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QUALITATIVE AND QUANTITATIVE ANALYSIS OF THE ‘FAT TALK’ CONSTRUCT

by

Sarah Royal

Bachelor of Medical Sciences (Honors), University of Western Ontario, London, Ontario, 2004

A thesis

presented to Ryerson University

in partial fulfillment of the

requirements for the degree of

Master of Arts

in the Program of

Psychology

Toronto, Ontario, Canada, 2010

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Abstract

Qualitative and Quantitative Analysis of the 'Fat Talk' Construct

Master of Arts, 2010

Sarah Royal

Psychology

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The literature currently lacks a psychometrically valid and reliable assessment tool that adequately measures the fat talk construct. This research aimed to use qualitative data gathered from young adult women to guide development of a fat talk measure. In Study 1, 14 individuals participated in fat talk themed focus groups or individual interviews. In Study 2, 257 participants completed questionnaires measuring fat talk and theoretically related (e.g., body image) and unrelated (e.g., 'academic talk') constructs. In a preliminary analysis, the newly-developed Fat Talk Questionnaire was found to be reliable and valid. In future research, the Fat Talk Questionnaire should be refined to further improve its psychometric properties.

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Qualitative and Quantitative Analysis of the 'Fat Talk' Construct

The Ideal Body Size for Women: "Thin is in"

Currently, there is a thin ideal body size for women in Western society (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). The media is frequently implicated in the perpetuation of this standard of attractiveness. Celebrities and fashion models portrayed in contemporary media are typically very slim. For example, Sypeck, Gray, and Ahrens (2004) reported that the female models depicted in popular fashion magazines had significantly smaller body sizes in the 1980s and 1990s compared to earlier decades. Seifert (2005) showed that the body size of Playboy centrefold models have also decreased gradually over time; however, there is some indication that this has stabilized and potentially reversed to some degree (Sypeck et al., 2006). These models are, however, still very thin. As well, media photographs are frequently airbrushed and altered to make fashion models appear even smaller than they actually are. Therefore, the women generally depicted as ideals of female beauty are not only extremely attractive but unattainably and unrealistically thin as well. Women's bodies are also more likely to be displayed in the media as body parts instead of whole bodies and they are often scantily clad (Malkin, Wornian, & Chrisler, 1999), a practice which makes the thin ideal apparent and difficult to ignore.

Media's portrayal of the thin ideal for women has been hypothesized to have a negative impact on women's mental health (Thompson et al., 1999). For example, the literature examining media's influence on women's body dissatisfaction is extensive. Several meta-analyses (Want, 2009; Grabe, Ward, & Hyde, 2008; Groesz, Levine, & Murnen, 2002) show that women have more negative body image after viewing slim media images compared to control conditions, particularly if participants have elevated levels of appearance concerns pre-exposure

(Want, 2009; Groesz, Levine, & Murnen, 2002). The influence of the media is explained using a social comparison framework. Social comparison theory (Festinger, 1954) suggests that individuals have a need for self-evaluation and do so through comparison to others' abilities. Upward social comparison involves comparing oneself with someone whose abilities or characteristics exceed one's own in a specific domain. Alternatively, a downward social comparison has occurred when comparing to another individual whose abilities or characteristics fall below one's own. In the realm of female body size and shape, an upward social comparison would refer to evaluating oneself against another woman who is attractive and thin, such as a fashion model. A downward social comparison, on the other hand, would be made with a woman's body larger than their own. Given that the body size and shape portrayed as ideal in today's society is generally unattainable, most women would, thus, fall short when comparing their bodies to the thin ideal. Therefore, exposure to the thin ideal can leave even normal weight women feeling as though they do not measure up. Supporting this suggestion, it is known that many women of normal weight consider themselves overweight (Chang & Christakis, 2003). A situation has emerged in Western culture where general body dissatisfaction is commonplace among women of all sizes: a concept that has been termed "normative discontent" (Rodin, Silberstein, & Striegel-Moore, 1984).

Festinger (1954) suggested that individuals are more likely to compare themselves and their abilities to similar others. In the body shape arena, Trottier, Polivy, and Herman (2007) noted that peers, as opposed to ultra-thin fashion models, are more suitable comparison figures for women. This notion highlights the possibility that peers may play a critical role in directly influencing body concerns; women may consider peers more suitable for comparison purposes given fashion models' elite beauty status.

Peer Influence

Peer influence is hypothesized as an avenue through which society's thin ideal is perpetuated, given the similarities that exist (e.g. age, social status, cultural milieu, etc.). Social comparisons to peers with respect to appearance, and their effect on body dissatisfaction, have been documented with adolescent girls (e.g., Carlson, 2004). In one study, Hutchinson & Rapee (2007) examined the influence of peer groups on body image and dieting behaviours in a sample of 1094 girls aged 10-14. Participants completed various self-report questionnaires, including a measure where they identified friends from their social clique. The results indicated that members of the same social circles scored similarly on dieting and binge eating measures. As well, the researchers reported that peer pressure to diet and be thin predicted body image concerns in female friendship circles. Keery, van den Berg, & Thompson (2004) also examined the influence of peers on body image in adolescent girls. They recruited 325 girls, aged 11-15, who completed a questionnaire package that included measures of body dissatisfaction and eating disturbance. The results indicated that the relationship between peer influence and general body dissatisfaction in adolescent girls was partially mediated by internalization of the thin ideal and comparison processes. Combined, these studies highlight both the direct (i.e. peer pressure) and indirect (i.e. social comparison) influence of peers on body image concerns, as well as dieting behaviour, in adolescent girls.

The influence of peers on body image via social comparison has also been studied in young adult women (e.g., Strahan, Wilson, Cressman, & Buote, 2006; Krones, Stice, Batres, & Orjada, 2005). For example, Wasilenko, Kulik, & Wanic, (2007) conducted experimental research in a naturalistic setting by exposing female exercisers using a particular fitness apparatus in a campus gym to either an exercising fit peer or exercising unfit peer (or no peer).

Participants then completed a measure of body satisfaction. The researchers demonstrated that exposure to a fit (versus unfit) peer results in lower body satisfaction in female exercisers (Wasilenko, Kulik, & Wanic, 2007). Leahey, Crowther, and Mickelson (2007) examined the influence of upward and downward social comparison with peers on body dissatisfaction and emotional affect, using diaries to track participants' experiences. They found that body-dissatisfied women not only made more overall comparisons but also made more upward comparisons than did body-satisfied women. For both groups of women, upward body comparisons were related to increased thoughts of exercising and increases in both body dissatisfaction and negative affect. In another study, exposure to information about a thin peer's weight led to more negative self-perceptions in restrained eaters (chronic dieters with considerable weight concerns), as compared to unrestrained eaters (Trottier, Polivy, & Herman, 2007). Restraint is important because these individuals may be even more sensitive to social comparisons of body size. Specifically, restrained eaters exposed to thin peer information reported that they felt heavier, were more body dissatisfied, and had lower appearance-related self-esteem than those exposed to an average-weight peer. These results were obtained in a situation where a peer was not even present. It is evident that the influence of peers on body image, in both adolescent girls and young women, is important and certainly has the potential to impact self-perceptions in a negative way.

Fat Talk

Specifically, peers can also be influential through negative conversations regarding their bodies. The term "fat talk", coined by Nichter and Vukovic (1994), refers to negative body-related conversations occurring in female adolescent peer groups. Nichter's (2000) anthropological research followed 240 middle and high school girls from the Western United

States over a three-year period. Students were interviewed each school term about their thoughts and feelings concerning their bodies. Nichter (2000) reported that these girls frequently engaged in dialogues with friends where they criticized their own bodies and received reassurance from one another. She noted that their motivations included highlighting personal and cultural concerns regarding body size and shape, expressing distress not necessarily linked to body image, asking for support from friends, seeking reassurance about body size, drawing attention to bodily imperfections before one's peers do, displaying vulnerability, and promoting social inclusion and group cohesion. It is suggested that adolescent females (and perhaps women of all ages) bond through mutual sharing of their problems and providing feedback and support to one another (Nichter, 2000). Negative conversations regarding body shape is one method of bonding, at least with respect to female adolescents.

The experimental research on fat talk is beginning to grow. Studies have generally been conducted on populations older than the adolescent participants in the Nichter (2000) study, namely female undergraduate students. Stice, Maxfield, and Wells (2003) exposed undergraduate participants to a thin confederate who either complained about her weight and discussed her exercise regimen extensively or discussed a neutral topic. The researchers hypothesized that exposure to a peer strongly matching the socio-cultural ideal of thinness who was complaining about her body would lead to increased body dissatisfaction and more negative affect in the listening peer. Body dissatisfaction and affect were measured before and after exposure to the thin peer. As predicted, Stice et al. (2003) found that exposure to a thin peer engaging in fat talk led to increases in body dissatisfaction that were not observed in the control condition. This result is important because the changes in body dissatisfaction were obtained above and beyond any negative effects of social comparisons made with the thin and attractive

peer used in both conditions. Unexpectedly, negative affect was not influenced by the experimental manipulation of fat talk. It has been theorized that the sociocultural pressure to be thin leads to body dissatisfaction, which in turn can negatively influence affect (Stice, 2001; Thompson et al., 1999). Therefore, one interpretation given by these authors is that the fat talk manipulation may not have been strong enough to lead to negative changes in affect, given its more distal position along this theoretical "chain" of influence. Alternatively, it is possible that fat talk does not influence affect.

Gapinski, Brownell, and LaFrance (2003) also attempted to manipulate fat talk by exposing participants to a confederate complaining about how a garment of clothing looked on her (a swimsuit or sweater) while changing in a mock dressing room. The fat talk control condition involved the same confederate complaining about her computer. The researchers found that hearing fat talk led to more positive feelings in women who were wearing swimsuits and more negative feelings in those who were wearing sweaters as compared to the computer control condition. The researchers suggested that participants in the swimsuit felt better after hearing fat talk because they may have been reassured that the garment was unflattering or because they were distracted from objectifying their own body. They also suggested that social comparison may have been taking place in that participants felt better because a peer, wearing the same garment, was not satisfied with how she looked. The researchers explained that the negative feelings following fat talk while trying on the sweater may have been due to surprise on the part of the participant who was "caught off-guard" that someone was complaining about the sweater and as a result was suddenly focusing more on her own body. The Gapinski et al. study highlighted potential effects of fat talk, both negative and positive, on women's self-perceptions.

A more recent study examined whether social norms are present that pressure young women to participate in fat talk (Britton, Martz, Bazzini, Curtin, & LeaShomb, 2006). The researchers had participants read a short vignette describing a target woman who was joining a fat talk discussion with other women. Participants were asked to decide whether the target woman would remain silent or make self-accepting or self-degrading comments about her own body. Both male and female participants reported that they expected a female would denigrate her body when joining a fat talk discussion with other women. The participants also reported that real-world women would find the 'self-degrade' response more attractive (implying that the target woman would be more liked) whereas they reported that real-world men would find a 'self-accept' response from women more attractive. These results provided evidence for the notion that fat talk may be a social tool to foster reciprocal liking among women. Interestingly, the authors noted that female participants reported that they, themselves, would not necessarily self-degrade. This suggests that women believe that they themselves would not contribute to a fat talk discussion by "putting down" their bodies, but that it is common for women, in general, to engage in this behaviour. This finding highlights the importance of discovering the frequency with which young women actually *do* engage in fat talk discussions and *which* women are engaging in this behaviour.

As discussed, Britton, Martz, Bazzini, Curtin, & LeaShomb (2006) suggested that women may feel pressured by a social norm to make negative comments about their appearance. Tucker, Martz, Curtin, & Bazzini (2007) examined this idea by creating a situation where female participants rated their own bodies orally following a confederate's disclosure of her own body satisfaction rating. Depending on the condition, the confederate self-derogated, self-accepted, or self-aggrandized when rating her body and it was predicted that participants would roughly

match the confederate ratings when rating themselves. The researchers found that participants in the self-derogate condition made significantly lower body satisfaction ratings than did participants in the self-accept condition. In turn, those in the self-accept condition made significantly lower body satisfaction ratings than did those in the self-aggrandize condition. The researchers offered several possible interpretations for this finding, namely: conformity, impression management, and social comparison processes. Regardless of the possible mechanism, the Tucker et al. study provided experimental evidence of a social pressure for women to conform to a fat talk norm.

Craig, Martz, & Bazzini (2007) investigated the potential roles of impression management by examining experimentally whether gender of social audience influenced fat talk. In this study, they operationally defined fat talk as changes in body dissatisfaction scores because participants were told that their second set of body image scores would be presented to an audience. These researchers predicted that body image scores would decrease if participants believed that females would see their scores (fat talk) and would increase for a male audience. The results, however, indicated no changes across time or condition. These null findings would suggest that fat talk requires the direct presence of, and social connection to, others as well as verbal, not written, expression of body dissatisfaction. However, these results should be interpreted with caution because defining fat talk as changes in body dissatisfaction scores may not have been appropriate.

Recently, Tompkins, Martz, Rocheleau, & Bazzini (2009) presented to female participants one of four vignettes that depicted a fat talk situation involving women. In a 2 x 2 design, both a fictitious target individual and the ‘group’ in the vignettes described their bodies in either a positive or negative manner. Participants were asked to rate their own liking of the

target individual and indicate the likely 'group' rating of the target individual's likeability. The results indicated that participants liked the target individual more if she made positive body-related comments; however, they reported that the group members would like the target more if she conformed to their particular presentation style. These results suggest that, when removed from the fat talk situation, women indicate that they prefer positive body talk from other women but that, in the moment, there is a pressure to conform to group norms in order to enhance one's likeability.

Most recently, Salk & Engeln-Maddox (in press), aimed to explore the frequency with which college women engage in fat talk, as well as the content of their conversations. This study is important because, despite the increase in experimental studies in this research area, less is known about what exactly young women are saying in these discussions. As part of the qualitative portion of the study, participants wrote representative fat talk 'scripts', highlighting the 'back and forth' nature of fat talk conversations. Next, they rated frequency of engagement in fat talk, based on a provided definition, on a 5-point scale ranging from 1 (it's extremely rare) to 5 (it's extremely common). In order to gauge their attitudes towards fat talk, participants selected from seven statements created based on Nichter's (2000) work with adolescents (e.g. 'It makes us feel like a more tightly-knit group'). As well, participants answered open-ended questions regarding what is meant when they tell a friend that they "feel fat". Finally, participants completed measures of body dissatisfaction and internalization of the thin ideal. Salk & Engeln-Maddox (in press) found that most college women in their study engage in fat talk to some degree and that the most typical conversation included denial that the other friend is fat. They also found that engagement in fat talk was associated with body dissatisfaction and internalization of the thin ideal. Interestingly, Salk & Engeln-Maddox (in press) reported that

the notion that fat talk could represent general distress, as suggested by Nichter (2000) with adolescents, was not supported in their young adult female participants. Perhaps as girls age into adulthood, fat talk represents body-specific distress and they use other methods to express general distress. As a suggestion for future research, Salk & Engeln-Maddox (in press) propose that the literature would benefit from studies using similar mixed qualitative/quantitative methods examining fat talk content and frequency in diverse populations, including more varied ethnicity.

In sum, fat talk is believed to occur frequently in young women (Britton, Martz, Bazzini, Curtin, & LeaShomb, 2006) yet the research is only beginning to grow. Taken together, these mainly experimental studies have demonstrated that there exists a pressure among young women to participate in fat talk and these conversations can impact their self-perceptions, including body dissatisfaction. What has been missing from the above described literature is a measurement tool that assesses the fat talk construct.

Fat Talk Scales

Recently, Ousley, Cordero, & White (2008) surveyed male and female college students to further examine the relationship between fat talk and both eating disturbance and body dissatisfaction. These researchers modified their own Weight Management Questionnaire (WMQ; Ousley, 1986) to include fat talk items, based on five dimensions: self-comparison to ideal eating and exercise habits, fears of becoming overweight, how eating and exercise habits compare to others, evaluation of others' appearance, and meal replacements and muscle building strategies. The researchers reported that the items were constructed based on transcripts of discussions with hundreds of undergraduate students, though the exact methodology is not clearly detailed. The WMQ was reportedly also used to identify eating and non-eating

disordered participants. They found that an increased frequency of fat talk, in both their purported eating disordered and non-eating disordered samples, was linked to self-reported eating pathology and body dissatisfaction. While these results are interesting, the use of a non-validated questionnaire to assess frequency of fat talk is one major limitation of the study. There is no description of how the items were selected and categorized and they were not field-tested on a group of university students to verify their validity. The researchers also use a non-validated questionnaire to diagnose eating disorders as opposed to seeking out an already-diagnosed eating disorder population or using a validated diagnostic research tool, such as the Eating Disorder Examination (EDE; Fairburn & Beglin, 1994) or the Structured Clinical Interview for DSM Disorders-IV (SCID-IV; First, Spitzer, Gibbon, & Williams, 1996). As well, the selection of fat talk subscales seems somewhat arbitrary and the categories are not mutually exclusive. Another limitation is that the researchers surveyed both males and females yet there are topics that appear more relevant to only one sex. For example, 'muscle building strategies' may be more relevant to males and 'fears of becoming overweight' may be more salient in women, for whom the consequences may be magnified in Western society. As well, fat talk, as described in the literature, appears to be a phenomenon evident primarily in women. It is likely that if men are engaging in fat talk, the dialogue is qualitatively distinct. Therefore, the WMQ, and its subscales, may not be appropriate for use with men.

Recently, Clarke, Murnen, & Smolak (2010) published a 9-item, single factor scale assessing fat talk (Fat Talk Scale (FTS); Appendix A). It consists of 9 short vignettes describing a target female, 'Naomi', and her friends in fat talk situations. Participants completing the questionnaire indicate the degree to which they would respond as 'Naomi' did in each situation. The scale was shown to have adequate reliability and validity and was positively correlated with

self-objectification and negatively with body esteem. Despite its potential, this scale has several important limitations. Firstly, it was partially based on Nichter (2000)'s fat talk construct, which is described in female adolescents as young as 12-13 years old. Fat talk, and its sequelae, likely differs in young women aged 18-24 years especially given the significant physical and emotional maturation that takes place during adolescence. Therefore, the scenarios created for the scale may not be entirely relevant for the young adult female population. The researchers did attempt to assess the relevance of their items by consulting a group of female friends of the first author as well as an undergraduate class in which the first author was an enrolled student. However, it would be preferable to consult individuals from the target population not known to the author to receive anonymous, and therefore presumably more honest, feedback on the items. This would also lead to more diverse opinions given that friends may be more likely to agree with one another.

Another limitation of the scale is found within the instructions. Participants are asked to assume that Naomi is of average height and weight. Firstly, research indicates that people, especially women, are inaccurate in their estimate of normal weight (Chang & Christakis, 2003). More importantly, however, is that this instruction presumes that all women would potentially engage in fat talk with a friend of average height and weight. Perhaps overweight women only participate in fat talk with other overweight friends, possibly due to shame or embarrassment regarding their size. Therefore, overweight women might not endorse fat talk items on the FTS when, in fact, they may be engaging frequently in fat talk. The authors indicate that this instruction was provided because fat talk is engaged in by women who are not overweight. However, the Salk & Engeln-Maddox (in press) study found that participation in fat talk did not vary based on Body Mass Index (BMI). While their sample consisted primarily of normal

weight or underweight women, it still highlights the importance of examining this behaviour in young women of all sizes. Therefore, more information is needed regarding with whom women are engaging in fat talk (including physical characteristics such as body size or possibly attractiveness) in order to increase the usefulness of a fat talk scale with a wider range of women.

There are several other problems with the Clarke, Murnen, & Smolak (2010) scale. While the use of scenarios is unique, in some cases they are quite specific and not all participants will be able to relate to them. The scale might not be capturing their actual behaviour (i.e. some individuals may make those comments but not in those situations). Therefore, it might not be clear whether participants are reporting a low frequency of fat talk or a low frequency of 'getting ready for a party', for example. A wider range of situations and comments are needed to more accurately assess this phenomenon. The scale also includes colloquial phrasing (e.g. love handles) and advanced wording (e.g. transgression) that might not be understood by individuals of different cultures or those who are less educated, respectively. As well, the only body parts complained about by the target character and her friend are thighs and stomachs. It is likely that other female body parts are discussed as part of fat talk conversations. Finally, the scale was not developed sufficiently in relation to content and ecological validity. Vogt, King, and King (2004) suggest that when theory is under-developed, as is the case with fat talk in young women, qualitative research (focus groups and/or individual interviews) should be conducted to inform scale development.

Summary

Nichter (2000) proposed that fat talk promotes group cohesion, bonding, body dissatisfaction, and rejection avoidance. Her seminal work was conducted solely on adolescent girls and, therefore, it is possible that the nature, frequency, and purpose of fat talk differ in

young adult women. The purpose of fat talk in young women, for example, could be less about avoiding rejection and more about expressing true body image distress. Therefore, the literature would benefit from further examination of the purpose and nature of fat talk in young women, especially given that all experimental work has been conducted on this population, and not adolescents. Salk & Engeln-Maddox (in press) have taken the first empirical step towards this goal. It is important to note, however, that these researchers created some of their materials based on Nichter's research. For example, statements regarding attitudes towards fat talk (to which participants indicated their agreement) were created directly based on the research with adolescents. While it is likely that some of the purposes of fat talk in young women overlap with those of female adolescents, there are also likely differences which could not be captured by the methodology used by Salk & Engeln-Maddox (in press). Therefore, further research is needed.

Another issue is that the experimental work conducted thus far has operationally defined and manipulated fat talk in different ways, such as hearing confederate complaints about her body, providing oral body satisfaction ratings, and noting changes in scores on body image questionnaires. These manipulations, while creative, do not adequately represent fat talk. For example, the use of a confederate in fat talk conversations instead of women who know one another does not appropriately capture the behaviour. Nichter (2000) suggested that fat talk occurs amongst female friends. Presuming this is the case for adult women as well, these studies may have limited ecological validity with respect to fat talk as it occurs in real life. A comprehensive study uncovering the nature of fat talk in young women could be the springboard for the future development of stronger fat talk manipulations to be used in experimental research.

As evidenced by the Ousley et al. (2008) and Clarke et al. (2010) studies, the literature lacks a valid and reliable instrument that *adequately* and *appropriately* assesses frequency of fat

talk in young women. Construct validity of a measure, according to Cronbach and Meehl (1955), can only be obtained if based upon a well-characterized construct. Therefore, a questionnaire can only be as good as the theory upon which it is based, yet fat talk has not been fully theorized for young women. It is not clear whether fat talk in young women is the same as fat talk in adolescents: this must be first established before a valid questionnaire can be designed. Such a questionnaire would allow this individual difference variable to be appropriately compared to other theoretically-related constructs, such as body dissatisfaction and eating pathology. With the development of this questionnaire, research could also further examine any behavioural or psychological consequences for women. The questionnaire would also be valuable, for use in future experimental studies of fat talk, to determine potential differences in eating behaviour and exercise habits in those who vary along the fat talk continuum. Though Salk & Engeln-Maddox (in press) examined fat talk frequency, they only used a single-item measure based on a definition given to participants. This likely did not truly capture frequency of fat talk when one considers the variety of situations in which it likely occurs and its possible multi-dimensional purposes.

Therefore, the broad objectives of the current studies are to: 1) use qualitative data to create a valid and reliable instrument to measure frequency of fat talk and; 2) assess the relationship between fat talk and theoretically-related and unrelated constructs.

Present Studies

Study 1: Specific Objectives and Hypotheses

The objective of this work was to further elucidate the fat talk construct, specifically as it relates to young women. In the case of fat talk, questions remain not only about the content of this communication but also regarding its nature and purpose in young women's social lives. Specifically, answers were sought to such questions as: Why do young women participate in negative conversations about their bodies? With whom are they engaging in this behaviour? What aspects of their bodies do young women complain about in these situations? The method was qualitative and involved individual interviews and focus groups to help clarify the answers to these questions.

According to Clark & Watson (1995), it is essential, early in the scale development process, to determine the scope of the target construct to be measured. Therefore, semi-structured focus groups and individual interviews were conducted with young women to provide insight into the fat talk construct and, ultimately, inform the development of questionnaire items. Focus groups - researcher-facilitated discussions with members of the target population - are suggested by Vogt, King, & King (2004) as an invaluable method to understand a given construct. They are structured to obtain a wide range of opinions on a topic of interest. Individual interviews, on the other hand, provide more in-depth exploration of a topic with only one member of the target population at a time. The principal investigator created questions that formed the semi-structured protocol of the focus groups and individual interviews. Questions were chosen to stimulate lively discussion. Vogt, King, and King (2004) also suggest that subject matter experts be consulted to gain further insight into a construct of interest. With respect to fat talk in young women, there are few clear "experts", especially given that this topic

has not been extensively studied. However, clinicians who work primarily with patients with eating disorders address the topic of fat talk with patients and their families/friends as part of treatment. Therefore, these clinicians may have insight and knowledge about the subject matter. Thus, a semi-structured individual interview was conducted with a prominent clinical psychologist who works exclusively with eating disordered patients at an internationally recognized day hospital treatment program.

There were no specific hypotheses regarding the data collected using qualitative methods, given that Study 1 was exploratory in nature. The collected qualitative data was subjected to thematic analysis (described below in the Methods section) to reveal fat talk-relevant themes discussed by participants.

Study 2: Specific Objectives and Hypotheses

The first objective of Study 2 was to develop a 'Fat Talk Questionnaire' (FTQ), based on the quotes obtained from participants during the focus groups and individual interviews, which measures the frequency with which women engage in this behaviour.

The second objective of Study 2 was to evaluate the preliminary psychometric properties of the newly developed FTQ by examining reliability (internal consistency) and validity (construct, concurrent, and discriminant validity). In order to meet this objective, participants completed a battery of questionnaires examining fat talk and related constructs.

Convergent Validity Hypotheses

Convergent validity is obtained when scores on a target instrument correlate with scores on another measure that assesses the same, or different but theoretically-related, construct. Scores on the newly-developed FTQ were compared to scores on the Clarke et al.'s Fat Talk

Scale, which is presumed to measure the same construct. It was predicted, however, that the FTQ would have stronger psychometric properties in the assessment of the fat talk construct.

Convergent validity was also assessed by examining the correlations between fat talk (as assessed by the FTQ) and theoretically-related variables. The first variable was body dissatisfaction, selected because it was hypothesized that participants with higher levels of body dissatisfaction likely engage more frequently in fat talk. The second construct was self-objectification, which refers to the degree to which women take an outsider's perspective of their own bodies (Fredrickson & Roberts, 1997; McKinley & Hyde, 1996). Given that fat talk about one's body could be viewed as objectifying in its own right, it was predicted that self-objectification and fat talk would be moderately correlated. Another variable of interest was the restrained eating construct. Restrained eating, or chronic dieting, is linked to many negative outcomes including lowered self-esteem, mood instability, weight fluctuations, overeating, and binge eating (Polivy, 1996). It is established in the literature that women who are body dissatisfied are more likely to be engaging in disordered eating patterns (e.g. Gingras, Fitzpatrick & McCargar, 2004). Given the theoretical link between fat talk participation and body dissatisfaction, it follows that women who engage in fat talk may also display abnormal eating behaviours and weight concerns. Therefore, it was hypothesized that fat talk and restrained eating are correlated moderately. Another variable of interest was social physique anxiety, which refers to anxiety regarding one's physique being viewed and evaluated by others (Hart, Leary, & Rejeski, 1989). Nichter (2000) reported that female adolescents sometimes engage in fat talk to draw attention to their flaws before others do. It is possible that young adult women do this as well, if they are concerned about others noticing their bodies. Therefore, it was hypothesized that fat talk and social physique anxiety would be correlated moderately. Finally,

concurrent validity will also be assessed by comparing the association between fat talk and social desirability. Social desirability reflects the degree to which individuals present a positive image of themselves (Crowne & Marlowe, 1960). Tompkin, Martz, Rocheleau, & Bazzini (2009) found that participants reported that a group engaging in fat talk would like an individual more if they conform to the group norms (i.e. engage more in fat talk). Since those high in social desirability would be concerned with being liked by others, it is predicted that fat talk and social desirability will be positively correlated.

Discriminant Validity Hypotheses

Discriminant validity is established when a construct is not correlated to a theoretically-unrelated construct. In this study, discriminant validity was determined by examining the relationship between fat talk and 'academic talk'. Academic talk, conceptualized for this study, refers to the degree to which participants make negative comments and criticisms about their academic life. Academic talk was chosen because it is relevant to undergraduate students and involves social interaction that should be distinguishable from fat talk (i.e. those who make complaints about their bodies shouldn't necessarily make complaints about academics/grades, etc.). This would provide some evidence that those who score highly in fat talk behaviours are *not* just more social in general (or not just complainers), but that fat talk is a unique social behaviour. It was hypothesized that fat talk and academic talk would not be related, providing support for discriminant validity.

To further establish discriminant validity, data was collected from male participants. The FTQ was developed based on interviews and focus groups conducted with women because fat talk is hypothesized to occur amongst women. Therefore, men should have lower levels of fat

talk behaviour than women. It was predicted that male participants would score significantly lower on the FTQ than do female participants.

Study 1

Method

Focus Groups

Participants were nine female undergraduate students enrolled in introductory psychology courses at Ryerson University. They were all recruited using SONA systems, which is a web-based human participant pool management program. The study was advertised with the title "Examining When and Why Women Talk About their Bodies" and participants were fully aware of the purpose of the study (i.e. no deception was used). Inclusion criteria were female sex, 24 years of age or younger, and fluency in English. Focus groups were conducted in private seminar rooms located on Ryerson University campus. The two focus groups consisted of four and five participants, respectively. During each session, participants provided informed consent and were introduced to the focus group leaders (described below). They were then provided with a brief description of the focus group format and invited to contribute to the discussion. They were informed that the research team was interested in a range of opinions and were encouraged to share their views, even if such views differed from another participant's experience. Participants were also asked to be respectful of one another during the discussion. Each focus group was audio-taped. The focus groups were moderated by the principal investigator (Master's level student in Clinical Psychology) who posed each structured question to the group and, subsequently, paraphrased respondents' comments. All structured focus group questions were created by the principal investigator in an attempt to gain information about the fat talk construct (See Appendix B for list of focus group questions). The note-taker, a PhD student in

Clinical Psychology, typed the paraphrased quotes into a word processing program using a laptop, and the image was projected onto a large white screen visible to all participants. In order to further stimulate the focus group conversation, participants were encouraged to review the quotes on the screen as the discussion progressed. Each focus group was semi-structured, in which the moderator asked follow-up/clarification questions, as needed. Following completion of the focus group, participants completed a demographics questionnaire and were fully debriefed, given course credit (1%) as compensation, and thanked for participating in the study. Average length of the focus groups was 36 minutes. See Appendices C, D, and E for the Consent Form, Debrief Form, and Demographics Questionnaire, respectively.

Individual Interviews

Participants were four female undergraduate students enrolled in introductory psychology courses at Ryerson University. They were recruited anonymously using the web-based SONA system. Participants were required to be female, 24 years of age or younger, and fluent in English. Each individual interview was conducted in a private room located on the Ryerson University campus. Following consent procedures, participants completed a semi-structured individual interview conducted by the principal investigator which was audio-taped. The stem questions were identical to those used in the focus groups (see Appendix B) and the interviewer asked follow-up/clarification questions, as needed. Upon completion of each individual interview, participants completed a demographic questionnaire, were fully debriefed, given course credit (1%) as compensation, and thanked for their participation. Average length of the individual interviews was 22 minutes.

Clinician Interview

An interview was conducted with a clinical psychologist employed by an intensive day hospital treatment program for eating disorders. This participant was previously known to the principal investigator and specifically selected for her expertise in the areas of eating and body image research and clinical work primarily with women. She had approximately 16 years of experience working with eating disordered patients at the time of the interview and contributes regularly to scholarly research in this area. The participant first provided informed consent and then asked questions designed by the principal investigator specifically for the expert interview that attempted to gain information about the fat talk construct (see Appendix F). The interview was audio-taped and also followed a semi-structured format (i.e. the participant was asked clarification and follow-up questions, as needed). Following completion of the interview, the participant was debriefed and thanked for her participation. See Appendices G and H for Consent Form and Debrief Form, respectively. The clinician interview was 23 minutes in length.

Qualitative Analysis

The qualitative data collected were subjected to thematic analysis to reveal pertinent themes, as outlined by Braun & Clarke (2006). First, all focus groups and individual interviews were transcribed by either the principal investigator or a research assistant and subsequently reviewed for errors. Transcripts were then read several times by the principal investigator who made initial notes based on their content. Given that qualitative analysis is an iterative process, each transcript was coded twice by the principal investigator for potential themes related to the research question (i.e. what is the nature and purpose of fat talk in young women?). Potential patterns in the data were first identified by examining whether a particular quote might portray an important facet of the research question (Braun & Clarke, 2006), i.e. the nature and purpose of

fat talk. Prevalence of themes across various focus groups and/or individual interviews was also considered. During this process, the principal investigator consulted with a supervisory committee member who is well-versed in qualitative analysis to review the broad and specific themes as they emerged during the coding process. The data were categorized based on meaningful segments that corresponded to each theme. Finally, themes were defined and illustrative quotes selected for presentation of results.

Results

Descriptive Statistics

Table 1 displays demographic information for Study 1.

Table 1

Study 1 Demographic Information

Variable	Mean Age/Percentage Ethnicity
Focus Groups	
Age	19.0
Ethnicity	
Caucasian	88.8%
Other	11.1%
Individual Interviews	
Age	19.8
Ethnicity	
Caucasian	25%
Black	50%
East Asian	25%

Description of Fat Talk

Participants described typical comments that occur during a fat talk conversation. They reported that comments reflected complaints about specific body parts. The body parts described by participants as being typical targets of fat talk comments were those in which women tend to gain weight, such as: stomach, hips, thighs, buttocks, arms, breasts, proportion of top half of the body to bottom half, and face. Participants also noted that they often complained about the body as a whole, or commented on general fatness (e.g. 'I hate my body', 'I feel fat'). Participants also reported that the content of fat talk comments commonly centered on food choices. For example, participants would complain if they ate a high calorie or 'fattening' food. Participants also reported the importance of familiarity or intimacy when engaging in a fat talk conversation. That is, most participants reported that fat talk most frequently occurred with close female friends but also with sisters or close female cousins. Some participants reported that they engage in fat talk with their mothers while others reported that they do not. They reported that they were more likely to engage in fat talk with friends who were of similar weight, or who had similar concerns about their own bodies (e.g. size of thighs). Fat talk infrequently occurs with men, and the most frequent reason cited was that they did not react in the same way as other women (i.e. less supportive, no 'back and forth'). Fat talk also occurs typically in female pairs or small groups, as opposed to large groups.

Key Themes

Five key themes, some with relevant subthemes, emerged from the data and are reported in detail below. Briefly, the main themes were 'Centrality to Womanhood', 'Pressure to Engage' (subthemes: male expectations of the female body; societal pressure to be thin), 'Body is Salient', 'Speaking up versus Being Silenced', and 'Functions' (subthemes: personal benefits,

perceived benefits of fat talk to other women, expression of body image distress, tool to fill time). Within each description, representative quotes are provided with reference to the interview or focus group in which they occurred. In the quotes provided, the 'I' refers to the Interviewer and 'P' to a participant. For focus groups where more than one individual was interviewed, participants are labelled P1, P2, etc. For each quote, no identifying participant information is provided.

Theme 1: Central to Womanhood

A main theme that emerged was fat talk's centrality to womanhood. Participants identified that fat talk is a common and acceptable behaviour among women, associated with society's focus on the thin ideal. Participants revealed that fat talk behaviour was almost expected, and it was a key part of being a woman.

Focus Group #1
I: How acceptable do you think it is for young women to complain about their bodies? I know we've talked about this, but in terms of how acceptable is it in society.
P1: Almost expected
I: Ok so it's almost expected?
P1: Yep it's all the, not all but, a lot of the ads or whatever in TV, magazines, wherever you find them are improve this, or tighter butt this
P2: Or look at her like she's not perfect
P1: You can be like her, or you are her
P2: Even on like the tabloid magazines its like 'Eww she's disgusting!'
P1: Cellulite, cellulite!
P2: Cellulite, or she's too skinny or she's too this or she's too that
P1: It's not she's perfect
P2: It's never like oh look at this beautiful woman. Or sometimes it even is! Cause then, and then you compare yourselves to them. So like it is expected definitely
P3: And like the movie Mean Girls, all I'm thinking about is when they all go over to the, whatever, the really popular girl's house
P1: Georgina
P3: Yeah Georgina, and the three popular girls are standing in front of the mirror and going 'oh I'm so gross' and they're pointing out all these things, and the…Lindsay Lohan's character is standing back going like what, what are you, like looking at them like they're insane and they're all just, they turn to her and she's like 'Oh, I have really bad breath in the morning'. And she comes up with this stupid thing that she hates about herself and it's like she didn't get it, cause

she didn't I guess she didn't grow up in the same culture, and that's all I can think about right now. But yeah it's expected of you in some situations

---

Focus Group #1
P4: And also it became kind of a culture, you don't feel (like) a girl if you don't gossip, if you don't discuss these issues

---

Focus Group #1
P3: I think that there's enough women and I, looking at how acceptable it is, it's almost accepted, expected but I know to myself it's bad like I shouldn't do it, because I should be happy, but yeah and I know that it's normal but I yeah I still feel like sometimes it's like, wow this is really dumb why am I doing this when it's putting myself down, but I don't know if everybody does that so…

Theme 2: Pressure to Engage

Participants also highlighted that women feel externally pressured to participate in fat talk conversations. Specifically, two subthemes were identified related to this key theme. Firstly, male expectations of the female body were seen as an external pressure associated with fat talk. Participants reported a conviction that men, in general, prefer smaller women.

Individual Interview #1
P: Guys! Guys seem, a lot of men like to see women being smaller
I: So, men like smaller women?
P: Mm hmm, another stereotype kind of, not all men but smaller men aren't, wouldn't necessarily come after me, like shorter or smaller body type, I get more of a bigger men

---

Individual Interview #4
P: I wish that you know guys wouldn't look at me and think 'she's thin, she's not' and you know just on first impressions, you know what I mean?

Individual Interview #4
P: I think that it could be more about men, that we'd make comments about our own bodies in particular and clothes. Like, with clothes, it'd be body shape and with men it'd be like 'do you think he'd like me being curvy?', you know 'do I look more buxom or do I just look fat?' You know what I mean?

...
I: So tell me more about when you're talking about men
P: When we're talking about men it's just like I'm really interested in this guy but I don't know if he's going to find me hot, I mean his last girlfriend is really, you know she's thin and I'm not. Or you know it's more like comparison of body types. Or you should see this new girl he picked out, she's terrible looking I meant I'm so much hotter than her and my body you know, I got into shape I mean, that'd be more body types

Regarding a second subtheme related to pressure to engage, participants identified societal pressure to be thin as a contributor to fat talk. This pressure manifested through media outlets as well as by one's peers, and they identified that these messages were directed at their age group.

Individual Interview #2
P: I'm expected to look a certain way, I'm expected to eat a certain type of food (laughs) um I'm expected to, yeah, look a certain way and present yourself as a women who's not really supposed to look human

---

Focus Group #1
P2: Like you don't see media influencing as much forty year old women who you know are housewives and- not all housewives sorry but like, that's so horrible for me to say (laughing) that like forty year old women who you know have careers and you know working and stuff like that and are being pushed to you know look amazing and stuff like that, it's all targeted to young women you know late teens early twenties to have these fabulous bodies so I think that's why we're pushed so much to or we have fat talk in essence, right?
I: So there's media, pressure from the media
P2: Yeah to our age
I: To this age
P2: Specifically our age group which is why I think we're the ones that fat talk occurs in
I: So in relation to the question, so do you find that it does seem to be most women, that there might not be that many who are rarely complaining it's often, or because the media pressure, or...?
P2: I think maybe there are one, there are people that are more influenced by the media then there may be people that are just not affected by the media but I think it just is still within our age group
I: Ok so they might be less affected?
P2: Less affected by the media, like because they're so focused on school so they don't pay attention to the media
I: Ok
P2: So that's where their focus is

Theme 3: Body is Salient

A general theme that emerged from the data was that situations where 'the body' was salient frequently initiated fat talk conversations, such as when menstruating, trying on clothing, being at the gym, when eating, presence of other female 'bodies' (social comparison), and noticing one's own body or when the body is on their mind.

Individual Interview # 1
P: Or even just randomly like me and my friends, even my smaller friends just randomly talk about their body like, you know when they're coming on, I don't know if I should say this, when they're coming on, we feel bigger cause we're bloated
I: Oh ok
P: So I see around that time…
I: Oh ok so depending where you are in the menstrual cycle

Individual Interview # 4
P: *sigh* I guess it's more like to the point you know when, you feel like, you know for example, when you've finished dinner and you're like should I get dinner I don't know I've eaten so much crap this week, and you know I've put on some in the middle or something like that. Or um if we're there like should I have the salad or should I have the pasta, if I have the pasta how much calories is that, and oh no I can't do that, and going to the gym that'll take away all my work at the gym and stuff like that

---

Focus Group #1
P2: And I think speaking from my own lived experience, when you're with a group of girls in say like in a bonding sort of moment say when you're going shopping so trying on new clothes, I think that's the sort of thing when you're reflecting yourself in the mirror and I think that's the sort of times though when you are trying on new clothes being oh like do my thighs look big or does my butt look big and that's sort of when you have the negative talk about that. And I know from my personal experience after the gym, when I was standing in front of the mirror just after working out with two of my other friends, looking back in the mirror and being like oh I don't like my thighs and I wish I could improve this and I wish I could improve that, and then one person started on it and then it kind of brought in a conversation where all three of us started talking about it

---

Focus Group #1
P2: Yeah but like and even just like when we were standing in the mirror the other week we were standing there and like comparing our legs like looking in the mirror and comparing our legs and saying like…and like three of us are completely like it would be impossible for us to be the same shape. Because one of us, well one of us is so like short and like thin boned, and then there's my

size and then the other one is like 6 foot something so there's like no way that we could even be the same shape. But here's me comparing like my legs to someone that's like this, and then me to someone to someone that's like 6 foot tall and like plays volleyball and me being like 'oh I wish my legs looked like yours' or' I wish my legs looked like you'. And they're like 'no, no your legs are fine but look at my legs'. And then like that would like make me feel bad because there's somebody beside me like comparing like thinking that they look bigger than I do but they're like half the size of me sort of thing. And I'm like 'how could you say that? Like look at me'. You know what I mean?
I: Right, ok so it sounds like you make actual direct comparisons sometimes with friends
P2: Sometimes, yeah
I: So everybody's nodding with that
Mixed: yeah

Focus Group #2
P3: Sometimes there really is no purpose to it you're just kind of like you're sitting that and you notice something and you're like "ugh my arm is huge" like and it'll just like start going from there. And there is no reason why you really brought it up it was just kind of there
I: Ok so, so just sort of something to talk about. Does that capture it?
P3: And cause it's so like, it's so it's like a big issue now. Like when she was talking about like the media and stuff, like we're always, like we're always really self conscious, a lot of girls are really self conscious about their weight anyways so it's like always kind of in the back of your mind so it's not really that it's like something to talk about but it's always on your mind anyway

Theme 4: Speaking up versus being silenced

Overall, participants identified that often fat talk occurred more frequently among women who were thinner, or at least of average weight. Women who were overweight usually didn't speak up among thinner women. However, some participants also noted that women didn't like to hear the thinner girls complaining. They also might not complain if they're uncomfortable about or embarrassed by their bodies. Participants also noted that a woman who is confident might also remain silent in fat talk conversations. The clinician interview revealed that women may avoid fat talk if they know one group member has an eating disorder.

Individual Interview #1
P: But typically it's the smaller girls that always bring this up in my personal experience and then the girls that are a little bit bigger are more quiet about it...It's usually the smaller ones that are more open and the bigger ones are quiet because like I don't know if they're embarrassed or

they're actually offended because why would these girls that are smaller be saying these things when in reality we're bigger than you so…

Individual Interview #1
P: Hmm I don't know if not but I say like I don't want to hear you complain if you're small, if you're a size zero, I don't really want to hear you complain so I guess bigger girls? I know that some of my friends like if I complain they'll be like just keep it to yourself like you're, you know, you don't know what you're saying like hurting us cause you're smaller than us and you're complaining about your legs when our legs are 3 sizes bigger than yours or….
I: ok so someone might be less likely to complain with someone who is larger than they are…
P: Around like the same size
I: Ok so usually with someone the same size
P: Or have the same problems like my butt's too big

Individual Interview # 1
I: So try and think about or imagine so a friend of yours or friends who might rarely complain about their body…why do you think that would be?
P: They're uncomfortable
I: In what sense?
P: Meaning that, to face reality, maybe they don't wanna publicize it to other people that "yeah, I have an issue with eating or yeah I feel that I'm too big…umm…embarrassed
I: embarrassed…so embarrassed of?
P: What we might think of them…maybe we've never seen them as being bigger or having an issue with their body and now, where we might judge them and, oh well 'you're lazy, you should do something or stop eating so much
I: So, worry about judgment?
P: Judgment

Clinician Interview
P: I mean it's different when an individual actually has an eating disorder because umm, like I think the social bonding is probably more for dieters or for people before they develop an eating disorder. Because once people realize that an individual has an eating disorder, umm not always, but um it can become a bit more taboo, like let's not talk about that, that could be upsetting, not always. But also when an individual has an eating disorder, you know depending on the individual they also don't want to get into that whole eating disorder arena with friends or family depending on um how they're feeling about their eating disorder. Like, if they're really struggling with their eating disorder and they feel like they've let their family down, and they've tried recovery for a number of years, it's almost like they won't even go there, that they kind of protect that

I: Right. So this is for individuals with eating disorders but it's known to others that they have it. Like they've been in recovery

P: Yes. Yes. Yes

I: In that case they may not…

P: They might try to censor

Theme 5: Functions

A key theme that emerged reflected the various functions of women's fat talk behaviour. There are four subthemes that fall under this general theme. Firstly, participants revealed that there are several perceived personal benefits to engaging in fat talk including reassurance-seeking and venting.

Focus Group #2
P3: There are some girls that are like really self-conscious anyways, so when they're with their friends they'll comment on something that may not be completely out of proportion but like they make it seem like a bigger deal so that they get like some kind of self-worth over someone saying like 'no, you don't look like that' or 'your arms aren't big' or even though they already know that they aren't
I: So it sounds like…
P3: They just want to like confirm

Focus Group #1
I: So think about yourself or young women you know who engage in fat talk, what do you think might be the purpose?
P3: To be reassured that you're not actually fat
P1: and not alone, in thinking it
I: ok so reassurance seeking, and then to know you're not alone
P2: I think venting your feeling as well. Like it's a venting system
I: venting, like venting feelings about the body?
P2: Yeah, or, yeah like venting. Yeah, yeah

Regarding a second subtheme, participants also reported perceived benefits of fat talk to other women, such as the empowerment of others.

Individual Interview #2
I: Ok, um are there any positive reasons that women might, so we talked a bit there about negative you know frustration, and pressure and based on comments from other people but are there any positive reasons why?

P: To talk about weight or just their bodies? Maybe for empowerment? Like to empower other women to feel comfortable to talk about their bodies um to encourage that body, that any body shape is beautiful…I know they're doing a lot of those ads, I think it's Dove, or some…I think it's Dove, talking about just embracing your body shape and your body image so I think that would be discussion, maybe why they want to talk about that
I: Ok so even if women are complaining it's still, they're able to express…
P: Yeah, they're able to express, they're able to talk about it sometime when you realize that you're not the only one going through that it's sort of empowers women ? to stop with that internal thing that's going on in their minds

---

Individual Interview #3
P: It sounds really negative but it's just you want to point out your flaws, nobody's perfect, right?
I: So pointing out your flaws to your friends, for example, and to kind of demonstrate that nobody is perfect, is that what you mean?
P: I don't know, in a sense, well not really to demonstrate to your friend so that, to tell them that nobody's perfect but it's more kinda like you pointing yourself out in a way to make your friend feel better about themselves, so if they're already complaining and you start complaining you're making them feel better about themselves, or they're already complaining and you're already complaining and they're complaining about themselves then, it's kinda like you're trying to make each other feel better and plus we're all social creatures, we just want to make each other feel better and just want to, if they're already complaining ok what the heck, why not? Why not join, right?

Thirdly, participants also reported negative reasons for engaging in fat talk, such as the expression of body image distress.

Focus Group #1
P1: I definitely have days where I'm so happy, everything's fine I could just yeah, and then the next day it's like oh crap
P2: I even read an article about how like, where it took somebody within, I think, 10 days or 15 days and it was twenty year old or a twenty something year old how she looked in the mirror and journalled how she felt over ten days or something, and like one day she felt fat, and one day she felt this, and one day she felt that and she wasn't allowed to like weigh herself. But she felt like skinny one day and then fat the next day, and this but she was the same over like the, the complete like that many days. But really like you feel like you would gain five pounds one day, and like feel so skinny the next day and feel fat in the same pair of jeans one day compared to like 'oh I feel so skinny in these jeans' the next day. But like you're always the, pretty much like exactly the same. And then that's what comes down to the realization that like everything's the same and that I'm normal and healthy, and that's in the reflective of everything.
I: Ok do you find that, that um on the days when you might be feeling more that way that it does occur more, the fat talk? Like when you are feeling more fat or feeling, you feel, ok so it

definitely happens more then? But then it also may not necessarily when you're feeling that way, is that right? Or is it really more when you're feeling dissatisfied?
P2: More so when you feel dissatisfied and when you are feeling fat it happens more. Like if you were to wake up like bloated in the morning, then you're like 'oh I feel so fat today' and 'I feel gross'
I: Ok so you'd be more likely to make a complaint that day
P2: Complaints those days as opposed to a day when you wake up and you don't feel …
P1: You feel good, and your head is held high

Lastly, participants also reported that fat talk was often a tool to fill time and provided something for women to talk about, especially because their bodies were often on their minds.

Focus Group # 2
P3: Sometimes there really is no purpose to it you're just kind of like you're sitting that and you notice something and you're like "ugh my arm is huge" like and it'll just like start going from there. And there is no reason why you really brought it up it was just kind of there
I: Ok so, so just sort of something to talk about. Does that capture it?
P3: And cause it's so like, it's so it's like a big issue now. Like when she was talking about like the media and stuff, like we're always, like we're always really self conscious, a lot of girls are really self conscious about their weight anyways so it's like always kind of in the back of your mind so it's not really that it's like something to talk about but it's always on your mind anyway
I: Ok, ok
P2: I think it's the easiest topic for girls when they're all together to just talk about yourself
I: Ok so it's an easy topic, it's on your mind

Focus Group #1
P3: It's something you talk about when you have nothing else to say.
P1: Like no wonder
P3:Yeah, I don't know sometimes it comes up and you're just like, I don't know if you're not saying anything for a couple minutes and you just happen to look at your leg and you're just like ugh, and I don't know it just comes out but I don't know
I: ok so just like something to talk about?
P3: Yeah, even if there's no initial purpose behind it like you know to be reassured or whatever, if you're not actually feeling bad about something that day, but sometimes it just comes out
I: Ok so even if you're not feeling dissatisfied at that moment necessarily you might, right?
P3: Yeah

The five themes, and relevant sub-themes, represent fat-talk related topics that arose most commonly across the focus groups and individual interviews. All quotes, including the

representative quotes provided above, were used to inform development of the fat talk questionnaire. A general discussion follows the description of Study 2.

Study 2

Method

Developing Questionnaire Items

The principal investigator reviewed focus group and interview audiotapes and highlighted instances where typical fat talk comments were provided by participants. Members of the research team (principal investigator, supervisor, and the same PhD student in Clinical Psychology who served as note-taker during the focus groups) reviewed the data together and created potential questionnaire items based on the participant quotes. The generated items maintained the terminology used by participants, while attempting to avoid overly colloquial phrasing. Clark & Watson (1995) suggest over-inclusivity during item generation, and the elimination of weaker items at a later point in the psychometric process. Therefore, the research team reviewed the item list, eliminated any overly redundant questions, and combined the selected items to create the preliminary questionnaire. Sixty-two items were included in the preliminary fat talk questionnaire (see Appendix I). Items are rated on a 5-point Likert scale, ranging from “Never” to “Always” and summed to give a total score.

Procedure

Undergraduate participants (226 females; 31 males) were recruited between April and September 2010 through the Ryerson University Psychology participant pool using the SONA systems program. The study was described as “An Examination of Eating, Body-related, and Social Behaviours”, with no specific mention of fat talk in the advertisement. Participants

completed the study in exchange for partial course credit (1%) in introductory psychology courses. To ensure a young adult sample, English-speaking participants aged 24 years and younger were recruited. Exclusion criteria included previous participation in an individual interview or focus group related to the current study. Each participant arrived individually at the Health and Sport Psychology Laboratory located on Ryerson University campus and was greeted by the researcher. Participants were informed that all aspects of the study were to be completed on a computer (including consent and debriefing procedures) but that the researcher was available should any questions arise. They were also provided with a conversion chart in hard copy to convert kilograms into pounds (if needed) when reporting current weight and related questions. Participants then completed a battery of questionnaires displayed on a computer using MediaLab software. The series included the newly-developed FTQ, as well as questionnaires assessing theoretically-related and unrelated constructs (described below). The consent form was always presented first to participants, the demographics questionnaire was completed second to last, and the debrief form presented at the end of administration. All other questionnaires were completed in a random order. See Appendices J and K for Consent Form and Debrief Form, respectively.

Fat Talk Questionnaire (FTQ; designed for use in this study). The FTQ was developed to address the main research goal of the current study. It is a 62-item self-report measure in which participants indicate their responses to items on a 5-point Likert scale ranging from 'Never' to 'Always'. Responses are summed to give a total score. Sample items are: "When I'm with one or several close female friend(s), I complain that I am fat" and "When I'm with one or several close female friend(s), I complain that my butt is too big". Psychometric properties of the FTQ are described in the Results section. See Appendix I.

Body Shape Questionnaire (BSQ; Cooper, Taylor, Cooper, & Fairburn, 1987). The BSQ was administered to measure participants' concerns about body shape. It is a 34-item self-report instrument in which responses are made on a 6-point Likert scale ranging from "Never" to "Always". Sample items include "Have you worried about your thighs spreading out when sitting down?", "Has seeing your reflection (e.g. in a mirror or shop window) made you feel bad about your shape?", and "Have you felt so bad about your shape that you've cried?" It was predicted that scores on the FTQ and BSQ would correlate moderately in young women, indicating convergent validity. The BSQ has demonstrated adequate psychometric properties (Cooper, Taylor, Cooper & Fairburn, 1987), including a test-retest reliability coefficient of .88 (Rosen, Jones, Ramirez, & Waxman, 1996). Internal consistency of the BSQ for the present female sample was $\alpha = .97$. The BSQ has been translated into other languages, including French (Rousseau, Knotter, Barbe, Raich, & Chabrol, 2005) and Spanish (Raich et al., 1996).

Objectified Body Consciousness Scale (OBCS; McKinley & Hyde, 1996). This measure was administered to examine the degree to which participants experience their own bodies as an object (i.e. they view themselves as an object to be gazed at and admired for their physical appearance over other attributes) and related beliefs. A sample item is "When I'm not the size I think I should be, I feel ashamed". This 24-item self-report instrument contains items that are rated on a 7-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree" and has three subscales: Surveillance, Body Shame, and Appearance Control Beliefs. The Surveillance subscale measures the extent to which the individual takes an outsider's stance when viewing his/her body while the Body Shame subscale measures shame associated with not conforming to body standards. The Appearance Control Beliefs subscale measures the degree to which a participant believes they can control their body and, thus, appearance. The OBCS, and its three

subscales, have good reliability and validity (McKinley & Hyde, 1996). In a sense, when women engage in fat talk dialogues they are objectifying their bodies. Therefore, it was predicted that scores on the OBCS would correlate moderately with scores on the FTQ in female participants, contributing to convergent validity. As well, it is hypothesized that the FTQ will correlate moderately with the Surveillance and Shame subscales, but not necessarily the Appearance Control Beliefs subscale. In the present female sample, internal consistency for the OBCS was $\alpha = .84$. Subscale internal consistencies ranged from $\alpha = .73 - .86$, which is comparable to past literature finding internal consistencies from $\alpha = .68 - .84$ for undergraduates (McKinley & Hyde, 1996).

Revised Restraint Scale (RS; Herman & Polivy, 1975). The 10-item self-report RS was administered to assess the degree of restrained eating, characterized by chronic dieting concerns and weight fluctuations, exhibited by participants. The scale consists of two subscales, Concern for Dieting and Weight Fluctuations, and has demonstrated adequate psychometric properties (Herman & Polivy, 1975). A sample item is "How often are you dieting?" Items scores on the RS are summed to give a total score, where higher scores indicate a higher degree of restrained eating. It was predicted that scores on the RS and FTQ would be moderately correlated in female participants, supporting convergent validity. Internal consistency of the RS in the present sample was $\alpha = .83$, which is comparable to previous findings. For example, internal consistency was .78 in a sample of normal weight, mostly college-aged, women (Laessle, Tuschl, Kotthaus, & Pirke, 1989). The research also indicates that the RS has good construct validity (Ruderman, 1982).

Social Physique Anxiety Scale (SPAS; Hart, Leary, & Rejeski, 1989). The SPAS was completed by all participants to examine their level of anxiety when their physiques are being

observed or evaluated by others. This scale is a 12-item self-report measure in which participants indicate the degree to which each statement applies to them. Items are rated on a 5-point Likert scale ranging from "Not at all" to "Extremely Characteristic". A sample item is "It would make me uncomfortable to know others were evaluating my physique/figure". The SPAS has good reliability and validity (Petrie, Diehl, Rogers, & Johnson, 1996; Hart, Leary, & Rejeski, 1989). It is predicted that scores on the SPAS and FTQ will be moderately correlated in female participants, contributing to convergent validity. For the current sample, the internal consistency of the SPAS was $\alpha = .89$. This is comparable to previous research that obtained $\alpha = .90$ for female participants (Petrie, Diehl, Rogers, & Johnson, 1996).

Academic Talk Questionnaire (ATQ; designed for use in this study). Participants completed the ATQ, a 15-item self-report instrument assessing the frequency with which they engage in negative discussions about academics. This measure was created to resemble the Fat Talk Questionnaire in structure but reflect a dissimilar construct. Items are scored on a 5-point Likert scale, with responses ranging from "Never" to "Always". A sample item is "When I'm with one or several close female classmate(s) from school, I complain that my grades are too low". Items are summed to give a total score, where higher scores indicate greater participation in academic talk. It was hypothesized that scores on the FTQ and ATQ would not be correlated, therefore, supporting discriminant validity. Internal consistency on the ATQ in the present sample was $\alpha = .91$. See Appendix L.

Fat Talk Scale (FTS; Clarke, Murnen, & Smolak, 2009). This scale was included to compare scores on the FTS and FTQ to determine which scale more adequately and accurately assesses the fat talk construct and to assess convergent validity. The FTS is a 9-item self-report measure that presents written 'fat talk' scenarios to participants who indicate the extent to which

they would respond as a target individual ("Naomi") did. A sample item is "As Naomi was walking to class with a friend, her friend began to remorse about the 'chocolate binge' that she just went on. Naomi responds by telling her that she has nothing on her since Naomi had just ate a bunch of chips, a hotdog, and ice cream. Her friend then matches Naomi by telling her what she ate for breakfast. Please indicate the extent to which you would respond as Naomi did in the situation" (Clarke, Murnen, & Smolak, 2009). Items are scored on a 5-point Likert scale ranging from "Never" to "Always" and are summed to give a total score. Higher scores indicate higher participation in fat talk. The FTS has shown adequate internal consistency ($\alpha = .90$), test-retest reliability, and validity (Clarke, Murnen, & Smolak, 2009). In the present sample, internal consistency on the FTS was also $\alpha = .90$. The FTS was found to be positively correlated with body shame, body surveillance, and eating disordered attitudes and negatively correlated with body esteem in previous research (Clarke, Murnen, & Smolak, 2009).

Marlowe-Crowne Social Desirability Scale (SDS; Crowne & Marlowe, 1960). This 33-item self-report measure was included to determine whether participants' response patterns indicate that they are trying to present a biased positive impression of themselves and to examine convergent validity. Participants answer 'true' or 'false' in response to questions regarding behaviours that are socially acceptable but unlikely. A sample item is "My table manners at home are as good as when I eat out at a restaurant". It was predicted that there would be a positive correlation between the FTQ and the SDS. In the current sample, internal consistency of the SDS was $\alpha = .76$, which is slightly lower than originally reported ($\alpha = .88$; Crowne & Marlowe, 1960) though some studies have found similar internal consistency values in undergraduate students ($\alpha = .73$; Barger, 2002).

Demographics Questionnaire (DQ; designed for use in this study). This 11-item self-report measure was included to assess participants' basic demographic information, including age, gender, ethnicity, height, weight, maximum lifetime weight, degree program at Ryerson University, and country of birth. See Appendix M.

Results

The data obtained from 257 participants were first screened for the presence of outliers and normality of distribution. Based on a criterion of *z*-scores greater than |3.29| (Tabachnick & Fiddell, 2007), no outliers were found in any of the variables of interest. To examine normality of distribution, skewness and kurtosis values were inspected for each variable. No values were found to be greater than |2| and |7|, respectively, indicating that the data are normally distributed (West, Finch, & Curran, 1995).

Two cases were deleted from the data because a fire alarm occurred in the building where the study sessions took place, within minutes of beginning the sessions leaving most of the data missing for those participants. Also, five cases were deleted from analysis because participants were greater than 24 years of age. This yielded a final sample size of 250.

Missing data were infrequent and random. Most items did not have any missing values. At most, 2 data points were missing for an item (out of 250 participants), and this only occurred for 3 items across all questionnaires. For the FTQ specifically, forty-five items had no missing data, fifteen items had one missing data point and two items had two missing data points. Therefore, missing data was judged to be random. Missing data points for each scale in the questionnaire package were replaced with the mean score for that particular item. According to

Tabachnick & Fidell (2007), when less than 5% of the sample is missing data (as was true in this sample), all data replacement procedures produce similar results.

Descriptive Statistics

Table 2 displays descriptive data on participant demographic information. The mean age of participants was 19.3 years, indicating a young adult sample. Ethnicities were varied with no group frequency representing the majority (i.e. greater than 50%). Most common ethnicities represented were Caucasian (43.2%), East Asian (21.2%), and South Asian (13.6%). With respect to female height and weight, mean values were 63.4 inches and 128.9 pounds, respectively. For males, mean height was 68.0 inches and mean weight was 153 pounds.

Item Analysis

The FTQ items were summed to give a total score for each participant. Reliability analyses were conducted to examine the usefulness of each item. First, corrected item-to-total correlations were scanned to identify items that did not correlate highly with the total scale (see Clark & Watson, 1995); items with values < .3 were eliminated. Item #7 (r = .26) and 29 (r = .25) were flagged and removed from subsequent analyses. Next, skewness and kurtosis values for all remaining items were produced to examine item distributions. Items were identified if their values were greater than |2| and |7| (West, Finch, & Curran, 1995). Item #8 and #36 were skewed and, thus, eliminated from further analyses. Finally, the inter-item correlation matrix was screened for highly correlated items, indicating redundancy, and negative correlations. No negative correlations were found. Correlations > .8 were flagged and items in each identified pair were inspected for redundancy and one of the paired items was eliminated. Four items (#5, 9, 28, and 33) were subsequently eliminated. The final revised FTQ, therefore, contained 54 items. The mean FTQ score for female participants was 123.31 (SD = 42.65) and for male

participants was 80.11 (SD = 22.87). Internal consistency for the revised FTQ was α = .98 based on female data. Split-half reliability for the FTQ based on female scores was α = .93. Split half-reliability was also conducted for the FTS, for purposes of comparison of psychometric properties, and was α = .80.

Convergent Validity

To examine convergent validity, total female scores on the FTQ were correlated with total female scores on the BSQ, RS, SPAS, SDS, FTS, and the OBCS and its subscales. The results are displayed in Table 3. The FTQ correlated highly with the BSQ and FTS and moderately with the RS, SPAS, OBCS total score, and its Surveillance and Shame subscales. The FTQ correlated weakly with the ATQ and weakly in the negative direction with the SDS. The FTQ was not correlated with the Control subscale of the OBCS. Table 3 displays Pearson correlations for these analyses.

Discriminant Validity

Discriminant validity was first examined by correlating total scores on the FTQ with the ATQ in female participants. The FTQ was weakly correlated with the ATQ (see Table 3). Further, total scores on the FTQ for females and males were compared using an Independent Samples T-Test. Levene's test of equal variances was significant indicating that equal variances could not be assumed. Female participants scored significantly higher (M = 123.3) than did male participants (M = 80.1; t = -8.61(64.64), $p < .001$)

Table 2

Study 2 Demographic Information

Demographic Variable	Total (N=250)	Females (N=219)	Males (N=31)
	M (SD) / % Total	M (SD) / % Female	M (SD) / % Male
Age	19.3 (1.9)	19.1 (1.9)	20.4 (2.0)
Ethnicity*			
Arab/West Asian	6.0%	4.6%	16.1%
Black	7.2%	7.8%	3.2%
East Asian	21.2%	21.5%	19.4%
Latin American	1.6%	1.4%	3.2%
South Asian	13.6%	13.7%	12.9%
South East Asian	6.8%	5.9%	12.9%
Caucasian	43.2%	44.3%	35.5%
Other	4.8%	4.6%	6.5%
Height (inches)	n/a	63.4	68.0
Weight (pounds)	n/a	128.9***	153.0

* Ethnicity percentages sum to greater than 100% because some participants identified with more than one ethnicity

** Mean height for females is based on 217 participants because self-reported height was unclear for two participants

*** Mean weight for females is based on 218 participants because self-reported weight was unclear for one participant

Table 3

Internal Consistency and Correlations (Female Data)

Variable	Internal Consistency (α)	Pearson Correlations (*r*) with FTQ
Body Shape Questionnaire	.97	.81*
Fat Talk Scale	.90	.75*
Objectified Body Consciousness Scale	.84	.59*
Surveillance	.86	.46*
Body Shame	.86	.64*
Appearance Control Beliefs	.73	.02
Revised Restraint Scale	.83	.62*
Social Desirability Scale	.76	-.20*
Social Physique Anxiety Scale	.89	.65*
Academic Talk Scale	.91	.30*
Fat Talk Questionnaire	.98	n/a

* $p < .01$

Discussion

The overarching goal of the current research study was to use qualitative data obtained from young women to inform the development of a reliable and valid fat talk measure. This study is important because an instrument that can appropriately assess this construct could have substantial utility in future research. For example, researchers could examine whether individuals who vary in fat talk behaviour also vary in objective eating behaviour. A secondary goal was to gain further understanding of fat talk as it manifests in young adult women and provide preliminary qualitative analysis of this behaviour using focus group and interviewing methods.

There were no specific hypotheses proposed for the qualitative examination of fat talk in Study 1. While it was presumed that some facets of fat talk would likely overlap with this behaviour as described in adolescents (Nichter, 2000), the focus groups and individual interviews provided a format through which participants could reveal their range of differing opinions and experiences without any assumptions of similarity to adolescent behaviour. The qualitative examination of fat talk in the present study revealed five key themes. Interestingly, fat talk was identified as being central to womanhood; that is, women consider fat talk to be an integral part of what it means to be a woman in Western society. Complaining about one's body is part of 'what a woman does'. This is remarkable given that complaining is generally viewed as inherently negative and possibly stimulates social disapproval in other contexts. The second theme revolved around external pressures to engage in fat talk, including men's expectations about female body size and shape. Women reported that these expectations from men, sometimes made blatant through their direct comments, frequently stimulate fat talk discussions with other women. Participants also noted that the external pressure in society, geared towards

their age group and perpetuated by the media and their peers, plays a key role in fat talk behaviour. There is pressure not only because other women are talking about their bodies but also because the thin ideal is made apparent to all women through magazines, television, commercials, and film. This result is consistent with literature citing the sociocultural pressure to be thin as contributing to negative consequences such as disordered eating (e.g. Stice, Schupak-Neuberg, Shaw, & Stein, 1994) and body dissatisfaction (e.g. Thompson et al., 1999). The third theme emerging from the current qualitative work was the notion that fat talk occurred frequently in situations where 'the female body' is relevant. When their attention is drawn to their bodies in some way, women tend to make complaints and criticisms about it. Another interesting theme revolved around the characteristics of women who choose to engage or withdraw from fat talk conversations. The body itself was revealed as a key player, specifically size and shape of a woman or of her companions. Participants highlighted embarrassment or discomfort with one's body as frequent precipitants of withdrawal from the conversation. Effectively, women were silenced by their feelings of shame or embarrassment. Participants also reported that women choose to not participate in fat talk with female friends who have larger body shapes, a finding consistent with adolescent research (Nichter, 2000). Finally, several important functions of fat talk emerged including perceived benefits to the self (e.g. reassurance-seeking, venting) and other women (e.g. empowerment), and expression of body image distress. Participants also revealed that fat talk sometimes occurred just to fill time, particularly if shape concerns were already on their mind.

With respect to Study 2, several hypotheses were proposed. Firstly, it was predicted that the FTQ would be moderately correlated with theoretically-related constructs such as the BSQ, OBCS (and subscales Shame and Surveillance), RS, and SPAS. The findings confirmed these

hypotheses, providing evidence of convergent validity of the FTQ. It was also hypothesized that the FTQ would be positively associated with the SDS, i.e. participants who engage more frequently in fat talk are more concerned about presenting themselves in a socially desirable manner, given the social pressure to engage. The correlation between the FTQ and SDS, however, was $r = -.20$, indicating a weak negative association. One possible explanation for this unexpected finding relates to the contradiction presented in labelling fat talk as an 'appropriate behaviour'. On the one hand, social norms create pressure for women to engage in fat talk, therefore making it appropriate and normative. However, given that fat talk involves complaints and negative comments, acts generally viewed as negative social behaviours, it follows that higher engagement in fat talk could indicate lower social desirability. That is, individuals who are concerned about maintaining a positive image of themselves might be reluctant to complain socially, in this case about their body.

It was also predicted that the FTQ and FTS would be highly correlated because, presumably, they measure the same construct. It was hypothesized, however, that the FTQ would be more psychometrically sound, given both the methodological rigour of its development and the inherent limitations of the FTS. The findings indicated that the FTQ and FTS were correlated at $\alpha = .75$, which is lower than might be expected if they were indeed measuring the same construct. With respect to reliability, in the present sample, the FTQ had higher internal consistency and split half reliability than did the FTS. As well, the FTQ was more highly correlated to theoretically related variables (restrained eating, self-objectification, social physique anxiety, and concerns about body shape) than was the FTS. These findings, in addition to the methodological rigour of scale development for the FTQ, demonstrate that the FTQ has higher construct validity than the FTS as a measure of fat talk. Therefore, these preliminary

comparisons of the FTQ and FTS indicate that it is a more psychometrically sound measure of fat talk.

It was predicted that the FTQ and ATQ would not be associated, providing preliminary evidence that fat talk is a unique social behaviour, and that the FTQ is not just measuring social behaviour in general. However, surprisingly, these two scales were correlated at $r = .30$, indicating that they do have some shared variance. It is possible that women who engage in fat talk are generally more social by nature (i.e. tend to talk more in general), or have a tendency to complain a lot. Future research should examine the influence of personality characteristics such as extraversion or sociability, in fat talk behaviour. As well, the FTQ could be compared to another theoretically-unrelated variable that does not contain a social aspect in order to further establish discriminant validity. The positive correlation between the FTQ and ATQ, however, should be viewed with caution. Given that the ATQ was created solely for validation of the FTQ in this study and was not based on any theory of academic-related complaints, it is ultimately unclear what exactly the ATQ is measuring. In retrospect, this may not have been the best measure to discriminate from fat talk. Future research should compare the FTQ to a theoretically-unrelated construct, such as intelligence.

Gender differences in FTQ scores were also investigated because the FTQ was intended to measure frequency of fat talk specifically in women. Not surprisingly, females scored significantly higher than males on the FTQ. This is logical, given the wording of the items on the FTQ which do generally reflect female body parts and experiences. This result provided some evidence for discriminant validity of the FTQ.

Consistency with Past Literature

While the purpose of the current study was not to provide a detailed comparison of fat talk in young women compared to adolescents (Nichter, 2000), some similarities are worth mentioning. With respect to functions, the focus groups and individual interviews highlighted that young women also engage in fat talk for reassurance-seeking regarding shape and size and bonding with other females. Some differences emerged as well. For example, the young women focused on male expectations of the female body size and shape as prompting fat talk. This was less emphasized in the work by Nichter (2000). Perhaps as young girls age into adulthood, they have more experiences exposing them to male expectations of female body size and shape. As well, several functions identified by Nichter (2000) were not raised by the young women who were interviewed including expression of distress not necessarily linked to body image and drawing attention to one's own imperfections so others do not. It also appears that conformity/desire to fit in is more relevant in adolescents than adults as this theme did not emerge in the qualitative study. This result makes sense given the pressure to fit in with peers during the adolescent years. It is possible that these are relevant in young women as well, but were not revealed in the qualitative work. Future research could examine these possibilities. Interestingly, Nichter (2000) suggested that fat talk appeared to be unrelated to dieting behaviour in adolescents. This differs from the current study because an association was found between fat talk and restrained eating. Perhaps as girls age into young women and indeed, their bodies are changing, their satisfaction with their bodies decrease and they are more active in attempting to make changes. The differences identified here between the Nichter (2000) study and the current study re-emphasizes the need to base empirical work on theory derived in young women, not adolescents, since clearly there are differences in the behaviour that manifests and potentially related psychological constructs.

The results are also consistent with recent fat talk research with young women. The current study provided further evidence for the connection between fat talk and body dissatisfaction as previously examined by Stice et al. (2003) and Salk & Engeln-Maddox (in press). As well, the pressure to engage in fat talk identified by Tucker, Martz, Curtin, and Bazzini (2007) was identified as a key theme discussed in the qualitative work in the current study. Finally, the finding that fat talk is a common behaviour among young women is also consistent with recent studies (e.g. Salk & Engeln-Maddow, in press).

Methodological Strengths

One of the strengths of the present study was the rigorous nature of the scale development process. Instead of generating questionnaire items that may or may not reflect true behaviour, the target population of interest was first consulted using qualitative methods to accurately capture the nature of fat talk and the range of its presentation. Participant quotes had a direct influence on the creation of FTQ items. Such qualitative methodology is suggested when theory is not fully developed, as is the case with fat talk in young women (Vogt, King, & King, 2004). Construct validity is supported if an instrument assesses the construct it is intended to measure. As previously mentioned, this can only be obtained if based upon a clearly characterized construct (Cronbach & Meehl, 1955). Therefore, the use of the present methodology provides initial support for construct validity of the FTQ. This method also provided valuable insight into the nature and purpose of fat talk in young women, a topic that has only begun to be explored in the literature. The key themes that emerged both confirmed what has previously been examined and revealed new facets that require further investigation in future research.

The current study utilized a mixed-method design, which allowed more varied data to be collected. This methodology has recently been suggested as an important next step in fat talk research (Salk & Engeln-Maddox, in press). Even within the qualitative component of the present study, focus groups *and* individual interviews were used allowing for both breadth and depth, respectively. Therefore, this study was comprehensive in nature, an important strength.

The development of a new fat talk questionnaire that improves on the limitations of previous measures is a strength of the current study. For example, the FTS was validated in a predominately white population (Clarke, Murnen, & Smolak, 2010). The FTQ, on the other hand, was validated in the present study in an ethnically diverse population, increasing its generalizability. As well, the FTQ contains items that represent a greater range of situations and body parts than does the FTS. Finally, the FTQ improved on the FTS instructions by asking participants to consider fat talk with friends who are of similar weight to themselves, not with friends of average weight. The assumption that fat talk only occurs in normal or underweight women is not entirely accurate. Though height and weight were not obtained in the individual interviews and focus groups, the sizes and shapes of participants varied and they did report engaging in fat talk to some degree. The qualitative work also revealed that typically fat talk occurs with friends of similar weight. Therefore, the instructions in the FTQ are more appropriate because they attempt to capture fat talk across body sizes.

Limitations and Future Directions

One potential limitation is that the sample size for the qualitative study was small (N = 14). While there is no gold standard minimum sample size for qualitative studies (Braun & Clarke, 2006), it is suggested that the number of focus groups and/or individual interviews be increased until a saturation point is reached. Saturation refers to the point where no new

information is obtained. While some of the information obtained through the focus groups and individual interviews was redundant, there were several interesting concepts that were only mentioned once or twice. For example, one participant highlighted motivation for exercise and/or diet change as one reason to fat talk, but indicated that, in her opinion, engaging in fat talk does not actually lead to any behavioural change. This topic also arose in the Salk & Engeln-Maddox (in press) study and, therefore, is likely important to the fat talk construct. This is an interesting topic to be explored in future research using focus groups and individual interviews. As well, only one clinician interview was conducted. In order to properly analyse the data collected, more clinician interviews are needed to identify themes emerging from their collective clinical experience. Sample size may also be a limitation in the quantitative study. A future goal is to use exploratory factor analysis for data reduction and to identify any multi-dimensional latent factor structures in the FTQ. For example, some items revolve around specific body parts while others reflect the whole body or feelings of fatness/weight gain. It is possible that these items would fall out as separate subscales in the FTQ. A factor analysis, however, could not be performed due to limited sample size. Nunnally (1978) suggests a minimum of 10 participants per item to ensure adequate power and stability of the factor structure. Therefore, given that 62 items were generated from the qualitative study, a sample size of at least 620 is needed to properly perform factor analysis. In future research, FTQ scores should be collected from more young women in order to examine its factor structure.

Another potential limitation of the current study is that the FTQ is 54 items in length. For practical reasons, it would be ideal to have a shorter scale that participants would require less time to complete. As well, the high value for internal consistency of the FTQ indicates redundancy (Streiner, 2003). Therefore, future refinement of the FTQ should include

elimination of additional redundant items which will decrease the length of the scale, thus, increasing its practicality.

This study did not assess the 'back and forth' nature of fat talk as extensively as is required to fully understand this construct. With respect to the FTQ, this is not a specific limitation of the measure. The FTQ requires participants to rate the extent of their *own* behaviour, since it is defined as an individual difference variable in this context. However, fat talk is certainly a social behaviour and likely differs depending on the level of fat talk behaviour of the other women in the group. Therefore, future focus groups and individual interviews could attempt to understand more about this facet of fat talk.

Fat talk is identified as a behaviour that occurs commonly in young women, and they report some perceived benefits. Yet, it is associated with negative psychological phenomena (e.g. body dissatisfaction, self-objection, and social physique anxiety) and behaviours (e.g. restrained eating). The cause-and effect direction is unclear in the current study because the methodology is neither longitudinal nor experimental. It is reasonable to predict that the sociocultural pressure to be thin influences body dissatisfaction and eating behaviour which leads to increased fat talk. On the other hand, it is also possible that women engage in fat talk because it is commonly occurring around them, which then leads to negative body dissatisfaction because their focused attention is only on the negative aspects of their bodies. In the short-term, this is what Stice and colleagues (2003) reported. Future studies could examine the etiology of fat talk behaviour, and its associated characteristics, from a developmental perspective. Another avenue for future research would be to examine the nature of fat talk in mother-daughter dyads. The qualitative research revealed that women vary in their engagement in fat talk with their mothers.

Finally, fat talk should be examined in eating disorder populations, including its potential role in the maintenance of symptomatology as well as preoccupation with weight and shape.

Summary

The findings of the current study provided deeper understanding of the nature and purpose of fat talk in young women. The study confirmed that fat talk occurs frequently among young women and they feel an external pressure to participate, given society's preoccupation with the thin ideal. This study also provided preliminary evidence that the newly developed FTQ is valid and reliable, though requires further refinement. Future research could utilize this measure to examine fat talk, as an individual difference variable, in order to further understand this behaviour as it manifests in young women.

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Appendix A

Sample Items from the Fat Talk Scale

Below are a series of scenarios in which women express and respond to weight concerns. Please read each scenario and indicate the extent to which you would respond as Naomi did in the situation (**1 = I would never respond that way** and **5 = I would always respond that way**). Please keep in mind that Naomi and her friends are of average weight.

1. Naomi is having a bad day. She just does not feel herself and she is kind of down. While walking to class one of her friends says that she looks nice today. She replies, "No, I'm having a fat day". **1 2 3 4 5**

2. Naomi and her friends are all getting ready for a party or a dance when one of Naomi's friends clutches her stomach and says that she looks fat. Her other friend says that she hates her thighs. Naomi responds with something that she hates about her own body.
1 2 3 4 5

3. Naomi is eating lunch with her friends when she decides to get up from the table and gets dessert. Before she leaves the table she makes a comment such as, "I am now officially a huge fatty!" **1 2 3 4 5**

4. As Naomi was walking to class with a friend, her friend began to remorse about the 'chocolate binge' that she just went on. Naomi responds by telling her that she has nothing on her since Naomi had just ate a bunch of chips, a hotdog, and ice cream. Her friend then matches Naomi by telling her what she ate for breakfast.
1 2 3 4 5

Appendix B

Focus Group and Individual Interview Questions

1. In what situations do you think women would engage in fat talk, conversations involving negative comments and criticisms about their bodies?

2. Imagine young women in (give example of situation given), what are some typical comments that they might make about their own bodies? (*Repeat with other types of situations)

3. What body parts do women your age generally complain about in relation to size, shape, and fatness?

4. Think about yourself or young women you know who engage in fat talk. What might be the purpose (negative and positive)?

5. With whom do young women complain about their bodies? With whom do they not?

6. Think about a friend (or friends) who rarely make complaints about her body. Why do you think that is?

7. Think about a friend who complains a lot about her body. How often does she do it in a typical day or week?

8. How acceptable is it for young women to complain about their bodies?

Appendix C

Consent Form for Focus Groups

"Focus Group Examining Negative Body Talk Among Young Women"

CONSENT AGREEMENT FOR FOCUS GROUP PARTICIPANTS

You are being asked to participate in a research study. Before you give your consent to be a volunteer, it is important that you read the following information and ask as many questions as necessary to be sure you understand what you will be asked to do.

Investigators:

Sarah Royal, M.A. Student, Department of Psychology, Ryerson University, Toronto.
Michelle M. Dionne, Ph.D., Department of Psychology, Ryerson University, Toronto.

Purpose of the Study: This is a study examining the purpose and nature of fat talk in young women. Fat talk refers to negative body comments and criticism that occur in groups of women. We are hoping to include up to 24 university students in this study.

Description of the Study:

If you choose to participate in this study, you will be asked to come to our research lab at a time in which a focus group has been scheduled. Focus groups will consist of 5-8 young undergraduate women enrolled at Ryerson University. All participants will be between the ages of 18 and 24. The focus group will be semi-structured; this means that a moderator will begin with pre-determined questions but other questions may arise depending on the comments made by group members. You are asked to contribute relevant comments where appropriate. We are interested in your own experiences and perception of the purpose and nature of fat talk in young women. The focus group will be audio-taped using three digital recorders. The focus group will take place in a private meeting room on the Ryerson University campus and will take approximately 1 hour.

What is Experimental in this Study: None of the procedures used in this study is experimental in nature, in the sense that they have all been used by other researchers and found to be safe and useful. This study is qualitative in nature; i.e. we are interested in gathering information directly from young women.

Risks and Discomforts:

- It is possible that you might feel some discomfort when discussing issues surrounding fat talk. Any discomfort is expected to be temporary and not greater than you might experience in a typical day. If any aspect of this study makes you uncomfortable, you may temporarily or permanently discontinue your participation without penalty or loss of benefit to which you are entitled.

Benefits of the Study: There is no direct benefit to participants in this study although the information gained from the overall study may improve our understanding of the nature and purpose of fat talk in young women. As well, this study provides a unique research experience

because it is qualitative in nature. You will be given a forum in which to express your thoughts and opinions about a topic relevant to psychology. You are welcome to contact us after summer 2010 for a report of the results.

Confidentiality: All information collected during this study will be confidential because your name is only collected on this informed consent form, which will be kept separate from the collected data. If you are participating for Psychology 102 or 202 partial academic credit, a separate form will collect your student ID number and it will be filed separately from your data. The data from this study will be held in a locked lab room, to which only the investigators and their research assistants will have access. Audio-taped focus groups will be listened to only by study staff and, after analysis, they will be permanently deleted. While confidentiality will be requested of other focus group members, confidentiality cannot be guaranteed on behalf of other focus group members.

Incentives to Participate:

- If you signed up for this study through SONA (i.e., the Intro Psychology Research Participant Pool), you will receive 1% towards your final mark in PSY102/202. This will be credited immediately following your lab visit.
- All other participants will be immediately compensated for their time with $10 cash.

Voluntary Nature of Participation: Participation in this study is voluntary. Your choice of whether or not to participate will not influence your grades, academic status, or future relations with Ryerson University or the Department of Psychology. If you decide to participate, you are free to withdraw your consent and to stop your participation at any time without penalty or loss of benefits to which you are allowed. Further, at any time, you may request that your data be removed from the data set. Should you choose to withdraw from the study, you will still be compensated for your participation.

Questions: If you have any questions about the research now, please ask. If you have questions later about the research you may contact either of the following investigators:

Sarah Royal	(416) 979-5000 ext.4694	sroyal@psych.ryerson.ca
Dr. Michelle Dionne	(416) 979-5000 ext.4694	mdionne@psych.ryerson.ca

If you having any questions regarding your rights as a human subject and participant in this study, you may contact the Ryerson University Research Ethics Board for information:

Alex Karabanow c/o Office of the Vice President, Research and Innovation
Ryerson University 350 Victoria Street Toronto, ON M5B 2K3 416-979-5042

If completing any of these measurements raises concerns that you would like to discuss, please contact the:

Centre for Student Development and Counselling (CSDC)
Ryerson University; Jorgenson Hall (JOR-07C) 416-979-5195 csdc@ryerson.ca

If you any have questions about receiving your Psychology 102/202 credit for participation please contact:
(416) 979-5000 ext. 7727 psychpool@ryerson.ca

Agreement: Your signature below indicates that you have read the information in this agreement and have had a chance to ask any questions you have about the study. Your signature also indicates that you agree to be in the study and have been told that you can change your mind and withdraw your consent to participate at any time, and have your data removed from the dataset. You have been given a copy of this agreement. By consenting to the study, you are also necessarily consenting to being audio-taped during the focus group.
You have been told that by signing this consent agreement you are not giving up any of your legal rights.

Incentive for participation (please check one):

☐ PSY 102 or 202 1% Participation Credit ☐ $10.00

_____
Name of Participant (please print)

_____ _____
Signature of Participant Date

_____ _____
Signature of Investigator Date

Appendix D

Debrief Form for Focus Groups

Debriefing Form

Thank you for participating in the focus group today. As mentioned, we conducted the focus group to discover more about the nature of fat talk in young women. Focus groups have been demonstrated in the literature to be an effective way to gain information from target populations of interest. There was no deception or incomplete disclosure in the current study; this was our true purpose.

Questions: If you have any questions about the research now, please ask. If you have questions later about the research you may contact either of the following investigators:

Sarah Royal	(416) 979-5000 ext.4694	sroyal@psych.ryerson.ca
Dr. Michelle Dionne	(416) 979-5000 ext.4694	mdionne@psych.ryerson.ca

If you have any questions regarding your rights as a human subject and participant in this study, you may contact the Ryerson University Research Ethics Board for information:

Alex Karabanow c/o Office of the Vice President, Research and Innovation

Ryerson University 350 Victoria Street Toronto, ON M5B 2K3 416-979-5042

If participating raised concerns that you would like to discuss, please contact the:

Centre for Student Development and Counselling (CSDC)

Ryerson University; Jorgenson Hall (JOR-07C) 416-979-5195 csdc@ryerson.ca

If you have any questions about receiving your Psychology 102/202 credit for participation, please contact:

(416) 979-5000 ext.7727 psychpool@ryerson.ca

Thank you again for participating and have a nice day!

Appendix E

Demographics Questionnaire for Focus Groups and Individual Interviews

1. Age: _____

2. Gender (select one): Male Female

2. Country of Birth: _____

3. If you were not born in Canada, how long have you lived in Canada? _____

4. Race/Ethnic Origin: (Please check all that apply)
□ Aboriginal (e.g., Inuit, Métis, North American Indian)
□ Arab/West Asian (e.g., from Egypt, Iran, Lebanon, Morocco)
□ Black (e.g., Africa, Haiti, Jamaica, Somalia)
□ East Asian (e.g., China, Japan, Korea)
□ Latin American (e.g., Mexico, Brazil, Columbia)
□ South Asian (e.g. India, Sri Lanka, Nepal)
□ South East Asian (e.g., Thailand, Philippines, Indonesia)
□ White (e.g., Caucasian, European)
□ If none of the above, please specify: _____

5. Degree Program at Ryerson University: _____

6. Year in University: _____

7. Do you speak fluent English? _____

Appendix F

Clinician Interview Questions

1. In your experience, how often does fat talk occur in female social circles?

2. What types of comments are typically made?

3. What aspects/characteristics of their bodies do young women generally complain about?

4. What specific body parts do young women complain about the most?

5. Why do you think young women engage in fat talk?

6. What impact does this behaviour have on young women? (psychologically, behaviourally, etc.)?

7. With whom do young women engage in fat talk?

8. With whom do young women not engage in fat talk?

9. Have you observed any reported benefits to fat talk?

10. Does engagement in fat talk vary as a function of age?

11. Thanks! Just to reiterate, the purpose of this study is to gain more information about the nature and purpose of fat talk in young women. Is there anything that I haven't asked about that you want to add?

Appendix G

Consent Form for Clinician Interviews

"Interview Examining Negative Body Talk Among Young Women"

CONSENT AGREEMENT FOR CLINICIAN INTERVIEWS

You are being asked to participate in a research study. Before you give your consent to be a volunteer, it is important that you read the following information and ask as many questions as necessary to be sure you understand what you will be asked to do.

Investigators:

Sarah Royal, M.A. Student, Department of Psychology, Ryerson University, Toronto.
Michelle M. Dionne, Ph.D., Department of Psychology, Ryerson University, Toronto.

Purpose of the Study: This is a study examining the purpose and nature of fat talk in young women. Fat talk refers to negative body comments and criticism that occur in groups of women. We are hoping to include up to 24 university students and 2 experts in this study.

Description of the Study:
If you choose to participate in this study, you will be asked to be interviewed by the principal investigator on the nature of fat talk in young women. The interview will be semi-structured in nature; that is, the interviewer will ask several pre-planned questions, but may also follow up your answers with clarification questions. You are asked to contribute relevant comments where appropriate. We are interested in your own experiences and perception of the purpose and nature of fat talk in young women. The interview will be audio-taped using three digital recorders. The interview will take place at Ryerson University and will take approximately 1 hour.

What is Experimental in this Study: None of the procedures used in this study is experimental in nature, in the sense that they have all been used by other researchers and found to be safe and useful. This study is qualitative in nature; i.e. we are interested in gathering information directly from clinicians.

Risks and Discomforts:
- There are no known risks to participating in an individual interview. If any aspect of this study makes you uncomfortable, you may temporarily or permanently discontinue your participation without penalty.

Benefits of the Study: There is no direct benefit to participants in this study although the information gained from the overall study may improve our understanding of the nature and purpose of fat talk in young women. As well, this study provides a unique research experience because it is qualitative in nature. You will be given a forum in which to express your thoughts and opinions about a topic relevant to psychology. You are welcome to contact us after summer 2010 for a report of the results.

Confidentiality: All information collected during this study will be confidential because your name is only collected on this informed consent form, which will be kept separate from the collected data. Audio-taped individual interviews will be listened to only by study staff and, after analysis, they will be permanently deleted.

Incentives to Participate:

- There is no incentive to participate.

Voluntary Nature of Participation: Participation in this study is voluntary. Your choice of whether or not to participate will not influence future relations with Ryerson University or the Department of Psychology. If you decide to participate, you are free to withdraw your consent and to stop your participation at any time without penalty. Further, at any time, you may request that your data be removed from the data set.

Questions: If you have any questions about the research now, please ask. If you have questions later about the research you may contact either of the following investigators:

Sarah Royal	(416) 979-5000 ext.4694	sroyal@psych.ryerson.ca
Dr. Michelle Dionne	(416) 979-5000 ext.4694	mdionne@psych.ryerson.ca

If you having any questions regarding your rights as a human subject and participant in this study, you may contact the Ryerson University Research Ethics Board for information:

Alex Karabanow c/o Office of the Vice President, Research and Innovation
Ryerson University 350 Victoria Street Toronto, ON M5B 2K3 416-979-5042

Agreement: Your signature below indicates that you have read the information in this agreement and have had a chance to ask any questions you have about the study. Your signature also indicates that you agree to be in the study and have been told that you can change your mind and withdraw your consent to participate at any time, and have your data removed from the dataset. You have been given a copy of this agreement. By consenting to the study, you are also necessarily consenting to being audio-taped during the interview.
You have been told that by signing this consent agreement you are not giving up any of your legal rights.

_____
Name of Participant (please print)

_____ _____
Signature of Participant Date

_____ _____
Signature of Investigator Date

Appendix H

Clinician Interview Debrief Form

Debriefing Form

Thank you for participating in the interview today. As mentioned, we conducted the interview to discover more about the nature of fat talk in young women. Interviews have been demonstrated in the literature to be an effective way to gain information from target populations of interest. There was no deception or incomplete disclosure in the current study; this was our true purpose.

Questions: If you have any questions about the research now, please ask. If you have questions later about the research you may contact either of the following investigators:

Sarah Royal	(416) 979-5000 ext.4694	sroyal@psych.ryerson.ca
Dr. Michelle Dionne	(416) 979-5000 ext.4694	mdionne@psych.ryerson.ca

If you have any questions regarding your rights as a human subject and participant in this study, you may contact the Ryerson University Research Ethics Board for information:

Alex Karabanow c/o Office of the Vice President, Research and Innovation

Ryerson University 350 Victoria Street Toronto, ON M5B 2K3 416-979-5042

Thank you again for participating and have a nice day!

Appendix I

Fat Talk Questionnaire

We are interested in the **comments you say out loud** when you are with **one or several close female friend(s)** who is/are of **similar weight to yourself**. Please answer honestly.

1. When I'm with one or several close female friend(s), I complain that my butt is too big.
   Never Rarely Sometimes Often Always

2. When I'm with one or several close female friend(s), I complain that my arms are too flabby.
   Never Rarely Sometimes Often Always

3. When I'm with one or several close female friend(s), I complain that my stomach hangs over my pants.
   Never Rarely Sometimes Often Always

4. When I'm with one or several close female friend(s), I complain that my legs are so big.
   Never Rarely Sometimes Often Always

5. When I'm with one or several close female friend(s), I complain that my arms are jiggly.
   Never Rarely Sometimes Often Always

6. When I'm with one or several close female friend(s), I complain that my stomach is fat.
   Never Rarely Sometimes Often Always

7. When I'm with one or several close female friend(s), I complain that my breasts are too big.
   Never Rarely Sometimes Often Always

8. When I'm with one or several close female friend(s), I complain that my ankles are too fat.
   Never Rarely Sometimes Often Always

9. When I'm with one or several close female friend(s), I complain that my face is pudgy.
   Never Rarely Sometimes Often Always

10. When I'm with one or several close female friend(s), I criticize my body compared to thin models in magazines.

Never Rarely Sometimes Often Always

11. When I'm with one or several close female friend(s), I comment on the bodies of women around us.

Never Rarely Sometimes Often Always

12. When I'm with one or several close female friend(s), I complain that my body is out of proportion.

Never Rarely Sometimes Often Always

13. When I'm with one or several close female friend(s), I complain that I have too many fat rolls on my body.

Never Rarely Sometimes Often Always

14. When I'm with one or several close female friend(s), I complain that food goes straight to my thighs.

Never Rarely Sometimes Often Always

15. When I'm with one or several close female friend(s), I complain that I hate my whole body.

Never Rarely Sometimes Often Always

16. When I'm with one or several close female friend(s), I complain that I feel so big.

Never Rarely Sometimes Often Always

17. When I'm with one or several close female friend(s), I complain that I am fat.

Never Rarely Sometimes Often Always

18. When I'm with one or several close female friend(s), I complain that food will go straight to my waist.

Never Rarely Sometimes Often Always

19. When I'm with one or several close female friend(s), I complain that women are expected to be smaller than men.

Never Rarely Sometimes Often Always

20. When I'm with one or several close female friend(s), I complain that I feel so bloated.

Never Rarely Sometimes Often Always

21. When I'm with one or several close female friend(s), I complain that I feel so gross in my body.

Never Rarely Sometimes Often Always

22. When I'm with one or several close female friend(s), I complain that eating dessert will make me feel bad about my body.

Never Rarely Sometimes Often Always

23. When I'm with one or several close female friend(s), I complain that my stomach is bulging.

Never Rarely Sometimes Often Always

24. When I'm with one or several close female friend(s), I complain that my face is fat.

Never Rarely Sometimes Often Always

25. When I'm with one or several close female friend(s), I complain that I'm getting too chubby.

Never Rarely Sometimes Often Always

26. When I'm with one or several close female friend(s), I complain that I'm gaining too much weight.

Never Rarely Sometimes Often Always

27. When I'm with one or several close female friend(s), I complain that I look like a whale.

Never Rarely Sometimes Often Always

28. When I'm with one or several close female friend(s), I criticize my body compared to female celebrities.

Never Rarely Sometimes Often Always

29. When I'm with one or several close female friend(s), I comment on the bodies of bigger women around us.

Never Rarely Sometimes Often Always

30. When I'm with one or several close female friend(s), I complain that food will go straight to my hips.

Never Rarely Sometimes Often Always

31. When I'm with one or several close female friend(s), I complain that I should not be eating fattening foods.

Never Rarely Sometimes Often Always

32. When I'm with one or several close female friend(s), I complain that my stomach is getting bigger.

Never Rarely Sometimes Often Always

33. When I'm with one or several close female friend(s), I complain that I've gained weight.

Never Rarely Sometimes Often Always

34. When I'm with one or several close female friend(s), I complain that I'm getting fatter.

Never Rarely Sometimes Often Always

35. When I'm with one or several close female friend(s), I complain that my clothes are too tight.

Never Rarely Sometimes Often Always

36. When I'm with one or several close female friend(s), I complain that I look like a hippo.

Never Rarely Sometimes Often Always

37. When I'm with one or several close female friend(s), I complain that I look fat in my clothes.

Never Rarely Sometimes Often Always

38. When I'm with one or several close female friend(s), I complain that eating unhealthy food makes me feel fat.

Never Rarely Sometimes Often Always

39. When I'm with one or several close female friend(s), I complain about how new clothes look on my body.

Never Rarely Sometimes Often Always

40. When I'm with one or several close female friend(s), I complain that I need to exercise more.

Never Rarely Sometimes Often Always

41. When I'm with one or several close female friend(s), I complain that I need to stop eating so much.

Never Rarely Sometimes Often Always

42. When I'm with one or several close female friend(s), I criticize my body compared to my friends' bodies.

Never Rarely Sometimes Often Always

43. When I'm with one or several close female friend(s), I complain that I need to strengthen my muscles.

Never Rarely Sometimes Often Always

44. When I'm with one or several close female friend(s), I complain that I feel pressure to be thin.

Never Rarely Sometimes Often Always

45. When I'm with one or several close female friend(s), I criticize my body compared to women in commercials.

Never Rarely Sometimes Often Always

46. When I'm with one or several close female friend(s), I compliment my friends' bodies.

Never Rarely Sometimes Often Always

47. When I'm with one or several close female friend(s), I complain that my thighs look big.

Never Rarely Sometimes Often Always

48. When I'm with one or several close female friend(s), I complain about how my body looks in the mirror.

Never Rarely Sometimes Often Always

49. When I'm with one or several close female friend(s), I complain that I wish I could improve my body.

Never Rarely Sometimes Often Always

50. When I'm with one or several close female friend(s), I complain about how my butt compares to my friends' butts.

Never Rarely Sometimes Often Always

51. When I'm with one or several close female friend(s), I complain that I feel fat.

Never Rarely Sometimes Often Always

52. When I'm with one or several close female friend(s), I complain that my body is disgusting.

Never Rarely Sometimes Often Always

53. When I'm with one or several close female friend(s), I complain that I need to do more 'cardio' exercise.

Never Rarely Sometimes Often Always

54. When I'm with one or several close female friend(s), I complain that clothing makes my butt look big.

Never Rarely Sometimes Often Always

55. When I'm with one or several close female friend(s), I complain that I look wide.

Never Rarely Sometimes Often Always

56. When I'm with one or several close female friend(s), I complain that clothing doesn't fit me properly.

Never Rarely Sometimes Often Always

57. When I'm with one or several close female friend(s), I complain that my legs are jiggly.

Never Rarely Sometimes Often Always

58. When I'm with one or several close female friend(s), I complain that I'm not in shape.

Never Rarely Sometimes Often Always

59. When I'm with one or several close female friend(s), I complain that my muscles are not toned.

Never Rarely Sometimes Often Always

60. When I'm with one or several close female friend(s), I complain that eating junk food will make me fat.

Never Rarely Sometimes Often Always

61. When I'm with one or several close female friend(s), I comment on the bodies of smaller women around us.

Never Rarely Sometimes Often Always

62. When I'm with one or several close female friend(s), I criticize my body compared to actresses on television/in movies.

Never Rarely Sometimes Often Always

Appendix J

Consent Form for Questionnaire Study

"Examining the Relationship between Psychosocial Variables in Undergraduate Students"

CONSENT AGREEMENT

You are being asked to participate in a research study. Before you give your consent to be a volunteer, it is important that you read the following information and ask as many questions as necessary to be sure you understand what you will be asked to do.

Investigators:

Sarah Royal, M.A. Student, Department of Psychology, Ryerson University, Toronto.
Michelle M. Dionne, Ph.D., Department of Psychology, Ryerson University, Toronto.

Purpose of the Study: This is a study examining the relationship between psychosocial variables relevant to undergraduate students. These variables include measures of eating behaviour, body image, and social behaviour. We are hoping to include up to 450 university students in this study.

Description of the Study:
If you choose to participate in this study, you will be asked to complete a battery of questionnaires online. The package includes questionnaires of varying lengths. It is expected that completion of the questionnaire battery will take approximately 50-60 minutes.

What is Experimental in this Study: Most of the questionnaires used in this study are not experimental in nature, in the sense that they have all been used by other researchers and found to be safe and useful. Two of the questionnaires have been developed specifically for this study.

Risks and Discomforts:
It is possible that you might feel some discomfort when answering questionnaires regarding your thoughts, attitudes, and behaviours. If any aspect of this study makes you uncomfortable, you may temporarily or permanently discontinue your participation without penalty or loss of benefit to which you are entitled.

Benefits of the Study: There is no direct benefit to participants in this study although the information gained from the overall study may improve our understanding of the relationship between various psychosocial variables relevant to young women and men. You are welcome to contact us in 2011 for a report of the results.

Confidentiality: All information collected during this study will be confidential because your name is only collected on this informed consent form, which will be kept separate from the collected data. The data from this study will be kept confidential in the Health and Sport Psychology Lab, to which only the investigators and their research assistants will have access.

Incentives to Participate:
You will receive 1% towards your final mark in PSY102/202. This will be credited immediately following your participation.

Voluntary Nature of Participation: Participation in this study is voluntary. Your choice of whether or not to participate will not influence your grades, academic status, or future relations with Ryerson University or the Department of Psychology. If you decide to participate, you are free to withdraw your consent and to stop your participation at any time without penalty or loss of benefits to which you are allowed. Further, at any time during your participation, you may request that your data be removed from the data set. Should you choose to withdraw from the study, you will still be compensated for your participation.

Questions: If you have any questions about the research you may contact either of the following investigators:

Sarah Royal	(416) 979-5000 ext.4694	sroyal@psych.ryerson.ca
Dr. Michelle Dionne	(416) 979-5000 ext.7103	mdionne@ryerson.ca

If you have any questions regarding your rights as a human subject and participant in this study, you may contact the Ryerson University Research Ethics Board for information:
Ryerson Ethics Board c/o Office of the Vice President, Research and Innovation
Ryerson University 350 Victoria Street Toronto, ON M5B 2K3 416-979-5042

In answering some of the items on the questionnaires, some individuals may feel mild discomfort because the items are asking you to reflect on your attitudes and behaviours. If completing any of these measurements raises concerns that you would like to discuss, please contact the:

Centre for Student Development and Counselling (CSDC) located in Jorgenson Hall (JOR-07C), 416-979-5195, csdc@ryerson.ca

If you any have questions about receiving your Psychology 102/202 credit for participation please contact:
(416) 979-5000 ext. 7727 or psychpool@ryerson.ca

Agreement: By clicking the button below, it indicates that you have read the information in this agreement. It also indicates that you agree to be in the study and have been told that you can change your mind and withdraw your consent to participate at any time, and have your data removed from the dataset.

You are aware that by providing your approval to this consent agreement you are not giving up any of your legal rights.

Appendix K

Online Debriefing Form for Questionnaire Study

Thank you for participating in this study! The purpose of this study was to assess the validity and reliability of a newly developed scale assessing fat talk. Fat talk refers to conversations among women involving negative comments and criticisms about their bodies. We were also interested in examining the relationship between fat talk and other theoretically-relevant variables such as body satisfaction, restrained eating, self-objectification, social physique anxiety, and social desirability. To ensure that the new fat talk scale does not just measure social behaviour, we also included a newly developed scale assessing the amount of talk in an unrelated topic, academics. Comparing the new fat talk scale to these variables allows us to assess the scale's construct validity; that is, how well the scale measures fat talk.

Questions: If you have any questions about the research you may contact either of the following investigators:

Sarah Royal	(416) 979-5000 ext.4694	sroyal@psych.ryerson.ca
Dr. Michelle Dionne	(416) 979-5000 ext.7103	mdionne@ryerson.ca

If you having any questions regarding your rights as a human subject and participant in this study, you may contact the Ryerson University Research Ethics Board for information:
Ryerson Ethics Board c/o Office of the Vice President, Research and Innovation
Ryerson University 350 Victoria Street, Toronto, ON M5B 2K3 416-979-5042

In answering some of the items on the questionnaires, some individuals may feel mild discomfort because the items are asking you to reflect on your attitudes and behaviours. If completing any of these measurements raises concerns that you would like to discuss, please contact the:

Centre for Student Development and Counselling (CSDC) located in Jorgenson Hall (JOR-07C), 416-979-5195, csdc@ryerson.ca

If you any have questions about receiving your Psychology 102/202 credit for participation please contact:
(416) 979-5000 ext. 7727 or psychpool@ryerson.ca

If you are interested in the results of this study, please contact Sarah Royal in September, 2010 for a copy of the findings:

Sarah Royal	(416) 979-5000 ext.4694	sroyal@psych.ryerson.ca

Thank you again for participating and have a nice day!

Appendix L

Academic Talk Questionnaire

We are interested in the **comments you say out loud** when you are with **one or several female classmate(s) from school.** Please answer honestly.

1. When I'm with one or several female classmate(s) from school, I complain that my grades are too low.

Never Rarely Sometimes Often Always

2. When I'm with one or several female classmate(s) from school, I complain that I am not studying hard enough.

Never Rarely Sometimes Often Always

3. When I'm with one or several female classmate(s) from school, I complain that I am not a strong student.

Never Rarely Sometimes Often Always

4. When I'm with one or several female classmate(s) from school, I complain that my classes are hard.

Never Rarely Sometimes Often Always

5. When I'm with one or several female classmate(s) from school, I complain that I am not managing my courses very well.

Never Rarely Sometimes Often Always

6. When I'm with one or several female classmate(s) from school, I complain that I should be working harder on my schoolwork.

Never Rarely Sometimes Often Always

7. When I'm with one or several female classmate(s) from school, I complain that I am not doing as well in school as my classmates.

Never Rarely Sometimes Often Always

8. When I'm with one or several female classmate(s) from school, I complain that I feel pressure related to my schoolwork.

Never Rarely Sometimes Often Always

9. When I'm with one or several female classmate(s) from school, I complain that I need to stop procrastinating on my homework.

Never Rarely Sometimes Often Always

10. When I'm with one or several female classmate(s) from school, I complain that I am not very good at class assignments.

Never Rarely Sometimes Often Always

11. When I'm with one or several female classmate(s) from school, I complain that my essays could be better.

Never Rarely Sometimes Often Always

12. When I'm with one or several female classmate(s) from school, I complain that I do not prepare well for my final exams.

Never Rarely Sometimes Often Always

13. When I'm with one or several female classmate(s) from school, I complain that my exam marks are not very good.

Never Rarely Sometimes Often Always

14. When I'm with one or several female classmate(s) from school, I complain that I wish my grades were higher.

Never Rarely Sometimes Often Always

15. When I'm with one or several female classmate(s) from school, I compare my grades to my classmates.

Never Rarely Sometimes Often Always

Appendix M

Demographics Questionnaire for Questionnaire Study

1. Age: _____

2. Gender: Male or Female

3. Country of Birth: _____

4. If you were not born in Canada, how long have you lived in Canada? _____

5. Race/Ethnic Origin: (Please check all that apply)
□ Aboriginal (e.g., Inuit, Métis, North American Indian)
□ Arab/West Asian (e.g., Armenian, Egyptian, Iranian, Lebanese, Moroccon)
□ Black (e.g., African, Haitian, Jamaican, Somali)
□ East Asian (e.g., Chinese, Japanese, Korean)
□ Latin American
□ South Asian
□ South East Asian
□ White (Caucasian)
□ If none of the above, please specify: _____

6. Degree Program at Ryerson University: _____

7. Year in University: _____

8. Do you speak fluent English? _____

9. What is your current height? _____

10. How much do you currently weigh (in pounds)?

11. What is your maximum weight ever (in pounds)?

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