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#SocialMedia: Exploring the Associations of Social Networking Sites and Body Image, Self-Esteem, Disordered Eating and/or Eating Disorders and the Impact of a Media Literacy Intervention

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**#SOCIALMEDIA: EXPLORING THE ASSOCIATIONS OF SOCIAL
NETWORKING SITES AND BODY IMAGE, SELF-ESTEEM, DISORDERED
EATING AND/OR EATING DISORDERS AND THE IMPACT OF A MEDIA
LITERACY INTERVENTION**

By

Sara Santarossa

A Thesis
Submitted to the Faculty of Graduate Studies
through the Department of Kinesiology
in Partial Fulfillment of the Requirements for
the Degree of Master of Human Kinetics
at the University of Windsor

Windsor, Ontario, Canada

2015

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#SOCIALMEDIA: EXPLORING THE ASSOCIATIONS OF SOCIAL NETWORKING SITES AND BODY IMAGE, SELF-ESTEEM, DISORDERED EATING AND/OR EATING DISORDERS AND THE IMPACT OF A MEDIA LITERACY INTERVENTION

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August 12, 2015

DECLARATION OF ORIGINALITY

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ABSTRACT

The aim of the present study was to investigate associations between SNSs and body image (BI), self-esteem (SE), and eating behaviours (EBs)/eating disorders (EDs) (Study A) and to evaluate the impact of a media literacy intervention (Study B). A sample of young adults ($N = 160$) completed Study A and then were randomly assigned to a control or intervention group (Study B). A follow-up survey was completed ($n = 78$) one month after the intervention. Study A revealed that females and males spent 4.1 ± 5.3 and 2.9 ± 2.8 hours on SNS, respectively; with the majority of time spent *lurking* (i.e., looking at another users' profile but not actually communicating with them). Furthermore, SNSs may impact internalization of beauty standards, SE, and EBs/EDs. The media literacy intervention was successful in decreasing ED symptoms/concerns. Therefore, educational tools, should be created to teach of the possible negative implications SNS usage can have.

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LIST OF ABBREVIATIONS/SYMBOLS

BANA	Bulimia Anorexia Nervosa Association
BESAA	Body Esteem Scale for Adolescents and Adults
BI	Body Image
BISS	Body Image States Scale
BMI	Body Mass Index
CI	Confidence Intervals
EAT-26	Eating Attitudes Test
EB/EBs	Eating Behaviour/Eating Behaviours
ED/EDs	Eating Disorder/Eating Disorders
FNAES	Fear of Negative Appearance Evaluation Scale
GPIUS	Generalized Problematic Internet Use Scale
PIU	Problematic Internet Use
RSES	Rosenberg Self-Esteem Scale
SE	Self-Esteem
SATAQ	Sociocultural Attitudes Towards Appearance Questionnaire
SNS/SNSs	Social Networking Site/ Social Networking Sites
SNSa	Social Networking Site Activity
SNSp	Social Networking Site Photographs
SSES	State Self-Esteem Scale

CHAPTER 1
RESEARCH ARTICLE
INTRODUCTION

Body dissatisfaction (Eisenberg, Neumark-Sztainer, Story, & Perry, 2005) and disordered eating (Neumark-Sztainer, Wall, Larson, Eisenberg, & Loth, 2011) are common problems among young adults. Low self-esteem (SE) has been found to be reciprocally predictive of body dissatisfaction (Etcoff, Orbach, Scott, & D'Agostino, 2004; Paxton, Neumark-Sztainer, Hannan, & Eisenberg, 2006a; Tiggemann, 2005; van den Berg et al., 2007; Webster & Tiggemann, 2003) and an important predictor of the development of eating pathology (Button, Sonuga-Barke, Davies, & Thompson, 1996; French, Story, Neumark-Sztainer, Fulkerson, & Hannan, 2001). The literature suggests that exposure to media cultivating beauty ideals impacts body image (BI), eating behaviours (EBs), and SE in males (Harrison & Cantor, 1997; Lavine, Sweeney, & Wagner, 1999; Muris, Meesters, van de Blom, & Mayer, 2005) and females (Harrison, 1997, 2000; Irving, 1990; Stice, Schupak-Neuberg, Shaw, & Stein, 1994). Although, few studies on media exposure in men have been performed, the literature suggests that for females, mass media is the most powerful conveyor of sociocultural ideas of beauty (Dohnt & Tiggemann, 2006; Smolak & Levine, 1996; Tiggemann, 2003). However, the majority of research on mass media and its impact on BI, EBs, and SE have focused on ideal images presented in print and television media. Yet media use is rapidly evolving, and the Internet, including social networking sites (SNSs) in particular, are quickly becoming the primary media sources used by young adults (Bair, Kelly, Serdar, & Mazzeo, 2012; Tiggemann & Slater, 2013).

The number of Canadian households with access to the Internet has increased from 79% in 2010 to 83% in 2012 (Statistics Canada, 2013). Moreover, social networking site (SNS) usage in young adults is very high (i.e., 85% - 100%; Ellison, Steinfield, & Lampe, 2007; Ross, Orr, Sisic, Arseneault, Simmering, & Orr, 2009; Sponcil & Gitimu, 2012; Spraggins, 2009). SNSs differ from traditional forms of media by their immediacy, interactive, active participation, and circle of connectedness (Pempek, Yermolayeva, & Calvert, 2009). Many SNSs exist, easily accessed on computers, tablets, or mobile phones, with the most popular in today's young adults being Facebook, Twitter, Instagram, and Pinterest (Duggan & Smith, 2014). Given the rapid growth of the Internet and SNSs, and the potential associations between media consumption and BI, EBs, and SE, further research into these online media sources is needed, in both females and males. Recently, positive correlations have been observed with SNSs usage and BI concern (Fardouly & Vartanian, 2015; Meier & Gray 2013; Tiggemann & Slater, 2013), dieting (Tiggemann & Slater, 2014), disordered eating level (Hummel & Smith, 2014; Mabe, Forney, & Keel, 2014), and low SE (Mehdizadeh, 2010). However, these studies have only looked at limited (i.e., Facebook), and somewhat outdated (i.e., MySpace, Friendster) types of SNSs, and males were not used in the samples, making generalizability of results difficult for today's ever changing online world.

According to the Sociocultural Model, the media, peers, and family are important vehicles through which messages about weight and appearance are transmitted to members of society. For females, the Sociocultural Model suggests that BI disturbances are the result of pervasive societal pressure to be thin (Halliwell & Harvey, 2006; Stice, 1994; Vandereycken, 1993) and lose weight (McCabe & Ricciardelli, 2005), whereas, for males, the ideal body should be tall, muscular, and mesomorphic (McCabe & Ricciardelli,

2005; McCreary & Sasse, 2000; McKinley, 1998). According to the constructs of the Sociocultural Model (i.e., media, peers, and family), SNSs are particularly powerful transmitters of messages about weight and appearance. This is because SNSs merge media, peers, and family influence to convey societal standards and virtually support the beauty ideals and, in turn, encourage body dissatisfaction.

Young adults are mainly using SNSs to facilitate pre-existing relationships, meaning they are interacting with people they know and trust (Ellison et al., 2007; Pempek et al., 2009; Spraggins, 2009; Stefanone, Lackaff, & Rosen, 2011). On certain SNSs users are able to like a post/picture or leave a comment. This like represents acceptance and further can be seen as an indicator of popularity and, thereby, assists in the transmission of ideals about beauty and body shapes (Jong & Drummond, 2013). With the use of comments and likes users gain an understanding of the type of pictures that are expected and respected by the social networking community, in turn, reproducing and maintaining the culturally endorsed norms with their own pictures and posts (Jong & Drummond, 2013).

For females, the speed and ease at which they can make social comparisons with their friends and celebrities while using SNSs may be a contributing factor to body dissatisfaction and internalization of the thin ideal (Jong & Drummond, 2013; Tiggemann & Slater, 2014). For example, a recent Australian study by Fardouly and Vartanian (2015) reported that the relationship between Facebook usage and BI concerns is specifically mediated by appearance comparisons in general (i.e., their tendency to compare their own appearance to others on Facebook). The online environment is filled with pictures of peers and opportunities for social comparisons. SNSs, such as Instagram, have applications that allow the user to filter or enhance/edit their pictures before posting.

Negative comparisons can (theoretically) be particularly likely when young women compare their online pictures with peers, not knowing their peers have digitally altered the photographs (Perloff, 2014). On the other hand, research has found that celebrities and their lifestyles play a dominant and inspirational role for the majority of young females, where many know every minute detail about the celebrities; including their diet and exercise habits (Mooney, Farley & Strugnell, 2009). SNSs are an outlet where users can specifically follow their favourite celebrities, reading personal and detailed posts about not only their lives but their diets, exercise habits, and/or beauty beliefs. SNSs appear to be a place where comparisons to peers and celebrities are made with ease, and research needs to further address SNSs ability to act as channels for body comparison and pressure of societal beauty standards.

Users' SE has been suggested to be directly related to the tone of responses received about information posted on their personal page/profile (i.e., positive feedback lead to positive SE and negative feedback lead to negative SE; Valkenburg, Peter, & Schouten, 2006). However, these studies (Jong & Drummond, 2013; Valkenburg et al., 2006) were not done in North America, which questions the generalizability to the Canadian culture. Recently, in a study mostly consisting of females (78%), comments received on Facebook were found to be associated with disordered eating attitudes and with weight and shape concerns (Hummel & Smith, 2014). Replication of these findings (i.e., associations between SNSs use and eating pathology) is necessary before establishing any strong conclusions. Furthermore, future research needs to explore the other relevant/current forms of SNSs (i.e., Twitter, Instagram, and Pinterest) as well as include a more gender-balanced sample to gather more meaningful and reliable results. Lastly, there needs to be combative tools developed and evaluated that educate those

using SNSs on how to be critical of the messaging they see online or while following their favourite celebrities.

A media literacy intervention is a type of combative (Levine & Murnen, 2009) and preventative health campaign, as it is thought, if one becomes media literate the credibility and pervasive influence of the media message may be reduced (Irving & Berel, 2001). Research on the efficiency of media literacy interventions as a combative approach to the ideals of the unrealistic society standards of beauty and eating disorder (ED) prevention is limited. Of the few studies that have assessed these effects, the majority focuses on women (Coughlin & Kalodner, 2006; Irving & Berel, 2001; Yamamiya, Cash, Melnyk, Posavac, & Posavac, 2005). Importantly, recent recommendations from the Standing Committee on the Status of Women (Government of Canada, 2014) urge the Government of Canada to consider supporting research on the impact of media messaging and marketing of society's narrow definition of beauty as well as encourage the promotion of media literacy to help individuals view media content critically. Furthermore, the Standing Committee on the Status of Women (Government of Canada, 2014) recommends that the Government of Canada collaborate with the provinces and territories to consider developing a health and well-being education and awareness campaign, including both in-school and social media content, to foster a positive sense of self to protect against eating disorders (EDs), and to include media literacy components to counteract images portrayed in mainstream media.

The Bulimia Anorexia Nervosa Association (BANA) is an organization based out of Windsor, Ontario, Canada, that offers media literacy interventions to elementary, secondary, and post-secondary students (all age appropriate). BANA's 60 min presentation hopes to encourage participants to re-evaluate the media. Through the use of

popular advertisements and images of models, BANA shows participants how the media tirelessly portrays societal beauty standards. After showing an image, the group discusses how these photos were edited and altered, suggesting that what the media conveys is a façade and a pressure to obtain an unattainable standard of beauty.

Therefore, the aim of the present study was to investigate the associations that exist between SNSs and BI, SE, and EBs/EDs (Study A). Furthermore, the impact of BANA's Media Literacy Intervention on BI, SE, and EBs/EDs was examined (Study B).

Specific objectives included for Study A:

(1) To determine the associations of SNSs (i.e., problematic SNS use, total time/day, and total friends) with BI, SE, and EBs/EDs. As well as, to determine the different associations specific SNS time (i.e., Facebook, Twitter, Instagram, and Pinterest) can have with BI, SE, EBs/EDs

(2) To determine the associations of specific SNS activities (i.e., looking at or posting pictures or comments on their personal, or others' profile, and filtering/editing photos) with BI, SE, and EBs/EDs.

Specific objective included for Study B:

(1) To determine if a media literacy intervention can influence changes in BI, SE, and EBs/EDs, from time 1 (Study A) to time 2 (Study B).

METHODS

Participants and Recruitment

As defined by Duggan & Smith (2013) of the PewResearch Internet Project, young adulthood includes individuals 18-29 years of age. Therefore, for the purpose of this document, participants aged 18 to 29 will be defined as young adults.

Young adults were recruited from a first year mandatory undergraduate course ($N = 212$) offered Winter Semester 2015 at the University of Windsor. Within this sample, the survey program randomly assigned participants to the control group or the intervention group (equally controlling for gender). Participation in this study was on a completely voluntary basis. All participants were entered into a draw to win one of four prize packages, upon completion of the pre-test (Study A) (i.e., FluidSurveys directed participants to a separate page where they chose to leave their name and email address for a chance to win). The prize packages contained a University of Windsor *I participated in Kinesiology Research* T-shirt and a Sandi Richard Cookbook. Finally, upon completion of the post-test (Study B), participants were again directed to a separate page where they chose to leave their name and email, this time to be entered in a chance to win a FitBit.

Materials

Overall survey design. An online survey development program, FluidSurveys, was used for this study. The survey included questions regarding the awareness and acceptance of cultural ideals of attractiveness, level of SE, symptoms and concern characteristics of disordered eating/EDs as well as SNS usage and dependent/problematic relationships with their use of SNSs. The use of gender specific survey tools were used where applicable, therefore, a male and female version of the online survey was available for this study. All participants provided informed consent at the onset of the survey.

Measures: Dependent Variables

Body Image

Body Image States Scale (BISS). The BISS is a 6-item self-report measure that assesses the evaluative/affective experience of one's physical appearance (Cash, Fleming, Alindogan, Steadman, & Whitehead, 2002). Responses to each item are on 9-point Likert

scale that it is bipolar (i.e., both positive and negative experiences), statements range from 1 (extremely dissatisfied) to 9 (extremely satisfied), with reverse scoring for appropriate items. Higher scores indicate greater body satisfaction. The instructions state: “For each of the items below, check the box beside the one statement that best describes how you feel RIGHT NOW, AT THIS VERY MOMENT. Read the items carefully to be sure the statement you choose accurately and honestly describes how you feel right now”. BISS’s internal consistency has been shown to be $\alpha = .77$ for women and $\alpha = .72$ for men (Cash, et al., 2002). Internal consistency was found to be unacceptable (i.e., $< .65$; Tavakol & Dennick, 2011), with Cronbach’s alpha .45 and .54 among females and males, respectively, in the current study’s sample.

Body Esteem Scale for Adolescents and Adults (BESAA); Attribution

Subscale. The BESAA is a 23-item measure designed to assess level of body satisfaction on 3 subscales. Responses to each item are on 5-point Likert scale, statements range from 0 (never) to 4 (always), with reverse scoring for appropriate items. The total score places the participant on a continuum of body esteem scores (ranging from 0 to 92), with higher scores indicating higher body esteem. The 3 subscales may be used together or individually, and have been shown to be valid and reliable in participants 12 years and older with test-retest correlations for each subscale between .83 and .92, $p < 0.001$ (Mendelson, Mendelson, & White, 2001). The question numbers for each subscale are as follows: BE-Appearance (1, 6, 7*, 9*, 11*, 13*, 15, 17*, 21*, 23); BE-Weight (3, 4*, 8, 10, 16, 18*, 19*, 22); and BE-Attribution (2, 5, 12, 14, 20). The asterisk (*) denotes negative items, which must be recoded for scoring by reversing the scale (i.e., 0 = 4, 1 = 3, 2 = 2, 3 = 1, 4 = 0).

The attribution aspect of body esteem may be critical in BI research (Mendelson, et al., 2001). In this study, only the attribution scale was used, which consists of 5 items. The attribution scale specifically measures positive evaluations attributed to others about one's body and appearance (Mendelson et al., 2001). A sample question is "Other people consider me good looking". Internal consistency was found to be acceptable (i.e., $>.65$), with Cronbach's alpha .87 among females and .91 among males in the current study's sample.

Sociocultural Attitudes Towards Appearance Questionnaire (SATAQ-3; female version, SATAQ-M; male version). The SATAQ-3 is a 30-item measure designed to assess the internalization of beauty ideals (i.e., thin and/or toned) in females. Items are scored on a 5-point Likert scale ranging from 1 (definitely disagree) to 5 (definitely agree). Items are then summed to obtain a total score out of 150. High scores indicate a higher internalization of beauty ideals. A sample question is "I compare my body to the bodies of people who appear in magazines". The SATAQ-3 contains 4 subscales with previous research reporting high Cronbach's alphas on these subscales: Information ($\alpha = .96$), Pressures ($\alpha = .92$), Internalization-Athlete ($\alpha = .95$), Internalization-General ($\alpha = .96$), with overall reliability also high ($\alpha = .96$; Thompson, van den Berg, Roehrig, Guarda & Heinberg, 2004). Furthermore, the SATAQ-3 subscales had excellent convergent validity with measures of BI and eating disturbance (Thompson et al., 2003). Internal consistency was found to be acceptable (i.e., $>.65$), with Cronbach's alpha .94 among the current study's female participants.

The SATAQ-M is a 29-item measure, modified version of the SATAQ-3, to assess the internalization of beauty ideals (i.e., athletic and/or muscular) in males. Like the SATAQ-3, items are scored on a 5-point Likert scale ranging from 1 (definitely

disagree) to 5 (definitely agree). However, wording of some items has been modified and item #15 has been removed to suit males (Karazsia & Crowther, 2008). For example Item #6 was changed from “I’ve felt pressure from TV or magazines to look pretty” to “I’ve felt pressure from TV or magazines to look muscular”. The SATAQ-M contains 4 subscales with relatively high Cronbach’s alphas on these subscales: Information ($\alpha = .95$), Pressures ($\alpha = .92$), Internalization-Athlete ($\alpha = .94$), and Internalization-General ($\alpha = .85$) (Karazsia & Crowther, 2008). Lastly, the SATAQ-M subscales had convergent validity with measures of BI and body size disturbance (Karazsia & Crowther, 2007). Internal consistency was found to be acceptable (i.e., $>.65$), with Cronbach’s alpha .95 among the current study’s male participants.

Fear of Negative Appearance Evaluation Scale (FNAES). The FNAES is a 6-item measure designed to assess fears about being negatively evaluated on the basis of one’s physical appearance (Lundgren, Anderson, & Thompson, 2004). Items are scored on a 5-point Likert scale ranging from 1 (not at all) to 5 (extremely). Items are then summed to obtain a total score out of 30, with a high score indicating a greater fear of being negatively evaluated based on physical appearance. A sample item is “I am afraid other people will notice my physical flaws”. This scale has demonstrated good internal consistency, with a sample of female undergraduates ($\alpha = .94$; Lundgren et al., 2004). Furthermore FNAES has good convergence with measures of BI, eating disturbance, anxiety, and mood (Lundgren et al., 2004; Maïano, Morin, Monthuy-Blanc, Garbarino, 2010). Internal consistency was found to be acceptable, with Cronbach’s alpha .94 among females and .91 among males in the current study’s sample.

Self-Esteem

State Self-Esteem Scale (SSES). The SSES is a 20-item measure designed to measure short-lived (i.e., state) changes in SE. Items are scored on a 5-point Likert scale ranging from 1 (not at all) to 5 (extremely), with reverse scoring for appropriate items; higher scores indicating higher state SE. The SSES contains the subscales: Social, Performance, and Appearance. An example item from the Appearance subscale is “I feel satisfied with the way my body looks right now”. Past research has shown the SSES to have a high degree of internal consistency ($\alpha = .92$; Heatherton & Polivy, 1991). Internal consistency was found to be acceptable (i.e., $>.65$), with Cronbach’s alpha .94 among females and .91 among males in the current study’s sample.

Eating Behaviours

Project Eat III – Eating Behaviour Questions. Questions #13, 16, 18, 20, 21 and 22 were taken from Project Eat-III survey (participants aged 20-31 years), to assess various aspects of eating behaviour (EB) (Larson, Neumark-Sztainer, Story, van den Berg & Hannan, 2011; Neumark-Sztainer et al., 2011; Neumark-Sztainer, Wall, Story, & Standish, 2012). Specifically, questions ask about both frequency and type of dieting/weight control behaviours. For example, “How often have you gone on a diet during the last year?” with response options ranging from “Never” to “I am always dieting”. Furthermore, questions involving the frequency of specific types of weight control behaviours (i.e., exercise, ate more fruits and vegetables, ate less high-fat foods, ate less sweets, drank less soda pop (not including diet pop), and watched portion sizes), and muscle gaining behaviour (i.e., changed eating, exercised more, used protein powder or shakes, used steroids, used another muscle-building substance) were also asked.

Response options for such behaviour questions range from “Never” to “On a regular basis”.

The Eating Attitudes Test (EAT-26). The EAT-26 is a 26-item measure and is one of the most widely used standardized self-report measures of symptoms and concerns characteristics of EDs (Garner, Olmsted, Bohr & Garfinkel, 1982). Items are scored on a 6-point Likert scale ranging from 0 (never, rarely, sometimes; #1-25), to 3 (always; #1-25), with reverse coding in question #26. Items are then summed to obtain a total score (out of 78), with any score of 20, or higher, considered at risk. The EAT-26 has shown a high degree of internal consistency $\alpha = .90$ on college females (Garner et al., 1982). The EAT-26 also asks several questions to assess the behavioural symptoms representative of an ED, an example statement is “In the past 6 months have you: Exercised more than 60 minutes a day to lose or to control your weight”. Internal consistency was found to be acceptable (i.e., $>.65$), with Cronbach’s alpha $.88$ among females and $.93$ among males in the current study’s sample.

Measures: Independent Variables

Problematic SNS use. The Generalized Problematic Internet Use Scale (GPIUS; Caplan, 2002) was modified to examine levels of problematic SNS use among study participants. This measure is a 29-item self-report questionnaire based on Davis’s (2001) cognitive-behavioural model of Problematic Internet Use (PIU). Items are scored on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). There are seven subscales: Mood Alteration, Perceived Social Benefit, Perceived Social Control, Compulsivity, Excessive SNS Use, and Negative Outcomes. Items are then scored and can range from 29-145, however, there is no definite cut off points exist and a higher score simply represents the degree of problematic SNS use. A recently modified version

of this questionnaire was used by Spraggins' (2009), whereby the word "Internet" or "online" was replaced with the words "social networking sites" to determine the degree to which respondents have a problematic or dependent relationship with SNSs, and was used for the purpose of this study. Spraggins' (2009) reliability analysis of the modified GPIUS revealed an internal consistency of .92. Internal consistency was found to be acceptable (i.e., $>.65$), with Cronbach's alpha .93 among females and .95 among males in the current study's sample.

Social networking site daily usage. Participants were asked to physically type the number of hours and minutes they spend daily, on each of the listed SNSs (i.e., Facebook, Twitter, Instagram, and Pinterest) they use. This question was modified from Tiggemann and Slater (2013), where participants were asked to report on average how long they spent on the Internet each day. These SNSs daily use data were then manipulated to be expressed in total hours for each SNS (i.e., Facebook, Twitter, Instagram, and Pinterest) as well as SNS total time (i.e., total hours spent on each individual SNS was summed).

Number of followers and number following. Participants were asked to physically type the number of users that follow them and that they follow for each of the listed (i.e., Facebook, Twitter, Instagram, and Pinterest) SNSs they use. This question was modified from Tiggemann and Slater (2013), where participants were asked how many friends they had on both MySpace and Facebook. Due to the nature of Facebook (i.e., all user friendships are mutual), only the number of users that they follow was used for analysis. These data were then summed to create the variable SNS total friends.

Social networking site activity (SNSa). To determine specific SNS activity, participants were provided with the statement "I usually spend a lot of time...". A sample

response item is “Posting pictures on your profile”. This question was modified from Meier and Gray (2013), where participants were asked to indicate their use of each Facebook feature on a 5-point scale. Additionally, the responses selected for this question were based on common SNS activities that were applicable to Facebook, Twitter, Instagram and Pinterest (i.e., *lurking*; Pempek et al., 2009). Responses were recorded on a 5-point Likert scale and were scored 1 (strongly disagree) to 5 (strongly agree).

Social networking site photographs (SNSp). To determine the level at which participants modify their photographs before posting them on a SNS, participants were asked “I usually filter/edit my photos before posting them...”. This question was also modified from Meier and Gray (2013), as well as Perloff’s (2014) idea that SNS users unknowingly compare themselves to digitally altered photographs. Responses were recorded using a 5-point Likert scale and were scored 1 (strongly disagree) to 5 (strongly agree).

Measures: Covariates

Demographic questionnaire. Gender, age, and ethnicity were obtained.

Rosenberg Self-Esteem Scale (RSES). The RSES is a widely used, 10-item self-report measure, used to measure global trait SE (Rosenberg, 1965, 1979). Items are measured on a 4-point scale ranging from 1 (strongly agree) to 4 (strongly disagree), with reverse scoring for appropriate items. Items are then summed to give a total score out of 40, with higher scores indicating higher global trait SE. A sample item is “I take a positive attitude toward myself”. Internal consistency was found to be acceptable (i.e., $>.65$), with Cronbach’s alpha 0.89 among females and 0.89 among males in the current study’s sample.

Study Procedures

All procedures were approved by the University of Windsor Research Ethics Board. Data was collected from February to April, 2015.

Study A

Study A (see Appendix A for a copy of the survey) took approximately 30 minutes, and was administered via FluidSurveys. Study A was administered electronically to all participants in their classroom during class time and an email link to the survey was sent via the course website (i.e., CLEW) which remained active for 48 hours. Study A survey acted as a pre-test for Study B. Following Study A survey completion, participants were randomly assigned to either the intervention or control group. Random sampling was accomplished through FluidSurveys. Upon completion of the survey, FluidSurveys randomly chose which page to display (controlling for gender) that indicated their room location for the day of the intervention. Lastly, upon completion of the Study A survey, participants were directed to a separate survey where they could leave their name and e-mail for a chance to win one of four Study A prize packages.

Study B

Intervention. Participation in the intervention was completely voluntary. A staff member from BANA came to the class lecture after participants completed Study A (i.e., on a separate day from the pre-test). The staff member personally presented a 60 minute Media Literacy Intervention to the intervention group of participants. Through visual aids and group discussion, participants were encouraged to re-evaluate images presented by the advertising industry. The goal of the presentation was to encourage the participants to think critically about the media and become conscious consumers, which may, in turn, lead to positively changing BI, SE, and disordered eating/ED risk.

Control. On the same day, and during the same time as the BANA Media Literacy Intervention, the control group was asked to meet in a different room. Attendance to this event was completely voluntary. Here, the Undergraduate Coordinator talked to the participants about careers they may wish pursue after the completion of their degree. This interaction lasted approximately 30 minutes.

Post-test. Approximately one month after the intervention, researchers returned to the classroom to administer the post-test. The purpose of this survey was to measure changes in SNS usage (time and friends/followers/following), SNSa, SNSp, problematic SNS use, BI, SE, and EBs/EDs among participants as a result of the BANA's Media Literacy Intervention. All questions were identical to the ones used in Study A (although some were removed to shorten the survey, including the RSES; see Appendix B for a copy of the Study B survey) which took approximately 30 minutes to complete. An additional question was added to the post-test, asking which room they attended (i.e., Classroom X, Classroom Y, Neither, or Forget/don't know) on the date of the intervention day. Both the control and intervention group completed the survey electronically via FluidSurveys, during class time. Moreover, an email link to the survey was sent via the course website (i.e., CLEW) and remained active for 48 hours; available for those who missed class or chose to not fill out the survey during the class time provided (e.g., did not feel comfortable taking the survey among peers), but still wished to participate in the study. Lastly, upon completion of the post-test survey, participants were directed to another page where they could leave their name and e-mail for a chance to win a Fitbit.

Data Analysis

Approach to data analysis. Data collected from both the Study A and Study B surveys were analyzed using SPSS version 21.0 for Windows (IBM Corp., 2012) and Minitab 15 Statistical Software (Minitab Inc., 2007). Reliability and descriptive analyses were performed on all variables included in this study. Although four different scales for BI were originally measured, only the SATAQ was analyzed in the present data analyses. Due to the small sample size and to reduce the number of degrees of freedom within the statistical analyses, the SATAQ was the only BI measure with gender specific versions and gender specific questions assessing the internalization of beauty. Similarly, although several EBs were measured only 10 were chosen for data analysis: (1) use binge eating to lose/control weight (EAT-26), (2) use vomiting to lose or control weight (EAT-26), (3) exercise more than 60 min/day to lose or control weight (EAT-26), (4) currently trying to change weight (Project Eat), (5) use protein powder or shakes to increase muscle size/tone (Project Eat), (6) use laxatives, diet pills or diuretics to lose or control weight (Project Eat), (7) skip meals because concerned about weight (Project Eat), (8) weight self often, (9) how often have you gone on a diet in the last year, and (10) watch my portion sizes. These behaviours were selected based on previous research findings and had applicable relevance to the current study. All 10 EBs were used for Study A analyses, however, only three EBs were used in Study B. The seven questions were removed from Study B because the other EB questions ask “within the last 6 months...” or “within the last year...”, and with the post-test only being one month later these questions were not appropriate.

All Study A objectives were tested using a series of multiple linear regressions in SPSS. For Study B, a series of independent sample t-tests were performed to ensure that

randomization had been successful and that participants in the experimental condition did not differ significantly from participants in the control condition on any of the covariates. Lastly, Study B objectives were tested using a series of generalized linear model ANOVAs in Minitab.

Missing data and reliability analyses. Prior to analysis, data were checked for accuracy of entry and missing values. Little's MCAR test was used to determine that the data missing occurred at random ($p = 1.000$). Missing values were identified and replaced with the participant's mean score on the respective subscale (Allison, 2002). After the missing values were filled-in, the internal consistency reliability Cronbach alpha coefficients were calculated for the appropriate measures, for both males and females. The reliability analyses yielded coefficients ranging .54 to .95 in males and .42 to .94 in females (as per what was indicated in the Methods section above).

Descriptive analyses. Next, descriptive analyses were performed on each variable to check for univariate normality and the presence of outliers. Univariate outliers were assessed by converting residuals into standardized residuals with a mean of 0 and a standard deviation of 1. Standardized residuals with absolute values greater than 3.29 were identified as outliers. Histograms, Q-Q plots, the Shapiro-Wilk (SW) statistic, and standardized scores of skewness and kurtosis were evaluated to determine whether each variable was normally distributed (Ghasemi & Zahediasl, 2012).

Covariates. Among the planned covariates, age did not correlate with BI (SATAQ-M $\alpha = -.03$, $p = .824$; SATAQ-3 $\alpha = -.01$, $p = .942$), SE ($\alpha = .15$, $p = .054$), or any EBs/EDs ($\alpha = -.11$, $p = .161$) variables and, therefore, was not entered as a covariate in the regressions for these dependent variables. Options for gender consisted of male or female (due to the gender specific scales used). Gender was controlled for in all multiple

linear regression analyses (Study A) and acted as a covariate in all generalized linear model ANOVAs (Study B). Participants' ethnicity was coded as white or non-white due to the small number of non-Caucasian participants. The pattern of results did not vary for participants with reported white or non-white ethnicity; therefore, all analyses were conducted on the group as a whole, and it was not used as a covariate. Lastly, the RSES did not correlate with BI (SATAQ-M $\alpha = -.04$, $p = 0.755$; SATAQ-3 $\alpha = -.02$, $p = .964$), or EBs/EDs ($\alpha = -.14$; $p = .068$), however was correlated with SE ($\alpha = .82$; $p < .001$), and, therefore, was entered as a covariate in the appropriate analyses in Study A. As the RSES was removed from the post-test, it was not included as a covariate in Study B data analyses.

Study A

Assumptions of multiple linear regression. Multiple linear regressions were used to examine associations among the independent and dependent variables for both objectives in Study A. The assumption of no perfect multicollinearity was assessed by examining intercorrelations between variables, and checking the variance inflation factors (VIF). Multicollinearity was not identified as a concern as all of the variables had a correlation below 0.65, except for Instagram vs. Twitter that had a correlation of 0.85. However, none of the VIFs had values that approached the cutoff of 10 (Field, 2009) and, therefore, were all included in analyses. Data also were checked for the assumptions of normally distributed errors and homoscedasticity. For each regression, the scatterplots of standardized residual versus predicted residuals appeared to be approximately rectangular with a concentration of scores around the centre. Additionally, the histograms of standardized residuals approximated the normal curve. Thus, it was concluded that the assumptions of linearity and homoscedasticity had been met. Error terms also were found

to be independent, as assessed by the Durbin-Watson statistic. While no univariate outliers were identified through the earlier descriptive analyses, the assumption of absence of outliers among the independent and dependent variables also requires the absence of multivariate outliers. Multivariate outliers were assessed through examining Mahalanobis and Cook's distances. Cut-off values for multivariate outliers were determined using the Chi squared distribution (Tabachnick & Fidell, 2007), and no multivariate outliers were identified.

Objective 1. Controlling for gender, the dependent variables (BI; SATAQ score, SE; SSES score, EAT-26 score and the 10 selected EBs) were examined in 13 separate multiple linear regression equations that included (1) problematic SNS use, (2) SNS total time, (3) SNS total friends (as the independent variables). In order to investigate whether specific SNS time (e.g., Facebook time, Twitter time, Instagram time, and Pinterest time), rather than total time spent on SNSs, a second round of 13 separate multiple linear regressions were completed replacing SNS total time for the four individual site times.

Objective 2. Controlling for gender, the dependent variables (BI; SATAQ score, SE; SSES score, EBs/EDs; EAT-26 score and the selected 10 EBs) were examined separately in 13 multiple linear regression equations that included (1-6) SNS_a and (7) SNS_p (as the independent variables).

Study B

Separate generalized linear model ANOVAs were used to examine the changes in the dependent variables (BI; SATAQ score, SE; SSES score, EBs/EDs; EAT-26 score and the selected 3 EBs), from time 1 (Study A) to time 2 (Study B), in both the intervention and control groups (independent variables). The differences between time 1 and time 2 were calculated (i.e., time 2 – time 1); negative values resulted from a decrease in scores

from T1 to T2, positive values resulted from an increase in scores from T1 to T2, and scores of zero suggested no change in values from T1 to T2. Due to the small sample size, especially among males, gender was entered into the models as a covariate and the analyses were run on both males and females combined.

RESULTS

Participants

Out of a possible 212 total students enrolled in the class, 191 started the Study A survey and 160 completed the pre-test in its entirety (representing a 76% response rate). A total of 115 participants started the post-test (Study B), of which 105 completed it in its entirety; yet only 78 of those participants indicated that they attended and participated in the BANA presentation ($n = 50$) or the control presentation ($n = 28$), which represents a response rate of 37% for Study B.

Of the 160 participants from Study A, 57% were female ($n = 92$), 43% were male ($n = 68$), and participants ranged from 18 to 27 years, with 85% being 18 and 19 years old. The majority of the participants were white (81%), compared to non-white (19%; Black, Aboriginal, Chinese/Korean/Japanese, Arabic, South Asian, or otherwise not noted). Importantly for Study B, there were no differences in age, gender, or ethnicity between the intervention and the control group. Females and males reported spending ~4 and ~3 hours/day on SNSs, respectively, and they had approximately the same number of SNS total friends (~1380 vs. ~1360). The most popular SNS (measured by number of hours) for females and males was Instagram and Twitter, respectively. Furthermore, the most popular SNS activity for females and males was *looking at photos on others' profile* and *leaving posts or comments on others' profiles*, respectively.

Validity of sample size. The sample size of 160 in Study A provided ample data to achieve statistical power. Maxwell (2000) suggests that historically, the most common rule of thumb for power to detect the multiple linear regression coefficient at 80% power and a type one error of 0.05 is given by the ratio of N to p (total number sample size to number of predictors) at least 10:1. The current study had 16 predictors, suggesting the minimum number of participants to get a medium-small effect size would be 160.

The sample size of 78 in Study B provided ample data to achieve statistical power. Using a priori sample size calculation (Faul, 2009), with settings to conduct an ANOVA (i.e., large effect, with $\alpha = .05$ and power = .80), the minimum total number of cases needed to achieve sufficient power in each group (i.e., control and intervention) was 26. Since 50 participants reported attending the BANA presentation and 28 reported attending the control presentation, the sample was valid for a large effect size.

Study A

Table 1 describes participant demographics by time spent on SNSs, popular SNS activity as well as BI, SE, and EBs/EDs variables. Although the variables were not compared statistically by gender, females reported a higher GPIUS score and SATAQ score (although slightly difference scales were used) compared to males, whereas males reported a higher state SE than females. Furthermore, when asked if trying to change their weight males responded to wanting to “Gain weight”, whereas, females wanted “Stay the same weight”.

Objective 1. For the following analyses, refer to Appendix C for a copy of the multiple linear regression tables.

Problematic social networking site use. Females who had a higher (vs. lower) GPIUS score were associated with having higher internalization of beauty standards

(SATAQ) ($p < .001$), lower state SE (SSES) ($p = 0.032$), and higher ED symptoms and concerns (EAT-26) ($p = .003$). Furthermore females who had a higher (vs. lower) GPUIS score were associated with weighing themselves often ($p = .016$), and with using binge eating ($p = .001$), vomiting ($p < .001$), daily exercise ($p = .007$), using laxatives/diet pills/diuretics ($p = .050$), meal skipping ($p = .021$) and dieting ($p = .008$) to lose/control weight. Males who had a higher GPUIS score, compared to a lower GPUIS score, were associated with having internalization of beauty standards (SATAQ) ($p < .001$), lower state SE (SSES) ($p = 0.011$), and higher ED symptoms and concerns (EAT-26) ($p = .020$).

Social networking site total time. No significant findings existed for females or males with total SNS time and BI or SE. However, females who spent more time (vs. less) on SNSs were associated with using binge eating ($p = .041$) to lose/control weight. Furthermore, males who spent more time on SNSs (vs. less) were associated with trying to change their weight ($p = .017$) and using laxatives/diet pills/diuretics ($p = .038$), and dieting ($p < .001$) to lose control weight.

Social networking site total friends. Among females, those who have more SNS friends (vs. less) were associated with using laxatives/diet pills/diuretics ($p = .008$) to lose/control weight. Among males, those who have more SNS friends (vs. less), were associated with weighing themselves often ($p = .037$), using laxatives/diet pills/diuretics ($p = .005$) to lose/control weight, and using protein powder or shakes ($p = .002$) to increase their muscle size or tone.

Facebook time. No associations were observed for females. Males who spent more time on Facebook (vs. less) were associated with having higher ED concerns and symptoms ($p = .049$) and with trying to change their weight ($p = .039$), and using

laxatives/diet pills/diuretics ($p = .001$) and meal skipping ($p = .044$) to lose/control their weight.

Instagram time. Females who spent more time on Instagram (vs. less) were associated with using vomiting ($p = .002$) and meal skipping ($p = .022$) to lose/control their weight. No associations were observed for males.

Twitter time. Females who spent more time on Twitter (vs. less) were associated with using vomiting ($p = .018$) and dieting ($p = .026$) to lose/control their weight. No associations were observed for males.

Pinterest time. No associations were found among females or males.

Objective 2. For the following analyses, refer to Appendix D for a copy of the multiple linear regression tables. Table 2 displays the descriptive statistics for SNSa, SNSp among females and males. Females, who frequently leave posts or comment on others, were associated with having a higher internalization of beauty standards (SATAQ) ($p = .028$). Furthermore, females who frequently look at post on others' profiles were associated with using laxatives/diet pills/diuretics ($p = .050$). Males who frequently look at posts on other users profiles were associated with wanting to change their weight ($p = .017$). Furthermore, males who frequently look at photos on other users' profiles were associated with meal skipping ($p = 0.044$) to lose/control weight, and weighing themselves often ($p = .020$). Lastly, males who frequently filter/edit their photos before posting them online were associated with skipping meals ($p = .047$) and watching portion sizes ($p = .002$) to lose/control weight.

Study B

For the following analyses, refer to Appendix E for a copy of the generalized linear model ANOVA tables. Table 3 describes the mean pre- and post-test scores

among males and females for the intervention and control groups. The intervention group (compared to the control group) had a significant decrease in EAT-26 scores ($p = .051$). Males, compared to females, had a significant decrease in wanting to weight themselves often ($p = .005$).

DISCUSSION

The present study extends previous literature in a number of different ways. First, it contributes to the dearth of literature on SNS exposure/usage and BI, SE, and EBs/EDs in young adults. This study has demonstrated, the possible dangerous associations that SNSs may have with the internalization of beauty standards (i.e., thin/toned), SE, some unhealthy EBs, and symptoms and concern characteristics of EDs in both males and females. Lastly, it suggests that media literacy interventions should incorporate Internet media (in addition to print and televised media) as such interventions may decrease ED symptoms and concerns in females.

Study A

This study further extends previous research by including males, as much of the previous research in the area of SNS impact on BI, SE, and EBs/EDs have specifically focused on females (Fardouly & Vartanian, 2015; Meier & Gray, 2013; Tiggemann & Slater, 2013; Tiggemann & Salter, 2014). Moreover, to our knowledge, this represents the first attempt to examine the SNSs Twitter, Instagram, and Pinterest (in addition to Facebook) and their associations with BI, SE, and EBs/EDs. Lastly, this is one of the first Canadian studies to examine the associations of SNSs with BI, SE, and EBs/EDs in this particular age group.

Objective 1. The first objective of this study aimed to determine the associations of SNSs (i.e., problematic SNS use, total time/day, specific site time/day, and total

friends) with BI, SE, and EBs/EDs. Overall, the prevalence of problematic SNS use of 14% is slightly higher than previous research (5-10%; Spraggins, 2009). Results of the current study suggest that increased symptoms of problematic SNS use is concerning, as it was associated with having higher internalization of beauty standards, lower SE, higher ED symptoms and concerns, and numerous unhealthy EBs in both females and males. The current results are similar to those of Spraggins (2009) who reported that increased symptoms of problematic use were associated with decreased SE, happiness, satisfaction with life, and increased depression and loneliness. The findings of our study, then, encourage further investigation of problematic SNS use and its possible associations with BI, SE and EBs/EDs.

These findings could perhaps be explained in that SNSs provide an environment in which a person can socially interact in a less-threatening atmosphere that cannot be gained offline (Morahan-Martin & Schumacher, 2000). Therefore, problematic SNS use may be associated with BI, SE and unhealthy EBs/EDs because individuals are in a less-threatening environment where they can gain support for dangerous behaviours in online communities. For example, “pro-anorexia” groups on SNSs are focused on social interactions (Juarascia, Shoaib, and Timko, 2010) where members support and encourage each other’s’ ED symptoms and concerns, thus, further perpetuating dangerous and unhealthy behaviours and beliefs.

The current study also made a contribution toward the measurement of the problematic use of SNSs, as the modified GPIUS measure was found to have high internal consistency in both males and females. The current study’s findings could also be considered supportive of the literature that suggests the classification of “Internet addiction” as a mental disorder. Currently, there is no recognized psychiatric diagnosis of

Internet addiction, although it is being considered for inclusion in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (Block, 2008). Future studies should continue to explore problematic SNS use with the modified GPIUS measure.

On average, females spent more time, than males, on SNSs (4.1 ± 5.3 hours vs. 2.9 ± 2.8 hours). Overall SNS time (i.e., summation of Facebook, Twitter, Instagram, and Pinterest time) was not associated with BI or SE. However, the present study observed that spending a lot of time on SNSs may have negative implications for both males and females, specifically, with EBs. Similarly, in a previous study (Tiggemann & Slater, 2014), time spent on the SNSs (i.e., MySpace and Facebook) was associated with higher levels of dieting. SNSs create an environment with multiple social comparisons, often made to somewhat idealized images, as users are likely to post only photographs showing themselves *looking good* or *doing something cool* (Tiggemann & Slater, 2014). Although the specific attributes of SNSs responsible for EBs (i.e., dieting) cannot be identified, it is perhaps the multiple appearance messages (i.e., blogs, comments/posts, digitally altered or filtered photographs) across the sites that reinforce or create these behaviours.

Similarly, having more friends/followers was associated with participating in dieting behaviours, which, in the current study was true for both males and females (similar to Tiggemann & Slater, 2014). Having more friends/followers/following was associated with laxatives/diet pills/diuretics use for females, and weighing often, laxatives/diet pills/diuretics use, and having used protein powder or shakes to increase muscle size/tone for males. Previous research has found SNS use and BI concerns to be mediated by appearance comparisons in general (Fardouly & Vartanian, 2015). Moreover, BI concerns have lead individuals to want to change how they look by using disordered eating habits (Stice, 2001) and/or EDs (Polivy & Herman, 2002). Therefore,

the current study's findings could be attributed to with having more friends/followers, there is a greater ease to connect with peers and/or a greater chance for social comparison. With a greater number of possible social comparison SNS users may feel more concerned about their body and, therefore, participate in unhealthy EBs because they compare their appearance to others more frequently (Fardouly & Vartanian, 2015). However, future studies should investigate the ratio of friends, celebrities, and family members that make up the users friends/followers list, as the different groups of people may have different influences. Past research has found the frequency of comparisons to peers to be the mediator between SNS usage and BI concerns (Fardouly & Vartanian, 2015), however, other studies have observed users adopting behaviours traditionally associated with celebrities (Stephanone et al., 2011). Therefore, it is suggested that future research investigate not only what ratio of groups (friends, family, celebrities) make up a user's friend/followers list but also to what extent user's compare themselves to these groups, and how these comparison then manifest into their own habits/beliefs.

The most popular SNS (in terms of time spent/usage) differ between genders, with females spending the most time on Instagram (1.5 ± 2.1 hours) and males spending the most time on Twitter (1.2 ± 1.4 hours). Previous studies have found relationships in females with Facebook usage and BI variables (Fardouly & Vartanian, 2015; Meier & Gray, 2013; Tiggemann & Slater, 2013; Tiggemann & Slater, 2014) and SE (Mehdizadeh, 2010); however, to the best of our knowledge, other types of SNSs have yet to be explored. Findings from the current study suggest that the type of SNS being used, may impact associations with BI, SE, and EBs/EDs. Unlike previous studies (Fardouly & Vartanian, 2015; Meier & Gray, 2013; Tiggemann & Slater, 2013; Tiggemann & Slater, 2014), Facebook usage was not associated with BI or SE in females in the current study,

in fact no associations were observed for females. The differences in findings between studies may be attributed to the fact that the online world (i.e., SNSs) is constantly changing and evolving. As user popularity shifts from one SNS to another (i.e., existing sites evolve and change and/or new sites are developed), it makes SNS difficult to study, as individuals may not be using (i.e., Facebook) in the same manner as they did only a few years ago. However, in the current study, high Facebook exposure was associated with higher ED concerns and symptoms, trying to change weight, using laxatives/diet pills/diuretics, and meal skipping to control/maintain their weight among males. These findings suggest that Facebook exposure may impact EBs/EDs in males, and future research is warranted. For example, experimental designs that manipulate exposure and prospective designs that track SNS use and BI, SE, and EBs/EDs over time are required to further explore the possible negative consequences of SNS use.

The nature of Instagram is to take a picture with your mobile camera and then use the filter feature to turn your average picture into a professional looking one (Instagram, 2014). The present study demonstrated that Instagram usage was associated with a few unhealthy EBs, for females (i.e., vomiting, and meal skipping); suggesting weight concerns may be perpetuated through social comparison of Instagram images of peers, family, and celebrities.

Results of this study also indicated that high Twitter usage in females was associated with using vomiting and dieting to lose/control weight. This finding may be explained, due to the fact that the aim of Twitter is to create a conversational structure. In such a case, that peers, family, and celebrities can create a Twitter conversation about diet, exercise and weight loss habits/regime, in which, users can reply, follow, and tweet to. Previous research has supported this finding, in that celebrities and their lifestyles play

a dominant and inspirational role for young females (Mooney, Farley, Strugnell, 2009). In turn, these conversations create a community or clout around the subject, impacting the beliefs of other users.

An important step in future research would be to further analyze how SNS members are using each individual SNS. For example, this current study found no associations with Pinterest and BI, SE, EBs/EDs, which is most likely due to the fact that majority of Pinterest members use the site for hobbies (i.e., recipes cooking, instructions for crafts, hair style tutorials, workout routines). Conducting research into specific activities and behaviours on SNSs would give a deep understanding in how each SNS impacts BI, SE, and EBs/EDs, and perhaps what behaviours/activities should be avoided.

Objective 2. The second objective aimed to determine the associations of specific SNS activities (i.e., looking at or posting pictures or comments on their personal, or others' profile, and filtering/editing photos) with BI, SE, and EBs/EDs. Similar to previous research (Pempek et al., 2009; Sponcil & Gitimu, 2012), lurking was found to be a popular activity for young adults on SNSs. Among females, spending time lurking was associated with using laxatives/diet pills/diuretics to lose/control weight, and in males, lurking was associated with weighing themselves often, wanting to change their weight, and using meal skipping to lose/control weight. Lurking creates multiple opportunities for social comparison, an idea proposed by other researchers (Jong & Drummond, 2013; Tiggemann & Salter, 2014). Interestingly, females who frequently posted on others' profiles (leave posts or comments) were associated with higher internalization of beauty standards. Lastly, males who frequently filtered their pictures before posting them on SNSs were associated with using meal skipping and watching portion sizes to lose/control weight.

Future studies, as suggested by Valkenburg et al. (2006), should investigate how other users have responded (i.e., liked, disliked, specific comments) to a participant's posts and pictures, as this may provide greater insight into what is causing this internalization of beauty standards. This could be accomplished by using a *hashtag* associated with the study, allowing researchers the ability to directly track pictures/posts and analyze the tone of comments and view the number of *likes* a user has received. Another possible idea would be to add survey questions, similar to those of Valkenburg et al. (2006), that specifically ask about the frequency and tone of reactions (i.e., "The reactions that I receive on my profile are . . ." and "The reactions that I receive on what I tell about my friends are . . .").

Study B

Albeit limited, past research has shown media literacy interventions to be effective at increasing skepticism about media images that depict a thin ideal of beauty (Irving & Berel, 2001), decrease engagement in social comparison (Posavac et al., 2001), and decrease body dissatisfaction (Coughlin & Kalodner, 2006; Posavac et al., 2001; Yamamiya et al., 2005). Results from BANA's Media Literacy Intervention suggest that educating young adults on thinking critically about the media and the images it presents may decrease ED symptoms and concerns in participants. In the current study no significant changes were observed in BI or SE. The lack of findings in the current study may be a result of the small sample size (i.e., females = 37 and males = 16), especially among males. The difficulty of implementing health interventions targeted at males was evident as noted in previous (Cameron & Bernardes, 1998; White, 2001) research. For example, successful health intervention design for men may perhaps depend on when and where it is held. Pringle, Zwolinsky, McKenna, Daly-Smith, Robertson, and White

(2014), delivered a men's health improvement program in 16 English Premier League football clubs. Having awareness raising events on match days helped to engage participants, as the intervention was shaped around times when the men could most easily attend (Pringle et al., 2014). Future research should then aim to create male health interventions during a time of *natural engagement* (e.g., sporting match) as this may create a convenient and supportive social environment. Future research could look at creating gender specific interventions that may aid in a better response rate. This would entail using the appropriate gender individual to recruit for, and deliver the intervention.

Importantly, EAT-26 scores significantly decreased in males and females who received the media literacy intervention, compared to the control group. The ability to impact EAT-26 scores, coupled with the findings from Study A, support Hummel and Smith's (2014) suggestion that SNSs may be an important target of intervention for individuals at-risk for EDs and unhealthy EBs. One of the goals of the BANA presentation was to encourage participants to think critically about the media and become conscious consumers through discussing/analyzing various images depicting different weight and shaped-sized individuals. The awareness of the media's attempt to only show "perfect" images may have helped participants dissociate with some of the ED symptoms and concerns in the EAT-26 questions.

Similar to previous research (Hummel & Smith, 2014; Jong & Drummond, 2013; Tiggemann & Slater, 2013; Tiggemann & Slater, 2014), and based on the finding of Study A suggesting that SNSs may be associated with a numerous of unhealthy EBs to lose/control weight, it is suggested that future media literacy interventions should include a SNS focus. The current study's media literacy intervention did not include a SNS component per se; however, the focus was on media images. With the online world being

filled of images of celebrities, and posting photos a major activity on SNSs (Pempek et al., 2009), image analysis was what made this intervention important and relevant in the current study. Furthermore, such interventions should include educational tools for safe SNS activity and participation. Lastly, findings from the current study support the recent recommendations from the Report of the Standing Committee on the Status of Women (Government of Canada, 2014) that media literacy should be promoted and supported in the research community.

Limitations

Study A. This study is not without limitations. The sample was of convenience; the sample size was slightly larger (100 in Mehdizadeh, 2010; 103 in Meier & Gray, 2013), yet slightly smaller (227 in Fardouly & Vartanian, 2015; 185 in Hummel & Smith, 2014; 189 Tiggemann & Slater, 2014) compared to other studies investigating a similar area. Additionally, the ethnic diversity was small compared to other studies (46% white in Fardouly & Vartanian, 2015; 73% white in Hummel & Smith, 2014). Since the sample was of convenience (1st year students from one class in a single faculty, with minimal range of ethnicity) this study may not be generalizable to the larger population; therefore, practical significance was not analysed. Future research on this topic should incorporate a large, more diverse participant sample and incorporate practical significance into the results. This could be accomplished through another cross-sectional study that looks at a different cohort of individuals (i.e. different/more classes from other faculties) or through a longitudinal study that would look at the impact SNSs over time.

The inability to directly measure variables (e.g., SNS usage, SNS activities, number of friends/followers, etc.) in participants could be an issue. All data collected were self-report, which may suffer from memory recall issues and a possible social

desirability bias. Future research should consider the use of computer tracking, similar to that of Hummel and Smith (2014). Furthermore, this study's findings are limited to only four SNSs (i.e., Facebook, Twitter, Instagram, and Pinterest). Based on data collected in this study, it is known that there are other forms of popular SNSs being used by this age group (i.e., Snapchat, Tinder) and for this reason future studies should seek to continue exploring a broad range of SNSs.

Although all effort was put into using methods reliable for both males and females, some of the surveys used had questions that were more female oriented (i.e., EAT-26), which may have impacted results. Additionally, given that the measure used to assess problematic SNS use (i.e., the GPIUS) did not have a definitive cut-off point which would differentiate problematic users from non-users, it is difficult to say with certainty that problematic SNS use is an identified phenomenon. Future work in this area should look to develop more gender specific survey tools to allow for more accurate and generalizable results.

These limitations are reasonable given that little research about SNSs has been conducted.

Study B. The study's response rate was low (37%) compared to another media literacy intervention (i.e., 85% in Primack, Fine, Yang, Wickett & Zickmund, 2009). Similarly to Study A, generalizability of results may be difficult. The small sample size, inability to directly measure variables (e.g., SNS usage, SNS activities, number of friends/followers, etc.), and non-gender specific surveys (i.e., EAT-26) could be an issue. In reflecting on the lack of significant changes among the participants, it could be due to the intervention being a mixed gender environment, which may have created feelings of comfortableness and perhaps unwillingness to fully engage in group discussion for fear of

embarrassment around the opposite gender. Future interventions should look to create gender specific interventions, perhaps with a same gender instructor to encourage relatability.

Study B took place on the second last day of the course, where perhaps student engagement may not have been as high as the start of the semester. Furthermore, 19% of the participants who completed Study B selected the *Forget/don't know* to the question (see Appendix B) that asked participants to identify where they were on intervention day. Perhaps utilizing mobile devices or SNSs (i.e., participants get sent a reminder of what group they were in) may help with attrition rates. Lastly, perhaps creating a survey that could be easily accessed and run from a mobile device may help to engage young adults in terms of the ease, speed and convenience at which the survey could be taken.

Lastly, a one-month follow up, after the intervention, makes it difficult to determine if the changes in beliefs and behaviours were durable. Further studies with a longer time frame between pre-test and post-test administration to investigate the sustainability of the changes post-intervention responses are warranted.

Conclusions

Study A. Study A was successful in demonstrating the possible dangers of SNSs and the impacts on BI, SE, EBs/EDs. problematic SNS use may increase ED symptoms and concerns in young females, where it may decrease SE in young males. Spending a lot of time on SNSs, and having many friends/followers/following may impact EB, particularly unhealthy and dangerous weight control methods. Importantly, participation in specific SNSs many have different impacts on BI, SE, EBs/EDs. Furthermore, SNS activities such as lurking and filtering should be monitored in females as they may increase internalization of beauty standard and impact EB. Educational tools should be

created to aid in assisting parents, teachers, and individuals to teach the possible negative implications SNS usage can have an impact on BI, SE, and EBs/EDs.

Study B. Study B was a successful intervention to decrease ED symptoms and concerns in female and male participants. Therefore, future media literacy interventions should continue to be used and become more widely spread in young adults. Furthermore, creating gender specific interventions, with same gender environments may create a more relatable and trusting situation for participants and produce more positive findings. Lastly, educating young adults may reduce unhealthy EBs and dangerous weight loss control method.

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Table 1

Social Networking Site, Body Image, Self-Esteem, and Eating Behaviour/Eating Disorder Variables among Males (n = 68) and Females (n = 92)

	Males [Mean (SD)]	Females [Mean (SD)]
Social Networking Site Total Time (hours/day)	2.9 (2.8)	4.1 (5.3)
Facebook Time (hours/day)	0.7 (0.9)	1.2 (1.8)
Twitter Time (hours/day)	1.2 (1.4)	1.3 (1.8)
Instagram Time (hours/day)	0.9 (1.1)	1.5 (2.1)
Pinterest Time (hours/day)	0.0 (0.3)	0.3 (0.6)
Social Networking Site Total Friends	1358.8 (1000.5)	1376.2 (959.5)
Facebook friends	486.8 (376.2)	421.2 (390.0)
Twitter friends/followers/following	400.1 (346.9)	424.6 (450.2)
Instagram friends/followers/following	380.4 (346.9)	505.0 (400.5)
Pinterest friends/followers/following	1.6 (8.8)	25.4 (64.4)
While on social networking sites, I usually spend a lot of time...(mean score, range 1-5)		
Posting pictures on my profile	2.1 (0.9)	2.7 (1.2)
Posting text-based comments on my profile	2.4 (1.1)	2.3 (1.1)
Looking at my own profile	1.9 (0.9)	2.6 (1.1)
Looking at photos on others' profiles	3.8 (1.0)	4.1 (0.8)
Looking at posts on others' profiles	4.0 (0.9)	3.9 (0.9)
Leaving posts or comments on others' profiles	2.5 (1.0)	2.6 (1.0)
I usually filter/edit my photos before posting them on a social networking site... (mean score, range 1-5)	2.2 (1.2)	3.2 (1.1)
Generalized Problematic Internet Use Scale (score, 29-145)	61.8 (19.0)	70.9 (18.3)
Sociocultural Attitudes Towards Appearance Questionnaire-Female (score, 30-150)	---	98.4 (19.6)
Sociocultural Attitudes Towards Appearance Questionnaire-Male (score, 29-145)	78.1 (20.3)	---
State Self-Esteem Scale (score, 20-100)	75.1 (13.0)	68.5 (14.7)
The Eating Attitudes Test (score, 0-78)	11.3 (10.4)	11.8 (11.0)

In the past 6 months have you...(mean score, range 0-5)		
Gone on eating binges where you feel that you may not be able to stop?	0.6 (1.1)	0.5 (0.9)
Ever made yourself sick (vomited) to control your weight or shape?	0.1 (0.5)	0.1 (0.6)
Ever used laxatives, diet pills, or diuretics (water pills) to control your weight or shape?	0.1 (0.6)	0.3 (1.0)
Exercised more than 60 minutes a day to lose or control your weight?	1.5 (1.9)	1.5 (1.8)
How strongly do you agree with the following statement? (mean score, range 1-4)		
I sometimes skip meals since I am concerned with my weight	1.3 (0.6)	1.7 (.95)
I weigh myself often	2.0 (1.0)	1.7 (0.9)
Are you currently trying to...(mean score, 0 "I am not trying to do anything with my weight", 1 "Gain weight", 2 "Stay the same weight", 3 "Lose weight")	1.5 (1.0)	2.1 (1.1)
How often have you gone on a diet during the last year? (mean score, range 0-4)	0.6 (1.0)	0.9 (1.1)
How often have you done each of the following things in order to lose weight or keep from gaining weight during the past year? (mean score, range 0-3)		
Watched my portion sizes (serving sizes)	1.1 (1.1)	1.8 (1.0)
How often have you done each of the following things in order to increase your muscle size or tone during the past year? (mean score, range 0-3)		
Used protein powder or shakes	1.7 (1.0)	1.9 (0.8)

Table 2*Descriptive Statistics of Popular Activities on Social Networking Site (SNS) among Males (n = 68) and Females (n = 92)*

	Strongly agree	Agree	Males [n (%)] In between	Disagree	Strongly disagree	Strongly agree	Agree	Females [n (%)] In between	Disagree	Strongly disagree
While on SNSs, I usually spend a lot of time...										
Posting pictures on my profile	0 (0.0)	6 (8.8)	14 (20.6)	27 (39.7)	21 (30.9)	7 (7.6)	16 (17.4)	32 (34.8)	20 (21.7)	17 (18.5)
Posting text-based comments on my profile	2 (2.9)	12 (17.6)	11 (16.6)	26 (38.2)	17 (25.0)	2 (2.2)	12 (13.0)	25 (27.2)	29 (31.5)	24 (26.1)
Looking at my own profile	0 (0.0)	4 (5.9)	11 (16.2)	29 (42.6)	24 (35.3)	6 (6.5)	12 (13.0)	26 (28.3)	32 (34.8)	16 (17.4)
Looking at photos on others' profiles	13 (19.1)	38 (55.9)	10 (14.7)	4 (5.9)	3 (4.4)	28 (30.4)	50 (54.3)	9 (9.8)	4 (4.3)	1 (1.1)
Looking at posts on others' profiles	18 (26.5)	37 (54.4)	8 (11.8)	3 (4.4)	2 (2.9)	26 (28.3)	42 (45.7)	16 (17.4)	6 (6.5)	2 (2.2)
Leaving posts or comments on others' profiles	1 (1.5)	10 (14.7)	29 (42.6)	13 (19.1)	15 (22.1)	1 (1.1)	19 (20.7)	30 (32.6)	29 (31.5)	13 (14.1)
I usually filter/edit my photos before posting them on a SNS...	1 (1.5)	9 (13.2)	18 (26.5)	13 (19.1)	26 (38.2)	13 (14.1)	18 (19.6)	40 (43.5)	15 (16.3)	6 (6.3)

Table 3*Mean Pre- and Post-test Scores among Males and Females (n=53) in the Intervention (IG) and Control (IC) Groups*

	Pre-Test [Mean (SD)]		Post-Test [Mean (SD)]	
	IG	CG	IG	CG
Sociocultural Attitudes Towards Appearance Questionnaire-Female (score, 30-150)	95.6 (21.2)	104.4 (18.4)	87.8 (26.8)	88.4 (21.1)
Sociocultural Attitudes Towards Appearance Questionnaire-Male (score, 29-145)	87.5 (22.0)	71.8 (21.0)	77.0 (25.7)	62.7 (30.3)
State Self-Esteem Scale (score, 20-100)	68.5 (15.8)	73.5 (14.7)	69.3 (15.4)	73.9 (16.7)
The Eating Attitudes Test (score, 0-78)*	11.2 (7.2)	8.8 (6.4)	8.3 (6.0)	9.2 (6.4)
How strongly do you agree with the following statement? (mean score, range 1-4)				
I sometimes skip meals since I am concerned with my weight	1.6 (1.0)	1.4 (0.7)	1.5 (0.7)	1.3 (0.6)
I weigh myself often	1.9 (0.9)	1.8 (1.1)	1.7 (0.8)	1.6 (0.9)
Are you currently trying to...(mean score, 0 "I am not trying to do anything with my weight", 1 "Gain weight", 2 "Stay the same weight", 3 "Lose weight")	2.5 (1.0)	2.6 (1.0)	2.8 (1.0)	2.8 (1.1)

**p* value < .05

CHAPTER 2
REVIEW OF LITERATURE
BODY IMAGE

Body image is thought to be composed of four different attitudes and behaviours: satisfaction (i.e., how satisfied one is with one's body image appearance), investment (i.e., the importance one places on body image physical appearance in defining one's self and determining self-worth), behaviour (i.e., appearance related behaviours such as grooming, concealing, and avoiding the sight of one's body), and perception (i.e., how accurately one estimates his/her own body size; Jarry, Kossert, & Ip, 2005). As body image is clearly multidimensional, body image disturbance or dissatisfaction is said to occur when a person experiences a distortion in perception, behaviour, or cognition and affect related to body weight and shape (Cash & Brown, 1987). Body dissatisfaction denotes the degree of discrepancy between one's actual and ideal body weight/shape (Stormer & Thompson, 1996); the subjective evaluation of one's body (Stice & Shaw, 2002).

Body satisfaction declines in males and females transitioning from high school to young adulthood (Eisenberg, Neumark-Sztainer, Story, & Perry, 2005), with women being more dissatisfied with their bodies (Bearman, Presnell, Martinez, & Stice, 2006; Loth, Mond, Wall, & Neumark-Sztainer, 2011; Smith, Thompson, Raczynski, & Hilner, 1999; van den Berg, Mond, Eisenberg, Ackard, & Neumark-Sztainer, 2010). A declining body satisfaction can cause women to want to change how they look and satisfy the societal standards of beauty, creating a negative body image associated with low self-concept, poor self-esteem, depressive symptomatology (Webster & Tiggemann, 2003)

and disordered eating habits (Stice, 2001) and/or eating disorders (Polivy & Herman, 2002). On the contrary, females with higher body satisfaction and a more positive body image report caring more about being healthy, eating healthy, and caring less about weight (Kelly, Wall, Eisenberg, Story, & Neumark-Sztainer, 2005).

In an attempt to gain a global understanding of women, beauty, well-being, and relationships between them, Etcoff, Orbach, Scott, & D'Agostino (2004) through Dove, conducted the Real Truth About Beauty Study. In a sample of over 3,000 women, across 10 countries, only 2% of women around the world choose beautiful to describe their looks. Past research has shown ethnic differences in body shape ideals (Overstreet, Quinn, & Agocha, 2010) and body dissatisfaction in women (Yates, Edman & Arugete, 2004). The majority of studies (Kelly et al., 2005; Neumark-Sztainer et al., 2002; Paxton, Neumark-Sztainer, Hannan, & Eisenberg, 2006b; Smith et al., 1999), but a rare few (e.g., Caldwell, Brownell, & Wilfley, 1997; Striegel-Moore, Schreiber, Pike, Wilfley, & Rodin, 1995), have found that African American females are less likely than Caucasian females to express body dissatisfaction. African American women may express less body dissatisfaction as they have been shown to be more flexible in their weight and body shapes as a standard of physical attractiveness (Celio, Zabinski, & Wilfley, 2002). Interestingly, in an ethnically diverse sample, Brazilian women were the most likely to describe themselves as beautiful (6%; Etcoff et al., 2004). Asian (Etcoff et al., 2004; Kelly et al., 2005; Neumark-Sztainer et al., 2002) and Hispanic (Kelly et al., 2005) females have comparable odds for body dissatisfaction as Caucasian females and were more to likely to report weight related concerns and behaviours than African-American females. However, it has been suggested (Etcoff et al., 2004) that the translation of

beautiful may have impacted results from non-English cultures. Additionally, even in studies that have a diverse sample, specific minority groups are often grouped together which could, in turn, impact findings. Furthermore, different ethnicities present with different cultural norms when it comes to beauty ideals (Molloy & Herzberger, 1998; Overstreet et al., 2010). Emphasizing societal standards of thinness as the ideal of feminine beauty can deny diversity in other cultural standards of beauty that can be potential sources of body dissatisfaction for women of different racial and ethnic backgrounds (Poran, 2002). Future research should continue to explore cultural differences in body satisfaction and body image and/or develop culturally specific tools to measure internalization and pressures of beauty ideals.

A number of studies have found that men are also experiencing dissatisfaction with their body shape (e.g., Abell & Richards, 1996; Ata, Ludden, & Lally, 2007; Emerson & Edwards, 2000; McDonald & Thompson, 1992; Parks & Read, 1997; Prybock, 2000). A body dissatisfaction or negative body image in males can cause problems, such as, low self-esteem, depression, eating disorders, muscle dysmorphic, and the use of muscle building supplements (Ricciardelli, McCabe, & Ridge, 2006). Although little research has been conducted on males, one longitudinal study observed higher body satisfaction in African American males in comparison to other ethnic groups (Paxton et al., 2006b). Interestingly, another study showed African American males reported greater investment in appearance than Caucasians, yet tended to have a greater body satisfaction (Smith et al., 1999). Future research should continue to determine predictors and implications of body image dissatisfaction in males, with specific emphasis placed on minority groups.

Body weight as a predictor of body dissatisfaction

It appears that some variables to predicting body dissatisfaction are not gender specific and exist in both males and females. For example, Body Mass Index (BMI), has been shown as a predictor of body dissatisfaction for both males and females in some studies (Eisenberg et al., 2005; Grilo & Masheb, 2005; Paxton et al., 2006b; Paxton, Schutz, Wertheim, & Muir, 1999; Watkins, Christie, & Chally 2008), but not all (Bearman et al., 2006; van den Berg et al., 2007). Specifically, overweight and obese individual are more likely to desire to be smaller and not like the way they look when compared to those of normal weight individuals (Loth et al., 2011; Willows, Ridley, Raine, & Maximova, 2013). Further, underweight females report greater body satisfaction compared to overweight females (Kelly et al., 2005). Lastly, results from a longitudinal study, reported that females who moved from a lower BMI to a higher BMI category were less satisfied with their body (Eisenberg et al., 2005). Underweight, overweight, and obese males also report body dissatisfaction (Eisenberg et al., 2005; Watkins et al., 2008). Besides body weight status (e.g., BMI), weight teasing and low socioeconomic status have also been shown as predictors of body dissatisfaction in males and females (Eisenberg et al., 2005; Grilo & Masheb, 2005; Paxton et al., 1999). Furthermore, some studies have found that parental and peer attitudes towards weight norms (Bearman et al., 2006; Dohnt & Tiggemann, 2006; Neumark-Sztainer, Wall, Story & Perry, 2003), healthy diet and exercise (Kelly et al., 2005) are influential factors in creating body satisfaction.

EATING BEHAVIOURS

In a study by Woodruff, Hanning, Lambraki, & McCargar (2008), over one quarter of those dieting or concerned about their body weight were actually classified as normal weight. This is troublesome as dieters tended to have significantly elevated odds for several psychosocial factors and health risk behaviours among both non-overweight and overweight participants (Neumark-Sztainer, Wall, Story, & Sherwood, 2009).

Dieting falls under the disordered eating definition, which has been described as eating attitudes and behaviours that are a particularly dangerous health risk, as they represent the subjective experiences and behaviours ranging from “normative discontent with weight and moderately dis-regulated eating, to clinical extremes of anorexia nervosa and bulimia nervosa” (Leung, Geller, & Katzman, 1996, p.253). Disordered eating is a prevalent problem among adolescents and young adults (Neumark-Sztainer, Wall, Larson, Eisenberg, & Loth, 2011). Weight control behaviours can range from healthful (i.e., exercise, ate more fruits and vegetables, ate less high-fat foods, and ate less sweets) to unhealthy (i.e., fasted, ate very little food, used a food substitute (powder or special drink), skipped meals, smoked more cigarettes, took diet pills, made myself vomit, used laxatives, and used diuretics) methods (Larson, Neumark-Sztainer, & Story, 2009).

Research has shown that persistent unhealthy weight control behaviour is associated with measures of poorer dietary intake (e.g., lower intakes of calcium and vegetables; Larson et al., 2009) and less frequent meals (Jones, Bennett, Olmsted, Lawson, & Rodin, 2001; Larson et al., 2009; McVey, Tweed, & Blackmore, 2004). Furthermore, it is a common practice among the young adult population to use unhealthy or extreme weight control strategies (e.g., fasting, using diet pills/powders/liquids, vomiting, or taking

laxatives; Boutelle, Neumark-Sztainer, Story, & Resnick, 2002; Eaton et al., 2010).

Extreme weight control behaviours and attitudes can predict the onset of more severe disordered eating behaviours including anorexia nervosa, bulimia nervosa, and binge eating disorder (Fonseca, Matos, Guerra, & Pedro, 2009; Neumark-Sztainer et al., 2009).

Many studies have identified gender differences in body image, weight concern, and weight control behaviours. However, as the literature indicates females are more likely to engage in weight control behaviours, many studies purposely recruited females only. Females have shown greater depression, body image dissatisfaction, and attitudes and behaviours related to disordered eating than males (Ata et al., 2007; Keel, Fulkerson, & Leon, 1997). Females are more likely than males to adopt strategies to lose weight (McCabe & Ricciardelli, 2005; Neumark-Sztainer, Paxton, Hannan, Haines, & Story, 2006; Viner et al., 2006), as they want to decrease overall size of their body (Ata et al., 2007). In one study, 15% of adult female respondents stated that they would sacrifice 5 years of their life to be the weight they desired (Garner, 1997). This desire to be thin can cause women to engage in dieting which may increase the odds for meal skipping (Neumark-Sztainer, Wall, Haines, Story & Eisenberg, 2007; Woodruff et al., 2008), and extreme weight control behaviours (Neumark-Sztainer et al., 2009) which are, in turn, predicative of suicidal ideation (Kim, Cho, Cho, & Lim, 2009). A large sample study suggested that adolescents who reported bingeing/purging to lose weight were less likely to report sense of purpose, self-esteem, personal power, and positive view of personal future (French, Story, Neumark-Sztainer, Fulkerson, & Hannan, 2001). Furthermore, cross-sectional studies have illustrated that women who are unhappy with their appearance are more prone to disordered eating compared to individuals who have a

positive sense of their bodies (Bearman et al., 2006; Kelly et al., 2005; Russell-Mayhew, McVey, Bardick, & Ireland, 2012). A longitudinal study demonstrated similar findings in that, women entering college with higher levels of body dissatisfaction were more likely to show worse patterns of eating pathology across the college years (Cooley & Toray, 2001). It is important to identify that body dissatisfaction and internalization of the thin-ideal alone does not cause eating disorder symptoms, they are but risk factors.

BMI may also play a role in disordered eating attitudes and behaviours in females. Many studies have found that overweight and obese females have a desire to lose weight (Anderson, Lundgren, Shapiro, & Paulosky, 2003). One study reported that overweight women would accept any weight loss but tend to set their goal/dream weights at approximately 15% less than their current weight (Anderson et al., 2003). To accomplish these weight loss goals females may engage in weight control behaviours ranging from unhealthful to extreme. Overweight and obese females have reported dieting more to lose weight (Boutelle et al., 2002; Woodruff et al., 2008) as well as exercising more to lose weight (Boutelle et al., 2002) than their normal weight counterparts. Studies that examined the nature of unhealthy weight control behaviours indicated that females engaged in more bulimic symptoms than males; particularly among overweight females (Boutelle et al., 2002; Crow, Eisenberg, Story, & Neumark-Sztainer, 2006; McCabe & Ricciardelli, 2009). Furthermore, it has been demonstrated that relative to healthy weight, being obese or extremely obese (but not overweight) was associated with significantly greater risk for adolescent engagement in suicidal ideation (Zeller, Reiter-Purtill, Jenkins, & Ratcliff, 2013). Overweight and obese females may be at a higher risk for unhealthy weight control strategies as they may be farther from society's view of the ideal

weight/shape for women, and feel pressured to try a quick solution. However, normal weight females have also reported desired weight loss (Anderson et al., 2003; Raudenbush & Zellner, 1997), and have also reported dieting to maintain weight (Crow et al., 2006) and using unhealthy weight control behaviours, such as, laxatives, diet pills and vomiting (Boutelle et al., 2002). This may suggest that women, regardless of weight status, feel a pressure to conform to the thin ideal portrayed in Western cultures. It is important to note that some of these studies used self-reported measures of height and weight (Boutelle et al., 2002; Crow et al., 2006; Woodruff et al., 2008; Zeller et al., 2013), which can result in an overestimation or underestimation of BMI. Future research should continue to explore the reasons why women engage in unhealthy weight control behaviours as well as use a trained investigator to measure height and weight.

Majority of studies (Akan & Grillo, 1995; Kumanyika, 1993; Neumark-Sztainer et al., 2002), have found that African American females are less likely than Caucasian females to care about controlling weight, to engage in unhealthy weight control behaviours (i.e., meal skipping) or extreme weight control behaviours (i.e., vomiting). This is not to suggest that African American women are not weight conscious. A study by Kumanyika (1993) found that overweight African American women are weight conscious, but approximately 40% considered their figures to be attractive or very attractive, which indicates a relatively positive body image. Less attention has been focused on other minority groups (i.e., Hispanic, Asian; Neumark-Sztainer et al., 2002). As mentioned in the Etcoff et al., (2004) study, that spanned 10 countries, despite mostly categorizing themselves as average on beauty and physical attractiveness, almost half of all women (47%) rate their body weight as too high (Etcoff et al., 2004). Majority of

studies are of a homogeneous sample in terms of ethnicity, future research needs to further explore pressures to be thin or seek to determine the cultural norms/specific societal ideals of weight/shape in minority populations and how this may impact unhealthy weight control behaviours.

Less is known about weight control behaviours among males, particularly those from different ethnic backgrounds (Ata et al., 2007; McCabe & Ricciardelli, 2003). However, research has shown that male dieters have greater odds for low self-esteem, depressive symptoms and body dissatisfaction (Neumark-Sztainer et al., 2009). Furthermore, body dissatisfaction (Neumark-Sztainer et al., 2006), and BMI (Anderson et al., 2003) have been shown as predictors for higher levels of unhealthy weight control behaviours in males. Some studies have suggested normal weight males are more likely to desire a greater muscle mass (Anderson et al., 2003; McCabe & Ricciardelli, 2005; Raudenbush & Zellner, 1997), or modify their body to improve in athletics (Ricciardelli et al., 2006), and report wanting a goal/dream weight which increased their BMI (Anderson et al., 2003). To accomplish this muscular physique, males are adopting strategies like binge eating (Neumark-Sztainer et al., 2006), eating special foods (e.g., muscle building supplements; Ricciardelli et al., 2006), or taking steroids (Irving, Wall, Neumark-Sztainer, & Story, 2002). However, it has been found that overweight men want to be thinner (Crow et al., 2005; Raudenbush & Zellner, 1997) and report using exercise, dieting (i.e., eating less to lose weight, or meal skipping), and unhealthy weight related behaviours, such as laxatives, diet pills, and vomiting to do so (Boutelle et al., 2002). When compared to Caucasian males, African Americans, Asians, Hispanics and Native Americans are at significantly greater odds for weight related concerns and

behaviours (Neumark-Sztainer et al., 2002). As the majority of studies have been focused on females, future research should continue to look at diverse male populations and explore pressures of muscularity in a larger sample size. Furthermore, broad age range in many studies (e.g., 13-19 years; Ata et al., 2007; 12-17 years; Boutelle et al., 2002) may also limit results, as some predictors of weight related concerns and behaviours may be more important for particular age groups (i.e., types of media influences, and influencing power of the media may vary during different life stages).

Common Predictors for Disordered Eating Attitudes and Behaviours

Parents and peers play an important influence on weight and weight adoption strategies (McCabe & Ricciardelli, 2005; Ricciardelli et al., 2006). Specifically, peer weight-related teasing for both males and females can result in the adoption of disordered eating attitudes and behaviours (Ata et al., 2007; Ricciardelli et al., 2006). Males feel more pressure from friends and family to gain muscle, whereas, females feel greater pressure to lose weight (Ata et al., 2007; Paxton et al., 1999). Mothers can play a role in adoption strategies to gain muscle (McCabe & Ricciardelli, 2005), and increase weight concern in their daughters (May, Kim, McHale, & Crouter, 2006). Females' concern with gaining muscle could perhaps allude to society's adoption of a slightly different female ideal, not just thin, but also muscle tone and athletic builds (Guendouzi, 2004). Fathers play an important role in males for both gaining muscle and losing weight strategies (McCabe & Ricciardelli, 2005). However, the majority of research on parent and peer influence on weight focuses on females and their relationships with peers and family members. Further research is needed to examine the nature of family pressures to adopt weight altering strategies, and how pressures/messages can be conveyed through a variety

of channels (i.e., comments left on social networking sites: SNSs). Knowledge about how these pressure/messages are conveyed may help researcher educate parents of how to promote health and wellness to their children.

SELF-ESTEEM

A person's self-esteem, especially in western societies, is influenced by cues that impact social acceptance, such as physical attractiveness (Anthony, Holmes, & Wood, 2007; Leary, Tambor, Terdal, & Downs, 1995). Self-esteem has been described as how an individual feels about all the characteristics that make up his or her person, taking into account, among other things, skills and abilities, interactions with others, and physical self-image (Piers & Herzberg, 2002). In longitudinal studies (i.e., 2 years; Keel et al., 1997; 5 years; Loth et al., 2011; 5 years van den Berg et al., 2010) it has been shown that females reported lower self-esteem compared to males.

Body Image and Self-Esteem

Low self-esteem and body dissatisfaction are reciprocally predicative of each other in females (Ettcoff et al., 2004; Paxton et al., 2006b; Tiggemann, 2005; van den Berg et al., 2007; Webster & Tiggemann, 2003). One study found that self-esteem was second only to being teased in the ability to predict degree of body-image dissatisfaction (Matz, Foster, Faith, & Wadden, 2002). Society's ideal beauty is unachievable for most, thus women have difficulty thinking of themselves as beautiful, which may result in lower self-esteem (Ettcoff et al., 2004). However, self-esteem has received little attention in women's reaction to the thin ideal (Jarry & Kossert, 2007). Few studies on body satisfaction and self-esteem have been conducted with males; however, van den Berg and colleagues (2007) reported that low self-esteem was associated with body dissatisfaction

in males. Finding an association between self-esteem and body satisfaction in males may suggest that society's masculine ideal beauty is unachievable for most as well. Future research should continue to explore the relationship of self-esteem and specific beauty ideals for both males and females.

Eating Behaviours and Self-Esteem

Those with low self-esteem are perhaps more vulnerable to negative comments, pressures to lose weight, or adopt unhealthy eating patterns from family, friends and the media. An association exists between low self-esteem and unhealthy eating behaviour (i.e., meal skipping, using food as a coping mechanism; Button, Sonuga-Barke, & Thompson, 1996). Moreover, in a cross-sectional ethnically diverse study of males and females, those with low self-esteem were at significantly greater risk of developing the more severe signs of eating disorders (Martyn-Nemeth, Penckofer, Gulanick, Velsor-Friedrich, & Bryant, 2009). Other supporting research has found that self-esteem is a predictor of bulimic symptoms (Ata et al., 2007; Bardone, Vohs, Abramson, Heatherton & Joiner, 2000; Dykens & Gerrard, 1986), and anorexic behaviours (Grant & Fodor, 1986), suggesting, self-esteem acts as an important predictor of the development of eating pathology (Button et al., 1996; French et al., 2001). Women with eating disorders may derive their self-esteem disproportionately from their appearance and perhaps, future research should look at creating educational tools or interventions that aid in building self-esteem which, in turn, may prevent unhealthy eating behaviours.

BMI and Self-Esteem

High BMI can lead to poor self-esteem (Loth et al., 2011; van den Berg et al., 2010; Paxton, Eisenberg, & Neumark-Sztainer, 2006a; Willows et al., 2013) and

depressive mood (Loth et al., 2011; Paxton et al., 2006a). Furthermore, overweight and obese individuals have been found to lack confidence and view themselves as being unpopular (Willows et al., 2013). BMI may be associated with self-esteem in females, as van den Berg and colleagues (2007) found that body dissatisfaction was related to self-esteem in normal, overweight, and obese females. Moreover, the literature suggests that obesity has less of an impact on the self-esteem of African American females than Caucasian females (Kimm et al., 1997; Viner et al., 2006). Males' self-esteem also appears to be impacted by BMI, as self-esteem was lower in obese males than those of normal weight (Viner et al., 2006). Within ethnic subgroups, self-esteem is lower in overweight Caucasian males and obese minority males (Viner et al., 2006). In addition, Strauss (2000) found no differences between African American, Hispanic, and Caucasian males in the impact of obesity on self-esteem. Future research should seek multiethnic samples of both males and females, reproduced within a longitudinal study to view the relationship of weight and self-esteem over time.

IMPACT OF MASS MEDIA ON BODY IMAGE, EATING BEHAVIOURS, AND SELF-ESTEEM

Time spent engaging in mass media (e.g., watching television, playing video games, or using the computer continues) increases each year and is currently, approximately two times higher than the recommended daily limit of 2 hours/day (Babey, Hastert, & Wolstein, 2013). The literature suggests that mass media is the most powerful conveyor of sociocultural ideas (Dohnt & Tiggemann, 2006; Smolak & Levine, 1996; Tiggemann, 2003) and the strongest predictor of body dissatisfaction (Irving, 1990). Even in remote areas of North America children receive forms of mass media set to influence their beliefs and attitudes about what is a healthy optimal body size (Willows et al.,

2013). McCabe & Ricciardelli (2005) suggest that media has a strong role in weight loss strategies for both males and females and a strong role in encouraging males to increase muscle. On the contrary, some studies (Ata et al., 2007; van den Berg et al., 2007), found that for females, but not males, media body comparison is associated with body dissatisfaction.

Media appears to exert more pressure on females to reach unattainable body standards (Ata et al., 2007), as women treat the messages they get from popular culture of beauty and physical attractiveness synonymously (Etcoff et al., 2004). In particular, women who are highly invested in their appearance are more negatively affected when exposed to thin media images (Ip & Jarry, 2008). In addition, several experimental studies have demonstrated that when women are exposed to media images of female beauty, they tend to experience an increase in body image disturbance (Heinberg & Thompson, 1995; Posavac, Posavac, & Posavac, 1998; Richins, 1991; Stice & Shaw, 1994), are more likely to display eating disorder symptoms (Harrison, 2000; Stice, Schupak-Neuberg, Shaw, & Stein, 1994) and have lower self-esteem (Irving, 1990). Interestingly, in one study, women who had been exposed to thin media images and had their self-esteem threatened, engaged in body image self-enhancement, using appearance to maintain a global sense of self-worth (Jarry & Kossert, 2007). Furthermore, in an ethnically diverse sample more than two-thirds (68%) of women strongly agree that the media and advertising set an unrealistic standard of beauty that most women can't ever achieve (Etcoff et al., 2004). However, other studies have found no relationship or inconsistent relationships with body satisfaction, eating disorder symptoms, self-esteem and exposure to thin media images (Botta, 1999; Cusumano & Thompson, 1997), yet

different media outlets (e.g., television, magazine, music videos, SNSs, etc.) were treated equivocally in the different studies. Alternatively, thinness is not the only standard of beauty that exists; researchers may be overlooking idealized images that can be sources of body dissatisfaction (Overstreet et al., 2010). Future research should continue to involve minority groups and explore varying cultural norms of beauty ideals.

To date, the few studies on media exposure in men indicate negative correlations with body perceptions (Harrison & Cantor 1997; Lavine, Sweeney, & Wagner, 1999) and self-esteem (Muris, Meesters, van de Blom, & Mayer, 2005), and a positive correlation with disordered eating (Harrison & Cantor, 1997). It appears that perceived failure to live up to body size standards is likely to increase negative self-evaluation, therefore, increasing depressive mood and lowering self-esteem (Paxton et al., 2006a). Future research should continue to explore these mechanisms of perceived failure to live up to societal normal in both females and especially in males and in larger, more diverse samples.

Magazines

Magazine exposure is associated with the internalization of the ideal form as thin for women and physically fit for men (Morry & Staska, 2001). Stice et al., (1994) found a direct link of magazine advertisements on eating disorder symptomology in females. For example, females exposed to magazine advertisements that glorify the thin ideal have resulted in lower body image satisfaction (Tucci & Peters, 2008; Yamamiya, Cash, Melnyk, Posavac, & Posavac, 2005), self-esteem, and greater fear of negative appearance evaluation (Boersma, 2011; Engeln-Maddox, 2005). In contrast, Bair, Kelly, Serdar and Mazzeo (2012), found that magazine exposure was not significantly associated with body

dissatisfaction and the internalization of the ideal form as thin for women, rather; only television and the internet mediated these relationships. This is possibly due to the age group (college-aged) and that this generation is more likely to use alternative forms of media (i.e., Internet and SNSs; Duggan & Smith, 2014).

Cross-sectional studies suggest that males, compared to females, perceive fewer pressures from the media to conform to the cultural ideals (McCabe & Ricciardelli, 2001; Vincent & McCabe, 2000), rather males may use other targets of body comparison, including sports heroes or peers (van den Burg et al., 2007). In one study, half of the males reported that the media had no effect on their body image or eating behaviours (Ricciardelli, Baylis, & Driver, 2000). On the contrary, some evidence does indicate that men are experiencing similar problems as women, in that they also internalize the ideals from media (e.g., fitness magazines), relating to problematic eating behaviours, self-objectification, and body shame (Morry & Staska, 2001). Interestingly, Neumark-Sztainer and colleagues (2009) found that for both overweight males and females, compared to normal weight counterparts, included exposure to weight loss magazine articles as a source of cultural ideals about body weight/shape. The differences in findings of males' body image or eating behaviours are not impacted by the media may exist because the types and number of magazines used in these studies were not specifically identified, and scales used were of varying consistency, making results difficult to compare. Moreover, it is possible the causal direction goes in the opposite direction (Morry & Staska, 2001), that is, dissatisfaction with one's body could lead to eating problems and influence the types of magazines an individual reads.

Television

Unlike magazine content which is limited to the images and articles included in a specific issue television provides constant access to image-focused content (Bair et al., 2012). Research has found that correlational links between television exposure and body image variables exist (Harrison, 2000; Jones, Vigfusdottir, & Lee, 2004). Specifically, females watching television shows with an appearance emphasis (i.e., soap operas, music videos, and sport; Tiggemann & Pickering, 1996), were less satisfied with their appearance (Dohnt & Tiggemann, 2006; Tiggemann & Pickering, 1996) which may be linked to eating disorders (University of Haifa, 2011). Finding a correlation between females' body image and type of television shows watched, may be associated with the fact that a vast majority (94%) of female characters in television programs are thinner than the average sized female (Gonzalez-Lavin & Smolak, 1995), further perpetuating the unrealistic beauty ideal of females. Males also feel body image pressure from television. In one study, undergraduate males who had been exposed to appearance-related television advertisements (i.e., males that were lean and muscular, often without a shirt on), reported higher body dissatisfaction and higher levels of depression than the males who had been exposed to neutral control advertisements (Agliata & Dunn, 2004). Adverse effects of appearance-related television exposure exists for both males and females, however, future research should aim to extend knowledge of other media outlets that also provided constant access to image-focused content, such as, the Internet and SNSs.

Internet and Social Networking Sites

The majority of research on mass media and its impact on body image have focused on ideal images presented in print and television media. Yet media use is rapidly evolving, and the Internet, SNSs in particular, are quickly becoming the primary media source used by young adults (Bair et al., 2012; Tiggemann & Slater, 2013). Given the rapid growth of the Internet and SNSs, and the associations between media consumption and body image and eating disorders, further research into these online media sources is needed. Researchers are just beginning to explore how the Internet and SNS use may impact body image. Some studies have shown link between exposure to Internet thin-ideal images and body dissatisfaction in females (Bair et al., 2012; Tiggemann & Miller, 2010; Tiggemann & Slater, 2014). Contrary to this, Meier and Gray (2013) did not find a correlation for total Internet use and body image variables. This could perhaps be due to the fact that the Internet, and what it offers, is ever changing. Literature suggests that new forms of SNSs and their effects on body image have yet to be completely explored (Jong & Drummond, 2013). One study reported that time spent on SNSs produced stronger correlations with body image concern than did overall Internet exposure in females (Tiggemann & Slater, 2014). Specifically, positive correlations with the time spent on MySpace and Facebook and body image concern (Tiggemann & Slater, 2013), low self-esteem (Mehdizadeh, 2010), and dieting (Tiggemann & Slater, 2014) exist. Moreover, a recent, unpublished study at University of Haifa (2011), reported that the more time females spend on Facebook, the more they suffered from eating disorders, negative approach to eating, and more of an urge to be on a weight-loss diet. However, these studies focus on total time usage, which is uninformative given the wide array of features

available on SNSs, as user activity may vary widely in time spent posting photos, videos, status updates, chatting, private messaging or lurking.

Female Facebook users have been shown to score significantly higher on all measures of body concern than their non-user counterparts (Fardouly & Vartanian, 2015; Meier & Gray 2013; Tiggemann & Slater, 2013; Tiggemann & Slater, 2014), and several studies have explored the relationship between specific Facebook activity and body-image related variables. Facebook appearance exposure/photo activity (i.e., sharing photos, viewing others' photos), in female college students, is positively correlated with body dissatisfaction and negatively correlated with weight satisfaction (Meier & Gray, 2013; Stefanone, Lackaff, & Rosen, 2011). These relationships may exist because heavy use of these photo activities may magnify the already intense pressure placed on females to be thin, which could contribute to body image disturbance or more serious pathology (Meier & Gray, 2013). Future research should examine associations with Instagram and Pinterest, which are solely SNS photo-type applications.

Negative correlations seem to exist between self-esteem and Facebook activity (Mehdizadeh, 2010). Lower self-esteem young adults appear to gain more from their use of Facebook than higher self-esteem users, as Facebook might facilitate communication, especially in initial social interactions, and perhaps mitigate fears of rejection (Steinfeld, Ellison, & Lampe, 2008). Potentially, SNSs interact with users self-esteem, helping lower self-esteem users initiate communication with others outside of their close personal networks (Steinfeld et al., 2008). Furthermore, a study looking at specific features of SNSs found that the frequency and direct tone of the feedback left on the users profile impacted self-esteem and well-being (Valkenburg, Peter, & Schouten, 2006). This study

used Friendster and MySpace, and due to the ever changing online world, these SNSs are no longer considered popular (Duggan & Smith, 2014) in this age group. Although these studies only focus exclusively on Facebook users or outdated SNSs, they demonstrate the usefulness of measuring user interaction with specific features, rather than just overall time spent on SNSs.

The nature of SNS's impact on eating behaviours, eating disorders and body image requires further investigation. Recent studies have found a small, but significant, association between Facebook usage, and disordered eating level (Hummel & Smith, 2014; Mabe, Forney, & Keel, 2014). Specifically, disordered eating levels were impacted in college-aged females after just 20 minutes of typical Facebook use in a laboratory setting (Mabe et al., 2014), which is troublesome as young adults spend ample time on SNSs (Pempek, Yermolayeva, & Calvert, 2009; Ross, Orr, Sisic, Arseneault, Simmering, & Orr, 2009). Moreover, a longitudinal study by Smith, Hames, & Joiner (2013), found that maladaptive Facebook use (i.e., the tendency to seek out negative evaluations and/or engage in social comparisons) at baseline, prospectively predicted greater eating pathology at a 4 week follow-up. This effect was partially mediated by body dissatisfaction, suggesting that Facebook use may impact eating pathology via body dissatisfaction (Smith et al., 2013). However, other studies are cross-sectional in nature (Meier & Gray, 2013; Tiggemann & Slater, 2013; Tiggemann & Slater, 2014) and future research should look to conduct longitudinal methods to test if pre-existing body image disturbances drive users to use appearance-related SNS features more heavily. Furthermore, the majority of research has only looked at Facebook (Fardouly & Vartanian, 2015; Meier & Gray, 2013; Steinfield et al., 2008; Stefanone et al., 2011) and

has not explored other popular SNSs like Twitter, Instagram and Pinterest, making generalizability difficult. Lastly, few studies (Fardouly & Vartanian, 2015; Hermrich, 2014) has been conducted on the effects of SNSs and its impact on body satisfaction in university aged individuals, however, similar to other research in the area of SNSs and body image (Meier & Gray, 2013; Tiggemann & Slater, 2013; Tiggemann & Slater, 2014) males were not included.

INTERNET

The number of Canadian households with access to the Internet has increased from 79% in 2010 to 83% in 2012 (Statistics Canada, 2013). An even greater increase can be seen if compared to 1998 where only 40% of households had a computer and only 1/3 of those having the Internet (Kraut et al., 1998). Young adults (18-29 years; Duggan & Smith, 2013) have been found to use the Internet more than adults (Kraut et al., 1998), whereby a recent study indicated that 99% of students in grades 4-11 were able to access the Internet outside of school (Steeves, 2014). Furthermore, young adults use various portable and personal devices, compared to 2005 where the majority of young adults accessed the Internet through desktop computers (Steeves, 2014). Individuals in contemporary life have continual accessibility to the Internet, making it the most commonly used media type in college aged individuals (Bair et al., 2012).

The modern Internet has been presented as a combination of all previous communication technologies (Bargh & McKenna, 2004). Unlike television and magazines, which are more passive, the Internet allows and encourages considerably greater participation by the user. Further, in contrast to magazines and television, the Internet presents a constantly changing medium that is not limited by cost or physical

availability (Tiggemann & Slater, 2014). A longitudinal study, associated with examining if the Internet is improving or harming participation in community life and social relationships, indicated that using the Internet adversely affected social involvement and psychological well-being, whereby greater Internet use resulted in increases in both loneliness and depression in college students (Kraut et al., 1998). However, it is important to consider that online phenomena are constantly changing and evolving, which can make it difficult to study as it is in a constant state of motion.

In recent years, literature has begun to accumulate about the existence of Internet addiction or problematic Internet use (PIU). In countries like South Korea and China, Internet addiction has become a serious public health issue (Block, 2008). Defined as the maladaptive cognitions and behaviours related to Internet use which may interfere with normal daily living (Caplan, 2002), PIU is a concern in our society where Internet usage continues to rise. Most research has examined dependency on the Internet without addressing a possible dependency on specific Internet applications (Spraggins, 2009). Research has suggested that communicative or interactive applications of the Internet might be particularly addictive (Chou, Chou, & Tyan 1999; Chou & Hsiao, 2000; Morahan-Martin & Schumacher, 2000). One type of communicative and interactive online application that has grown rapidly in recent years are SNSs.

SOCIAL NETWORKING SITES

Boyd and Ellison (2007) define SNSs as “web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system”. SNSs

differ from traditional forms of media by their immediacy, interactive, active participation, and circle of connectedness (Pempek et al., 2009). SNSs reveal important information on how individuals are interacting with one another (Pempek et al., 2009) and within the online world. SNSs offer a platform for individuals to observe interactive Internet advertising campaigns, follow their favourite celebrities, express themselves through photographs and text, and gain social feedback from an audience (Jong & Drummond, 2013; Pempek et al., 2009). Furthermore, SNSs plays a role in facilitating the maintenance of close friendships and that of distant relationships (Spraggins, 2009; Steinfield et al., 2008). It has been argued that SNSs attract today's youth through mass popularity and perceived social benefits (Steinfield et al., 2008; Wilson, Gosling & Graham, 2012). Many SNSs exist, easily accessed on computers, tablets, or mobile phones, with the most popular in today's young adults being Facebook, Twitter, Instagram and Pinterest (Duggan & Smith, 2014).

Facebook

Facebook is a popular SNS that has grown to, as of June 2014, 1.32 billion monthly active users (Facebook, 2014). It has been suggested that Facebook has the highest engagement level of a SNSs (compared to Twitter, Instagram, LinkedIn, and Pinterest), as 63% of Facebook users visit the site at least once daily (Duggan & Smith, 2014). Founded in February 2004, the Facebook mission is “to give people the power to share and make the world more open and connected. People use Facebook to stay connected with friends and family, to discover what's going on in the world, and to share and express what matters to them” (Facebook, 2014). Features within the site make it easier for users both to broadcast information about their own activities and to engage in

a form of social surveillance wherein they can track the activities of a wide set of Facebook Friends (i.e., wall posts, pokes, messages; Steinfield et al., 2008). To become Facebook Friends, one user must send a friend request to another user, which that user can then, chose to accept or reject the request. Furthermore, Facebook users have a variety of options when it comes to privacy settings, meaning a user can leave their profile open (e.g., any user can view their pictures, comments, wall posts, etc.) or maintain a highly privatized profile (e.g., only confirmed friends can view profile content).

Twitter

Another popular SNS, with 284 million monthly active users is Twitter (Twitter, 2014). The first tweet (i.e., a text based message, limited to 140 characters, 117 characters if you include a link/URL) was sent in 2006, marking the birth of Twitter; a SNS aiming to “to give everyone the power to create and share ideas and information instantly, without barriers” (Twitter, 2014). Conversations on Twitter create networks with identifiable outlines as people reply to and mention one another in their tweets, with conversational structure depending on the subject and the people driving the conversation. Conversational structures are created as individuals choose whom to reply to or mention in their Twitter messages and the structures tell a story about the nature of the conversation (Duggan & Smith, 2014). Twitter users can chose to have a public or private account. If using a public account (i.e., many celebrities), other Twitter users do not have to ask permission to follow you, meaning anyone can view your profile content and Tweets. A private Twitter account will ask the profile owner’s consent before allowing a follower.

Instagram

Instagram is a SNS that has seen a surge of popularity in recent years. Launched in 2010, within 2 months the Instagram community grew to 1 million users, and reached 100 million users by May 2013 (Instagram, 2014a). According to the website (www.instagram.com), Instagram is a “fun and quirky way to share your life with friends through a series of pictures” (Instagram, 2014b). Instagram is mainly used as a mobile application, in which users take a picture with their mobile camera, and then choose a filter to edit/enhance their photograph before posting it. Instagram claims that the filter feature was created to solve the problem of mobile phone photographs coming out looking mediocre or average. Instagram suggests “our awesome looking filters transform your photos into professional-looking snapshots” (Instagram, 2014b). Similar to Twitter, Instagram users can choose to have a public (i.e., anyone can view content) or private account (i.e., must first ask permission before they are able to follow and view content).

Pinterest

Founded in March 2010, Pinterest is a SNS that allows users to discover ideas for all their hobbies and interests (i.e., recipes for cooking, latest fashion trends, and instructions on crafts to do with children). As described by Pinterest (Pinterest, 2014), Pins are visual bookmarks, linking users back to the original source of the image. These Pins are then collected on to Boards, and when someone Pins, likes or comments on your Pins, or follows or mentions you, Pinterest will send you a notification (Pinterest, 2014). However, Pinterest users can create secret Boards which are only visible to the user and other people the user invites. When a user adds a Pin to a secret Board, it won't show up

anywhere else on Pinterest. Pinterest users essentially create a profile that is a visual collage (public or secret) of what they are and what interests them.

Although SNSs like Facebook, Twitter, Instagram and Pinterest have gained widespread popularity in recent years, little research has been conducted regarding the use of these sites, their addictive nature and the implications they may have on well-being (i.e., body satisfaction, eating disorders and self-esteem).

Usage and Social Networking Site Addiction

Spending time on SNSs appears to be a part of most Canadian young adults' daily activities, as the majority of undergraduate students engage in some form of computer-mediated social networking (Mazman & Usluel, 2011). In one study, 100% of college students indicated they used some form of SNS, with a large majority (99%) being members of Facebook (Sponcil & Gitimu, 2012). Similar results have been found in other studies of undergraduate students (i.e., 85-95%; Ellison, Steinfield, & Lampe, 2007; Ross et al., 2009; Spraggins, 2009). The high number of young adult SNS users may be due to the fact that SNSs can help to address the relationship development and maintenance needs of young adults at a point in their lives where they are moving away from home and into the adult-life (Steinfield et al., 2008). In fact, it has been demonstrated that less actively engaged SNS (i.e., Facebook) users are more likely to report a low satisfaction of campus life (Ellison et al., 2007). It has been reported that students are using Facebook 10-60 mins/day (Pempek et al., 2009; Ross et al., 2009), suggesting that regardless how busy young adults are, SNSs has become an integrated part of their daily routine.

Young adults are using SNSs to connect with others, in particular, relationships that already exist in their offline lives (Ellison et al., 2007; Sponcil & Gitimu, 2012;

Subrahmanyam, Reich, Waechter, & Espinoza, 2008). A significant reason for young adults to be on a SNS was for lurking (i.e., spending time looking at other users' profiles without having communication with them; Pempek et al., 2009; Sponcil & Gitimu, 2012). Lurking is reported as an important means by which SNS members keep track of the many people in their networks and the interaction that their network members have with others (Subrahmanyam et al., 2008). Other uses of SNSs for undergraduates appear to be filling up free time (Subrahmanyam et al., 2008) and entertainment purposes (Sponcil & Gitimu, 2012).

Problematic SNS use exists in college students, however, to what degree is difficult to say (e.g., 5-10%; Spraggins, 2009). With SNSs like Instagram and Facebook becoming some of the most operated websites in the world, even the possibility that the use of these types of sites may become problematic for some individuals is cause for concern. A novel study by Spraggins (2009), reported that some students have a difficult time stopping their SNS use and keeping themselves from using these sites, while also utilizing the sites for greater amounts of time than planned. Furthermore, individuals showing greater symptoms of problematic use also had more symptoms of depression, loneliness, unhappiness and having lower self-esteem and less satisfaction with their lives (Spraggins, 2009). Currently, no specific measure exists to assess problematic SNS use. Spraggins (2009), used a modified PIU measure, which no definitive cut-off points exist to differentiate problematic users from non-users. As SNS use has become so prominent in our current society, developing a valid and reliable assessment tool should be the focus of future research.

SOCIOCULTURAL THEORY AND THE NEGATIVE IMPACT OF SOCIAL NETWORKING SITES ON BODY IMAGE, EATING BEHAVIOURS, AND SELF-ESTEEM

According to the Sociocultural Model, the media, peers, and family are important vehicles through which messages about weight and appearance are transmitted to members of society. For females, the Sociocultural Model suggests that body image disturbances are the result of pervasive societal pressure to be thin (Stice, 1994; Vandereycken, 1993), and lose weight (McCabe & Ricciardelli, 2005), which is often accompanied by social anxiety, depression, eating disturbances, and poor self-esteem (Cash & Pruzinsky, 2004). Furthermore, body surveillance, defined as the tendency to view one's body from the perspective of an outside observer (Fredrickson & Roberts, 1997; McKinley & Hyde, 1996), may further lead to body dissatisfaction because it promotes an awareness of the discrepancy between one's own body and internalized cultural standards of attractiveness (McKinley & Hyde, 1996). Specifically, body surveillance has been shown to be highly correlated to the internalization of the thin ideal in university aged women (Kim & Jarry, 2014). However, other research has suggested that body dissatisfaction may not revolve solely around a desire for thinness, but may also be influenced by a desire to achieve a curvaceous body shape (i.e., wider breasts and buttocks with a thin waist; Harrison, 2003), or a lean, toned, athletic body type (Field, Carmago, Taylor, Berkely, & Colditz, 1999; Guendouzi, 2004; Thompson, Altabe, & Tantleff-Dunn, 1999). These differences of ideal beauty may exist because much research conducted in the area of body dissatisfaction has been on Caucasian females in westernized cultures, where the thin ideal is said to be dominant (Thompson & Stice, 2001), or because society is portraying that being slim is no longer enough, today women also have to be fit, and muscular (Guendouzi, 2004). It cannot be overlooked that women

of other ethnicities and cultures feel pressure from society to obtain certain beauty standards. In a diverse sample, 60% of women surveyed believed that society expects women to enhance their physical attractiveness (Etcoff et al., 2004), suggesting that regardless of ethnicity women are feeling pressure to live up to beauty standard put forth as the cultural norm.

It has been suggested that the media may play a less important role in transmitting sociocultural messages regarding the ideal body to males (Vincent & McCabe, 2000) or that males may become aware of social pressures to conform to an appearance ideal later in life than females (Holsen, Kraft, & Roysamb, 2001). However, based on the Sociocultural Model, Morry and Staska (2001) purposed that there are social and cultural pressures toward physical fitness in men. The sociocultural norm indicates that the ideal male body should be tall, muscular, and mesomorphic (McCabe & Ricciardelli, 2005; McCreary & Sasse, 2000; McKinley, 1998).

Sociocultural Theory and Social Networking Sites

According to the constructs of the Sociocultural Model (i.e., media, peers, and family), SNSs are particularly powerful transmitters of messages about weight and appearance. This is because SNSs merge media, peers, and family influence to convey societal standards and virtually support the beauty ideals and, in turn, potentially encourage body dissatisfaction. Young adults are mainly using SNSs to facilitate pre-existing relationships, meaning they are interacting with people they know and trust (Ellison et al., 2007; Pempek et al., 2009; Spraggins, 2009; Stefanone et al., 2011). On certain SNSs users are able to like a post/picture or leave a comment. This like represents acceptance and further can be seen as an indicator of popularity and, thereby, assists in

the transmission of ideals about beauty and body shapes (Jong & Drummond, 2013). Perloff (2014), suggests that individuals low in self-esteem, high in beauty internalization and appearance based self-worth are especially susceptible to turn to social media to validate their self-concepts, satisfy personal reassurance needs, and convince themselves they measure up to beauty ideals. Further suggested is that individuals who seek gratification through SNSs may accomplish this through compulsively checking their Facebook profile pictures, validate their self-concepts by spending considerable time comparing their Instagram pictures to those of less attractive friends, and try to ritualistically escape personal problems by tweeting celebrity role models (Perloff, 2014).

In a study by Pempek and colleges (2009), posting photographs was reported as a major activity on SNSs, as photos helped young adults to express who they are. The most common activity that has been reported is lurking or observing other's actions (i.e., newsfeed, pictures) rather than posting information or updating their own profile (Pempek et al., 2009). With the use of comments and likes users gain an understanding of the type of pictures that are expected and respected by the social networking community, in turn, reproducing and maintaining the culturally endorsed norms with their own pictures and posts (Jong & Drummond, 2013). This is further seen in users adopting behaviours traditionally associated with celebrities (e.g., the importance of image and appearance in social interaction; Stefanone et al., 2011). Interestingly, the main reason for untagging (i.e., removing one's self from a posted picture) themselves in photos is because they did not like the way they looked (Pempek et al., 2009). Thus, the individual is creating a SNS persona, perhaps not based on individual expression, but on these virtually constructed social norms (Jong & Drummond, 2013).

The sociocultural model proposes that internalization of the thin ideal mediates the relationship between media exposure and body image concerns. The speed and ease at which females can make social comparisons with their friends and celebrities while using SNSs may be a contributing factor to body dissatisfaction and internalization of the thin idea (Jong & Drummond, 2013; Tiggemann & Slater, 2014). For example, a recent Australian study by Fardouly & Vartanian (2015) found that the relationship between Facebook usage and body image concerns is specifically mediated by appearance comparisons in general. Intriguingly, social comparisons with attractive peers can actually lead to more negative self-attractiveness ratings than comparisons with attractive advertising models, as friends are perceived more similar (Cash, Cash, & Butters, 1983). The online environment is filled with pictures of peers and opportunities for social comparisons. SNSs such as Instagram have applications that allow the user to filter or enhance/edit their pictures before posting. Negative comparisons can then (theoretically) be particularly likely when young women compare their online pictures with peers, not knowing their peers have digitally altered the photographs (Perloff, 2014). On the other hand, research has found that celebrities and their lifestyles play a dominant and inspirational role for the majority of young females, where many know every minute detail about the celebrities; including their diet and exercise habits (Mooney, Farley & Strugnell, 2009). SNSs are an outlet where users can specifically follow their favourite celebrities, reading personal and detailed posts about not only their lives but their diets, exercise habits, and beauty beliefs. SNSs appear to be a place where comparisons to peers and celebrities are made with ease, and future research needs to further address SNSs ability to act as channels for body comparison and pressure of societal beauty standards.

It has been suggested that users' self-esteem is directly related to the tone of responses received about information posted on their personal page/profile (i.e., positive feedback lead to positive self-esteem and negative feedback lead to negative self-esteem) and that self-esteem, in turn, was related to their overall well-being (Valkenburg et al, 2006). However, these studies (Jong & Drummond, 2013; Valkenburg et al., 2006) were not done in North America and looked at outdated/unpopular forms of SNSs (i.e., Friendster, MySpace). Recently, in an American study, of primarily females (78%), responses and feedback received via Facebook were found to be associated with disordered eating attitudes and weight/shape concerns (Hummel & Smith, 2014). Replication of these findings (i.e., associations between SNSs use and eating pathology) is necessary before establishing any strong conclusions. Furthermore, future research needs to explore the other relevant/current forms of SNSs (i.e., Twitter, Instagram, and Pinterest) and include a more gender balanced sample to gather more meaningful and reliable results.

MEDIA LITERACY

Several ideas have been suggested as to how to reverse or prevent the negative impact media images can have on body image and overall well-being. Some have suggested increasing the number of averaged-size models, potentially making a positive change in how individuals viewing the images perceive themselves (Pinhas, Toner, Ali, Garfinkel & Stuckless, 1999). Others have suggested that disclaimer messages should be present if measures had been taken to alter the image in any way, thus, clarifying that humans typically do not naturally look like those illustrations and personal comparisons should not be drawn (Henderson-King, Henderson-King, & Hoffmann, 2001; Levine &

Piran, 2004). However, changing the types of models used or presenting disclaimers on images are suggestions directed towards that of the image producers. Targeting the image producers may be costly, timely, and inefficient. A more reasonable approach seems to be in the education of the consumers.

Media literacy has been described as a way to promote adaptive behaviour by teaching individuals, to evaluate media critically (Irving & Berel, 2001). Becoming media literate is thought to reduce the credibility and pervasive influence of the media message (Irving & Berel, 2001). A media literacy intervention, therefore, is a type of combative (Levine & Murnen, 2009) and preventative health campaign (Irving & Berel, 2001). Recent recommendations from the Report of the Standing Committee on the Status of Women (Government of Canada, 2014) indicate that the Government of Canada consider supporting research on the impact of media messaging and marketing of society's narrow definition of beauty and encourage the promotion of media literacy to help individuals view media content critically. However, research on the efficiency of media literacy interventions as a combative approach to the ideals of the unrealistic society standards of beauty and eating disorder prevention is limited. Of the few studies that have assessed these effects, the majority focus on women (Coughlin & Kalodner, 2006; Irving & Berel, 2001; Posavac, Posavac, & Weigel, 2001; Yamamiya et al., 2005).

To date media literacy interventions in females have found to be effective at increasing skepticism about media images that depict a thin ideal of beauty (Irving & Berel, 2001), decrease engagement in social comparison (Posavac et al., 2001), and decrease body dissatisfaction variables (Coughlin & Kalodner, 2006; Posavac et al., 2001; Stormer & Thompson, 1995; Yamamiya et al., 2005). For example, Haas, Pawlow,

Pettibone, & Segrist (2012) used a brief, single time media literacy intervention and reported that, regardless of BMI, the intervention group showed an increase in positive feelings about themselves. On the other hand, Irving and Berel (2001) found no differences between the non-intervention and media literacy intervention group on body image variables and sociocultural determined attitudes toward appearance. Difference in findings could be due to the images/intervention strategy used not being relatable to the participants, and that the body image and internalization of the thin ideal variables had not been assessed at pretest (Irving & Berel, 2001). In a study that did include males, no effect on beliefs or behaviours of body image after the media literacy intervention was concluded (Rabak-Wagener, Eickhoff-Shemek, & Kelly-Vance, 1998). However, in this particular study (Rabak-Wagener et al., 1998), a small male sample size was exposed to a media literacy intervention developed for females and, furthermore, perhaps the males could not relate to the models in the fashion magazine advertisements used in the intervention. Overall, differences among results may be due to the broad age ranges and varying length and type of media literacy intervention, making it difficult to establish reliability. In addition, the specific images used in each study differed, making reliably difficult to measure. The small sample sizes used may also have played a role in differences found across the literature, as Haas et al., (2012) suggests in small groups participants may be reacting to the bodies of the other participants and not the models in the media images.

Dove Campaign for Real Beauty

One such intervention that has gained popularity in the media but less in academic circles (Gustafson, Hanley, & Popovich, 2008; Johnston & Taylor, 2008; Millard, 2009;

Murray, 2013) is Dove's Campaign for Real Beauty. In a recent study Gustafson and colleagues (2008), examined perceptions of female body shapes and celebrity models in health and beauty advertisements (with specific emphasis on Dove advertisements with plus-sized women), finding the majority supported using real women in advertising. Interestingly, 40% of the respondents disliked images of plus-sized women in their underwear (Gustafson et al., 2008), perhaps reflecting the cultural belief that thin and beautiful are synonymous (Millard, 2009). A study by Millard (2009), illustrated that women like the variety of body sizes in the Dove campaign images, and in addition, felt that Dove's advertisements make beauty standards more achievable for the average women. Furthermore, the regular features of the real-people models in the Dove advertisements help viewers feel better about their own physical appearance and self-image, while generating a discussion that allows participants to appear as intelligent consumers and critics of mass media (Millard, 2009). Johnston and Taylor (2008), have argued that although Dove's campaign provides a critique that partially disrupts Western beauty ideals, it does not decent the role of beauty. Future research should continue to aid in the creation of wide scale media literacy interventions that focus on overall well-being and not beauty.

Inclusive of Social Networking Sites

College age individuals are an appropriate population for media literacy interventions regarding society standards of beauty, as body image concerns and eating problems are prevalent on university campuses for both males (Drummond, 2002) and females (Drewnowski, Yee, Kurth, & Krahn, 1994; Hill, 2002). Creating active and conscientious media recipients may be a promising approach to reducing internalization

of societal standards of beauty and, either directly or indirectly, body dissatisfaction (Berel & Irving, 1998) and eating disorders (Coughlin & Kalodner, 2006). Furthermore, a strong majority of media literacy interventions have focused on magazine advertisements, and high fashion models (Etcoff et al., 2004; Posavac et al., 2001; Yamamiya et al., 2005). Recently, however, Tiggemann and Slater (2013, 2014) suggests that because of their findings (i.e., Facebook users score higher on all measures of body image dissatisfaction and have a lower body esteem), media literacy programs should now also include consideration of the Internet, including things like SNSs. Further supported by Hummel and Smith (2014), it is suggested that Facebook usage may be an important target of intervention for individuals at-risk for eating disorders, as individuals who engaged in negative social interactions via Facebook (i.e., seeking or receiving negative feedback) were more likely to increase their disordered eating concerns. Furthermore, Jong & Drummond (2013), have suggest that individuals need to be educated on how to utilize SNSs as tools for developing a positive digital footprint rather than an undesirable one that has the potential to impact body image and body identity.

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APPENDICES

APPENDIX A

#SocialMedia

In order to keep track of your answers please create a 6 digit ID.

What are the last 2 digits of your phone number?

Ex: 555-555-3000: 00

What day of the month were you born?

Ex: January 12th, 1990: 12

What are the last 2 letters of your last name?

Ex: If your last name is Smith: TH

You would consider yourself...?

- White (for example, Canadian, English, French, Italian, Polish, etc)
- Black (for example, African-Canadian, African-American, African, Nigerian, etc)
- Aboriginal (for example, First Nations, Metis, Inuit, etc)
- Chinese, Korean, Japanese
- Arabic (for example, Lebanese, Jordanian, Palestinian, Egyptian, Iraqi, Syrian, etc)
- South Asian (for example, Irani, Indian, Pakistani, Sri Lankan, Nepali)
- Other? _____

How old are you (in years)?

What gender do you most identify with?

- Female
- Male

Indicate how often you agree with the following statement.

	Definitely agree	Mostly agree	Neither disagree or agree	Mostly disagree	Definitely disagree
TV programs are an important source of information about fashion and “being attractive.”	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I’ve felt pressure from TV or magazines to lose weight.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like my body to look like the people who are on TV.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I compare my body to the bodies of TV and movie stars.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
TV commercials are an important source of information about fashion and “being attractive”.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I’ve felt pressure from TV or magazines to look pretty.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like my body to look like the models who appear in magazines.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I compare my appearance to the appearance of TV and movie stars.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Music videos on TV are an important source of information about fashion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

and “being attractive”.

I’ve felt pressure from TV and magazines to be thin.

I would like my body to look like the people who are in the movies.

I compare my body to the bodies of people who appear in magazines.

Magazine articles are an important source of information about fashion and “being attractive”.

I’ve felt pressure from TV or magazines to have a perfect body.

I wish I looked like the models in music videos.

I compare my appearance to the appearance of people in magazines.

Magazine advertisements are an important source of information about fashion and “being attractive”.

I’ve felt pressure from TV or magazines to diet.

I wish I looked as athletic as the people in magazines.

I compare my body to that of people in “good shape”.

Pictures in magazines are an important source of information about fashion and “being attractive”.

I’ve felt pressure from TV

or magazines to exercise.

I wish I looked as athletic as sports stars.

I compare my body to that of people who are athletic.

Movies are an important source of information about fashion and “being attractive”.

I’ve felt pressure from TV or magazines to change my appearance.

I try to look like the people on TV.

Movies stars an important source of information about fashion and “being attractive”.

Famous people are an important source of information about fashion and “being attractive”.

I try to look like sports athletes.

Indicate how often you agree with the following statement.

	Definitely agree	Mostly agree	Neither disagree or agree	Mostly disagree	Definitely disagree
TV programs are an important source of information about fashion and “being attractive”.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I’ve felt pressure from TV or magazines to lose weight.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- | | | | | | |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| I would like my body to look like the people who are on TV. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I compare my body to the bodies of TV and movie stars. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| TV commercials are an important source of information about fashion and “being attractive”. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I’ve felt pressure from TV or magazines to look muscular. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I would like my body to look like the models who appear in magazines. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I compare my appearance to the appearance of TV and movie stars. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Music videos on TV are an important source of information about fashion and “being attractive”. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I’ve felt pressure from TV and magazines to be muscular. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I would like my body to look like the people who are in the movies. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I compare my body to the bodies of people who appear in magazines. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Magazine articles are an important source of information about fashion and “being attractive”. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

I've felt pressure from TV or magazines to have a perfect body.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I compare my appearance to the appearance of people in magazines.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Magazine advertisements are an important source of information about fashion and "being attractive".	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I've felt pressure from TV or magazines to diet.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I wish I looked as athletic as people in magazines.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I compare my body to that of people in "good shape".	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pictures in magazines are an important source of information about fashion and "being attractive".	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I've felt pressure from TV or magazines to exercise.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I wish I looked as athletic as sports stars.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I compare my body to that of people who are athletic.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Movies are an important source of information about fashion and "being attractive".	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I've felt pressure from TV or magazines to change my appearance.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I try to look like the people on TV.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Movie stars are an important source of information about fashion and “being attractive”.

Famous people are an important source of information about fashion and “being attractive”.

I try to look like sports athletes.

Social networking site usage...

In the space provided enter the number of friends and followers you have on each social networking site. In the space provided enter how long you spend on each social networking site daily.

	I don't have this	Number of followers	Number I am following	Average daily use (hours)	Average daily use (minutes)
Facebook	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Twitter	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Instagram	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Pinterest	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Do you belong to any other social networking sites, not listed above?

Yes

No

If "yes" please use the space provided to enter the names of the site (separate with commas).

While on social networking sites, I usually spend a lot of time...

	Strongly Agree	Agree	In Between	Disagree	Strongly Disagree
Posting pictures on my profile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Posting text-based comments on my profile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Looking at my own profile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Looking at photos on others' profiles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Looking at posts on others' profiles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leaving posts or comments on others' profiles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I usually filter/edit my photos before posting them on a social networking site...

- Strongly Agree
- Agree
- In Between
- Disagree
- Strongly Disagree

Rate the extent to which you agree or disagree with each statement about your use of online social networking sites.

	Strongly Agree	Agree	In Between	Disagree	Strongly Disagree
I have used social networking sites to talk with others when I was feeling isolated.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can control how others perceive me when I am using a social networking site.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find it hard to stop thinking about what is waiting for me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

online on the social networking site(s) I like to use.

I have gone on a social networking site to make myself feel better when I was down or anxious.

I have tried to stop using one or more social networking sites for such long periods of time.

When not on a social networking site, I wonder what is happening on that site.

When I am on a social networking site, I socialize with people without worrying about relationship commitment.

I have attempted to spend less time on social networking sites but have not been able to.

I am treated better by others while online using social networking sites than I am offline.

I use social networking sites to make myself feel better when I'm down.

I have missed class or work because of being online on a social networking site.

I feel worthless offline, but online on a social networking site I am someone.

I want to, or have made, unsuccessful efforts to cut down or control my use of one or more social networking sites.

I have missed a social event or social engagements because of being online on a social networking site.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am more comfortable with computers than with people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel guilty about the amount of time I spend on social networking sites.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I am on a social networking site, I socialize with other people without worrying about how I look.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I lose track of time when I am using a social networking site.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I miss being online on a social networking site if I can't get on it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am treated better in my online relationships through social networking sites than in my face-to-face relationships.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have used a social networking site for a longer time than I intended.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am more confident socializing on social networking sites than I am offline.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have used a social networking site for longer periods of time than I had expected to.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel safer relating to people online on social networking sites rather than face-to-face.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel lost if can't get on a social networking site.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I have spent a good deal of time using social networking sites.

I have gotten into trouble with my employer or school because of being online on a social networking site.

I am preoccupied with thinking about social networking sites if I can't connect for some time.

I have sought others online on social networking sites when I was feeling isolated.

Right now I feel...

- Extremely dissatisfied with my physical appearance
- Mostly dissatisfied with my physical appearance
- Moderately dissatisfied with my physical appearance
- Slightly dissatisfied with my physical appearance
- Neither dissatisfied nor satisfied with my physical appearance
- Slightly satisfied with my physical appearance
- Moderately satisfied with my physical appearance
- Mostly satisfied with my physical appearance
- Extremely satisfied with my physical appearance

Right now I feel...

- Extremely satisfied with my body size and shape
- Mostly satisfied with my body size and shape
- Moderately satisfied with my body size and shape
- Slightly satisfied with my body size and shape
- Neither dissatisfied nor satisfied with my body size and shape
- Slightly dissatisfied with my body size and shape
- Moderately dissatisfied with my body size and shape

- Mostly dissatisfied with my body size and shape
- Extremely dissatisfied with my body size and shape

Right now I feel...

- Extremely dissatisfied with my weight
- Mostly dissatisfied with my weight
- Moderately dissatisfied with my weight
- Slightly dissatisfied with my weight
- Neither dissatisfied nor satisfied with my weight
- Slightly satisfied with my weight
- Moderately satisfied with my weight
- Mostly satisfied with my weight
- Extremely satisfied with my weight

Right now I feel...

- Extremely physically attractive
- Very physically attractive
- Moderately physically attractive
- Slightly physically attractive
- Neither attractive nor unattractive
- Slightly physically unattractive
- Moderately physically unattractive
- Very physically unattractive
- Extremely physically unattractive

Right now I feel...

- A great deal worse about my looks than I usually feel
- Much worse about my looks than I usually feel
- Somewhat worse about my looks than I usually feel
- Just slightly worse about my looks than I usually feel

- About the same about my looks as usual
- Just slightly better about my looks than I usually feel
- Somewhat better about my looks than I usually feel
- Much better about my looks than I usually feel
- A great deal better about my looks than I usually feel

Right now I feel that I look...

- A great deal better than the average person looks
- Much better than the average person looks
- Somewhat better than the average person looks
- Just slightly better than the average person looks
- About the same as the average person looks
- Just slightly worse than the average person looks
- Somewhat worse than the average person looks
- Much worse than the average person looks
- A great deal worse than the average person looks

Indicate how often you agree with the following statement.

	Always	Often	Sometimes	Seldom	Never
Other people consider me good looking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think my appearance would help me get a job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People my own age like my looks.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I'm as nice looking as most people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My looks help me to get dates.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Indicate how often you agree with the following statement.

	Not at all	Slightly	Moderately	Very	Extremely
I am concerned about what other people think of my appearance.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

It bothers me if I know someone is judging my physical shape.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I worry that people will find fault with the way I look.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I meet new people, I wonder what they think about my appearance.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am afraid other people will notice my physical flaws.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think that other people's opinions of my appearance are too important to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Indicate how often you agree with the following statement.

	Strongly agree	Agree	Disagree	Disagree strongly
On the whole, I am satisfied with myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At times I think I am no good at all.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that I have a number of good qualities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am able to do things as well as most other people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel I do not have much to be proud of.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I certainly feel useless at times.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that I'm a person of worth, at least on an equal plane with others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I wish I could have more respect for myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
All in all, I am inclined to feel that I am a failure.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I take a positive attitude toward myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

This is a questionnaire designed to measure what you are thinking at this moment. There is, of course, no right answer for any statement. The best answer is what you feel is true of yourself at this moment. Be sure to answer all of the items, even if you are not certain of the best answer. Again, answer these questions as they are true for you RIGHT NOW.

	Extremely	Very much	Somewhat	A little bit	Not at all
I feel confident about my abilities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am worried about whether I am regarded as a success or failure.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel satisfied with the way my body looks right now.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel frustrated or rattled about my performance.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that I am having trouble understanding things that I read.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that others respect and admire me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am dissatisfied with my weight.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel self-conscious.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel as smart as others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel displeased with myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel good about myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am pleased with my appearance right now.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am worried about what other people think of me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel confident that I understand things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel inferior to others at this moment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel unattractive.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel concerned about the impression I am making.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- I feel that I have less scholastic ability right now than others.
- I feel like I'm not doing well.
- I am worried about looking foolish.

Please fill out all the questions below as accurately, honestly and completely as possible.

There are no right or wrong answers. All of your responses are confidential.

Complete the following questions:

Current weight (lbs)

Highest weight (excluding pregnancy)

Lowest adult weight (lbs)

Ideal weight (lbs)

How tall are you?

Use the dropdown boxes to describe your height in feet and inches.

- Feet 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

In the past 6 months have you:

	Never	Once a month	2-3 times a month	Once a week	2-6 times a week	Once a day or more
Gone on eating binges (defined as eating much more than most people would under the same circumstances and feeling that eating is out of control) where you feel that you may not be able to stop?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ever made yourself sick (vomited) to control your weight or shape?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ever used laxatives, diet pills, or diuretics (water pills) to control your weight or shape?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Exercised more than 60 minutes a day to lose or control your weight?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How strongly do you agree with the following statements?

	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree
I sometimes skip meals since I am concerned about my weight.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is hard to find time to sit down and eat a meal.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I tend to “eat on the run”.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most healthy foods just don’t taste that great.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I weigh myself often.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regular meals are important to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I stop eating when I feel full.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- I eat meals at about the same time every day.
- I trust my body to tell me how much to eat.
- It seems like I have food on my mind a lot.
- I think I enjoy eating a lot more than most other people.

Are you currently trying to...

- Lose weight
- Stay the same weight
- Gain weight
- I am not trying to do anything with my weight

How often have you gone on a diet during the last year? By diet we mean changing the way you eat so you can lose weight.

- Never
- 1-4 times
- 5-10
- 10+
- I am always dieting

Have you done any of the following things in order to lose weight or keep from gaining weight during the past year:

- | | Yes | No |
|------------------------------|-----------------------|-----------------------|
| fasted | <input type="radio"/> | <input type="radio"/> |
| ate very little food | <input type="radio"/> | <input type="radio"/> |
| took diet pills | <input type="radio"/> | <input type="radio"/> |
| made myself vomit (throw up) | <input type="radio"/> | <input type="radio"/> |
| used laxatives | <input type="radio"/> | <input type="radio"/> |
| used diuretics (water pills) | <input type="radio"/> | <input type="radio"/> |

- | | | |
|---|-----------------------|-----------------------|
| used food substitute (powder/special drink) | <input type="radio"/> | <input type="radio"/> |
| skipped meals | <input type="radio"/> | <input type="radio"/> |
| smoked more cigarettes | <input type="radio"/> | <input type="radio"/> |
| followed a high protein/low carbohydrate diet (e.g., Atkins or other) | <input type="radio"/> | <input type="radio"/> |

How often have you done each of the following things in order to lose weight or keep from gaining weight during the past year?

- | | Never | Rarely | Sometimes | On a regular basis |
|--|-----------------------|-----------------------|-----------------------|-----------------------|
| exercise | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| ate more fruits and vegetables | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| ate less high-fat foods | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| ate less sweets | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| drank less soda pop (not including diet pop) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| watched my portion sizes (serving sizes) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

How often have you done each of the following things in order to increase your muscle size or tone during the past year?

- | | Never | Rarely | Sometimes | On a regular basis |
|--|-----------------------|-----------------------|-----------------------|-----------------------|
| changed my eating | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| exercised more | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| used protein powder or shakes | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| used steroids | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| used another muscle-building substance (such as creatine, amino acids, hydroxyl methylbutyrate [HMB], DHEA, or growth hormone) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Congratulations! You have been assigned to GROUP A.

Please show up at the St. Dennis Center Multipurpose Room (instead of the classroom) on Thursday February 26th at 8:30 am

Congratulations! You have been assigned to GROUP B.

Please show up to the regular classroom (Rm. 140) on Thursday February 26th at 8:30 am

THANK YOU FOR COMPLETING THIS SURVEY! If you feel that you may benefit from seeking advice from a mental health professional or wish to speak to someone, here are some valuable resources:

(1) Teen Health (many services available free to individuals 24 years and younger) at 519-253-8481(2) University of Windsor Counseling Services at 519-253-300 ext. 4616 or scc@uwindsor.ca(3) Good2Talk Ontario's Postsecondary Student Helpline at 1-866-925-5454(4) Bulimia Anorexia Nervosa Association at 1-855-969-5530. (5) National Eating Disorder Information Center at www.nedic.com If you wish to be included in the draw to win 1 of 4 prize packages (I participated in Kin Research t-shirt and a cook book from Food Network Host Sandi Richard), please click submit and it will re-direct you to another survey to leave your contact information.

APPENDIX B

#SocialMedia

During class on Thursday April 26th did you...

- Attend Prof. Martindale's talk in the St. Denis Multipurpose Room
- Attend BANA's talk in the classroom (HK room 140)
- Not attend class that day
- Forget/don't know

In order to keep track of your answers please create a 6 digit ID.

What are the last 2 digits of your phone number?

Ex: 555-555-3000: 00

What day of the month were you born?

Ex: January 12th, 1990: 12

What are the last 2 letters of your last name?

Ex: If your last name is Smith: TH

What gender do you most identify with?

- Female
- Male

Indicate how often you agree with the following statement.

	Definitely agree	Mostly agree	Neither disagree or agree	Mostly disagree	Definitely disagree
TV programs are an important source of information about fashion and “being attractive.”	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I’ve felt pressure from TV or magazines to lose weight.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like my body to look like the people who are on TV.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I compare my body to the bodies of TV and movie stars.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
TV commercials are an important source of information about fashion and “being attractive”.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I’ve felt pressure from TV or magazines to look pretty.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like my body to look like the models who appear in magazines.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I compare my appearance to the appearance of TV and movie stars.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Music videos on TV are an important source of information about fashion and “being attractive”.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I’ve felt pressure from TV	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

and magazines to be thin.

I would like my body to look like the people who are in the movies.

I compare my body to the bodies of people who appear in magazines.

Magazine articles are an important source of information about fashion and “being attractive”.

I’ve felt pressure from TV or magazines to have a perfect body.

I wish I looked like the models in music videos.

I compare my appearance to the appearance of people in magazines.

Magazine advertisements are an important source of information about fashion and “being attractive”.

I’ve felt pressure from TV or magazines to diet.

I wish I looked as athletic as the people in magazines.

I compare my body to that of people in “good shape”.

Pictures in magazines are an important source of information about fashion and “being attractive”.

I’ve felt pressure from TV or magazines to exercise.

I wish I looked as athletic

as sports stars.

I compare my body to that of people who are athletic.

Movies are an important source of information about fashion and “being attractive”.

I’ve felt pressure from TV or magazines to change my appearance.

I try to look like the people on TV.

Movies stars an important source of information about fashion and “being attractive”.

Famous people are an important source of information about fashion and “being attractive”.

I try to look like sports athletes.

Indicate how often you agree with the following statement.

	Definitely agree	Mostly agree	Neither disagree or agree	Mostly disagree	Definitely disagree
TV programs are an important source of information about fashion and “being attractive”.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I’ve felt pressure from TV or magazines to lose weight.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like my body to look like the people who	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

are on TV.

I compare my body to the bodies of TV and movie stars.

TV commercials are an important source of information about fashion and “being attractive”.

I’ve felt pressure from TV or magazines to look muscular.

I would like my body to look like the models who appear in magazines.

I compare my appearance to the appearance of TV and movie stars.

Music videos on TV are an important source of information about fashion and “being attractive”.

I’ve felt pressure from TV and magazines to be muscular.

I would like my body to look like the people who are in the movies.

I compare my body to the bodies of people who appear in magazines.

Magazine articles are an important source of information about fashion and “being attractive”.

I’ve felt pressure from TV or magazines to have a

perfect body.

I compare my appearance to the appearance of people in magazines.

Magazine advertisements are an important source of information about fashion and “being attractive”.

I’ve felt pressure from TV or magazines to diet.

I wish I looked as athletic as people in magazines.

I compare my body to that of people in “good shape”.

Pictures in magazines are an important source of information about fashion and “being attractive”.

I’ve felt pressure from TV or magazines to exercise.

I wish I looked as athletic as sports stars.

I compare my body to that of people who are athletic.

Movies are an important source of information about fashion and “being attractive”.

I’ve felt pressure from TV or magazines to change my appearance.

I try to look like the people on TV.

Movie stars are an important source of information about fashion

and “being attractive”.

Famous people are an important source of information about fashion and “being attractive”.

○ ○ ○ ○ ○

I try to look like sports athletes.

○ ○ ○ ○ ○

Social networking site usage...

In the space provided enter the number of friends and followers you have on each social networking site. In the space provided enter how long you spend on each social networking site daily.

	I don't have this	Number of followers	Number I am following	Average daily use (hours)	Average daily use (minutes)
Facebook	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Twitter	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Instagram	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Pinterest	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

While on social networking sites, I usually spend a lot of time...

	Strongly Agree	Agree	In Between	Disagree	Strongly Disagree
Posting pictures on my profile	○	○	○	○	○
Posting text-based comments on my profile	○	○	○	○	○
Looking at my own profile	○	○	○	○	○
Looking at photos on others' profiles	○	○	○	○	○
Looking at posts on others' profiles	○	○	○	○	○

Leaving posts or comments on others' profiles

I usually filter/edit my photos before posting them on a social networking site...

- Strongly Agree
- Agree
- In Between
- Disagree
- Strongly Disagree

Rate the extent to which you agree or disagree with each statement about your use of online social networking sites.

	Strongly Agree	Agree	In Between	Disagree	Strongly Disagree
I have used social networking sites to talk with others when I was feeling isolated.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can control how others perceive me when I am using a social networking site.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find it hard to stop thinking about what is waiting for me online on the social networking site(s) I like to use.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have gone on a social networking site to make myself feel better when I was down or anxious.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have tried to stop using one or more social networking sites for such long periods of time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When not on a social networking site, I wonder what is happening on that site.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I am on a social	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

networking site, I socialize with people without worrying about relationship commitment.

I have attempted to spend less time on social networking sites but have not been able to.

I am treated better by others while online using social networking sites than I am offline.

I use social networking sites to make myself feel better when I'm down.

I have missed class or work because of being online on a social networking site.

I feel worthless offline, but online on a social networking site I am someone.

I want to, or have made, unsuccessful efforts to cut down or control my use of one or more social networking sites.

I have missed a social event or social engagements because of being online on a social networking site.

I am more comfortable with computers than with people.

I feel guilty about the amount of time I spend on social networking sites.

When I am on a social networking site, I socialize with other people without worrying about how I look.

I lose track of time when I am using a social networking site.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I miss being online on a social networking site if I can't get on it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am treated better in my online relationships through social networking sites than in my face-to-face relationships.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have used a social networking site for a longer time than I intended.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am more confident socializing on social networking sites than I am offline.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have used a social networking site for longer periods of time than I had expected to.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel safer relating to people online on social networking sites rather than face-to-face.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel lost if can't get on a social networking site.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have spent a good deal of time using social networking sites.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have gotten into trouble with my employer or school because of being online on a social networking site.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am preoccupied with thinking about social networking sites if I can't connect for some time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have sought others online on social networking sites when I was feeling isolated.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Right now I feel...

- Extremely dissatisfied with my physical appearance
- Mostly dissatisfied with my physical appearance
- Moderately dissatisfied with my physical appearance
- Slightly dissatisfied with my physical appearance
- Neither dissatisfied nor satisfied with my physical appearance
- Slightly satisfied with my physical appearance
- Moderately satisfied with my physical appearance
- Mostly satisfied with my physical appearance
- Extremely satisfied with my physical appearance

Right now I feel...

- Extremely satisfied with my body size and shape
- Mostly satisfied with my body size and shape
- Moderately satisfied with my body size and shape
- Slightly satisfied with my body size and shape
- Neither dissatisfied nor satisfied with my body size and shape
- Slightly dissatisfied with my body size and shape
- Moderately dissatisfied with my body size and shape
- Mostly dissatisfied with my body size and shape
- Extremely dissatisfied with my body size and shape

Right now I feel...

- Extremely dissatisfied with my weight
- Mostly dissatisfied with my weight
- Moderately dissatisfied with my weight
- Slightly dissatisfied with my weight
- Neither dissatisfied nor satisfied with my weight
- Slightly satisfied with my weight
- Moderately satisfied with my weight

- Mostly satisfied with my weight
- Extremely satisfied with my weight

Right now I feel...

- Extremely physically attractive
- Very physically attractive
- Moderately physically attractive
- Slightly physically attractive
- Neither attractive nor unattractive
- Slightly physically unattractive
- Moderately physically unattractive
- Very physically unattractive
- Extremely physically unattractive

Right now I feel...

- A great deal worse about my looks than I usually feel
- Much worse about my looks than I usually feel
- Somewhat worse about my looks than I usually feel
- Just slightly worse about my looks than I usually feel
- About the same about my looks as usual
- Just slightly better about my looks than I usually feel
- Somewhat better about my looks than I usually feel
- Much better about my looks than I usually feel
- A great deal better about my looks than I usually feel

Right now I feel that I look...

- A great deal better than the average person looks
- Much better than the average person looks
- Somewhat better than the average person looks
- Just slightly better than the average person looks

- About the same as the average person looks
- Just slightly worse than the average person looks
- Somewhat worse than the average person looks
- Much worse than the average person looks
- A great deal worse than the average person looks

Indicate how often you agree with the following statement.

	Always	Often	Sometimes	Seldom	Never
Other people consider me good looking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think my appearance would help me get a job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People my own age like my looks.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I'm as nice looking as most people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My looks help me to get dates.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Indicate how often you agree with the following statement.

	Not at all	Slightly	Moderately	Very	Extremely
I am concerned about what other people think of my appearance.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It bothers me if I know someone is judging my physical shape.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I worry that people will find fault with the way I look.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I meet new people, I wonder what they think about my appearance.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am afraid other people will notice my physical flaws.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think that other people's opinions of my appearance are too important to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

This is a questionnaire designed to measure what you are thinking at this moment. There is, of course, no right answer for any statement. The best answer is what you feel is true of yourself at this moment. Be sure to answer all of the items, even if you are not certain of the best answer. Again, answer these questions as they are true for you RIGHT NOW.

	Extremely	Very much	Somewhat	A little bit	Not at all
I feel confident about my abilities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am worried about whether I am regarded as a success or failure.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel satisfied with the way my body looks right now.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel frustrated or rattled about my performance.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that I am having trouble understanding things that I read.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that others respect and admire me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am dissatisfied with my weight.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel self-conscious.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel as smart as others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel displeased with myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel good about myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am pleased with my appearance right now.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am worried about what other people think of me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel confident that I understand things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel inferior to others at this moment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel unattractive.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel concerned about the impression I am making.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- I feel that I have less scholastic ability right now than others.
- I feel like I'm not doing well.
- I am worried about looking foolish.

Please fill out all the questions below as accurately, honestly and completely as possible.

There are no right or wrong answers. All of your responses are confidential.

Complete the following questions:

Current weight (lbs)

Highest weight (excluding pregnancy)

Lowest adult weight (lbs)

Ideal weight (lbs)

How tall are you?

Use the dropdown boxes to describe your height in feet and inches.

- Feet 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

How strongly do you agree with the following statements?

	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree
I sometimes skip meals since I am concerned about my weight.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is hard to find time to sit down and eat a meal.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I tend to “eat on the run”.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most healthy foods just don’t taste that great.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I weigh myself often.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regular meals are important to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I stop eating when I feel full.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I eat meals at about the same time every day.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I trust my body to tell me how much to eat.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It seems like I have food on my mind a lot.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think I enjoy eating a lot more than most other people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Are you currently trying to...

- Lose weight
- Stay the same weight
- Gain weight
- I am not trying to do anything with my weight

THANK YOU FOR COMPLETING THIS SURVEY! If you feel that you may benefit from seeking advice from a mental health professional or wish to speak to someone, here are some valuable resources:

(1) Teen Health (many services available free to individuals 24 years and younger) at 519-253-8481(2) University of Windsor Counseling Services at 519-253-300 ext. 4616 or scc@uwindsor.ca(3) Good2Talk Ontario's Postsecondary Student Helpline at 1-866-925-5454(4) Bulimia Anorexia Nervosa Association at 1-855-969-5530. (5) National Eating Disorder Information Center at www.nedic.com If you wish to be included in the draw for a chance to win a FitBit please click submit and it will re-direct you to another survey to leave your contact information.

APPENDIX C

Results of the Multiple Regression Analyses with Females (n = 92) for Study A, Objective 1

	<i>t</i>	<i>p</i>	β	<i>F</i>	<i>df</i>	<i>P</i>	adj. <i>R</i> ²
Body Image (SATAQ-3)							
Overall Model				8.34	3, 88	.000	.20
Problematic Social Networking Site Use	3.95	.000	.40				
Total Time	1.12	.267	.11				
Total Friends	0.96	.340	.10				
Body Image (SATAQ-3)							
Overall Model				4.64	6, 85	.000	.25
Problematic Social Networking Site Use	3.95	.000	.40				
Facebook Time	1.68	.097	.21				
Twitter Time	0.61	.543	.11				
Instagram Time	-1.03	.307	-.19				
Pinterest Time	0.07	.945	.01				
Total Friends	1.27	.207	.14				
Self-Esteem (SSES)							
Overall Model				43.37	4, 87	.000	.65
Problematic Social Networking Site Use	-2.18	.032	-.15				
Total Time	-0.81	.422	-.05				
Total Friends	0.59	.559	.04				
Global trait self-esteem	11.14	.000	.74				
Self-Esteem (SSES)							
Overall Model				25.57	7, 84	.001	.19
Problematic Social Networking Site Use	-2.21	.030	-.16				
Facebook Time	0.35	.724	-.11				
Twitter Time	-1.33	.187	.13				
Instagram Time	1.05	.295	-.11				
Pinterest Time	-0.91	.368	.06				
Total Friends	0.46	.645	.03				
Global trait self-esteem	10.76	.000	.74				

Eating Disorder symptoms and concerns (EAT-26)							
Overall Model				9.44	3, 88	.000	.22
Problematic Social Networking Site Use	4.08	.000	.40				
Total Time	0.99	.324	.10				
Total Friends	1.41	.161	.14				
Eating Disorder symptoms and concerns (EAT-26)							
Overall Model				5.39	6, 85	.000	.22
Problematic Social Networking Site Use	4.13	.000	.41				
Facebook Time	0.87	.388	.11				
Twitter Time	-1.63	.106	-.30				
Instagram Time	1.72	.090	.31				
Pinterest Time	-0.01	.996	.00				
Total Friends	1.44	.154	.00				
Binge eating							
Overall Model				6.99	3, 88	.000	.17
Problematic Social Networking Site Use	3.29	.001	.34				
Total Time	2.08	.041	.21				
Total Friends	0.26	.794	.03				
Binge eating							
Overall Model				4.14	6, 85	.001	.17
Problematic Social Networking Site Use	3.27	.002	.33				
Facebook Time	0.97	.336	.12				
Twitter Time	-0.53	.600	-.10				
Instagram Time	1.45	.150	.27				
Pinterest Time	-1.17	.247	-.12				
Total Friends	0.04	.967	.00				
Vomiting							
Overall Model				4.53	3, 88	.005	.10
Problematic Social Networking Site Use	3.49	.001	.37				
Total Time	0.17	.867	.02				
Total Friends	-0.24	.812	-.03				

Vomiting							
Overall Model				4.20	6, 85	.001	.17
Problematic Social Networking Site Use	3.67	.000	.37				
Facebook Time	-1.07	.289	-.13				
Twitter Time	-2.41	.018	-.45				
Instagram Time	3.16	.002	.58				
Pinterest Time	0.31	.757	.03				
Total Friends	0.31	.757	.03				
Exercising							
Overall Model				4.26	3, 88	.007	.10
Problematic Social Networking Site Use	2.76	.007	.29				
Total Time	1.49	.139	.15				
Total Friends	-0.08	.935	-.01				
Exercising							
Overall Model				2.75	6, 85	.017	.10
Problematic Social Networking Site Use	2.75	.007	.29				
Facebook Time	1.36	.176	.18				
Twitter Time	-0.78	.435	-.15				
Instagram Time	1.06	.292	.20				
Pinterest Time	-0.92	.358	-.10				
Total Friends	-0.06	.949	-.01				
Trying to change weight							
Overall Model				2.16	3, 88	.099	.04
Problematic Social Networking Site Use	1.18	.241	.13				
Total Time	1.72	.089	.18				
Total Friends	0.40	.691	.04				
Trying to change weight							
Overall Model				1.44	6, 85	.209	.03
Problematic Social Networking Site Use	1.22	.226	.13				
Facebook Time	1.26	.210	.17				
Twitter Time	-1.10	.273	-.22				
Instagram Time	1.25	.216	.25				
Pinterest Time	0.44	.659	.05				
Total Friends	0.63	.534	.07				

Protein shakes							
Overall Model				1.36	3, 88	.262	.01
Problematic Social Networking Site Use	0.95	.346	.11				
Total Time	-1.49	.140	-.16				
Total Friends	1.10	.274	.12				
Protein shakes							
Overall Model				1.10	6, 85	.369	.01
Problematic Social Networking Site Use	1.01	.316	.11				
Facebook Time	-0.40	.690	-.06				
Twitter Time	-0.49	.626	-.10				
Instagram Time	-0.48	.633	-.10				
Pinterest Time	1.42	.161	.16				
Total Friends	1.37	.176	.16				
Laxatives/diet pills/diuretics							
Overall Model				5.03	3, 88	.003	.16
Problematic Social Networking Site Use	1.99	.050	.21				
Total Time	-0.76	.449	-.08				
Total Friends	2.70	.008	.28				
Laxatives/diet pills/diuretics							
Overall Model				2.78	6, 85	.016	.11
Problematic Social Networking Site Use	1.95	.054	.21				
Facebook Time	-0.05	.959	-.01				
Twitter Time	1.04	.300	.20				
Instagram Time	-1.44	.152	-.28				
Pinterest Time	-0.16	.875	-.02				
Total Friends	2.55	.012	.29				
Meal skipping							
Overall Model				2.41	3, 88	.073	.04
Problematic Social Networking Site Use	2.33	.022	.25				
Total Time	0.31	.758	.03				
Total Friends	0.31	.758	.03				

Meal skipping							
Overall Model				2.42	6, 85	.033	.09
Problematic Social Networking Site Use	2.35	.021	.25				
Facebook Time	-0.41	.684	-.05				
Twitter Time	-1.54	.128	-.30				
Instagram Time	2.33	.022	.45				
Pinterest Time	-1.29	.200	-.14				
Total Friends	-0.16	.877	-.02				
Weigh myself often							
Overall Model				2.65	3, 88	.054	.05
Problematic Social Networking Site Use	2.46	.016	.27				
Total Time	-1.20	.232	-.13				
Total Friends	0.58	.566	.06				
Weigh myself often							
Overall Model					6, 85	.166	.04
Problematic Social Networking Site Use	2.45	.016	.27				
Facebook Time	0.09	.927	.01				
Twitter Time	0.49	.625	.10				
Instagram Time	-1.38	.172	-.27				
Pinterest Time	0.44	.662	.05				
Total Friends	0.79	.435	.09				
Dieting							
Overall Model				2.47	3, 88	.068	.05
Problematic Social Networking Site Use	2.61	.011	.28				
Total Time	0.16	.872	.02				
Total Friends	-0.36	.719	-.04				
Dieting							
Overall Model				2.42	6, 85	.033	.09
Problematic Social Networking Site Use	0.29	2.73 3	.01				
Facebook Time	1.77	.081	.23				
Twitter Time	-2.27	.026	-.45				
Instagram Time	1.23	.222	.24				
Pinterest Time	0.31	.757	.03				
Total Friends	0.16	.877	.02				

Portion control							
Overall Model				0.29	3, 88	.831	-.02
Problematic Social Networking Site Use	0.36	.717	.04				
Total Time	0.32	.751	.04				
Total Friends	0.57	.573	.06				
Portion control							
Overall Model				0.21	6, 85	.973	-.06
Problematic Social Networking Site Use	0.37	.711	.04				
Facebook Time	0.48	.636	.07				
Twitter Time	-0.49	.624	-.10				
Instagram Time	0.39	.700	.08				
Pinterest Time	0.01	.990	.00				
Total Friends	0.62	.540	.08				

Results of the Multiple Regression Analyses with Males (n = 68) for Study A, Objective 1

	<i>t</i>	<i>p</i>	β	<i>F</i>	<i>df</i>	<i>p</i>	adj. <i>R</i> ²
Body Image (SATAQ-M)							
Overall Model				3.86	3, 64	.013	.11
Problematic Social Networking Site Use	2.93	.005	.36				
Total Time	-0.06	.941	-.01				
Total Friends	1.25	.216	.14				
Body Image (SATAQ-M)							
Overall Model				2.26	6, 61	.052	.21
Problematic Social Networking Site Use	2.76	.008	.37				
Facebook Time	0.27	.790	.05				
Twitter Time	-1.28	.206	-.19				
Instagram Time	0.53	.599	.10				
Pinterest Time	1.07	.288	.14				
Total Friends	1.17	.247	.17				
Self-Esteem (SSES)							
Overall Model				40.98	4, 63	.000	.70
Problematic Social Networking Site Use	-2.64	.011	-.21				
Total Time	-0.73	.467	-.05				
Total Friends	0.46	.649	.03				
Global trait self-esteem	9.69	.000	.72				
Self-Esteem							
Overall Model				26.87	8, 59	.000	.76
Problematic Social Networking Site Use	-1.89	.065	-.15				
Facebook Time	-1.97	.055	-.15				
Twitter Time	0.37	.715	.03				
Instagram Time	-0.25	.801	-.02				
Pinterest Time	-0.59	.560	-.04				
Total Friends	-1.40	.167	-.10				
Global trait self-esteem	9.33	.000	.74				

Eating Disorder symptoms and concerns (EAT-26)				
Overall Model				3.95 3, 64 .012 .12
Problematic Social Networking Site Use	3.03	.003	.37	
Total Time	0.54	.592	.07	
Total Friends	0.02	.988	.00	
Eating Disorder symptoms and concerns (EAT-26)				
Overall Model				2.40 6, 61 .041 .13
Problematic Social Networking Site Use	2.40	.020	.32	
Facebook Time	2.02	.049	.36	
Twitter Time	0.49	.627	.07	
Instagram Time	-1.41	.163	-.26	
Pinterest Time	-0.28	.779	-.04	
Total Friends	1.01	.316	-.04	
Binge eating				
Overall Model				1.14 3, 64 .339 .01
Problematic Social Networking Site Use	1.52	.134	.20	
Total Time	0.49	.629	-.06	
Total Friends	-0.45	.657	.06	
Binge eating				
Overall Model				0.71 6, 61 .644 -.03
Problematic Social Networking Site Use	1.18	.242	.17	
Facebook Time	1.16	.253	.22	
Twitter Time	-0.07	.944	-.01	
Instagram Time	-0.48	.636	-.10	
Pinterest Time	0.04	.966	.01	
Total Friends	0.20	.841	.03	
Vomiting				
Overall Model				1.27 3, 64 .277 .09
Problematic Social Networking Site Use	0.97	.334	.12	
Total Time	1.30	.250	.09	
Total Friends	0.75	.454	.28	

Vomiting							
Overall Model				0.48	6, 61	.177	.32
Problematic Social Networking Site Use	0.67	.505	.08				
Facebook Time	0.36	.801	.52				
Twitter Time	-1.80	.077	-.24				
Instagram Time	0.47	.641	.08				
Pinterest Time	0.17	.867	.02				
Total Friends	1.20	.232	.28				
Exercising							
Overall Model				4.26	3, 64	.319	.01
Problematic Social Networking Site Use	1.25	.214	.16				
Total Time	0.11	.824	.41				
Total Friends	-0.10	-.776	.44				
Exercising							
Overall Model				0.71	6, 61	.644	-.03
Problematic Social Networking Site Use	1.32	.192	.19				
Facebook Time	-0.73	.467	-.14				
Twitter Time	-0.06	.952	-.01				
Instagram Time	1.20	.236	.24				
Pinterest Time	0.20	.846	.03				
Total Friends	-1.15	.254	-.18				
Trying to change weight							
Overall Model				2.12	3, 64	.107	.05
Problematic Social Networking Site Use	-0.23	.820	-.03				
Total Time	2.45	.017	-.05				
Total Friends	-0.44	.663	.31				
Trying to change weight							
Overall Model				1.52	6, 61	.190	.05
Problematic Social Networking Site Use	-0.26	.799	-.04				
Facebook Time	2.12	.039	.39				
Twitter Time	1.13	.263	.18				
Instagram Time	-0.33	.742	-.06				
Pinterest Time	1.51	.137	.20				
Total Friends	0.22	.825	.03				

Protein shakes							
Overall Model				4.41	3, 64	.007	.13
Problematic Social Networking Site Use	-1.21	.231	-.15				
Total Time	0.98	.331	.38				
Total Friends	3.31	.002	.12				
Protein shakes							
Overall Model				2.01	6, 61	.081	.10
Problematic Social Networking Site Use	-0.88	.384	-.12				
Facebook Time	-0.19	.848	-.03				
Twitter Time	-0.15	.878	-.02				
Instagram Time	0.99	.328	.19				
Pinterest Time	0.76	.450	.10				
Total Friends	2.30	.025	.34				
Laxatives/diet pills/diuretics							
Overall Model				3.40	3, 64	.023	.10
Problematic Social Networking Site Use	0.81	.422	.10				
Total Time	2.12	.038	.26				
Total Friends	1.45	.151	.17				
Laxatives/diet pills/diuretics							
Overall Model				4.86	6, 61	.001	.29
Problematic Social Networking Site Use	0.39	.701	.05				
Facebook Time	3.56	.001	.57				
Twitter Time	-1.15	.254	-.16				
Instagram Time	-0.26	.797	-.04				
Pinterest Time	-0.02	.986	.00				
Total Friends	2.94	.005	.38				
Meal skipping							
Overall Model				3.30	3, 64	.026	.09
Problematic Social Networking Site Use	2.35	.022	.29				
Total Time	1.23	.224	.15				
Total Friends	-0.21	.836	.13				

Meal skipping							
Overall Model				2.08	6, 61	.072	.10
Problematic Social Networking Site Use	1.83	.073	.25				
Facebook Time	2.07	.044	.37				
Twitter Time	0.11	.911	.02				
Instagram Time	-0.72	.476	-.14				
Pinterest Time	-0.18	.856	-.02				
Total Friends	0.76	.448	.11				
Weigh myself often							
Overall Model				4.49	3, 64	.006	.14
Problematic Social Networking Site Use	1.32	.191	.16				
Total Time	1.81	.076	.22				
Total Friends	2.13	.037	.24				
Weigh myself often							
Overall Model				1.83	6, 61	.111	.08
Problematic Social Networking Site Use	1.19	.240	.16				
Facebook Time	0.32	.748	.06				
Twitter Time	0.33	.745	.05				
Instagram Time	0.86	.393	.17				
Pinterest Time	-0.22	.824	-.03				
Total Friends	1.54	.129	.23				
Dieting							
Overall Model				6.60	3, 64	.001	.20
Problematic Social Networking Site Use	0.07	.942	.01				
Total Time	3.95	.000	.46				
Total Friends	0.95	.345	.11				
Dieting							
Overall Model					6, 61	.021	.16
Problematic Social Networking Site Use	0.04	.967	.01				
Facebook Time	0.98	.334	.17				
Twitter Time	1.47	.149	.22				
Instagram Time	1.26	.214	.23				
Pinterest Time	-0.68	.498	-.09				
Total Friends	0.60	.552	.08				

Portion control							
Overall Model				0.36	3, 64	.786	-.03
Problematic Social Networking Site Use	0.29	.773	.04				
Total Time	0.42	.678	.06				
Total Friends	0.75	.457	.09				
Portion control							
Overall Model				0.26	6, 61	.952	-.08
Problematic Social Networking Site Use	0.28	.782	.04				
Facebook Time	0.44	.663	.09				
Twitter Time	-0.26	.799	-.04				
Instagram Time	0.15	.885	.03				
Pinterest Time	0.55	.586	.08				
Total Friends	0.74	.464	.12				

APPENDIX D

Results of the Multiple Regression Analyses with Females (n = 92) for Study A, Objective 2

	<i>t</i>	<i>p</i>	β	<i>F</i>	<i>df</i>	<i>p</i>	adj. <i>R</i> ²
Body Image (SATAQ-3)							
Overall Model				4.61	7, 84	.000	.22
Posting pictures on my profile	1.26	.211	.16				
Posting text-based comments on my profile	0.11	.912	.01				
Looking at my own profile	0.08	.937	.01				
Looking at photos on others' profiles	1.12	.265	.13				
Looking at posts on others' profiles	0.73	.469	.09				
Leaving posts or comments on others' profiles	2.24	.028	.26				
I usually filter/edit my photos before posting them on a social networking site	1.11	.272	.12				
Self-Esteem (SSES)							
Overall Model				21.81	8, 83	.000	0.65
Posting pictures on my profile	-1.19	.238	-.10				
Posting text-based comments on my profile	-0.38	.707	-.03				
Looking at my own profile	0.40	.693	.03				
Looking at photos on others' profiles	-1.84	.070	-.15				
Looking at posts on others' profiles	1.77	.080	.15				
Leaving posts or comments on others' profiles	-0.90	.372	-.07				
I usually filter/edit my photos before posting them on a social networking site	0.59	.557	.04				
Global trait self-esteem	12.66	.000	.85				

Eating disorder symptoms and concerns (EAT-26)							
Overall Model				1.40	7, 84	.218	.03
Posting pictures on my profile	0.86	.395	.12				
Posting text-based comments on my profile	0.22	.826	.03				
Looking at my own profile	1.29	.202	.17				
Looking at photos on others' profiles	1.03	.307	.14				
Looking at posts on others' profiles	-0.16	.875	-.02				
Leaving posts or comments on others' profiles	0.26	.796	.03				
I usually filter/edit my photos before posting them on a social networking site	-0.43	.667	-.05				
Binge eating							
Overall Model				1.03	7, 84	.415	.00
Posting pictures on my profile	1.23	.221	.18				
Posting text-based comments on my profile	0.36	.717	.05				
Looking at my own profile	-0.44	.662	-.06				
Looking at photos on others' profiles	1.18	.243	.16				
Looking at posts on others' profiles	-0.01	.992	.00				
Leaving posts or comments on others' profiles	-0.13	.895	-.02				
I usually filter/edit my photos before posting them on a social networking site	0.36	.717	.05				
Vomiting							
Overall Model				0.91	7, 84	.506	-.01
Posting pictures on my profile	-0.59	.558	-.08				
Posting text-based comments on my profile	0.16	.870	.02				
Looking at my own profile	0.24	.811	.03				
Looking at photos on others' profiles	1.77	.080	.24				
Looking at posts on others' profiles	-0.11	.916	-.02				
Leaving posts or comments on others' profiles	0.47	.643	.06				
I usually filter/edit my photos before posting them on a social networking site	-1.78	.078	-.22				

Exercising							
Overall Model				0.61	7, 84	.748	-.03
Posting pictures on my profile	0.32	.750	.05				
Posting text-based comments on my profile	0.25	.807	.04				
Looking at my own profile	0.66	.512	.09				
Looking at photos on others' profiles	-1.20	.233	-.16				
Looking at posts on others' profiles	0.85	.399	.12				
Leaving posts or comments on others' profiles	-0.42	.679	-.06				
I usually filter/edit my photos before posting them on a social networking site	0.83	.410	.10				
Trying to change weight							
Overall Model				0.62	7, 84	.736	-.03
Posting pictures on my profile	0.39	.696	.06				
Posting text-based comments on my profile	-0.76	.452	-.11				
Looking at my own profile	0.46	.646	.06				
Looking at photos on others' profiles	0.24	.810	.03				
Looking at posts on others' profiles	0.58	.567	.08				
Leaving posts or comments on others' profiles	0.08	.941	.01				
I usually filter/edit my photos before posting them on a social networking site	1.12	.264	.14				
Protein shakes							
Overall Model				0.67	7, 84	.700	-.03
Posting pictures on my profile	1.51	.136	.22				
Posting text-based comments on my profile	-0.13	.896	-.02				
Looking at my own profile	0.00	.998	.00				
Looking at photos on others' profiles	0.07	.943	.01				
Looking at posts on others' profiles	0.64	.523	.09				
Leaving posts or comments on others' profiles	-0.10	.917	-.01				
I usually filter/edit my photos before posting them on a social networking site	-0.13	.900	-.02				

Laxatives/diet pills/diuretics							
Overall Model				1.84	7, 84	.089	.06
Posting pictures on my profile	1.17	.247	.16				
Posting text-based comments on my profile	0.54	.594	.08				
Looking at my own profile	0.34	.739	.04				
Looking at photos on others' profiles	0.51	.615	.07				
Looking at posts on others' profiles	-1.99	.050	-.27				
Leaving posts or comments on others' profiles	1.45	.150	.18				
I usually filter/edit my photos before posting them on a social networking site	-0.36	.723	-.04				
Meal skipping							
Overall Model				0.52	7, 84	.817	-.04
Posting pictures on my profile	-0.61	.546	-.09				
Posting text-based comments on my profile	0.33	.746	.05				
Looking at my own profile	0.58	.565	.08				
Looking at photos on others' profiles	0.44	.660	.06				
Looking at posts on others' profiles	0.78	.437	.11				
Leaving posts or comments on others' profiles	-0.10	.922	-.01				
I usually filter/edit my photos before posting them on a social networking site	0.24	.811	.03				
Weigh myself often							
Overall Model				1.05	7, 84	.403	.00
Posting pictures on my profile	0.18	.859	.03				
Posting text-based comments on my profile	1.08	.282	.16				
Looking at my own profile	0.53	.601	.07				
Looking at photos on others' profiles	0.02	.982	.00				
Looking at posts on others' profiles	-0.51	.611	-.07				
Leaving posts or comments on others' profiles	1.15	.255	.15				
I usually filter/edit my photos before posting them on a social networking site	-0.49	.628	-.06				

Dieting							
Overall Model				0.67	7, 84	.694	-.03
Posting pictures on my profile	0.00	.997	.00				
Posting text-based comments on my profile	-1.03	.305	-.16				
Looking at my own profile	0.57	.574	.08				
Looking at photos on others' profiles	-0.50	.618	-.07				
Looking at posts on others' profiles	0.96	.340	.13				
Leaving posts or comments on others' profiles	0.49	.629	.06				
I usually filter/edit my photos before posting them on a social networking site	1.37	.175	.17				
Portion control							
Overall Model				0.85	7, 84	.553	-.01
Posting pictures on my profile	-1.01	.314	-.14				
Posting text-based comments on my profile	0.55	.585	.08				
Looking at my own profile	0.83	.410	.11				
Looking at photos on others' profiles	-0.93	.355	-.13				
Looking at posts on others' profiles	1.44	.155	.20				
Leaving posts or comments on others' profiles	0.51	.614	.07				
I usually filter/edit my photos before posting them on a social networking site	-0.86	.395	-.11				

Results of the Multiple Regression Analyses with Males (n = 68) for Study A, Objective 2

	<i>t</i>	<i>p</i>	<i>B</i>	<i>F</i>	<i>df</i>	<i>p</i>	adj. <i>R</i> ²
Body Image (SATAQ-M)							
Overall Model				1.08	7, 61	.390	.01
Posting pictures on my profile	0.35	.727	.06				
Posting text-based comments on my profile	0.03	.976	.01				
Looking at my own profile	0.75	.454	.10				
Looking at photos on others' profiles	1.74	.087	.27				
Looking at posts on others' profiles	-1.48	.145	-.23				
Leaving posts or comments on others' profiles	1.02	.313	.15				
I usually filter/edit my photos before posting them on a social networking site	0.04	.971	.01				
Self-Esteem (SSES)							
Overall Model				17.70	8, 59	.000	.67
Posting pictures on my profile	-1.24	.219	-.12				
Posting text-based comments on my profile	1.02	.312	.10				
Looking at my own profile	-1.21	.233	-.10				
Looking at photos on others' profiles	-0.35	.726	-.03				
Looking at posts on others' profiles	0.83	.410	.07				
Leaving posts or comments on others' profiles	-0.68	.499	-.06				
I usually filter/edit my photos before posting them on a social networking site	0.28	.780	.02				
Global trait self-esteem	11.33	.000	.84				

Eating disorder symptoms and concerns (EAT-26)							
Overall Model				0.98	7, 61	.454	.00
Posting pictures on my profile	0.79	.433	.13				
Posting text-based comments on my profile	0.37	.715	.06				
Looking at my own profile	0.41	.683	.06				
Looking at photos on others' profiles	-0.09	.928	-.01				
Looking at posts on others' profiles	-1.19	.239	-.18				
Leaving posts or comments on others' profiles	0.64	.522	.10				
I usually filter/edit my photos before posting them on a social networking site	1.06	.291	.15				
Binge eating							
Overall Model				0.40	7, 61	.899	-.07
Posting pictures on my profile	-0.24	.811	-.04				
Posting text-based comments on my profile	0.07	.948	.01				
Looking at my own profile	-0.83	.408	-.12				
Looking at photos on others' profiles	0.02	.984	.00				
Looking at posts on others' profiles	-0.07	.944	-.01				
Leaving posts or comments on others' profiles	1.14	.258	.18				
I usually filter/edit my photos before posting them on a social networking site	-0.47	.642	-.07				
Vomiting							
Overall Model				1.59	7, 61	.155	.06
Posting pictures on my profile	0.89	.500	.13				
Posting text-based comments on my profile	-0.94	.353	-.16				
Looking at my own profile	0.30	.765	.04				
Looking at photos on others' profiles	-1.78	.080	-.26				
Looking at posts on others' profiles	-0.65	.520	-.10				
Leaving posts or comments on others' profiles	-0.40	.693	-.06				
I usually filter/edit my photos before posting them on a social networking site	1.90	.063	.25				

Exercising							
Overall Model				0.50	7, 61	.830	-.06
Posting pictures on my profile	0.52	.604	.09				
Posting text-based comments on my profile	0.08	.937	.01				
Looking at my own profile	-1.09	.279	-.15				
Looking at photos on others' profiles	0.67	.505	.11				
Looking at posts on others' profiles	-0.47	.639	-.07				
Leaving posts or comments on others' profiles	0.93	.356	.14				
I usually filter/edit my photos before posting them on a social networking site	0.30	.764	.04				
Trying to change weight							
Overall Model				1.73	7, 61	.119	.07
Posting pictures on my profile	0.37	.715	.06				
Posting text-based comments on my profile	-1.21	.233	-.20				
Looking at my own profile	0.74	.463	.10				
Looking at photos on others' profiles	-0.50	.620	-.07				
Looking at posts on others' profiles	2.45	.017	.36				
Leaving posts or comments on others' profiles	-1.08	.283	-.16				
I usually filter/edit my photos before posting them on a social networking site	0.37	.711	.05				
Protein shakes							
Overall Model				1.59	7, 61	.155	.06
Posting pictures on my profile	-0.84	.405	-.14				
Posting text-based comments on my profile	-0.29	.770	-.05				
Looking at my own profile	0.11	.916	.01				
Looking at photos on others' profiles	1.94	.058	.29				
Looking at posts on others' profiles	1.25	.215	.19				
Leaving posts or comments on others' profiles	0.43	.669	.06				
I usually filter/edit my photos before posting them on a social networking site	-0.26	.800	-.03				

Laxatives/diet pills/diuretics							
Overall Model				0.86	7, 61	.564	-.02
Posting pictures on my profile	1.66	.102	.29				
Posting text-based comments on my profile	-0.95	.347	-.16				
Looking at my own profile	-0.08	.937	-.01				
Looking at photos on others' profiles	-1.19	.239	-.18				
Looking at posts on others' profiles	-0.69	.493	-.11				
Leaving posts or comments on others' profiles	0.28	.785	.04				
I usually filter/edit my photos before posting them on a social networking site	1.21	.230	.17				
Meal skipping							
Overall Model				2.03	7, 61	.066	.10
Posting pictures on my profile	1.79	.078	.29				
Posting text-based comments on my profile	-0.72	.474	-.12				
Looking at my own profile	0.54	.590	.07				
Looking at photos on others' profiles	-2.06	.044	-.30				
Looking at posts on others' profiles	-0.27	.788	-.04				
Leaving posts or comments on others' profiles	0.77	.447	.11				
I usually filter/edit my photos before posting them on a social networking site	2.03	.047	.27				
Weigh myself often							
Overall Model				1.45	7, 61	.204	.05
Posting pictures on my profile	-1.51	.137	-.25				
Posting text-based comments on my profile	0.39	.701	.07				
Looking at my own profile	0.85	.397	.11				
Looking at photos on others' profiles	2.40	.020	.36				
Looking at posts on others' profiles	-0.10	.920	-.02				
Leaving posts or comments on others' profiles	0.56	.577	.08				
I usually filter/edit my photos before posting them on a social networking site	0.17	.869	.02				

Dieting

Overall Model				1.82	7, 61	.100	.08
Posting pictures on my profile	0.59	.557	.10				
Posting text-based comments on my profile	-0.50	.619	-.08				
Looking at my own profile	-1.04	.305	-.14				
Looking at photos on others' profiles	0.02	.987	.00				
Looking at posts on others' profiles	-0.18	.859	-.03				
Leaving posts or comments on others' profiles	0.00	.998	.00				
I usually filter/edit my photos before posting them on a social networking site	3.25	.002	.43				

Portion control

Overall Model				1.61	7, 61	.152	.06
Posting pictures on my profile	0.58	.565	.10				
Posting text-based comments on my profile	0.48	.630	.08				
Looking at my own profile	-1.37	.175	-.18				
Looking at photos on others' profiles	1.45	.153	.21				
Looking at posts on others' profiles	-2.99	.004	-.45				
Leaving posts or comments on others' profiles	0.55	.586	.08				
I usually filter/edit my photos before posting them on a social networking site	0.37	.712	.05				

APPENDIX E

Results of the Generalized Linear Model ANOVA Analyses for Study B

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Body Image (SATAQ)					
Gender	1	12.10	12.10	0.03	.869
Group	1	375.10	375.10	0.86	.358
Self-Esteem (SSES)					
Gender	1	10.45	10.45	0.17	.682
Group	1	3.10	3.10	0.05	.823
Eating Disorder symptoms and concerns (EAT-26)					
Gender	1	32.64	32.64	1.01	.319
Group	1	128.33	128.33	3.98	.051
Meal Skipping					
Gender	1	0.02	0.02	0.05	.827
Group	1	0.00	0.00	0.00	.967
Weigh myself often					
Gender	1	2.45	2.45	8.80	.005
Group	1	0.00	0.00	0.00	.973
Trying to change weight					
Gender	1	0.66	0.66	0.51	.480
Group	1	2.65	2.65	2.05	.158

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