

“Like” Me: Shopping, Self-Display, Body Image, and Social Networking Sites

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Ideals of beauty and product information are transmitted via sociocultural channels, including social media. Through the framework of objectification theory, we examined the relation of involvement on Facebook to women’s internalization of appearance ideals, psychological well-being, and their intentions to make online purchases. Participants were 796 female college students who completed online measures regarding internalization, sources of beauty information, social comparisons, body satisfaction, self-esteem, purchases referrals, and purchase intentions. Using structural equation modeling, we found that passive Facebook usage influenced the women’s internalization of societal beauty ideals, which was related inversely to the women’s satisfaction with their bodies and self-esteem. Active Facebook usage had direct effects on attention to friends’ referrals and purchase behaviors. Purchase intentions also were influenced by referrals, the importance they placed on social media outlets as sources of information about fashion and appearance, and a more positive self-image. Findings suggest that women’s intentions to make online purchases are determined through their involvement in social media, their friendship connections, and the extent to which their self-perceptions have been affected by sociocultural processes.

Keywords: Facebook, body satisfaction, self-esteem, purchase intention, internalization

As occurs naturally as part of socialization processes in all cultures, beauty and physical appearance ideals are transmitted via a mix of sociocultural channels, including traditional mass media (e.g., TV, magazines), parents and friends, and current social media outlets (e.g., Facebook). Over time and repeated exposure, such ideals are internalized by girls and women to varying degrees, which can have different psychological consequences (Tiggemann, 2011). Although certain symptoms of eating disorders, such as binge eating, have a genetic basis, research has indicated that other symptoms, such as those related to self and body evaluations, are determined primarily by environmental and sociocultural factors (Striegel-

Moore & Bulik, 2007). Media-propagated appearance ideals are difficult, if not impossible, to achieve for most women because these ideals are far thinner and lighter than the average body size and shape of women in the United States (Garner, Garfinkel, Schwartz, & Thompson, 1980; Morris, Cooper, & Cooper, 1989). Thus, when women internalize, and compare themselves to, such ideals they are likely to perceive their bodies as discrepant and may experience negative emotions (e.g., shame, guilt, anger, sadness) and may become dissatisfied with themselves, their appearance, and their bodies (Bessenoff, 2006; Ferguson, 2013; Knobloch-Westerwick & Romero, 2011; Sohn, 2009). As researchers have noted (Stice, 2002), such negative emotions and body image concerns often serve as the immediate precursors to the development of disordered eating symptoms or, for a smaller number, actual clinical eating disorders. With the rise of the Internet, the ubiquity of social media outlets, and a clear focus on appearance on such sites (e.g., through celebrity websites, fashion blogs, pornography), social media has become an even more powerful sociocultural channel for transmitting body-centric information and imagery than occurred with traditional media outlets (e.g., TV; Manago, Ward,

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Lemm, Reed, & Seabrook, 2015; Vandenbosch & Eggermont, 2015). Exposure to thin media images, as opposed to average or plus-sized models, is predictive of more negative body image, particularly for college-aged women (Groesz, Levine, & Murnen, 2002).

The presence of cultural beauty ideals, as well as individuals' self- and body perceptions, also affect the way they consume. The consumption of clothing, cosmetics, cosmetic procedures, diet programs, dietary supplements, and exercise can potentially be used to manage appearance, weight, and body size and shape (Banister & Hogg, 2004; Chattaraman & Rudd, 2006; Rosa, Garbarino, & Malter, 2006; Rudd & Lennon, 2000; Thompson & Hirschman, 1995). Currently, social media allows companies to provide targeted communications and greater interactivity with consumers. Although research has shown that the use of social media does impact consumer behavior (Heinonen, 2011), such involvement is most useful at the presale and initial sales phases when consumers are searching for product information and reviews from vendors and other users alike (Hall, 2015). What is unclear is how social media usage, both its quality and quantity, may interact with individuals' self-perceptions and psychological well-being to ultimately explain their consumer behaviors. Using objectification theory as the framework for the conceptual model we tested in this study (Fredrickson & Roberts, 1997), we examined women's involvement in social media and its relation to their internalization of societal appearance ideals, their self-perceptions, and ultimately their purchase intentions.

Social Media, Objectification, and Self-Perceptions

Through images and verbal communications (e.g., slogans, articles), mass media outlets, such as fashion magazines, TV, social media, and so forth, communicate society's ideals about body size and shape, appearance, weight, eating, and what it means to be feminine. Although all people, regardless of gender and age, are susceptible to body image concerns, young adult women (e.g., 18–30 years) who live in western societies are under particular pressure to approximate a cultural ideal that is defined by a thin body and no visible signs of aging (Bessenoff, 2006; Knobloch-Westerwick & Ro-

mero, 2011). According to objectification theory (Fredrickson & Roberts, 1997), through such socialization processes, which include sexual objectification and messages about gender identity, women are exposed to and internalize these socially constructed and culturally based standards of appearance (i.e., develop cognitive schema). From this perspective, women self-objectify (i.e., take on the perspective of an external observer with themselves), often becoming more self-focused in terms of their general appearance, and increasingly monitoring and attending to the aesthetic, versus functionality, of their bodies (Moradi, 2010). Such internalization, social comparisons, and self-monitoring are particularly problematic for young women because of their unstable sense of self and evolving identities (Groesz et al., 2002), their tendency to think dualistically, and their formation, and negotiation of, interpersonal relationships, including romantic/sexual couplings (Smolak & Levine, 1996). Objectification theory predicts that such processes can promote increases in young women's bodily shame and dissatisfaction and anxiety about appearance, and reductions in awareness of internal bodily states (Moradi, 2010); such outcomes have been supported by empirical research (Bessenoff, 2006; Cattarin, Thompson, Thomas, & Williams, 2000; Grabe, Ward, & Hyde, 2008; Hawkins, Richards, Granley, & Stein, 2004). For example, in a meta-analysis of 77 studies, Grabe et al. (2008) found that exposure to media images depicting the ideal thin body was related to higher levels of body dissatisfaction ($ES = -.28$) and a stronger internalization of the thin ideal for women. ($ES = -.30$).

Research (Correa, Hinsley, & De Zuniga, 2010; McLean, Paxton, Wertheim, & Masters, 2015) has demonstrated that social media sites serve as important socialization outlets, particularly for adolescents and young adults. The use of social media, such as Facebook, is different from less engaging traditional media. Because such sites are available 24/7, users may experience ongoing pressures to monitor whether (and how) their personal information and photos are presented to the public. These pressures may drive adolescents and young adults to engage in self-presentational behaviors, such as modifying photos or only posting information that suggests a happy, successful existence. Social media sites also can serve as a virtual stage for

criticism and solicited judgment where users seek peer-validation and gratification by socially comparing themselves to others they perceive as less attractive (Perloff, 2014). According to self-objectification theory, women not only monitor their appearance in general, but more specifically, judge their physical and sexual appearance in relation to individuals in their immediate social groups (Moradi, 2010). For example, female undergraduates may make group-specific comparisons to other women in college regarding hairstyles, body characteristics, sexual attractiveness, and skin features, but pay less attention to these same physical characteristics among women who are in their 40s and 50s. Thus, through social media sites, women receive direct and indirect feedback about how they compare to others who are in their social sphere, and it is through such interactions that their self-concepts can be influenced, and perhaps, distorted.

Studies investigating Facebook usage, like exposure to traditional media (e.g., fashion magazines), have shown that involvement is related to increased levels of objectified body consciousness and body shame (Haferkamp & Krämer, 2011; Manago et al., 2015; Meier & Gray, 2014). For example, Meier and Gray (2014) found that exposure to specific photo-related Facebook features, such as browsing friends' photos, intensified users' body dissatisfaction and self-objectification (e.g., body monitoring). In related studies, higher appearance exposure and photo sharing (amount of time allocated to photo activities) on Facebook was associated significantly with body dissatisfaction, drive for thinness, thin ideal internalization, and self-objectification, especially among adolescent girls (Fardouly & Vartanian, 2016; Kim & Chock, 2015; Manago et al., 2015; Meier & Gray, 2014). In their study on social media sites, Haferkamp & Krämer (2011) found that male and female participants experienced higher discrepancies between their perceived and ideal bodies after viewing the profiles of attractive others. The results of these studies suggest that Facebook plays an influential role in the objectification process, particularly among young adult women, and should be studied more to better delineate their role and effects women's psychological well-being.

Consistent with objectification theory is the increasing role of hypersexualization of young

girls on social media. Many young girls and women do not hesitate to self-sexualize (e.g., posting provocative photos of themselves or photos that ritualize subordination), especially when they realize it draws attention to themselves and provides social rewards in the form of comments and "likes" (Hall, West, & McIntyre, 2012; Manago et al., 2015). In fact, many young girls and women enjoy being perceived as sexual objects because it affirms their attractiveness and can even feel empowering (Manago, Graham, Greenfield, & Salimkhan, 2008; Manago et al., 2015; Sales, 2014). Interestingly, Daniels and Zurbriggen (2016) found that when adolescent girls and young adult women used a sexualized photo for their Facebook profile, they experienced negative evaluations of physical attractiveness and competence by their peers, demonstrating that perhaps Facebook users are becoming particularly critical of hypersexualization.

Social Commerce

Facebook has become one of the most popular platforms for online social interaction. According to Facebook (2015), there are currently 1.44 billion monthly users who can participate in any number of activities. The majority of these users (83%) are between the ages of 18 and 29 years; slightly more are female (Smith, 2013). Active Facebook users are fully engaged in the community (e.g., posting photos, commenting on photos and status of others, updating their own status), whereas a more passive use is represented through activities such as browsing newsfeeds and clicking "like" on posts or images. The extent to which engaging in these types of Facebook activities may be related differentially to psychological well-being and purchase decisions warrants additional study (Duffett, 2015; Hutter, Hautz, Dennhardt, & Füller, 2013; Manago et al., 2015; Meier & Gray, 2014).

Social media sites also have emerged as an innovative communication tool for retailers to interact with consumers. An estimated 76% of retailers connect with consumers using social media sites (Stambor, 2012). Social commerce, the merging of social networking and online shopping allows consumers to participate in the shopping process while interacting with friends and other users (Stephen & Toubia, 2010). Fa-

cebook is an industry leader in social commerce; 52% of its users admitted that the social network impacts the way they shop (“What Consumers Want,” 2015). Another 28% of social network users around the world claim to have purchased an item directly via a social media platform, making it critical for retailers to ensure that social media is integrated throughout the entire customer journey (“What Consumers Want,” 2015). *F-commerce*, or Facebook commerce, is the use of Facebook as a platform for facilitating and executing transactions between buyers and sellers, inside Facebook or externally via the Open Graph (Anderson, Sims, Price, & Brusa, 2011). F-Commerce, although in its developmental stages, shows infinite potential. Recent research has demonstrated that Facebook positively influenced purchase intention, specifically as it related to certain usage characteristics (e.g., time spent on Facebook, Duffett, 2015). It is estimated that by the end of 2015, the dollar volume of goods sold through social media sites largely driven by F-commerce should rise to \$30 billion (Anderson et al., 2011).

Within the advertising that occurs on social media sites, the physical attractiveness of the product endorser (or model) may influence women’s engagement in behaviors designed to alter, and improve, their appearance (e.g., purchasing make-up, buying new clothing). Susceptible consumers may succumb to marketing strategies that suggest a specific product will make them as attractive as the endorser, or that the goods will act as an extension of the self, leading to an elevation in esteem and a reduction in anxiety about their current appearance (Dolich, 1969; Malhotra, 1988; Sirgy, 1982; Stephens, Hill, & Hanson, 1994). By consuming products that are designed to improve and enhance women’s looks (e.g., clothing and cosmetics; Peng, Wong, & Wan, 2012; Rosa et al., 2006; Thompson & Hirschman, 1995), the marketplace offers them hope that they can change their lives. For example, Rosa et al. (2006) found that body esteem was related positively to involvement (i.e., concern or general interest) with apparel, which subsequently was related to male and female consumers’ intentions to make purchases online. Products that women use to manage others’ perceptions of them (e.g., clothing, grooming) may be related to the construction of an ideal identity, allowing them to create

a more positive self-image, reduce their anxiety about how they look, increase their satisfaction with their body size and shape, and make them more sexually appealing to potential partners. Women’s perceptions of brands or products, as related to the self, have a positive impact on their purchase decisions and intentions (Dolich, 1969; Malhotra, 1988; Peng et al., 2012; Thompson & Hirschman, 1995). People consume products and brands for a variety of reasons, such as identity development, ego-congruence, and self-expression (Blackwell, Miniard, & Engel, 2006; Hawkins, Moth-erbaugh, & Best, 2007), but what is particularly interesting and relevant to women’s psychological well-being may be when such purchases are made with the purpose of changing their image to more closely align with societal (and others’) expectations or create a sense of self that is unique, and thus “special.”

Conceptual Model and Purpose

Consistent with objectification theory (Moradi, 2010), social media sites, such as Facebook, are expected to play a substantial role in orienting women to ideals about appearance, weight, eating, and body, and in providing them with a built-in group against which to compare themselves. Festinger (1954) has suggested that, in the absence of available objective cues, women will rely on lateral social comparisons to determine their worth and value, seeking out other individuals who are similar in terms of age, gender, and related characteristics (e.g., educational level). Such comparisons often leave women viewing themselves as lacking (or discrepant from the ideal; Higgins, 1987), which has been associated with feelings of body dissatisfaction and low self-esteem (Cattarin et al., 2000; Gillen & Lefkowitz, 2011; O’Dea, 2012; Sohn, 2009; Tiggemann & McGill, 2004). Women may also make upward social comparison to others they believe to be better than them, which can also be threatening to their self-evaluation. However, unattainable upward social comparisons might act as a motivation for self-improvement (Bandura, 1986). Regardless of the direction of social comparison, how women feel about themselves and their bodies, in turn, has been related to their consumption behaviors, including their intentions to purchase products through social commerce

platforms (Hong & Zinkhan, 1995; Phau & Lo, 2004; Rosa et al., 2006).

Within our conceptual model, and consistent with objectification theory (e.g., Moradi) and the importance of Facebook in social commerce (Anderson et al., 2011; Geron, 2011; Vision Critical, 2014), we expected to find several significant pathways among the proposed constructs (see Figure 1 for an illustration of the expected significant pathways as well as the direction of the relation between the constructs). First, higher levels of Facebook usage (both active and passive), as well as viewing media outlets as important sources of information about fashion, would result in higher levels of internalization of, and comparison with, societal appearance ideals. Second, higher levels of Facebook usage (both active and passive) would be related to lower levels of self-esteem and body satisfaction. Third, greater internalization (and social comparisons) would be related to lower self-esteem and lower satisfaction with body. Fourth, internalization of appearance ideals, social media sites as sources of information, and self-esteem would be related to purchase referrals.

Fifth, both active and passive Facebook usage, as well as social media outlets as important sources of information about fashion and appearance, internalization about appearance ideals, self-esteem, purchase referrals, and body satisfaction, would be related to purchase intentions.

Method

Participants

Participants were 796 female undergraduate and/or graduate students at a university located in the south central region of the United States; all women reported having a Facebook account. Mean age was 20.71 years ($SD = 3.25$ years; Median = 20.00 years). Regarding race/ethnicity, the majority of participants were White/NonHispanic ($n = 407$; 51.5%), followed by Hispanic ($n = 188$; 23.6%), African American ($n = 122$; 15.3%), Asian American ($n = 38$; 4.8%), Biracial ($n = 26$; 3.3%), Native American ($n = 4$; 0.5%), and Middle Eastern ($n = 3$; 0.4%); eight responded "Other". The

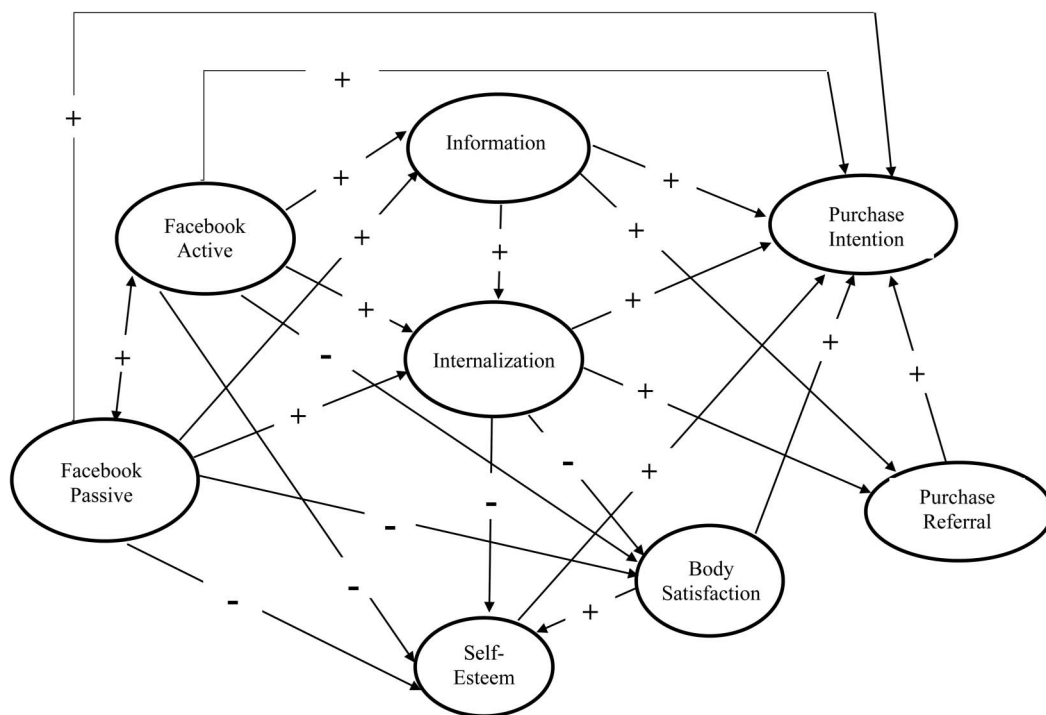


Figure 1. Hypothesized structural model with predicted relations among the constructs.

majority of the women also indicated that they were single (89.4%).

Instruments

Facebook usage. For this study, we adapted the General Social Media Usage subscale from the Media & Technology Usage and Attitudes Scale (Rosen, Whaling, Carrier, Cheever, & Rokkum, 2013; 7 items; logging on to Facebook, posting status updates, posting photos, browsing profiles and photos, reading other's posts, commenting on posts, liking post or photos) and then added five new items to measure other types of Facebook activities (i.e., posting videos, editing one's profile, browsing one's newsfeed, creating events, sharing a photo, video, or post). After indicating that they had a Facebook account, the women rated how often they engaged in each activity using an 11-point scale that ranged from 1 (*never*) to 11 (*two or more times an hour*). In a sample of 942 participants, Rosen et al. (2013) reported an alpha of .97 (for the General Social Media Usage subscale).

We examined the factor structure of the 12 items to determine if they represented different types of Facebook usage. We used exploratory factor analysis with principal axis factoring and squared multiple correlations as the communality estimates. Bartlett's Test of Sphericity ($\chi^2 = 6617.69$, $df = 66$, $p < .0001$) and KMO (.909) indicated that factoring was appropriate. Based on parallel analysis, a two-factor solution was supported. A Promax rotation revealed two factors that we identified as Facebook Usage-Active (6 items; e.g., post photos/create albums, post status updates) and Facebook Usage-Passive (6 items; e.g., log-on, browse profiles, like posts/photos/etc.). Cronbach's alphas were .87 (Active) and .92 (Passive).

Sociocultural internalization and social comparisons. We used the original five items from the internalization factor from the Sociocultural Attitudes Toward Appearance Scale (SATAQ-3; Thompson, Van den Berg, Roehrig, Guarda, & Heinberg, 2004) that measure the extent to which women incorporate societal values or attitudes about beauty and appearance into their own identity that are present within traditional media outlets (e.g., TV). We also added two new questions that addressed internalization based on experiences with social net-

working sites (i.e., “I would like my body to look like people who are on Social Networking Sites” and “I do not care if my body looks like the body of people who are on Social Networking Sites”). The women then responded to these seven items on a 5-point Likert scale that ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). Total score is the mean of the seven items; higher scores indicate greater internalization of appearance ideals. In a sample of undergraduate women, Thompson et al. (2004) reported a Cronbach's alpha of .93, and provided extensive information regarding the scale's validity. Cronbach's alpha from the current study was .89.

We used the five-item Physical Appearance Comparison Scale (PACS; Thompson, Heinberg, & Tantleff-Dunn, 1991) to assess the degree to which individuals compare their own appearance with others. On items such as “I compare my physical appearance to others,” the women responded on a 5-point scale that ranged from 1 (*definitely disagree*) to 5 (*definitely agree*). Total score is the mean of the five items; higher scores indicate a greater tendency to make comparisons. In a sample of adult women, Thompson et al. (1991) reported a Cronbach's alpha of .78 and significant correlations with measures of body dissatisfaction and self-esteem, supporting the scale's validity. Cronbach's alpha from the current study was .87.

Sociocultural information about fashion and appearance. We used eight of the original nine items from the Information subscale from the Sociocultural Attitudes Toward Appearance Scale (SATAQ-3; Thompson et al., 2004), dropping the one item referring to magazine advertisements. We also developed two new questions to assess the importance of social networking sites (i.e., “Social Networking Sites are an important source of information about fashion and being attractive,” and “Images/photos on Social Networking Sites are an important source of information about fashion and being attractive.”). Thus, all 10 items provided a measure of traditional (e.g., TV) and social media as sources of information about fashion and being attractive. For each item, the women responded on a 5-point Likert scale that ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). Total score is the mean of the 10 items; higher scores indicate perceptions of the media outlets as more important sources of information. Among female undergraduates, Thompson et al.

reported a Cronbach's alphas of .94, and provided extensive information regarding the scale's validity. Cronbach's alpha from the current study was .92.

Body satisfaction and body shame. We used the 7-item body factor from the Body Parts Satisfaction Scale for Females (BPSS-F; Petrie, Tripp, & Harvey, 2002) to assess women's satisfaction with their body based on ratings of different body parts (e.g., arms, butt, thighs). The women rated their level of satisfaction with each on a 6-point scale that ranged from 1 (*extremely dissatisfied*) to 6 (*extremely satisfied*). Total score was the mean of the seven items; higher scores indicate more satisfaction. Petrie et al. (2002) reported a Cronbach's alpha of .90 in a sample of female undergraduates, and provided extensive information concerning the scale's validity. Cronbach's alpha from the current study was .88. In addition, we used a single item of "satisfaction with overall size and shape of body" that was rated on the same 6-point scale.

We used a four-item body shame scale (Andrews, 1995; Tripp & Petrie, 2001) to assess women's feelings of shame associated with the size and shape of their bodies. On items such as "I feel ashamed of my body or some part of it," the women responded from 1 (*definitely disagree*) to 5 (*definitely agree*). Total score is the mean of the four items; higher scores indicate more shame. Tripp and Petrie (2001) reported a Cronbach's alpha of .90 among female undergraduates and provided evidence for the scale's validity. The Cronbach's alpha from the current study was .90.

Self-esteem. We used the 10-item Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965) to assess personal judgments of overall worth. On items such as "I am satisfied with myself," the women responded from 1 (*strongly disagree*) to 5 (*strongly agree*). Total score is the mean; higher scores indicate greater self-esteem. Cronbach's alphas have ranged from .72 to .88 (Gray-Little, Williams, & Hancock, 1997), and Huang and Dong (2013) have provided extensive evidence of the scale's validity and factor structure. Cronbach's alpha from the current study was .89.

Purchase intention and referral. Based on existing literature (Kang & Johnson, 2013; Kim, Gupta, & Koh, 2011; Vision Critical, 2014), we developed three items to represent

purchase intention/consideration (the likelihood of using a social networking site to make a purchase in the future; e.g., "Because of my involvement in, and use of, Social Networking Sites the likelihood of my purchasing products/services from Social networking Sites within the next 6 months is high") and two items to measure purchase referral (using social networking sites to gather referrals and explore new products/services/ideas that do not necessarily lead to purchase; e.g., "Because of my involvement in, and use of, Social Networking Sites I am more likely to purchase new things based on friends' suggestions/recommendations/referrals"). The women rated each item from 1 (*strongly disagree*) to 5 (*strongly agree*). Each item was used as an independent indicator of that construct (either Referral or Intention) in the structural equation model, though Cronbach's alphas for the two dimensions were .87 (Referral) and .97 (Intention).

Procedure and Data Analysis

Following IRB approval, data were collected via an online-based research platform and from undergraduate courses. Participants provided consent and then proceeded to the survey, which was done anonymously and took ~30 min to complete; the women received extra course credit for their participation.

First, we evaluated the data for missing values, which ranged from 0% to 3.4% across the items. Consistent with current recommendations (Schlomer, Bauman, & Card, 2010), expectation maximization was used to replace missing values. We then calculated the total score for each measure (where appropriate) and examined their distributional properties (Tabachnick & Fidell, 2007); because skewness and kurtosis were within acceptable limits we made no transformations. We computed means, standard deviations, bivariate correlations, and internal consistencies.

We tested the proposed model using structural equation modeling (SEM; Tabachnick & Fidell, 2007). We established the measurement model using confirmatory factor analysis, and then tested the structural model to determine the strength and significance of the proposed pathways between the factors. Because the sample demonstrated acceptable univariate and multivariate normality, we used the maximum like-

lihood (ML) procedure within EQS 6.2 to estimate the model parameters and fit indices. Fit was determined using the Satorra-Bentler chi-square (X^2) Goodness of fit, the comparative fit index (CFI), the standardized root-mean-square residual (SRMR), and the root mean-square error of approximation with a 90% confidence interval (RMSEA). CFI values $>.95$, and SRMR and RMSEA values $<.08$ indicate a very good fitting model (Hu & Bentler, 1999).

Because Self-Esteem and Sociocultural Information were represented by only one measured variable, and consistent with approaches used in previous structural equation modeling research (Little, Cunningham, Shahar, & Widaman, 2002; Wupperman & Neumann, 2006), we employed scale composites of item subsets (i.e., parcels) as indicators of the latent variables. Parceling of measures is appropriate when the items that comprise the parcels are unidimensional, which was the case in this study. For Purchase Referrals, Purchase Intention, and Facebook Usage (Active

and Passive), we used the individual items as indicators of each latent variable (LV).

Results

Correlations, means, and standard deviations for all variables included in the model are reported in Table 1.

Measurement Model

The fit of the model was very good (Satorra-Bentler chi-square = 747.74, $df = 203$; CFI = .960; SRMR = .044; RMSEA = .058 [90% CI = .054–.063]). All LVs were allowed to correlate, ranging from $-.020$ to $-.645$ and $.036$ to $.671$. All the measured variables loaded on the LVs as expected with two exceptions: (a) Facebook Active—three items (post videos, edit profile, and create events) were dropped due to low factor loadings and high residuals and one of the Facebook Passive items was added due to

Table 1
Standardized Parameter Estimates for the Measurement Model ($N = 796$)

Latent variable	Observed variable	Standardized factor loadings	Standard error
FB Usage: Passive	Log on	.875	.071
	Browse profiles	.777	.069
	Read posts, etc.	.935	.063
	Like posts, etc.	.784	.076
	Browse newsfeed	.836	.076
FB Usage: Active	Post status updates	.825	.082
	Post photos, create album	.725	.084
	Share photos, videos, etc.	.757	.086
	Comment on posts, etc.	.776	.083
Self-Esteem	Parcel 1	.896	.070
	Parcel 2	.916	.022
Body Satisfaction	BPSS body	.895	.027
	Overall body	.898	.034
	Body shame	-.731	.031
Sociocult. Information	Parcel 1	.866	.029
	Parcel 2	.946	.028
Sociocult. Internal.	PACS	.652	.034
	SATAQ-Internal.	.842	.029
SNS Referral	Item 1	.886	.037
	Item 2	.851	.038
SNS Purchase	Item 1	.934	.027
	Item 2	.962	.025
	Item 3	.960	.027

Note. FB Usage (Facebook behaviors); Self-Esteem (five-item parcels); Body Satisfaction (BPSS, Body and Overall Body are from the BPSS, four-item Body Shame Scale); Sociocultural Information (parcels from the SATAQ Information scale); Sociocultural Internalization (PACS—Physical Appearance Comparison Scale, SATAQ—Internalization scale); SNS Referral (Item 1—“purchase new things based on friends’ referrals”; Item 2—“Try new things based on friends’ referrals.”); SNS Purchase (Items 1, 2, & 3, respectively, measure the “probability,” “willingness,” or “likelihood,” of buying products/services from SNS within the next 6 months is high).

it loading more strongly on this factor (i.e., comment on posts/photos/etc.); (b) Facebook Passive—one item (comment on posts/photos/etc.) was removed as previously described. See Table 2 for the factor loadings of the measured variables on the latent constructs.

Structural Model

The fit of the full model was good (Satorra-Bentler chi-square = 808.88, $df = 205$; CFI = .956; SRMR = .050; RMSEA = .061 [90% CI = .056–.065]), though not all proposed pathways were significant. In terms of the significant pathways in the model (see Figure 2), the importance the information from media about fashion and being attractive (Sociocultural Information) and using Facebook passively, such as reading and liking posts, were related to the women internalizing societal appearance ideals (Internalization; $R^2 = .328$). As expected, the more the women internalized the images (Internalization), the less satisfied they were with their bodies (Body Satisfaction; $R^2 = .334$). Lower levels of internalizing media images (Internalization) and feeling more satisfied with the size and shape of their bodies (Body Satisfaction) were associated with the women feeling more positively about themselves (Self-Esteem; $R^2 = .396$). The women's likelihood of listening to friends' advice about purchases (Referral for Purchases; $R^2 = .14$) was based on the extent to which they had internalized societal appearance ideals (Internalization) and they viewed media as important sources of information about fashion and being attractive (Information). Finally, the women's active and passive use of Facebook, their reliance on media for fashion/appearance information (Information), their internalization of media images (Internalization), how they felt about themselves (Self-Esteem), and their acceptance of friends' advice about products (Purchase Referral) all were significant and combined to explain the women's intention to make purchases via social networking sites at some point in the next six months (Purchase Intention; $R^2 = .338$).

Discussion

Overall, the women's self-reported intention to purchase products through social networking sites in the future was explained by several

statistically significant psychological and behavioral factors, including being actively involved in using Facebook (e.g., posting status updates, posting photos), internalizing societally based images about attractiveness and appearance, viewing media outlets (including SNS) as important sources of information about fashion and being attractive, feeling positively about themselves, and being encouraged to try and/or purchase new things by friends. These variables explained 34% of the variance in the women's purchase intentions.

Inconsistent with objectification theory (Moradi, 2010) and past research (Haferkamp & Krämer, 2011; Manago et al., 2015; Meier & Gray, 2014), we found no support for a connection between Facebook usage and either the women's body satisfaction or their self-esteem. Other researchers, though, have suggested that Facebook usage actually may have beneficial effects with respect to psychological well-being (Andsager, 2014; Ellison, Steinfield, & Lampe, 2007; Turner, 2014). For many adolescent girls and young women Facebook may serve as a platform through which they can seek social gratifications, such as self-validation. Facebook provides them with a comfortably safe environment where they can create and maintain social connections with others from different backgrounds, which might be as beneficial alternative for social comparisons. Turner (2014) has suggested that Facebook allows for "pro-social downward comparisons" (p. 398) that encourage users to evaluate their own bodies through a more realistic lens. The diverse body types found on Facebook, for example, may serve as alternatives to those found on more self-abasing sites, such as proana and promia (probulimia sites). Further, Ellison et al. (2007) has proposed that social media platforms, such as Facebook, may be especially helpful in promoting psychological well-being (e.g., self-esteem and satisfaction with life) because of the social connections that exist to family and friends. Thus, the potential effects of social media platforms, like Facebook, may be complex, ranging from the deleterious ones predicting by objectification theory, to more and stronger social connections that can serve as a source of support to users. Additional research is needed in this area to delineate what types of media, under what circumstances, with which types of users act as

Table 2
Means, Standard Deviations, and Correlations of Measured Variables ($N = 796$)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1. FB Log on	—																						
2. FB Browse profiles	.65	—																					
3. FB Read posts	.82	.74	—																				
4. FB Like posts	.69	.58	.73	—																			
5. FB Browse newsfeed	.76	.66	.78	.64	—																		
6. FB Status updates	.43	.40	.46	.50	.37	—																	
7. FB Post photos	.40	.43	.40	.45	.35	.64	—																
8. FB Share photos	.35	.37	.42	.50	.34	.64	.57	—															
9. FB Comment on posts	.56	.56	.60	.71	.48	.63	.50	.58	—														
10. SE—Parcel 1	-.01	-.04	-.04	-.02	.00	-.05	.03	-.02	-.04	—													
11. SE—Parcel 2	-.01	-.04	-.04	.01	.01	-.04	.03	.02	-.01	.88	—												
12. BPSS Body	-.04	-.06	-.10	-.06	-.03	-.04	.03	-.01	-.05	.52	.44	—											
13. Overall Body	-.04	-.07	-.09	-.08	-.03	-.06	-.01	-.02	-.07	.52	.41	.82	—										
14. Body Shame	.08	.11	.13	.10	.08	.10	.04	.10	.11	-.56	-.53	-.63	-.64	—									
15. SATAQ Info Parc 1	.02	.12	.04	.03	.05	.00	.06	.03	.05	-.15	-.14	-.14	-.12	.20	—								
16. SATAQ Info Parc 2	.03	.15	.05	.04	.05	.03	.09	.07	.09	-.14	-.15	-.11	-.10	.18	.82	—							
17. SATAQ Internal	.82	.17	.11	.06	.08	.01	.04	.08	.11	-.42	-.39	-.47	-.45	.50	.49	.49	—						
18. PACS	.07	.15	.10	.04	.09	.00	.02	.04	.05	-.37	-.34	-.35	-.38	.46	.32	.35	.55	—					
19. Referral Item 1	.08	.15	.13	.15	.09	.07	.11	.13	.18	-.05	-.02	-.01	-.02	.07	.24	.28	.21	.19	—				
20. Referral Item 2	.07	.16	.14	.14	.09	.07	.13	.11	.16	.00	.01	-.01	-.02	.05	.24	.26	.19	.15	.75	—			
21. Purchase Item 1	.04	.12	.06	.12	.06	.14	.19	.19	.15	.02	.07	.01	.03	.00	.30	.37	.21	.16	.42	.42	—		
22. Purchase Item 2	.03	.12	.05	.11	.05	.14	.21	.17	.14	.02	.05	.03	.05	.00	.28	.35	.20	.14	.42	.40	.90	—	
23. Purchase Item 3	.06	.13	.07	.13	.07	.16	.22	.20	.16	.03	.06	.04	.05	.00	.28	.37	.21	.16	.41	.40	.90	.92	—
Mean	7.34	5.67	6.80	6.15	6.76	2.91	2.82	3.18	4.46	3.75	3.72	3.58	3.72	3.10	3.10	3.06	2.93	3.68	3.46	3.51	2.60	2.54	2.46
SD	2.57	2.75	2.68	2.81	3.02	1.95	1.67	2.28	2.72	.78	.78	1.04	1.38	1.11	1.03	1.03	.92	.94	1.24	1.11	1.32	1.33	1.30

Note. SE (Rosenberg Self-Esteem Scale, each parcel is composed of five items—scores can range from 1, *low*, to 5, *high*); BPSS (Body Parts Satisfaction Scale—Body Factor and Overall, scores range from 1, *low*, to 6, *high*); Body Shame (scores range from 1, *low*, to 5, *high*); SATAQ (Socio-cultural Attitudes Toward Appearance Scale—Information subscale [which were divided into two parcels] and Internalization subscale, scores for all subscales can range from 1, *low*, to 6, *high*); PACS (Physical Appearance Comparison Scale—scores can range from 1, *low*, to 5, *high*); Referral (Social Network Sites Referral actions composed of item 1 [I am more likely to purchase new things based on friends' suggestions/recommendations/referrals] and item 2 [Try new things based on friends' suggestions/recommendations/referrals])—scores can range from 1, *strongly disagree*, to 5, *strongly agree*); Purchase (Social Network Sites Purchase intentions is composed of item 1 [The probability that I would consider buying products/services from Social networking sites within the next 6 months is high], item 2 [My willingness to buy products/services from Social Networking Sites within the next 6 months is high], and item 3 [The likelihood of my purchasing products/services from Social networking Sites within the next 6 months is high])—scores can range from 1, *strongly disagree*, to 5, *strongly agree*). Correlations > .13 are significant at $p < .0001$.

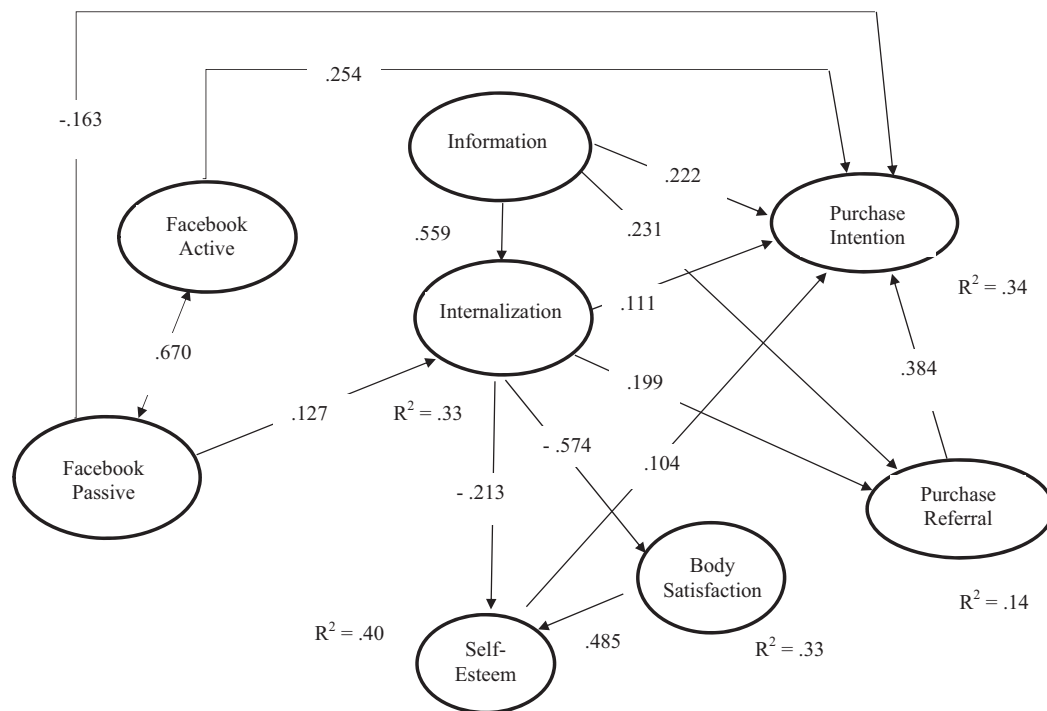


Figure 2. Structural model with standardized parameter estimates and R^2 values ($N = 796$). All paths are significant at $p < .05$.

a risk factor or provide social and psychological benefits.

In our study, only the women's passive involvement in Facebook was related to any of the psychosocial variables. Specifically, Passive Facebook usage, which was defined as engaging in low involvement practices (e.g., browsing posts and photos), along with endorsing media outlets as important sources of information about fashion, predicted the extent to which the women internalized culturally based standards about appearance, weight, attractiveness, and body. When women spend time on Facebook observing other peoples' profiles, which is what occurs when they are using Facebook passively, they are outwardly focused and likely engaging in a comparison process where they define themselves through the lives of others rather than through their own lived experiences. Such a passive approach is similar to what women experience when they observe the images of models (and other beauty icons) in magazines and on TV, a process that has been related to higher levels of internalization (Cattarin et al.,

2000; Dittmar & Howard, 2004; Grabe et al., 2008; Thompson & Stice, 2001); only with Facebook, comparison groups are their friends. According to Paasch, Eckler, and Kalyango (2013), social comparison to peers and friends in social media is more dangerous than self-comparison to celebrities in traditional media because the comparisons are more relevant and ubiquitous (i.e., social comparison targets are people who are known). Images posted to Facebook are likely to be carefully chosen, often edited and posed to create an aura of perfection. This idealized self-display provides a new source of media images to which girls and women can compare themselves and, subsequently, internalize external beauty ideals.

As expected, internalization was related to lower levels of body satisfaction and, in conjunction with body dissatisfaction, lower self-esteem. Numerous studies have shown that women's exposure to, and discrepancy from, societally constructed beauty ideals increases their chances of being dissatisfied with their body size and shape, and experiencing negative

mood states, lowered self-esteem, and eating disorders (Hawkins et al., 2004; Moor, 2009). Self-objectification processes include constant body monitoring through which women identify flaws and note discrepancies from internalized societal ideals in terms of appearance and body size and shape. When such discrepancies are large, dissatisfaction follows because women believe their bodies have let them down. That women who are body dissatisfied also have lower levels of self-esteem is consistent with a hierarchical view of self-concept (Harter, 1990). From this perspective, general, overall feelings of well-being are defined through specific aspects of self, including physical appearance. When women feel positively about specific aspects of their lives (e.g., body, physical appearance, relationships, etc.) they generally hold themselves in higher regard.

Women who had internalized societal appearance ideals and who viewed social media sites as important sources of information about fashion and appearance indicated that they were intending to make purchases via social networking sites in the near future (i.e., next six months). These women may be more likely to seek information on, and consume, products that they believe will help them to achieve their personal, or cultural, ideals (e.g., the images they see in the general media and among their Facebook connections). Because of their internalization of culturally based standards of attractiveness and their belief that media (social and traditional) provide useful information about appearance, these women are vulnerable to product claims and messages, such as those in advertisements for weight loss products, diet supplements, cosmetic procedures, and shaping and masking garments (e.g., Spanx). People consume products that are consistent with the image they want to portray to others or in order to obtain the image they desire (Banister & Hogg, 2004; Frith & Gleeson, 2004; Rosa et al., 2006; Sirgy, 1985; Watson, Wells, & Hudson, 2011).

Our findings indicate that active Facebook usage was related to the women's purchase intentions, which makes sense given our samples' demographics. The majority of our respondents were Millennials (97.9%), who are highly active, influential, cross-device, channel-agnostic sharers with more than 9 in 10 in the United States using Facebook (Abrahamson, 2014;

“Why Do Millennials,” 2015). Furthermore, a study conducted by Crowdtap indicated that user-generated content-based media, such as Facebook, occupies about 5.4 hours of the average Millennial's day (Mendez-Villamil, 2014), and Millennials will not make any purchase decisions—big or small—without first using user-generated content (“Talking to Strangers,” 2012). Because Millennials engage with brands more deeply through social networks (Barton, Koslow, & Beauchamp, 2013) it is consistent to find that women's active Facebook usage would be related to stronger purchase intentions. However, many things can be related to purchase intentions, and although we had a moderate effect size, there was unexplained variance. Thus, in future studies researchers will want to examine other variable that might influence purchase intentions, such as “top-of-mind awareness” (TOMA). TOMA refers to when brands or specific products comes to mind of a consumer as a result of exposure to advertisements (brand awareness) via magazines, TV, and social media (Laurent, Kapferer, & Roussel, 1995). In order to stay top-of-mind many companies are utilizing Facebook to create brand communities, client lists, newsfeeds, private messaging in order to establish and cultivate relationships with their clients (Donelson, 2010; Levy, 2010; “Staying Top of Mind”, n.d.).

Consistent with past research (Harris & Dennis, 2011), our findings indicate that recommendations from friends about what to try and buy were the most important factor in determining their own purchase intentions. All our participants were women, and in comparison to men, women have more Facebook friends and are more likely to share posts related to recent purchases or experiences with businesses, including restaurants, beauty salons and retailers, which in turn could impact their purchase intention (Mellema, 2014). Further, on average, the purchase decisions of 7 out of 10 Millennials who use social media are somewhat influenced by friends' posts and positive shared recommendations about products (Abrahamson, 2014; “Millennials' Social Media,” 2014).

There were certain limitations in our study that warrant discussion. First, all data were collected via self-report, which may be influenced by presentational biases. We did, though, collect the data anonymously, which would reduce

the need to present oneself in a certain light. Second, our data were cross-sectional, thus limiting our ability to establish temporal relations among the variables. As a next step, researchers could use longitudinal designs to examine changes over time among the variables where relations have now been established. Third, Facebook was the only social media site considered in this study, thus we do not know the potential influence of other sites on women's psychological well-being and purchase intentions. In future studies, researchers might want to focus on the potential effects of more "photo-centric" sites, such as Instagram or Pinterest, to determine if the primary modality in which information is portrayed makes a difference. Fourth, our sample included primarily female millennials from the south central region of the United States, which although key users of social media and a target group for marketers (Abrahamson, 2014; "Millennials' Social Media," 2014), does limit the generalizability of our findings to similar groups. Finally, we examined only purchase intentions and not actual purchases made by the women. In future studies, researchers might track how friends' recommendations and individuals' intentions actually translate into either online or traditional purchases of products. Further, researchers might attempt to differentiate between types of purchases to determine if women are more, or less, likely to shop for (and buy) certain types of products online based on how they feel about themselves and how often they engage with social media. A future study could examine how women's self-esteem and body dissatisfaction might vary based on the motivations for their Facebook usage.

In terms of implications, marketers might focus on users' specific social media activities (passive or active), rather than overall Facebook usage because each appears to affect self-concept and consumer activities differently. Firms should identify and segment their market in terms of individual consumer characteristics and needs, which could help with product positioning to people whose self-concepts may be particularly ambiguous or erratic. Past studies have suggested that advertisements may motivate self-improvement through upward social comparison between consumers and the models in the advertisements (Martin & Kennedy, 1994). For example, ads for beauty products and

apparel highlight the difference between the consumer's appearance and the model in the ads, implying that this discrepancy will disappear if they buy the product. Furthermore, research has shown that purchase intent is stronger in individuals whose self-images is congruent with perceived brand image, which demonstrates that consumer profiles based on self-concept could be used for positive decision making and assessing advertising effectiveness (i.e., persuasiveness; Hong & Zinkhan, 1995; Mehta, 1999).

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