy in expressing their pride in me and helped me build the confidence required to pursue a Ph.D.

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Abstract

In this study, we examined potential direct, indirect, and moderated effects in the relations between the use of TikTok, a video-based appearance-related social networking site, and body dissatisfaction among a sample of 778 United States' young adult college women residing in the Southeast. Results showed that TikTok use was indirectly related to body dissatisfaction through more upward appearance comparison and more body surveillance acting in serial. We also found that exposure to body acceptance and critique of appearance expectations, a facet of exposure to body positive media, and commercial media literacy moderated the direct relations between TikTok use and upward appearance comparison and the indirect relations between TikTok use and body dissatisfaction through upward appearance comparison and upward appearance comparison and body surveillance in serial. However, the findings were contrary to our hypotheses indicating an exacerbating rather than buffering effect. That is, the relations were significant for those at high and average levels of acceptance and critique exposure and high and average levels of commercial social literacy, but not for those with low levels. Finally, we found that TikTok use was only associated with upward appearance comparison at average and low levels of peer social media literacy but not high levels. These findings suggest that attempting to protect women from body dissatisfaction in the face of exposure to social media via body acceptance and critiques of appearance expectations and commercial social media literacy may actually inadvertently increase appearance comparison which worsens body dissatisfaction as it puts their focus on their body's appearance. Having this knowledge and these skills may make women even more aware of bodies and all the things people do to make them look attractive. Thus, clinicians should encourage college women to limit their time on TikTok and refrain from comparing themselves to unrealistic and idealized representations of others and constantly surveilling their bodies.

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Chapter 1: Introduction

Body dissatisfaction is common among United States' (U.S.) college women, with the majority reporting discontent with their body and/or body parts (Neighbors & Sobal, 2007). In addition, college women report more body dissatisfaction than college men. This high prevalence of body dissatisfaction is concerning because it is a strong risk factor in the development and persistence of eating disorders (Stice, 2002), and eating concerns are a common presenting issue among college students receiving psychological services at college counseling centers (Center for Collegiate Mental Health, 2020). Understanding factors that contribute to college women's body dissatisfaction is important so that interventions can be customized to attend to their unique needs.

Objectification (Fredrickson & Roberts, 1997) theory provides some insight into why so many college women report being unhappy with their bodies. Objectification theory posits that women's bodies are frequently treated as sexual objects in patriarchal societies through interpersonal (e.g., male gaze, unwanted sexual advances) and cultural (e.g., idealized television depictions of attractive, thin, sexualized women) means. Women learn from a young age that their bodies will be viewed and evaluated, so they need to meet conventional standards of attractiveness in order to be accepted, liked, and successful. When a woman is objectified, her body is separated out from her personhood and is evaluated as a reflection of her entire being. She is treated as a body whose sole purpose is to please others. If her appearance does not please others, she is seen as undesirable and lacking. Objectification theory postulates that these experiences contribute to women's body image problems.

With its widespread use and popularity, particularly among young adults (GlobalWebIndex, 2016), researchers have recently turned their attention to social media as

another avenue where sexual objectification of women occurs. Many social media platforms, including Instagram, Pinterest, and Facebook, involve photo and video sharing which allows users to engage with physical representations of the lives of others, including their appearance, via likes, shares, and comments. People often put forth an idealized version of themselves by only posting flattering and attractive photos (Fardouly & Vartanian, 2016). This can lead to body dissatisfaction among women as they are exposed to idealized, and often heavily edited, images of attractive women (Seekis et al., 2020). In the current study, we investigated the relations between a relatively new social media application (TikTok) and body dissatisfaction among young adult college women. In addition, we examined potential indirect effects (via upward appearance comparison and body surveillance) in these links. We also examined the potential moderating or buffering roles of exposure to body positive media and social media literacy (both commercial and peer) in these direct and indirect links. Our conceptual model is shown in Figure 1.

TikTok and Body Dissatisfaction

With Tiktok, users can create and view up to 60-second-long video clips. TikTok launched in 2016 and has now surpassed 800 million active users worldwide and has been downloaded over two billion times. In the U.S., TikTok has been downloaded 165 million times. TikTok's target audience is Generation Z with 41% of users being age 16-24 years. Ninety percent of users access the app on a daily basis and spend an average of 52 minutes per day on the app, creating their own video content or engaging with existing videos (Mohsin, 2020). TikTok content often revolves around singing and dancing and "the platform's structure and culture encourage users to mimic one another and participate in trends" (Kaufman, 2020). Many of these dance trends tend to be provocative in nature including suggestive music, sexualized

dance moves, and clothing that highlights certain body parts including crop-tops, low-cut shirts or bras, and tight-fitting leggings. These trends often originate with “influencers”- usually young, attractive users who have thousands, if not millions of followers, and are then imitated by other users. The app also uses an algorithm to track what users interact with via likes and comments and aims to show them related content, thereby fostering communities of users who share similar interests. Thus, college women using TikTok can receive a constant stream of highly sexualized, appearance-focused content which may lead them to feel dissatisfied with their own bodies and appearance.

Previous research has shown that social media usage is linked to women’s body dissatisfaction. Fardouly and Vartanian (2015) found that greater Facebook use was associated with greater body dissatisfaction among U.S. college women. Among Australian college women, Seekis et al. (2020) found that viewing “fitspiration” content (i.e., images designed to inspire people to eat healthy and exercise to achieve an attractive body) on social media was directly linked to body dissatisfaction. In an experimental study, Tiggemann and Zaccardo (2015) exposed female college students to fitspiration images and control images on Instagram and found that exposure to fitspiration images led to increased body dissatisfaction as compared to exposure to control images. Relatedly, college-aged women reported less physical appearance satisfaction after viewing attractive profiles on a social networking site (Haferkamp & Kramer, 2011). These findings suggest that appearance-focused social media platforms may be particularly harmful to college women’s body image. Finally, a longitudinal study found that greater social media use predicted greater body dissatisfaction 18 months later among adolescent girls and boys (de Vries et al., 2015).

Upward Appearance Comparison and Body Surveillance

In addition to direct relations, TikTok use is likely to be related to body dissatisfaction indirectly through upward appearance comparison and body surveillance operating in serial. Social comparison theory (Festinger, 1954) posits that people have a drive to understand their standing in the world and, thus, seek out standards they can compare themselves to. The theory postulates that people most often evaluate themselves by comparing themselves to similar others. However, research suggests that women compare themselves to unrealistic, idealized images of other women as often as they compare themselves to similar peers (Engeln-Maddox, 2005). Thus, women engage in upward appearance comparison where they compare their appearance to that of women they deem more attractive than themselves.

College women who use TikTok more often are likely to compare their appearance to those of the popular users. When they feel that they do not measure up, body dissatisfaction is likely to ensue. In addition, when college women regularly engage in unrealistic upward social comparisons on TikTok, they might begin to self-objectify where they engage in body surveillance in order to determine if they are as good as these idealized images (Feltman & Szymanski, 2018). They may also recreate sexualized dance videos themselves to try and gain popularity on TikTok. According to objectification theory, this constant attention to one's appearance and how it is perceived by others is likely to lead to body dissatisfaction (Fredrickson & Roberts, 1997; McKinley & Hyde, 1996).

Previous research has found that social media use is positively related to both appearance comparison and body surveillance (for a review, see Holland & Tiggemann, 2016). Research shows that appearance comparison (for a meta-analysis, see Myers & Crowther, 2009) and body surveillance (Fitzsimmons-Craft et al., 2012; Mercurio & Rima, 2011; Szymanski & Mikorski,

2017) are positively associated with body dissatisfaction. Support for indirect effects also exists using samples of college women. Fardouly and Vartanian (2015) found that more Facebook use was directly and indirectly related to body dissatisfaction through more upward appearance comparison. Feltman and Szymanski (2018) found that Instagram use was directly and indirectly related to body surveillance via upward but not downward appearance comparison. Seekis et al (2020) found that appearance-related social media use via both viewing images of celebrities, fashion, and beauty and the importance of likes and comments was indirectly related to body dissatisfaction via upward appearance comparison, body surveillance, and social appearance anxiety operating in serial.

Exposure to Body Positive Media

Beyond examining if and how TikTok use may be related to body dissatisfaction, it is important to examine potential moderators or buffers in these links. One potential moderator of the direct and indirect relations between TikTok use and body dissatisfaction is exposure to body positive media. With body image scholars and the general public becoming more aware of the negative effects of exposure to idealized media (disordered eating, body dissatisfaction, etc.), a new movement of appreciation for all bodies has developed to challenge the restrictive and dominant view of what bodies should look like and to promote acceptance of bodies of all shapes and sizes (Cohen et al., 2019). This body positive movement promotes media that focuses on showcasing bodies beyond those that fit the thin-ideal, and bodies in their natural, unedited form. It promotes having respect, appreciation, and acceptance of one's bodily appearance and functionality (Wood-Barcalow et al., 2010). Body positive media encourages individuals to (a) have favorable opinions of their body, regardless of their appearance, (b) accept their body regardless of their weight, shape, and size, (c) respect their body by attending to its needs, and

(d) protect their body by rejecting images of the "ideal" body depicted in the media (Avalos et al., 2005). On TikTok, some users and influencers focus their content solely on body positivity.

Research has started to examine the effects of this kind of content on women's body image. Tiggemann et al. (2020) studied the impact of body positive Instagram captions on young women's body image. While the type of image proved to be more impactful than the caption, they found that exposure to average images resulted in less body dissatisfaction and more body appreciation than thin images. They also found that for women with high thin-ideal internalization, body positive captions on average images led to more body appreciation, but when the caption was attached to thin images, it led to lower body appreciation. Relatedly, Cohen and colleagues (2019) examined the impact of body positive Instagram content and found that exposure to this content was related to improvement in body satisfaction and body appreciation compared to exposure to thin-ideal and neutral content. Mulgrew et al. (2018) found that viewing body functionality media campaigns (vs. a control) led to more appearance satisfaction and intent to exercise, but did not provide a consistent protective benefit when participants were exposed to idealized images of models. Other research shows similar buffering effects for women who have higher (vs. lower) body appreciation attitudes in the relations between thin ideal advertisements and body image variables (Andrew et al., 2015; Halliwell, 2013). However, research in this area is scant and existing research has focused solely on one-time, brief experimental exposure to body positive media. No research has examined if exposure to body positive media buffers the relations between social media use and body image variables with real life use.

A recent body positive trend on social media commonly referred to as "Instagram vs. reality" involves posting side by side photos of the same woman, who in one image is presented

in an idealized way and in the other is presented in a more natural way. Tiggemann and Anderberg (2020) examined the effect of these images on social comparison and body image. Women viewed either Instagram vs reality images, the ideal side alone, or the real side alone. They found that viewing the Instagram vs reality and real images led to less body dissatisfaction compared to the ideal image group. Further, they found that appearance comparison predicted an increase in body dissatisfaction and decrease in body appreciation for those viewing the ideal images, but not for those viewing the paired images or the real images. This suggests that more natural photos, as well as those that compare a person's real self to their edited, idealized self, have the potential to improve women's body satisfaction.

Creating humorous, parody images of thin-ideal celebrity's Instagram posts has become another body positive trend on social media. Celeste Barber, an Australian comedian, began parodying popular Instagram posts from celebrities in 2015. Slater et al. (2019) wanted to examine the impact of parodies like these on women's body satisfaction. They had women view either Instagram posts from thin-ideal celebrities or parody images of those same posts. They found that exposure to parody images led to increased body satisfaction compared to exposure to thin-ideal celebrity images. This suggests that there are many types of body positive media that could potentially decrease body dissatisfaction and weaken the direct and indirect links between TikTok use, upward appearance comparison, body surveillance, and body dissatisfaction.

Social Media Literacy

Social media literacy may serve as another protective factor in the relations among Tik Tok use, upward appearance comparison, body surveillance, and body dissatisfaction. Media literacy refers to the ability to think critically about media and to examine the reality of the content one consumes (McLean et al., 2016). Two important facets of social media literacy are

realism skepticism and critical thinking. Realism skepticism involves questioning the reality of the media content one consumes; whereas, critical thinking involves considering the intention, meaning, and influence of the messages consumed (Rodgers et al., 2019). These are especially important skills for social media consumers. Oftentimes social media represents a person's "highlight reel" where the best parts of a person's life are put on display and their most appealing images are showcased, while less flattering aspects of their lives and appearance are not shown. Further, users may edit and photoshop images and videos before posting them on social media, leading to content that is not necessarily real. This can also be true of content created by companies, as advertisements found on websites directed towards teens have been shown to be heavily appearance-focused (Slater et al., 2012).

A college woman with strong social media literacy skills would be able to evaluate idealized images and recognize that they may not be real. This may help her refrain from comparing herself to these images, engaging in body surveillance, and feeling dissatisfied with her body as she understands that significant editing and alteration may be taking place and thus, this image does not represent reality and may not be a healthy target of comparison. Thus, the direct and indirect relations between TikTok use and upward appearance comparison, body surveillance, and body dissatisfaction are likely to be weaker when social media literacy is high and stronger when social media literacy is low.

Only a handful of studies have examined the potential buffering effects of social media literacy. In an intervention study, McLean and colleagues (2019) found that a social media literacy program increased adolescent girls' realism skepticism and reduced their upward appearance comparison. In an experimental study, McLean et al. (2016a) exposed girls to thin-ideal images and then measured their body satisfaction. They found that girls with strong media

literacy skills had greater body satisfaction than girls with weak media literacy skills. In a study examining the effect of exposure to appearance-ideal social media images on body satisfaction, Tamplin et al. (2018) found that commercial social media literacy served as a protective factor in this relation, while there was no protective effect of peer social media literacy. This suggests that critical examination and skepticism of advertisements put out by companies who want users to buy their products may prevent users from comparing their bodies to models in ads and, in turn, prevent body dissatisfaction. Contrary to these findings, Rogers et al. (2019) using a cross-sectional design found no support for moderating roles of realism skepticism and critical thinking in the direct and indirect relations between general media exposure and body dissatisfaction via appearance comparison. However, this study did not specifically focus on social media and did not include body surveillance as an additional explanatory variable.

Current Study

In the current study, we examined potential direct, indirect, and moderated effects in the relations between TikTok use and young adult college women's body dissatisfaction (see Figure 1). Our specific hypotheses were:

1. TikTok use would be directly and indirectly related to body dissatisfaction through upward appearance comparison and body surveillance operating in serial. That is, more TikTok use would be related to greater upward appearance comparison, which in turn would be related to higher levels of body surveillance. Body surveillance would then be related to more body dissatisfaction.
2. Exposure to body positive media, commercial social media literacy, and peer social media literacy would moderate or buffer the direct relations between TikTok use and upward appearance comparison, body surveillance, and body dissatisfaction, such that

these relations would be weaker when exposure to body positive media, commercial social media literacy, and peer social media literacy is high and stronger when exposure to body positive media, commercial social media literacy, and peer social media literacy is low.

3. The indirect effects of TikTok use and body dissatisfaction via upward appearance comparison and body surveillance would be weaker when exposure to body positive media, commercial social media literacy, and peer social media literacy is high and stronger when exposure to body positive media, commercial social media literacy, and peer social media literacy is low.

Chapter 2: Method

Participants

Because there are no power analysis calculators or guidelines for a moderated serial direct and indirect effects model, we used the following suggestions to determine our minimum sample size. When reliability of scores on measures used is good, Weston and Gore (2006) recommended a minimum of 200 participants for path/indirect effects analysis. Fritz and MacKinnon (2007) recommended a minimum sample size of 148 to be able to detect a small to medium effect size of 0.26 and 462 to be able to detect a small effect size of .14 for simple mediation with 80% power. For moderation, Aiken and West (1991; p. 164, Table 8) suggested a sample size of 752 to achieve statistical power of .80 in detecting an interaction for small effect sizes for predictor and moderator variables measured with reliabilities of .80, variance accounted for by the main effects is .20, and inter-predictor correlations around .50.

The initial sample was comprised of 806 participants. Thirteen participants did not finish the survey and were removed (seven left the entire survey blank and six left at least one measure blank). We also removed one person who had more than 20% missing data on at least one measure and another participant who was under the age of 18 years old because they did not meet the study's eligibility criteria. We removed four participants who failed Aust et al.'s (2013) seriousness check item (i.e., "It would be very helpful if you could tell us at this point whether you have taken part seriously, so that we can use your answers for our scientific analysis, or whether you were just clicking through to take a look at the survey") and nine participants who failed attention two or more of the three attention check items (e.g., Please check "Strongly Agree" so we know you are paying attention). Therefore, our final sample was 778 participants.

Of the 778 female participants in the final sample, 99% (n = 773) identified as women and 1% (n =4) identified as genderqueer, nonbinary, gender nonconforming, or another gender.

One participant did not report their gender identity. In terms of sexual orientation, 84% of the sample (*n* =651) identified as heterosexual, while 9% (*n* = 68) identified as bisexual, 2% (*n* = 13) identified as lesbian, 1% (*n* = 10) identified as pansexual, 3% (*n* = 26) identified questioning, and 1% (*n* = 8) identified as another identity (e.g., queer, asexual). Two participants did not report their sexual orientation. Participants ranged in age from 18 to 29 years old (*M* = 18.62, *SD* = 1.04). The sample was 85% White (*n* = 662), 4% (*n* = 31) Black, 4% (*n* = 28) Asian, 3% (*n* = 22) Hispanic/Latinx, 3% (*n* = 27) Biracial, and 1% (*n* = 8) identified as another race. In terms of student status, 79% (*n* = 619) were first-year students, 12% (*n* = 93) were sophomores, 7% (*n* = 53) were juniors, and 2% (*n* = 13) were seniors. In terms of socioeconomic status, 63% (*n* = 491) identified as upper middle class, 24% (*n* = 184) identified as lower middle class, 6% (*n* = 50) identified as wealthy class, 5% (*n* = 40) identified as working class, and 2% (*n* = 13) identified as poor class. Of our 778 participants, 22% (*n* = 173) were first generation college students.

Procedure

Participants were recruited via our university's Department of Psychology SONA system (i.e., human research pool). On SONA, potential participants only saw the study name (i.e., College Women's Body Image Survey), study type (i.e., online survey), duration (i.e., 45 to 60 minutes), credits (i.e., 1 credit), eligibility requirements, sign up times, and IRB approval code. Participants received a link to the informed consent page of the online survey when they signed up for the study. In the informed consent, we asked them to participate in a study on college women's body image and answer questions related to their feelings about their bodies and their social media use. All measures were randomly ordered in the survey, with the exception of demographics, which was presented last. Granting of course credit was automated.

Measures

TikTok use. Consistent with Fardouly and Vartanian (2015), we assessed TikTok use via two highly correlated questions. Participants were asked "On a typical day, how often do you check TikTok?" and responded on a 7-point Likert scale from 1 (*not at all*) to 7 (*every 2 minutes*). They were also asked "Overall, how long do you spend on TikTok on a typical day?" and responded on a 9-point Likert scale ranging from 1 (*5 minutes or less*) to 9 (*10 hours or more*). Because these two items have different response ranges, we standardized them first by using *z*-scores and then calculated the mean. Higher scores indicate more TikTok use. Construct validity was supported via theorized relations with poorer body image (Fardouly & Vartanian, 2015; Holland & Tiggemann, 2016). In the current study, the correlation between the two TikTok use items was .75.

Upward appearance comparison. We used the 10-item Upward Physical Appearance Comparison Scale (O'Brien et al., 2009) to assess the extent to which participants make upward appearance comparisons. Sample items include "I compare myself to those who are better looking than me rather than those who are not" and "I tend to compare my own physical attractiveness to that of magazine models." Participants rated each item on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strong agree*). Mean scores were used, with higher scores indicating a greater tendency to engage in upward appearance comparisons. The scale authors reported support for reliability (α =.95) and structural (via principal components analysis) and construct (via positive correlations with appearance evaluation and disordered eating and no relationship with a non-appearance related measure) validity. For the current sample, alpha and omega were both .94.

Body surveillance. We assessed self-objectification using the 8-item Surveillance subscale of the Objectified Body Consciousness Scale (OBCS; McKinley & Hyde, 1996), which measures objectified body consciousness via women's scrutiny and monitoring of their bodies. Sample items include "During the day, I think about how I look many times," and "I often worry about whether the clothes I am wearing make me look good." Participants responded to each item using a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree)*. Mean scores were used, with higher scores indicating more body surveillance. The developers of this scale reported a Cronbach's α of .89. Structural validity of scores on the OBCS was supported via both exploratory and confirmatory factor analyses. Validity of scores on the OBCS was supported by (a) the negative correlation between surveillance and body esteem and (b) the positive correlations between surveillance and private self-consciousness, body shame, control beliefs, disordered eating, and social anxiety (McKinley & Hyde, 1996). For the current sample, alpha was .82 and omega was .83.

Body dissatisfaction. We used the 9-item Eating Disorder Inventory Body Dissatisfaction subscale (Garner et al., 1983) to assess if a woman thinks various body parts are too large. Sample items include "I think that my stomach is too big" and "I feel satisfied with the shape of my body" (reverse-scored). Participants rated each item on a 6-point Likert scale that ranged from 1 (*never*) to 6 (*always*). Mean scores were used, with higher scores representing more body dissatisfaction. Reliability (αs = .90 and .91) as well as validity (via group differences in the expected directions on body dissatisfaction between clients with anorexia, those recovered from anorexia, and those without anorexia; congruence between client's with anorexia body dissatisfaction scores and clinicians' ratings; and positive relations with other

measures of body dissatisfaction and disordered eating) were supported (Garner et al., 1983). For the current sample, alpha and omega were both .84.

Exposure to body positive media. To date, there are no known validated scales that measure exposure to body positive media. Thus, in this study we developed scale to assess for exposure to body positive media. We generated an initial pool of 23 items to assess exposure to body media. Responses for each item were rated on a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Mean scores were used with higher scores representing more exposure to body positive media. Providing initial evidence of content validity, items were developed based on a review of the literature and the first author's own experience of using body positive media. Five reviewers (a social psychologist, two counseling psychologists [one in private practice and the other at a university counseling center], and three counseling psychology doctoral students) with expertise in psychometrics, body image, and/or the body positive movement evaluated the items for relevancy, clarity, and representativeness. They also provided comments and/or suggested revisions on the items. Based on their feedback, we dropped three items that were either outside the domain of interest or awkward and unclear. We also revised a few items to make them clearer and/or less complex and to distinguish between items that appeared similar to each other. This resulted in an initial 20-item scale.

Preliminary descriptive analyses indicated that each item had adequate distribution and sufficient normality (i.e., skewness <3, kurtosis <10; Weston & Gore, 2006). Inspection of the item correlation matrix suggested eliminating three redundant items (i.e., "The media I consume communicates the message that my worth is not determined by my appearance," "The media I consume promotes the idea that slim bodies are more desirable than non-slim bodies," and "The media I consume encourages me to have positive attitudes toward my body") due a high inter-

item correlation ($r > .70$) with a conceptually similar item (Field, 2013). To establish structural validity for the Exposure to Body Positive Media Scale, we conducted an exploratory factor analysis using principal axis factoring with promax rotation on the remaining 17 items. Results indicated that the data were appropriate for factor analysis (Chi-square test of sphericity, $p < .001$) and the sample size was large enough to evaluate the factor structure (Kaiser-Meyer-Oklin measure of sampling adequacy = .88; Kahn, 2006). We used five criteria to determine the number of factors to be extracted and rotated for the final solution: (a) parallel analysis; (b) Velicer's minimum average partial (MAP) test; (c) a minimum loading of three items on each factor; (d) at least 5% of total variance explained by each factor; and (e) interpretability of the solution, using factor loadings of at least.45, and no cross-loadings with less than a .15 difference from an item's highest factor loading (Field, 2013; Kahn, 2006; O'Connor, 2000; Worthington & Whittaker, 2006). Using O'Connor's (2000) programs for SPSS, results of a parallel analysis indicated a three-factor solution and results of Velicer's MAP indicated a two-factor solution so we explored both.

The three-factor solution was poorly defined, with only two items meeting our above criteria. Thus, we chose the two-factor solution as the best fit. For item deletion on the two-factor solution, we eliminated one item ("I engage with media that parodies/makes fun of unrealistic beauty standards") that had a low communality ($h^2 = .15$) and another item ("The media I consume encourages me to love my body") that had a high cross loading and re-ran the factor analysis on the remaining 15 items. Items related to body acceptance and critiquing of appearance expectations loaded on Factor 1 (eigenvalue = 5.62) and accounted for 37% of the variance. Items related to non-exposure to the thin-ideal and societal expectation of bodies loaded on Factor 2 (eigenvalue = 2.24) and accounted for 15% of the variance. Table 1 shows the

items, factor loadings, means, and standard deviations for the Exposure to Body Positive Media Scale. Alphas and omegas were both .88 for scores on the Acceptance and Critique Exposure subscale, .77 for the Non-Thin Ideal Exposure subscale, and .86 for the full scale.

In order to provide initial support for construct validity, we correlated the Exposure to Body Positive Media Scale with the Body Appreciation Scale-2 (alpha and omega for the current sample were both .94; Tylka & Wood-Barcalow, 2015), Body Dissatisfaction subscale of the Eating Disorder Inventory (alpha and omega were both .84 for the current study; Garner et al., 1983), Internalization subscale of the Sociocultural Attitudes Toward Appearance Questionnaire (for the current sample alpha was .87 and omega was .88; Heinberg, Thompson, & Stormer, 1995) and Self-Esteem Scale (alpha and omega for the current sample were both .88; Rosenberg, 1965). We found that the Exposure to Body Positive Media full scale and both the Acceptance and Critique Exposure and Non-Thin Ideal Exposure subscales were positively and significantly correlated with body appreciation (r = .32, r = .25, r = .30) and self-esteem (r = .20, r = .12, r = .24) and negatively correlated with body dissatisfaction (r = -.26, r = -.15, r = -.33) and internalization of the thin media ideal (r = -.38, r = -.21, r = -.48), respectively.

Social media literacy. We assessed social media literacy using the 11-item Social Media Literacy Scale which is composed of a commercial social media literacy subscale and a peer social media literacy subscale (Tamplin et al., 2018). The scale assesses critical thinking and realism skepticism, two components of social media literacy, in regards to social media content created by companies as well as by peers, friends, and similar others. Tamplin modified items to be relevant to social media literacy from the Critical Thinking about Media Messages Scale (Scull et al., 2010) and Realism Scepticism subscale of the Media Attitudes Questionnaire (Irving et al., 1998), two scales that have good support for structural (via exploratory and

confirmatory analyses), convergent (via correlations with other media literacy scales), and construct (via correlations with disordered eating risk factors) validity (McClean et al. 2016b). Tamplin et al. (2018) reported a Cronbach's alpha of .93 for scores on the commercial social media subscale and .80 for scores on the peer social media subscale. Sample items include "When I view commercially generated social media messages I think about the purpose behind the message" and "When I view social media messages posted by my friends, peers, or people like me, I think about the motive for the post." Participants rated each item on a 5-point Likert scale from 1 (*never*) to 5 (*always*). We used mean scores with higher scores reflecting higher social media literacy and more frequent critical thinking about and skepticism of the reality of social media posts by commercial entities and peers. For the current sample, alpha and omega were both .87 for the commercial subscale and .83 for the peer subscale.

Chapter 3: Results

Descriptives and Preliminary Analyses

For the 778 participants included in our study, item-level missing data on the survey measures were very small (0.08%). All items had < 1.0% of missing values, and 95% of participants had no missing data. To address missing data points, we used available case analysis procedures (Parent, 2013) at the scale level. Examination of absolute values for skewness (range = .12 – .95) and kurtosis (range = .10 – .95) for each variable indicated sufficient normality (i.e., skewness < 3, kurtosis < 10; Weston & Gore, 2006). Three multivariate outliers were observed (Mahalanobis distance p <.001). These outliers did not display any unusual patterns in their responses and each had a Cook's distance well below 1 (highest Cook's distance = .002), indicating that they did not have a significant impact on the overall model (Field, 2013). Because there was no justifiable reason to remove them, we retained these outliers. Multicollinearity was not a problem in any of the regressions analyses performed as variance inflation factors were well below 10 (Field, 2013).

Descriptive statistics and bivariate correlations among all main study variables are shown in Table 1. Consistent with our hypothesis, TikTok use was positively (p < .001) related to upward appearance comparison (r = .16), body surveillance (r = .17), and body dissatisfaction (r = .14).

Analyses of Indirect Effects

We used the PROCESS SPSSv3.0 macro (Hayes, 2018; Model 6 for multiple mediators operating in serial) to test our hypothesized indirect effects model. We used bootstrapping analyses with 5,000 bootstrapping resamples to produce 95% confidence intervals for the indirect effect. If the confidence interval does not include zero, mediation is significant (Hayes,

2013). The results of our model are shown in Figure 2. The test of cross-sectional indirect effects revealed that TikTok use was indirectly (but not directly) related to body dissatisfaction through upward appearance comparison (mean indirect [unstandardized] effect = .06; *SE* = .02, 95% CI [.030, .093]), body surveillance (mean indirect [unstandardized] effect = .01; *SE* = .01, 95% CI [.002, .028]), and upward appearance comparison and body surveillance in serial (mean indirect [unstandardized] effect = .02; *SE* = .01, 95% CI [.009, .035]). The variables in the model accounted for 30% of the variance in body dissatisfaction scores.

Moderation of Direct Effects

We used hierarchical multiple regression analyses to test the moderation of direct effects on upward appearance comparison, body surveillance, and body dissatisfaction. We centered scores for acceptance and critique exposure, thin-ideal non-exposure, commercial social media literacy, and peer social media literacy. We entered main effects in Step 1 and interaction effects in Step 2. The results predicting upward appearance comparison were significant $R^2 = .25$, F (9, 768) = 28.14, $p < .001$. Tiktok use, thin-ideal non-exposure, peer social media literacy, and the interactions of Tiktok use and acceptance and critique exposure, TikTok use and commercial social media literacy, and TikTok use and peer social media literacy significantly and uniquely predicted upward appearance comparison (see Table 2).

We used Hayes' (2013) SPSS PROCESS macro (Model 1) to interpret significant moderation effects. When examining each interaction, we controlled for all independent variables not included in the significant interaction in the regression model. Results showed that acceptance and critique exposure moderated the link between TikTok use and upward appearance comparison ($\beta = .08$, $\Delta R^2 = .006$, significant ΔF $p = .01$). TikTok use predicted upward appearance comparison for women with high (+1 *SD*; *B* = .18, *t* = 4.47, *p* =.000, 95% CI

[.104, .266]) and at the mean (*B* = .11, *t* = 4.14, *p*=.000, 95% CI [.060, .168]) levels of acceptance and critique exposure but not low (-1 *SD; B* = .04; *t* = 1.14, *p* =.254, 95% CI [-.031, .117]) levels (see Figure 3).

Commercial social media literacy also moderated the link between TikTok use and upward appearance comparison (β = .08, ΔR^2 = .005, significant ΔF *p* = .03). Results showed that TikTok use predicted upward appearance comparison for women with high (+1 *SD*; *B* = .18, *t* = 4.84, *p* =.000, 95% CI [.107, .252]) and at the mean (*B* = .11, *t* = 4.14, *p* =.000, 95% CI [.060, .168]) levels of commercial social media literacy but not low (-1 *SD; B* = .05; *t* = 1.09, *p* = .275, 95% CI [-.038, .135]) levels (see Figure 4). Finally, results showed that peer social media literacy moderated the link between TikTok use and upward appearance comparison (β = -.07, ΔR^2 = .004, significant ΔF *p* = .04). TikTok use predicted upward appearance comparison for women with low (-1 *SD; B* = .17; *t* = 4.38, *p* =.000, 95% CI [.095, .250]) levels and at the mean (*B* = .11, *t* = 4.14, *p* = .000, 95% CI [.060, .168]) of peer social media literacy but not high (+1 *SD*; *B* = .06, *t* = 1.41, *p* =.160, 95% CI [-.022, .132]) levels (see Figure 5).

The results predicting body surveillance were significant R^2 = .43, *F* (10, 767) = 58.25, *p* < .001. Upward appearance comparison, thin-ideal non-exposure, and the interaction of TikTok use and thin-ideal non-exposure significantly and uniquely predicted body surveillance. Although the beta weight for the interaction of TikTok use and thin-ideal non-exposure interaction was significant, the increment in R^2 at Step 2 was not significant suggesting that the interaction effects did not help explain additional variance in body surveillance scores. Thus, we did not plot or interpret this interaction effect. The results predicting body dissatisfaction were significant R^2 = .32, *F* (11, 766) = 32.24, *p* < .001. Upward appearance comparison, body

surveillance, and thin-ideal non-exposure significantly and uniquely predicted body dissatisfaction.

Moderation of Indirect Effects

We used Model 85 of the Hayes (2018) PROCESS macro to test the moderation of indirect effects. We ran it four times, once for each moderator. We used bootstrapping analyses with 5,000 bootstrapping resamples. Our results indicated that acceptance and critique exposure moderated the indirect effect of TikTok use on body dissatisfaction through upward appearance comparison (Index of Moderation Mediation = .038, SE [boot] =.02, 95% CI [.009, .072]). The indirect path was significant when acceptance and critique exposure was higher (+1 SD; *B* = .10; boot estimate =.03; 95% CI [.055, .155]) and at the mean (*B* = .06; boot estimate =.02; 95% CI [.034, .093]), but not significant when acceptance and critique exposure was lower (-1 SD; *B* = .02; boot estimate = .02; 95% CI [-.015, .060]). Acceptance and critique exposure also moderated the indirect effect of TikTok use on body dissatisfaction through upward appearance comparison and body surveillance in serial (Index of Moderation Mediation = .012, SE [boot] =.01, 95% CI [.003, .024]) but not through body surveillance alone (Index of Moderated Mediation = -.0003, SE [boot] =.005, 95% CI [-.010, .010]). The indirect path was significant when acceptance and critique exposure was higher (+1 SD; *B* = .03; boot estimate =.01; 95% CI [.015, .056]) and at the mean (*B* = .02; boot estimate =.01; 95% CI [.009, .034]), but not significant when acceptance and critique exposure was lower (-1 SD; *B* = .01; boot estimate = .01; 95% CI [-.005, .022]). Results also revealed that thin-ideal non-exposure did not moderate the indirect effect of TikTok use on body dissatisfaction through upward appearance comparison (Index of Moderation Mediation = -.002, SE [boot] = .01, 95% CI [-.028, .022]), body surveillance (Index of Moderation Mediation = -.009, SE [boot] = .01, 95% CI [-.019, .0001]), and upward appearance

comparison and body surveillance in serial (Index of Moderation Mediation = -.001, SE [boot] =.004, 95% CI [-.009, .007]).

Results indicated that commercial social media literacy did moderate the indirect effect of TikTok use on body dissatisfaction through upward appearance comparison (Index of Moderation Mediation = .052, SE [boot] = .022, 95% CI [.013, .097]). The indirect path was significant when commercial social media literacy was higher (+1 SD; *B* = .10; boot estimate =.02; 95% CI [.054, .141]) and at the mean (*B* = .06; boot estimate =.02; 95% CI [.026, .088]), but not significant when commercial social media literacy was lower (-1 SD; *B* = .02; boot estimate = .02; 95% CI [-.029, .064]). Commercial social media literacy also moderated the indirect effect of TikTok use on body dissatisfaction through upward appearance comparison and body surveillance in serial (Index of Moderation Mediation = .017, SE [boot] =.008, 95% CI [.003, .033]) but not through body surveillance alone (Index of Moderated Mediation = -.011, SE [boot] =.009, 95% CI [-.029, .004]). The indirect path was significant when commercial social media literacy was higher (+1 SD; *B* = .03; boot estimate =.01; 95% CI [.015, .051]) and at the mean (*B* = .02; boot estimate =.01; 95% CI [.008, .033]), but not significant when commercial social media literacy was lower (-1 SD; *B* = .01; boot estimate = .01; 95% CI [-.009, .023]). Finally, peer social media literacy did not moderate the indirect effect of TikTok use on body dissatisfaction through upward appearance comparison (Index of Moderation Mediation = -.009, SE [boot] = .02, 95% CI [-.046, .029]), body surveillance (Index of Moderation Mediation = -.001, SE [boot] = .01, 95% CI [-.019, .009]), and upward appearance comparison and body surveillance in serial (Index of Moderation Mediation = -.003, SE [boot] =.01, 95% CI [-.017, .009]).

Chapter 4: Discussion

This study advances existing research on the relation between social media use and body image. Though various studies have examined this relation for applications such as Instagram (Feltman & Szymanski, 2018) and Facebook (Fardouly & Vartanian, 2015), to our knowledge this is the first study to examine the newer social media application, TikTok. Consistent with our hypotheses, at the bivariate level, we found that TikTok use was positively associated with body dissatisfaction. At the multivariate level, we found that TikTok use was indirectly related to body dissatisfaction through upward appearance comparison, body surveillance, and upward appearance comparison and body surveillance in serial. These findings are consistent with social comparison (Festinger, 1954) and objectification (Fredrickson & Roberts, 1997) theories and prior research (Holland & Tiggemann, 2016; Seekis et al., 2020) and indicate that the more a young adult college woman uses TikTok, the more she engages in upward appearance comparison, the more she surveils her body, and thus, the more body dissatisfaction she experiences. These findings suggest that the regular and consistent use of image-based social media applications, like TikTok, which is common among college-aged women, may have harmful impacts on women's body image.

We also extend previous research by exploring possible protective factors in the link between social media use and body image variables. In terms of body positive media exposure, we found that exposure to body acceptance and critique of appearance expectations when using social media moderated the direct relations between TikTok use and upward appearance comparison and the indirect relations between TikTok use and body dissatisfaction through upward appearance comparison and upward appearance comparison and body surveillance in serial. However, the findings were contrary to our hypotheses indicating an exacerbating rather

than buffering effect. That is, the relations were significant for those at high and average levels of acceptance and critique exposure, but not those with low levels. As shown in Figure 3, at low levels of TikTok use young adult college women with high acceptance and critique exposure engaged in the least amount of upward appearance comparison. However, as TikTok use increased this relation reversed and those with high acceptance and critique exposure engaged in the most upward appearance comparison. Thus, the direct relations between TikTok use and upward appearance comparison and the indirect relations between TikTok use and body dissatisfaction through upward appearance comparison and upward appearance comparison and body surveillance in serial were stronger (not weaker as hypothesized) when exposure to acceptance and critique media was high.

Research findings on the use of disclaimers (i.e., a warning label stating that an image has been digitally altered) also reflect these surprising results. In experimental studies, researchers have found that disclaimers actually increase both the perceived self-relevance of the thin-ideal image and appearance comparison (Bury et al., 2014; Tiggemann et al., 2013). It may be that women with high acceptance and critique exposure pay more, rather than less, attention to the thin-ideal body images on TikTok, which may, in turn, lead to more appearance comparison. In investigating the effect of “Instagram vs reality” images, Tiggemann and Anderberg (2020) found that real images did not evoke less social comparison as compared to idealized images and actually, they tended to evoke more. They hypothesized that this is because these real images are seen as more realistic and therefore, better targets of comparison. This suggests that body positive media that attempts to depict real bodies may actually unintentionally fuel more appearance comparison when using image-based social media which may, in turn, lead to more body dissatisfaction, rather than less.

We also found acceptance and critique exposure did not moderate the direct relations between TikTok use and body surveillance and body dissatisfaction. These findings are similar to experimental studies that have found no effects for disclaimer and/or body positive captions on body dissatisfaction for college women who viewed thin-ideal celebrity images (Brown & Tiggemann, 2020), thin-ideal fashion images (Tiggemann et al., 2013; Tiggemann & Brown, 2018), and Instagram images of unknown peers (Tiggemann et al., 2020). Relatedly, Mulgrew and colleagues (2017) found that writing reflections about positive parts of one's appearance and of one's body's functionality did not protect women from increased body dissatisfaction after exposure to the thin-ideal images. These findings suggest that even when reminded that images may be edited or unrealistic, they can still have detrimental effects on the way women feel about their body. Women may also discount body positive messages when they are presented with thin-ideal images. Thus, it is possible that body acceptance and exposure to critiques of appearance expectations are not strong enough to protect positive body image in the face of exposure to thin-ideal images while using TikTok.

Contrary to our hypotheses, a lack of exposure to the thin-ideal and societal expectations of bodies did not moderate any of the hypothesized direct and indirect relations between TikTok use and upward appearance comparison, body surveillance, and body dissatisfaction. This suggests that TikTok use effects body image variables regardless of their level of exposure to the thin-ideal. It may be that using social media exposes women to more objects of comparison than they would be exposed to if not using social media. Regardless of what kinds of videos women see on TikTok (even if the videos do not directly promote the thin-ideal), they still see other bodies and may be inadvertently comparing themselves to those bodies, even if they are not consciously aware that they are doing so. Mulgrew and colleagues (2018) found that social

media campaigns that focused on body functionality led to more appearance satisfaction, but were not protective when the participants were exposed to thin-ideal images of models. Thus, even when social media is focused on body functionality and is not exposing users to the thin-ideal and appearance expectations, users are still not protected from the damage the thin-ideal can cause. Although thin-ideal non-exposure did not act as a buffer, it did have main effects on upward comparison, body surveillance, and body dissatisfaction (see Table 3). These findings are consistent with previous research (Groesz et al., 2002; Levine & Murnen, 2009) and suggest that less media exposure to the thin-ideal is good for young adult college women's body image.

In terms of social media literacy, we found that commercial social media literacy exacerbated the direct relations between TikTok use and upward appearance comparison and the indirect relations between TikTok use and body dissatisfaction through upward appearance comparison and upward appearance comparison and body surveillance in serial. These finding were contrary to our buffering hypotheses but similar to our findings for acceptance and critique exposure described above. That is, the direct and indirect relations were significant for those at high and average levels of commercial social media literacy, but not those with low levels. The fact that commercial social media literacy did not serve as a protective factor is consistent with some prior research. In their study, Rogers and colleagues (2019) found no support for moderating roles of realism skepticism and critical thinking, two important aspects of media literacy, in the relation between media exposure and body dissatisfaction. In regard to the exacerbating effects of commercial social media literacy, it may be that having strong social media literacy skills may inadvertently make appearance expectations and appearance evaluations more prominent in women's minds. Maybe becoming more aware of the ways that social media distorts reality and depicts heavily edited bodies makes women feel that they too

need to alter their bodies in order to be attractive, because they are not currently good enough the way they are.

Finally, we found that peer social media literacy moderated the direct link between TikTok use and upward appearance comparison. The predictors affected upward appearance comparison in the same direction though TikTok use was only associated with upward appearance comparison at average and lower levels of peer social media literacy. Their lack of social media literacy may make it hard for them to question the reality of the content they see, and they may not consider that the content may be edited or altered. Therefore, they may be comparing themselves to unrealistic, altered images, without being aware that they are doing so. It may be that because these social media users are their peers, women assume that they are not editing and manipulating their content the way advertisements, celebrities or influencers would. Maybe they assume that peer content is more real and thus, a fair target of comparison, which leads to them engaging in more upward appearance comparison.

Limitations and Directions for Future Research

We must discuss some limitations of our study. First, self-selection bias may have impacted our results. Our sample was not random and college women had the option whether or not to participate. Therefore, there may be important differences between women who chose to participate and those who did not. For example, those who chose to participate were likely more active social media users than those who did not. This study also relied entirely on self-report measures, which means that response bias could have impacted our results. Our research design was also correlational, which means that we cannot claim causation or determine directionality. Additionally, our sample was limited in sexual orientation and racial diversity. Most of our

participants were White and heterosexual, which may make findings less generalizable to LGBTQ women and women of color.

Future research might explore other moderators to identify protective factors in the social media use-body dissatisfaction link. Body neutrality is a new movement taking root in social media content. Proponents of body neutrality argue that we should appreciate what our body does rather than what it looks like. Rather than suggesting that all bodies are beautiful, the way body positivity does, body neutrality advocates say that it does not matter what your body looks like because your appearance is irrelevant to your value. Body neutrality takes the focus off appearance all together. This suggests that body neutrality could prove to be a protective factor against strengthening body dissatisfaction in the face of social media use.

Future studies could also investigate how gender expression impacts the social media use-body dissatisfaction link. It could be that women who perform their gender in a more stereotypically feminine way are more susceptible to body dissatisfaction after engaging with social media than those who present more masculine or neutral. Further research should also examine the social media use-body dissatisfaction link from an intersectional lens. It is important to consider how this link may look similar or different for women with marginalized identities. For example, do women of color, LGBQ women, and LGBQ women of color experience this same phenomenon? It is possible that they experience different societal appearance expectations than their straight, White counterparts. It is also possible that something about their non-White, non-straight identities may serve as a protective factor in this link. On the contrary, it may be that their marginalized identities and experiences of oppression exacerbate this link.

Practice Implications

Our findings suggest some implications for practicing clinicians working with college women. First, clinicians should encourage clients to limit their time on TikTok. Since we know that regular use leads to body dissatisfaction, it may be helpful for clients to take "social media breaks" or only check their social media once per day. Clinicians should also encourage clients to refrain from comparing themselves to unrealistic and idealized representations of others and from constantly surveilling their bodies. Helping clients limit these behaviors will likely reduce their body dissatisfaction.

Clinicians could also engage in prevention work by conducting workshops and outreach events geared towards those most vulnerable to body dissatisfaction in the face of social media use (i.e., women who spend significant time on social media and those with high body positive media exposure and/or high commercial literacy skills). These workshops could focus on limiting social media use and avoiding appearance comparison and body checking, which would ideally help combat college women's body dissatisfaction. In terms of social justice work, psychologists could advocate for policies that combat the thin-ideal and that make social media a safer place for women's body image. Psychologists could share research with the public on the harmful effects of social media on body image and encourage them to be authentic on social media and also limit their use.

Conclusion

Our findings suggest that image-based social media use present risks to college women's positive body image. Our study extends previous research by demonstrating that TikTok use is linked to more body dissatisfaction through upward appearance comparison and body surveillance in serial. Surprisingly, exposure to body positive content and commercial social

media literacy skills did not protect against these risks. Thus, our results suggest that college women should limit their time on TikTok in order to reduce body dissatisfaction. Future research should explore other potential buffers in this link, such as body neutrality, in order to discover ways to help college women combat body dissatisfaction in the face of social media use.

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Appendix

Table 1. *Factor Analysis of the Exposure to Body Positive Media Scale*

Item No.	Item	Loadings		Mean (*SD*)
		Factor 1	Factor 2	
7	The media I consume encourages me to accept my body.	.73	.10	4.74 (1.32)
20	The media I consume helps me challenge unrealistic beauty standards.	.71	.01	4.39 (1.44)
11	I engage with media content that challenges traditional standards of beauty.	.70	-.20	4.58 (1.46)
9	The media I consume teaches me to question society's definition of the "ideal" body.	.70	-.31	4.71 (1.42)
13	The media I consume encourages me to feel confident in my body just the way it is.	.70	.13	4.66 (1.40)
19	The media I consume communicates the message that a person can be happy at any size.	.69	.15	4.83 (1.44)
16	I seek out media that promotes acceptance of bodies of all shapes and sizes.	.64	-.04	4.82 (1.49)
5	I follow body positive content creators on social media.	.61	-.16	4.39 (1.86)
4	The media I consume communicates the message that all bodies are beautiful.	.60	.18	4.73 (1.41)
14	The media I consume depicts bodies of all shapes and sizes.	.58	.13	4.74 (1.54)
15	The media I consume encourages me to look a certain way in order to attract romantic and/or sexual partners. (RS)	.04	.71	3.58 (1.75)
10	The media I consume promotes the idea that thin bodies are more beautiful than non-thin bodies. (RS)	.10	.69	3.73 (1.73)
17	The media I consume encourages me to look attractive so that I can succeed in my work and social life. (RS)	-.03	.64	3.57 (1.62)
8	The media I consume promotes exercise routines in which the purpose is to lose weight. (RS)	-.15	.63	3.22 (1.62)
6	The media I consume promotes weight loss tips. (RS)	-.16	.58	3.58 (1.72)

Note. Factor 1 = Acceptance and Critique Exposure; Factor 2 = Non-Thin-Ideal Exposure; RS = Reverse-scored. Item numbers 1, 2, 3, 12, and 18 were removed in preliminary analyses and not included in the final exploratory factor analysis. Each item was rated on a 7-point Likert scale from 1 (*strongly disagree*) to 7 (s*trongly agree*).

Table 2 *Means, Standard Deviations, and Correlations for All Study Variables*

Variable	*M*	*SD*	1	2	3	4	5	6	7
1. TikTok	.00	.93	---						
2. Upward appearance comparison	3.92	.80	.16***	---					
3. Body surveillance	5.17	.99	.17***	.64***	---				
4. Body positive media-Acceptance and critique	4.66	1.03	.02	-.15***	-.17***	---			
5. Body positive media-Non-thin ideal exposure	3.53	1.22	-.07*	-.44***	-.37***	.33***	---		
6. Commercial social media literacy	3.15	.76	-.10**	.01	-.06	.29***	.10**	---	
7. Peer social media literacy	3.12	.85	-.03	.20***	.10**	.06	-.13***	.33***	---
8. Body dissatisfaction	3.56	.93	.14***	.52***	.46***	-.15***	-.33***	-.08*	.05

Note: $*p < .05$. $**p < .01$. $***p < .001$.

Table 3. *Test of Body Positive Social Media Exposure and Social Media Literacy as Moderators of Predictor-Mediators and Predictor-Outcome Links*

Predictor variables	Criterion	*B*	*β*	*t*	R^2	*F*	*df*
	Upward Appearance Comparison						
TikTok use		3.92		154.0	.21	52.69	4
Body acceptance and critique exposure		-.02	-.02	-.49			
Non-exposure thin ideal		-.27	-.42	-12.01			
Media literacy-commercial		.01	.01	.39			
Media literacy-peer		.13	.14	4.01			
TikTok X Body acceptance and critique exposure		.06	.07	2.10	.23	28.91	8
TikTok X Non-exposure thin ideal		-.03	-.04	-1.25			
TikTok X Media literacy-commercial		.12	.10	2.90			
TikTok X Media literacy-peer		-.07	-.07	-2.04			
	Body Surveillance						
TikTok use							
Upward appearance comparison							
Body acceptance and critique exposure							
Non-exposure thin ideal							
Media literacy-commercial							
Media literacy-peer							
TikTok X Body acceptance and critique exposure							
TikTok X Non-exposure thin ideal							
TikTok X Media literacy-commercial							
TikTok X Media literacy-peer							
	Body Dissatisfaction						
TikTok use							
Upward appearance comparison							
Body surveillance							
Body acceptance and critique exposure							
Non-exposure thin ideal							
Media literacy-commercial							
Medial literacy-peer							
TikTok X Body acceptance and critique exposure							
TikTok X Non-exposure thin ideal							
TikTok X Media literacy-commercial							

Note. *B,* β and *t* reflects values from the final regression equation; * $p < .05$. ** $p < .01$. ** $p < .001$

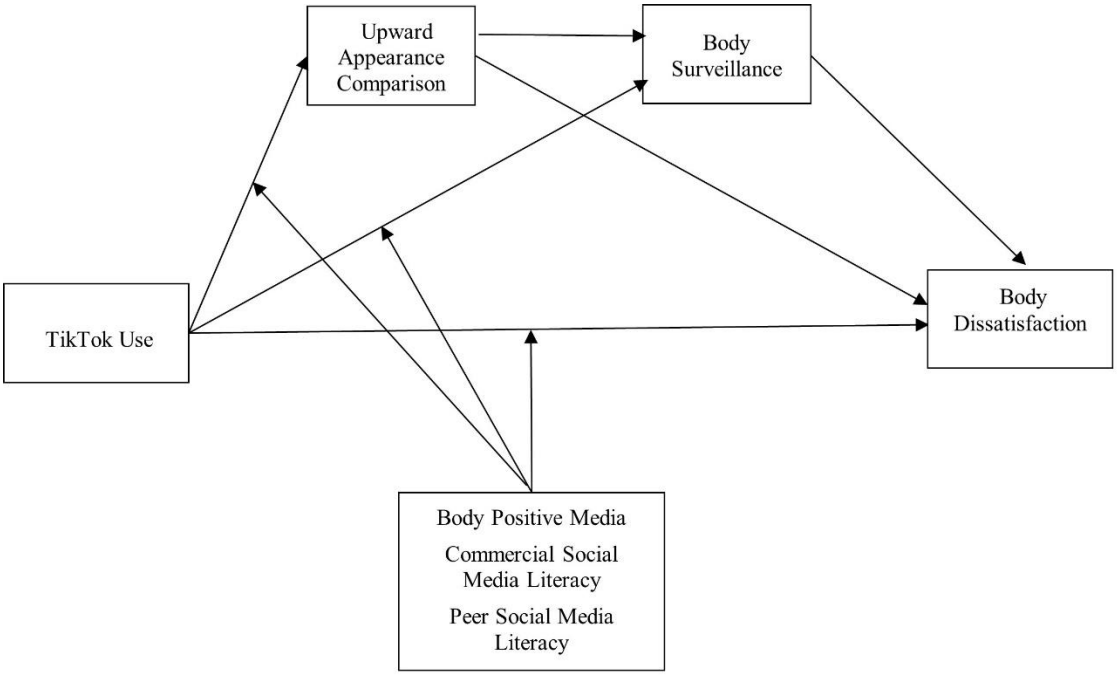

Figure 1. *Conceptual Model*

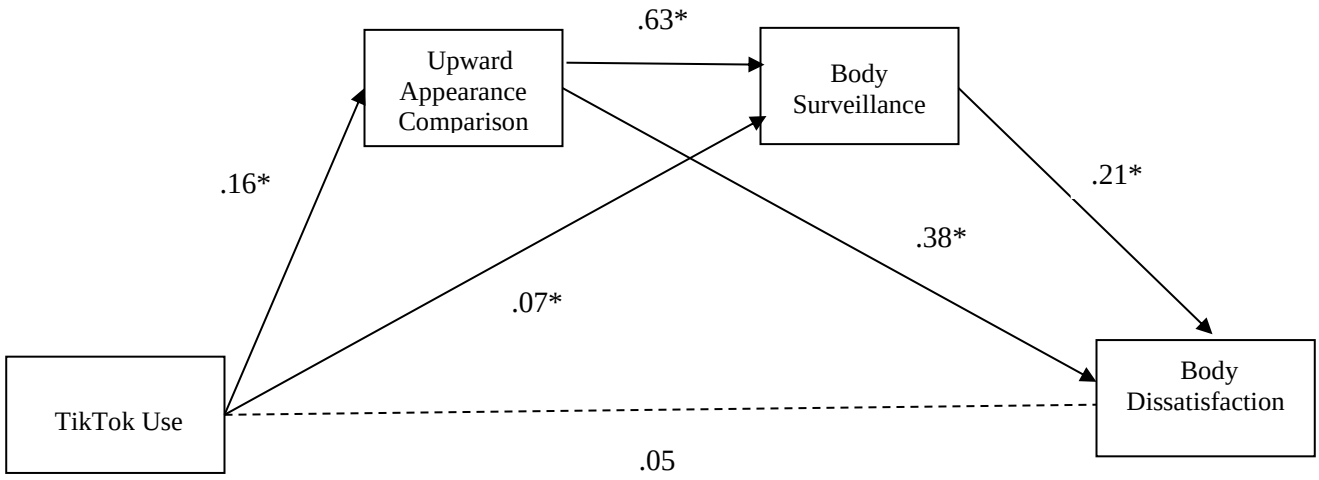

Figure 2. *Direct and Indirect Relations from TikTok Use to Body Dissatisfaction.*

Note: Values reflect standardized coefficients. Black, solid paths are significant (*$p < .05$) whereas grey, dashed paths are not.

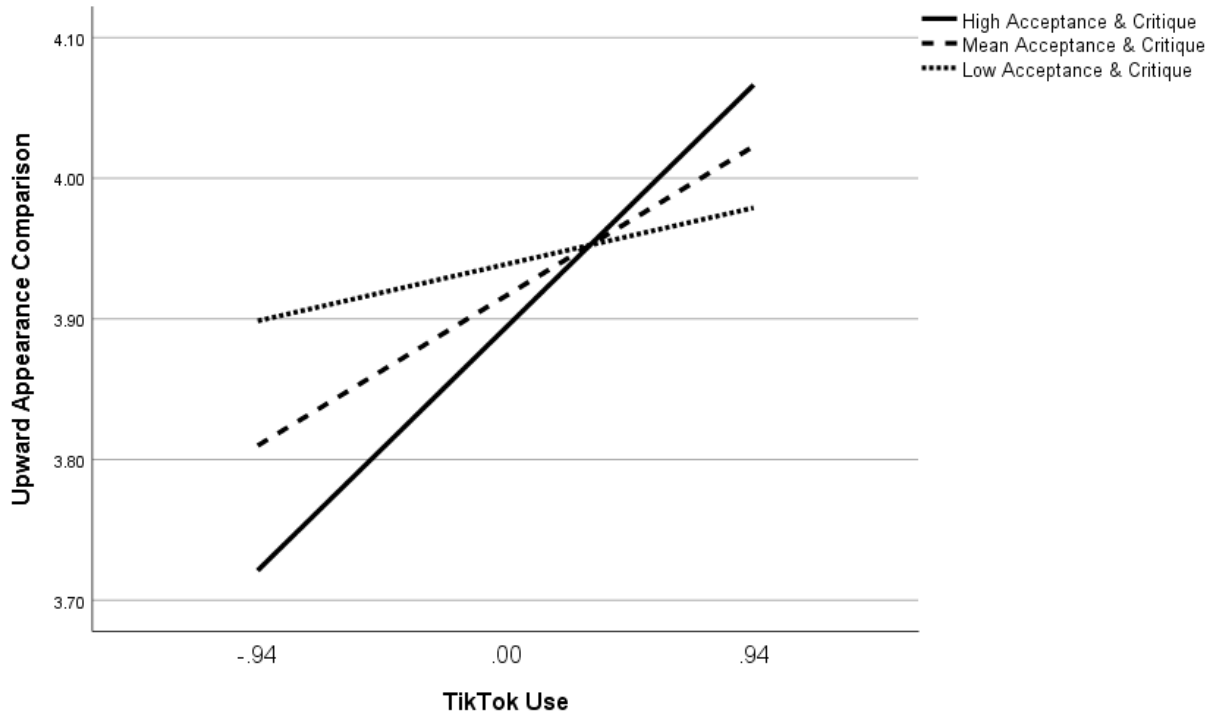

Figure 3. *Acceptance and Critique as a Moderator*

Acceptance and Critique moderated the link between TikTok use and upward appearance comparison (β = , ΔR^2 = .01, significant ΔF p = .01). Hayes' (2013) SPSS PROCESS macro (Model 1) was used to interpret significant moderation effects. When examining each interaction, main effects not included in the significant interaction in the regression model were controlled for. Results showed that TikTok use predicted upward appearance comparison for women with high (+1 *SD*; *B* = , *t* = 4.47, *p* =.000, 95% CI [.104, .266]) and at the mean (*B* = , *t* = 4.14, *p*=.000, 95% CI [.060, .168]) levels of acceptance and critique but not low (-1 *SD; B* = ; *t* = 1.14, *p* =.254, 95% CI [-.031, .117]) levels.

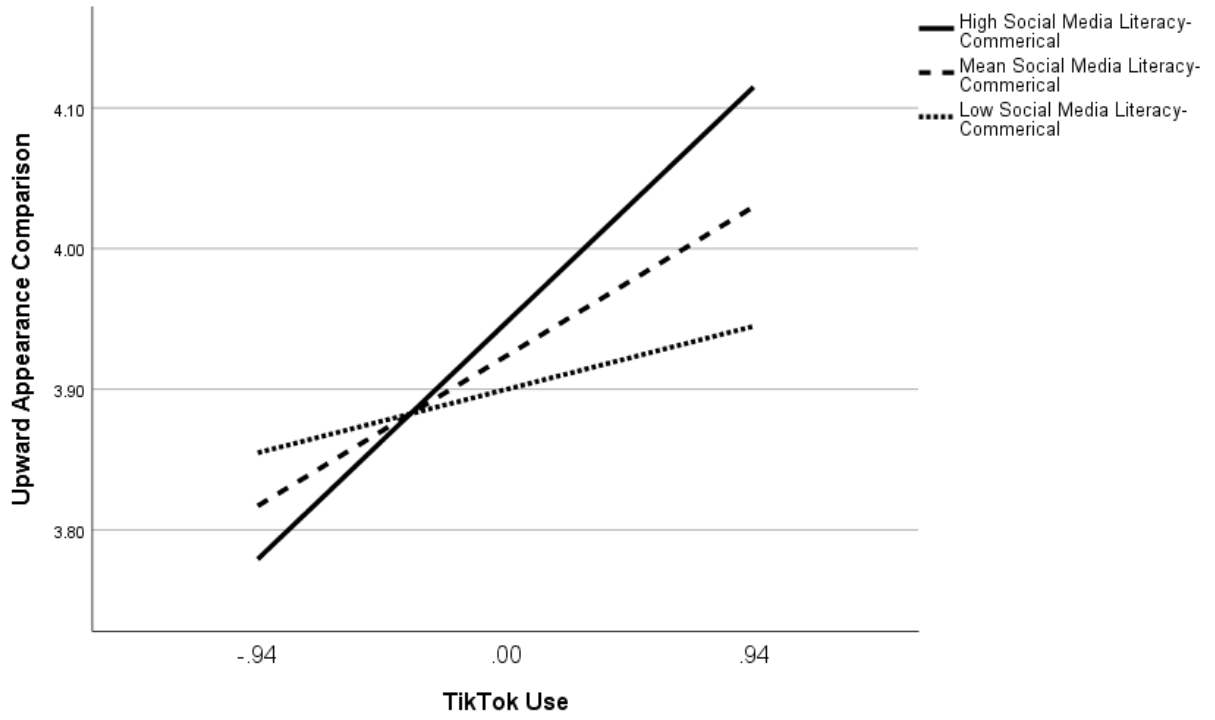

Figure 4. *Commercial Social Media Literacy as a Moderator*

Commercial social media literacy moderated the link between TikTok use and upward appearance comparison (β = , ΔR^2 = .005, significant ΔF p = .03). Hayes' (2013) SPSS PROCESS macro (Model 1) was used to interpret significant moderation effects. When examining each interaction, main effects not included in the significant interaction in the regression model were controlled for. Results showed that TikTok use predicted upward appearance comparison for women with high (+1 *SD*; *B* = , *t* = 1.09, *p* =.000, 95% CI [.107, .252]) and at the mean (*B* = , *t* = 4.14, *p*=.000, 95% CI [.060, .168]) levels of commercial social media literacy but not low (-1 *SD; B* = ; *t* = 4.84, *p* =.275, 95% CI [-.038, .135]) levels.

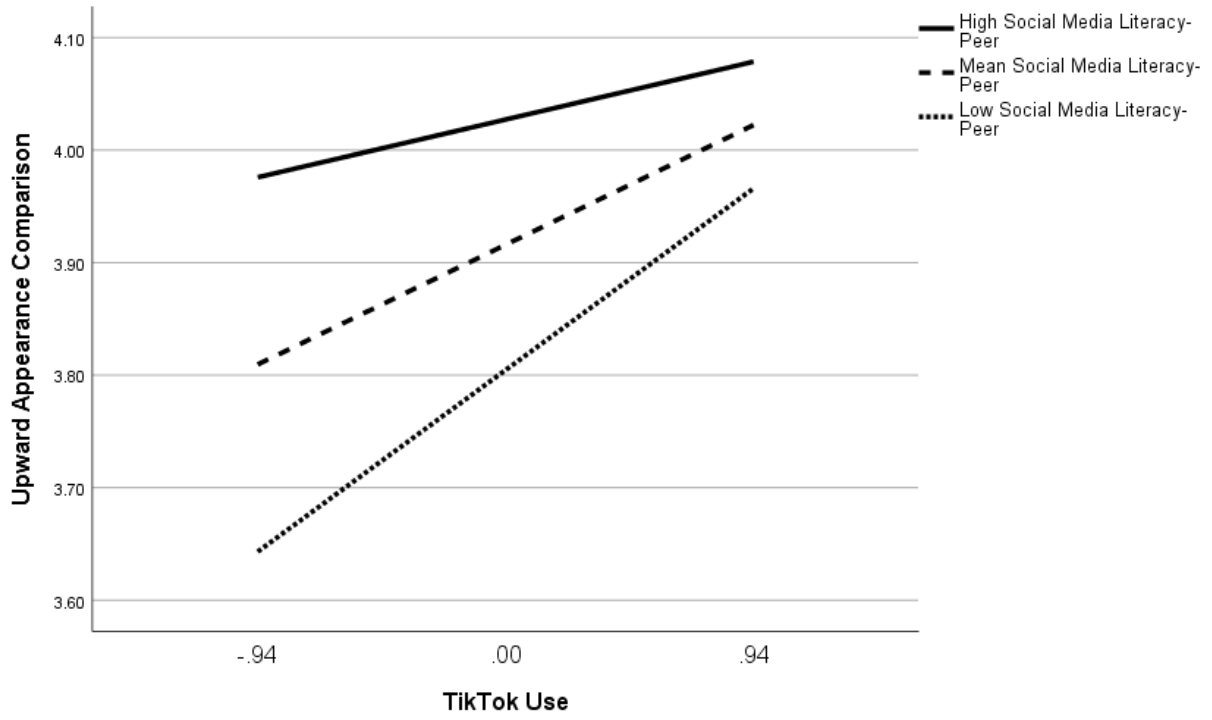

Figure 5. *Peer Social Media Literacy as a Moderator*

Peer social media literacy moderated the link between TikTok use and upward appearance comparison (β = , ΔR^2 = .004, significant ΔF p = .01). Hayes' (2013) SPSS PROCESS macro (Model 1) was used to interpret significant moderation effects. When examining each interaction, main effects not included in the significant interaction in the regression model were controlled for. Results showed that TikTok use predicted upward appearance comparison for women with high (+1 *SD*; *B* = , *t* = 1.41, *p* =.160, 95% CI [-.022, .132]) and at the mean (*B* = , *t* = 4.14, *p*=.000, 95% CI [.060, .168]) levels of peer social media literacy but not low (-1 *SD; B* = ; *t* = 4.38, *p* =.000, 95% CI [.095, .250]) levels.

Vita

This dissertation is the culminating project of Danielle Bissonette Mink's doctoral degree in counseling psychology. She spent five years at the University of Tennessee, Knoxville pursuing this degree with special interest areas in body image and LGBTQ issues. Her major advisor is Dr. Dawn Szymanski, and she has enjoyed being an active member of the Feminist-Multicultural Research Lab. Prior to this degree, Danielle received her Master of Art in psychology from UTK and her Bachelor of Art in psychology from Villanova University.