OBJECTIFICATION CULTURE: A STUDY OF THE RELATIONSHIPS BETWEEN OBJECTIFIED BODY CONSCIOUSNESS, MENTAL HEALTH, BODY IMAGE, AND RISKY SEXUAL BEHAVIOR IN ADOLESCENT FEMALES

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THESIS ABSTRACT

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From a feminist perspective, theorists have increasingly emphasized that, particularly for females, socio-historical context plays an integral role in the development of feelings, thoughts, perceptions, and beliefs about one's body. Over the course of the last decade, the importance of understanding women's body objectification experiences in the American cultural context has been widely studied and empirically demonstrated. From these studies has arisen the concept of Objectified Body Consciousness (OBC), a construct consisting of three components, namely body shame, body surveillance, and appearance control beliefs, that operationalized one's cognitions about his or her own body . Unfortunately, most studies to date are restricted to adult populations and to the American cultural context.

The current study made use of a nationally representative probability sample of Swiss adolescent females (n = 4,014, mean age = 17.14 years) to examine the relationships between OBC and three aspects of adolescent development particularly, mental health, body image, and risky sexual behavior. This study analyzed participants' self reported responses to measures of OBC (body surveillance, body shame, and appearance control beliefs), measures of mental health (depressive symptoms, somatic complaints, suicidal ideation), items for body image (perceptions of fatness/thinness and BMI), and measures of risky sexual behavior (age at first intercourse, number of sexual partners, condom use are first intercourse, and condom use at last intercourse) using path analysis.

Results indicated, consistent with expectations, that a significant relationship exists between OBC and each of the three adjustment measures investigated in the current study. Strong relationships were found between OBC and each of the mental health measures, as well as between OBC and all of the body image items. This suggests that for adolescent females, a high level of OBC is positively associated with a variety of internalizing behaviors (depressive symptoms, somatic complaints, suicidal ideation, and perceptions of fatness/thinness) and actual body composition (BMI). Significant relationships were also found between OBC and risky sexual behavior, though the magnitude of this relationship was quite modest in comparison to the magnitude of the other relationship tested. Implications are discussed in terms of the developmental nature of OBC and how more research needs to be conducted on younger female populations.

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The American Psychological Association's Publication Guidelines 5.0 were followed in the present thesis. SPSS 16.0 and AMOS 16.0 were the statistical software packages used for analyses.

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INTRODUCTION

Viewing adolescence from a feminist perspective necessarily involves the proper acknowledgement and investigation of a power differential between the genders as a fundamental organizational feature of human development. Furthermore, this framework emphasizes that in order to truly examine the intricacies of adolescence, there is a need to investigate multiple levels of concurrent development including physical, maturational changes as well as psychological development.

Adolescence is generally regarded to be a transitional time between childhood and adulthood (Udry & Billy, 1987). The time period spent in adolescence is home to a variety of different and pivotal developments—puberty, identity development, and autonomy seeking. However, one aspect of development that is exclusive of this maturational time period, and thus garners significant investigation, is sexuality. The development of a sexual self generally happens in conjunction with pubertal development (Lindberg, Hyde, McKinley, 2006). Undoubtedly, it is important to investigate sexuality in adolescents, as the persisting effects of sexual development will accompany the transition into, and likely be perpetuated in, one's adult life.

A feminist lens presupposes that sexual development is markedly different for females and males. The power differential between the genders cultivates a variety of unattainable societal pressures during sexual development exclusive to females. Part of being a female in Western culture is being looked at and evaluated by others (Sinclair,

2006). Western cultures in particular have constructed an idealized feminine body—one that puts on pedestal thinness and sexualization—and young women are often pressured to feel they should and must attain this particular type of body. Dealing with the bodily changes of puberty in cultures like the United States that propose a social construction of the female body as an object can be particularly challenging for developing adolescent minds. The goals of having a sexy and thin body in adolescence are unrealistic and unattainable for a majority. Even so, many young women are subject to internal shame at the failure to reach the romanticized ideal. Societal pressures to be sexy and thin, as well as the constant monitoring by self and others during this delicate stage of development feed into the belief held by many adolescent girls that they should be able to control their appearance by their will and actions. McKinley (2006b) coined a term for this set of beliefs that encompasses this body surveillance, body shame, and appearance control beliefs—Objectified Body Consciousness (OBC).

The current study examines the manifestation of different facets of OBC during adolescence. While there is a growing literature base on OBC in adults, little empirical research exists which considers this phenomenon in adolescent populations. An evaluation of the literature reveals a variety of themes in this literature and these—body image, mental health, and sexuality—will be more carefully examined and discussed.

Research on OBC has been primarily conducted on European American, college student samples in the United States (Sinclair, 2006). By and large, empirical evidence supports that having an objectified body perspective results in a negative body experience for women. The current study hypothesizes that the concept of OBC is a global one. It is

expected that examining OBC in a different Western cultural context, namely Switzerland, will yield similar results as found in the United States. In previous works, researchers have found considerable parallels between the adolescents in these two countries. Vazsonyi, Pickering, Belliston, Hessing and Junger (2002) found the rates of deviance, as well as the amount of time spent alone, with peers, and with family, to be similar between American and Swiss youth. Also, it is expected that examining OBC of individuals in the adolescent developmental period will yield similar or parallel findings to studies conducted on adult samples. Across the globe, adolescence is a developmental period devoted to professional training, college, or other post-college career preparation; in turn, this delays autonomy development and financial independence among youth (Narring, Roulen, Addor, & Michaud, 2002). In Switzerland, similar to the United States, practically all youth continue education, schooling or training throughout their adolescent years, which includes formalized apprenticeships for 2/3 of all Swiss adolescents (Vazsonyi & Snider 2008). In fact, recent trends in European countries are providing youth with more college preparatory education, similar to the educational structure in the United States. Thus, much of both American and Swiss adolescent's sexual development happens in formal educational settings, surrounded by both peers and adult figures. One could suppose that this predominantly peer context includes numerous age mates that are used as continuous sources of comparison, thus increasing the self-monitoring behaviors and feelings of objectification for many young women.

The previous argument seems to make conceptual sense, but lacks empirical support. Thus, it is important to examine OBC and its relationship with the different

aspects of adolescent development already accepted as being influential in developing later pathologies in which females are overrepresented—like disordered eating or depression. To better understand these feelings, thoughts, and beliefs surrounding these pathologies and objectification in general, we must first identify how these feelings, thoughts, and beliefs are related to different aspects of adolescent development, namely, sexuality, mental health, and body image. Consequently, using a nationally representative sample from Switzerland, the current study examined how OBC as a latent construct consisting of body shame, body surveillance, and appearance control beliefs influenced risky sexual behaviors, mental health and body image. It is expected that OBC will have be negatively related to mental health (i.e. as levels of OBC increase, mental health decreases), negatively related to body image (i.e. as levels o OBC increase, thoughts and beliefs of positive body image decreases , and positively related to risky sexual behaviors (as levels of OBC increase, engagement in risky sexal behaviors increase).

In the following section, the Feminist Psychodynamic Developmental Framework (FPDF) will be briefly examined. In particular, the lens through which FPDF views body image, adolescent sexuality, and OBC will be discussed in greater detail, as these aspects of development appear to be conceptually related to adolescents' thinking about their own body. Following an explanation of the developmental framework will be a section that highlights thematically the different aspects that this thesis intends to enlighten—OBC, adolescent sexual behavior, sexuality and mental health symptoms, and sexuality and body image. This allows for an examination of each distinct content area. Since there are few studies examining OBC in an adolescent age group, studies examining OBC in

any age range will be examined to review relevant work. Subsequently, the specific study goals and hypotheses are outlined.

DEVELOPMENTAL FRAMEWORK

Feminist thinking accentuates the power struggle between the genders, namely, the power differences experienced in patriarchy. As young female children grow to be adolescents, their experience of this power differential is a fundamental organizing principle in girls' psychological development (Tolman, Impett, Tracy, and Michael, 2006). From this notion, a set of theories that assume a feminist standpoint have come to be collectively known as a feminist psychodynamic developmental framework (FPDF) which describes the ways in which girls' development is shaped by and responsive to the sociocultural context of patriarchy (Tolman et al., 2006). This psychodynamic framework assumes "multiple layers of consciousness constituting the psyche" (Tolman et al., 2006, p. 86) and illustrates the need to examine multiple levels of influence on adolescent development.

According to a FPDF, an adolescence girl faces the challenging mental task of attempting to deal with the changes her body undergoes during puberty in a society that objectifies women's physical appearance (Tolman et al., 2006). In addition to these dramatic bodily changes, girls become aware of sexual drive and erotic feelings and are faced with previously foreign views of themselves as sexual beings capable of exhibiting sexual interest in others (O'Sullivan, Meyer-Bahlburg, & McKeague, 2006). Girls must carefully navigate their physical development while balancing the societal influences that force them to embody femininity by training their bodies to move (or not move) in ways

acceptable of a woman, while starving physical hungers (e.g. for food, sex) (O'Sullivan et al., 2006). This framework posits dominant cultural conceptions of female sexuality include images of a passive, subordinate being devoid of desire and vulnerable to males' sexual yearning (Thompson & Holland, 1994).

Body Image

Much of recent feminist perspective literature investigates the extent of the relationship between feminist ideology and body image (Peterson, Tantleff-Dunn, & Bedwell, 2006). Many empirical studies of eating disorders have found a significant relationship between an individual's personal feminist ideology and body esteem (Cash, Ancis, & Strachan, 1997; Dionne, Davis, Fox, & Gurevich, 1995; Snyder & Hasbrouck, 1996; Lindberg, Hyde, & McKinley, 2006), while a few found no such relationship (Mintz & Betz, 1986; Xinaris & Boland, 1990). From the discovery of this pivotal relationship between feminist ideology and body image, a number of specific feminist theories that investigate women's views of their own body in a cultural context have been shaped—Objectification Theory, Culture of Thinness, Weight as Power and Control, and Anxieties about Female Appearance-Achievement (Peterson, Tantleff-Dunn & Bedwell, 2006; Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999).

Objectification theory posits that a culture of objectification helps to manifest a heightened level of body self-consciousness among adolescents (Fredrickson & Roberts, 1997). According to Fredrickson and others there is a direct link between viewing one's body as a "thing" to be evaluated (self-objectification) and disordered eating (Fredrickson & Roberts, 1997; Noll & Fredrickson, 1998; Smolak & Murnen, 2004). The Culture of

Thinness proposes that women receive a societal message that they must be thin to be loved. According to this theory, these types of societal messages foster a reaction of negative body image that can lead to disordered eating. The theory of Weight as Power and Control takes into account the sociohistorical context of women, body image and weight (Thompson et al., 1999). Since "historically women have had no jurisdiction over their bodies or possessions . . .[they] consequently experience this needed control through dieting or overeating" (Peterson et al., 2006, p.239). Lastly, anxieties about Female Appearance-Achievement posits that society advocates females to resist womanhood using the tools of body image and disordered eating to return to or keep a non-threatening prepubescent body (Thompson et al., 1999).

Each of these feminist theories highlights a unique aspect of the relationship between body image and feminist ideology. Together they create a comprehensive theory that illustrates how cultural ideals and pressures influence women and can lead to disordered eating, negative body image, and heightened body self-consciousness.

Adolescent Sexuality

Much of the current literature regarding adolescent sexuality exclusively investigates the relating dangers and deficits of sexual behavior (Bay-Cheng & Lewis, 2006). This narrow and restricting view of the subject carries many flaws and risks that are perpetuated to adolescents through education and socialization. A sex-negative approach to adolescent sexuality has been created from the narrow and restricting view of the subject (Bay-Cheng & Lewis, 2006). This sex-negative, and oftentimes teen negative,

approach to sexuality make the subject one that many try to elude, adolescents or otherwise.

Additionally, the concept of gender is often contested among sexuality theorists (Tolman, Striepe & Harmon, 2003). Evolutionary theorists believe gender is grounded in biological or physical characteristics, whereas social role theorists believe it is the norms that differentiate masculine and feminine qualities of behavior, and social constructionists support the notion that gender is understood as a set of practices and performances constituted through languages or discourses and as features of a political system (Tolman et al., 2003). Theoretical assumptions aside, this convoluted meaning of gender can obscure to adolescents and researchers alike how gender plays out in the realm of sexuality in terms of promoting and undermining adolescent sexual health (Tolman et al., 2003).

Though many adolescents themselves, along with parents, politicians, teachers and communities would like to ignore the fact that sexuality is a part of making the transition from childhood to adulthood, they cannot. With such negative views of sexuality rampant in today's society, it is no wonder why it seems to be the preference of many parents, adolescents and educators to ignore it. Society is confronts these groups with statistics and research garnered about the impending dangers of pregnancy, STIs, sexual assault, and other negative aspects of sexual behavior. This leaves young women faced with two extremes related to sexual development and sexual behavior—they can be characterized as promiscuous or matronly. In fact, Brooks and Ripperger-Suhler (2004) strongly label these undesirable options for young women as a choice between being

"sluts" or "frigid." Although sexual development exists on a continuum, girls are left to choose from two very dichotomous and undesirable options while at the same time being forced to acknowledge a very different portrayal of their male counterparts. Young men, however, do not have such options. Sexual development for male adolescents is limited to the popular portrayal of young men having an "insatiable appetite," or they are presumed to be "out of control predators" poaching on young female prey (Brooks & Ripperger-Suhler, 2004). This hetero-normative view of adolescent sexuality leaves adolescent of both sexes in the precarious position –according to societal standards, they cannot develop their sexual selves without first choosing from adverse selections.

Feminist theorists since the 1960s have argued that women and girls are sexually objectified in a variety of different western cultures (Hirschman, Impett, & Schooler, 2006). Examining adolescent's sexuality from the perspective of a system of social control leads both adolescents and adults to construe adolescent sexuality as an individual "problem" as opposed to a social "problem" (Brooks & Ripperger-Suhler, 2004). It is nonsensical to expect adolescents to make the transition to healthy sexually functioning adults when their foundational formation of sexuality is one that views this particular aspect of development as a "problem."

Objectified Body Consciousness

Given the insights into human sexuality brought about by feminist thinking, a new phenomenon has been brought to light regarding adolescent sexuality—the concept of Objectified Body Consciousness (OBC) formed in light of the social constructionist perspective (McKinley & Hyde, 1996). Out of society's creation of an objectification

culture is born the idea of a type of objectification specific, but not exclusive, to female adolescents. “OBC is based on the theory that cultural constructions of women as objects to be evaluated encourage women to view themselves as objects, that is, to experience their bodies as if they were an outside observer, rather than experiencing their bodies in terms of what they can do or how they feel” (McKinley, 2006b, p. 679).

According to OBC theory, girls experience increasing amounts of sexual objectification by others and over time, chronic objectification by others lead the girl to internalize the others’ perspectives. However, it is important to note that OBC goes beyond the standard adolescent feelings of self-consciousness (awareness of self as a social being and concern with self-presentation) and it is separate from imaginary audience behavior (the adolescent belief that others are as anxious about their thoughts and behaviors are they themselves are) (Lindberg, Hyde, & McKinley, 2006).

Girls with high levels of OBC internalize societal and cultural standards of appearance and exhibit symptoms of body-monitoring thought and behaviors. In addition, they are subjected to heightened body shame when they are unable to shape their body in a way that matches the current cultural standards (Lindberg et al., 2006). In general, a young woman with high OBC is not only hyper aware of and anxious about others’ perceptions of her own body, but also she assumes the perspective of the other and evaluates herself as if she were an onlooker. The concept of OBC has been associated with a number of negative outcomes, including low body esteem (McKinley, 1998, 1999; McKinley & Hyde, 1996; Noll & Fredrickson, 1998), depression (Muehlenkamp & Saris-Baglama, 2002), restrictive eating and eating disorders (McKinley, 1999; Muehlenkamp

& Saris-Baglama, 2002; Noll & Fredrickson, 1998; Tiggemann & Slater, 2001), sexual dysfunction (Wiederman, 2000), and low psychological well-being (McKinley, 1999).

There are three main components of OBC: body surveillance, body shame, and appearance control beliefs. These components were developed by McKinley and Hyde (1996) to "signify the extent to which a person monitors his or her body and views it as an outsider, feels shame when the body does not conform to cultural standards, and believes that people can control their appearance" (Lindberg et al., 2006, p. 66).

Body surveillance, the central tenet of OBC, is a construct in which the female body is seen as an object of male desire, existing only for the purpose of catching the eye of the male "other." Feminists believe constant self-surveillance is essential to ensure that women comply with cultural body standards to avoid judgment (McKinley & Hyde, 1996). Research has shown that self-surveillance beliefs are related to body esteem, body shame, psychological well-being and eating disordered behaviors (McKinley, 2006b). Negative implications for women with constant self-surveillance have been documented by various empirical research studies (McKinley, 2006b; McKinley & Hyde, 1996).

Body shame is a construct defined as feeling shame when one's body does not conform to cultural standards (Lindberg et al., 2006). Oftentimes cultural body standards are internalized in young women, making it seems as though the pressure to conform to these standards comes from internal, psychological sources, as opposed to external, societal pressures. Because the current cultural body standards for the female body are almost impossible to reach fully, some women (especially those who have internalized

those standards) experience shame when they are unable to contort their bodies into the cultural ideal (McKinley & Hyde, 1996).

The appearance control beliefs component of OBC is described as the set of beliefs that one can control her own appearance (Lindberg et al., 2006). The key underlying assumption in appearance control beliefs is that a person believes that they, given enough effort, are able to control their bodily appearance and conform to cultural standards regardless of body type or genetics (McKinley & Hyde, 1996). However, empirical research suggests otherwise—that body composition and type is genetically, as opposed to environmentally, determined.

OBC was originally designed to study the body surveillance, body shame, and appearance control beliefs of adults. Empirical research has linked high levels of OBC as a potential vulnerability factor for disorders in which women are staggeringly overrepresented— depression and disordered eating (McKinley & Hyde, 1996; Fredrickson & Roberts, 1997). It has been a commonly accepted belief that these disorders develop during adolescence, though there is very little empirical research to support this notion. For this reason, McKinley and colleagues developed a measure of OBC youth, intended to age-appropriately measure the same components of OBC that had been tested in adults and undergraduates (Lindberg et al., 2006). This study intends to examine the relationship between this construct of OBC and mental health symptoms, body image, and sexuality. The scholarship using this measure will be reviewed subsequently.

LITERATURE REVIEW

A careful review of the literature regarding OBC and adolescent sexuality reveal that these concepts are likely related. However, OBC is a relatively new notion; to date, there has been little empirical research connecting it with adolescent sexuality. However, there have been quite a few more studies concerning the different components of OBC using a variety of different terms such as, body image dissatisfaction or body dysmorphia (Turner, Hamilton, Jacobs, Angood & Dwyer, 1997). While each of these concepts highlights an important aspect of self-evaluation, they fall short in providing a perspective as comprehensive as OBC. Thus, a closer inspection of the rather limited literature about OBC will be discussed first, supplemented by the literature regarding different components of OBC consistent with the thematic organization used to discuss adolescent sexuality. After this discussion, an examination of the major themes in the literature concerning adolescent sexuality will be evaluated—the link between sexuality and body image issues (disordered eating and excessive dieting), the link between sexuality and mental health, and sexual activity/risk taking. Also, characteristics of Swiss female adolescents, and their similarity to American female adolescents, will be discussed because the current study focused on a national sample of Swiss adolescent females.

Objectified Body Consciousness

OBC consists of three different components: body surveillance, body shame, and body appearance control beliefs (McKinley & Hyde, 1996). Body surveillance is a constant monitoring of how one's body looks. Body shame is an internalization of (and the feelings associated with) cultural body standards. Body appearance control beliefs are those viewpoints associated with the line of thought that the individual can control their appearance. In effect, McKinley and Hyde conceptualized and operationalized OBC as a latent construct, with three constituent parts, which represents the experiences of the body as an object and the thoughts, feelings, and beliefs surrounding these three dimensions (McKinley & Hyde, 1996). The vast majority of empirical research concerning OBC has focused on adult populations (Lindberg et al., 2006; McKinley, 2006a; McKinley, 2006b; Sinclair, 2006). However, critical thinking about this research suggests that adolescent populations should be examined as well, largely because pubertal development and other bodily changes during this time may magnify awareness of one's body and contribute to young girls' OBC.

OBC has been found to affect both men and women in empirical studies (McKinley, 2006a). However, much empirical research supports the notion that OBC, by and large, affects women more than men (Lindberg et al., 2006; Sinclair, 2006; Wiederman, 2000). In a longitudinal study of 115 women and 49 men (mean age of 28.97 and 29.40 years respectively), McKinley (2006a) tested hypotheses on the post-college developmental trajectories and the social construction of gender. She found consistent with expectations that women continued to have higher levels of body

surveillance, body shame, and lower body esteem than men did 10 years after college (2006a). This suggests that cultural constructions of men and women's bodies are true beyond the college-aged years and continue to be perpetuated into adulthood. Other empirical research has documented in Western cultures that women experience body objectification and evaluation by others in various contexts—sexually, as a comparison, etc.—at a frequency greater than men (Wiederman, 2000). While many studies have included both females and males in their samples, OBC illuminates an array of physical and psychological consequences that appear to be uniquely female (Sinclair, 2006). Accordingly, this research will examine OBC in a female sample.

In Western cultures, the desired body type is extremely thin and disproportionate (read: small waist, large bust and hips). Cultural reinforcements of the perfect female body as being extremely thin and disproportional are thought to exacerbate levels of OBC in adult women. Larger women are stigmatized as sexually undesirable because there are only a very small percentage of men that find larger-than-average women (as determined by Body Mass Index) sexually desirable (Wiederman, 2000). The aspiration to be seen as sexually desirable, along with other factors such as societal pressures and influences of the media compounds the desire to be thin in women from an early age (Wiederman, 2000). When empirically examining women's personal approval of cultural pressures about appearance in general (and more specifically, thinness) women's body surveillance has shown to be a powerful predictor of the degree to which she observes and monitors her own body (Sinclair, 2006).

OBC theory hypothesizes and empirical evidence supports that women's internalization of the virtually impossible feminine cultural body standards can lead to body shame (Sinclair, 2006). Body shame is similar to body dissatisfaction in that each represents a set of negative feeling and beliefs about one's own body; however, body shame includes an emotional component of a desire to hide oneself and one's body where body dissatisfaction has no such emotional component (Schooler, Ward, Merriwether & Caruthers, 2005). In her 1999 study based on 151 undergraduate women, McKinley found that body shame had significant associations with multiple dimensions of psychological well being, such as autonomy, environmental mastery, personal growth, positive relations, purpose in life, and self-acceptance. In addition, she found significant negative relationships between body surveillance and autonomy, personal growth, purpose in life, and self-acceptance (McKinley, 1999).

The physical and biological changes that occur in the female body during puberty and sexual maturation, such as menstruation, can be embarrassing and a source of shame for young women from many different cultures and societies. In American cultures there is a cultural taboo around menstruation that makes is socially unacceptable to talk about or, in some cases, even acknowledge. Schooler and colleagues (2005) examined the relationship between menstrual shame and body shame in predicting sexual decision making in sample of 199 young women (mean age 19.7 years). Menstrual shame has been linked to body shame as an indirect association that impacts sexual decision-making. The biological components of puberty and menstruation in adolescent females make this group particularly vulnerable to the impact of body shame via menstrual shame

on one's sexual decision-making. These researchers found that women's attitudes concerning menstruation are directly linked to sexual assertion, sexual experience, and sexual risk. Women with negative attitudes toward menstruation reported significantly less sexual assertiveness, and less condom use self-efficacy, whereas women with positive attitudes toward menstruation reported significantly more sexual assertiveness, more sexual experience, and greater condom use self-efficacy.

In addition to the unique experiences of adolescent girls concerning menstrual shame, this group is also subject to objectification experiences and socio-cultural attitudes that reinforce unattainable body standards. Sinclair (2006) studied European-American, heterosexual, traditional college-aged females to find the extent to which the components of OBC could account for both objectification experiences and attitudes toward appearance (Sinclair, 2006). She found that objectification experiences and socio-cultural attitudes toward appearance did predict a significant proportion of the variance in the components of OBC. The results of the regression analysis revealed that body surveillance had a positive relationship with personal endorsement of socio-cultural attitudes toward appearance. That is to say, the degree to which a woman personally accepts cultural pressures regarding appearance and thinness is a powerful predictor of the extent to which she observes and monitors her body.

Adolescent and young adult groups have been found in empirical research to be the groups most affected by OBC. Cross-sectional and longitudinal studies show that BMI tends to increase with age; however, contrary to expectations, OBC tends to decrease with age (McKinley & Hyde, 2006). This notion is supported in McKinley's

(2006a) large general population comparative study mentioned above based on the social construction of gendered bodies and the developmental contexts of the post-college transition, which found the average body dissatisfaction of both women and men has decreased over time. This suggests that younger populations or adolescents are particularly at risk for internalized objectification (Garnere, 1997). A study by McKinley and Hyde (2006) further illustrates this notion as these authors made use of a sample of women in different life stages. This study sought to examine the relationship of OBC in women in different developmental stages—a younger cohort (average age of 29 years) and a middle-aged cohort (average age of 57)—over a ten-year period. The researchers found that for body surveillance and body shame young women's scores were significantly greater than middle-aged women's scores at Wave 1, although the young women's scores did decrease over time from Wave 1 to Wave 2. The transition from college to independent adulthood leads young women to experience significant changes in the developmental tasks during the first decade of adult life. This transition, along with the formation of committed relationships was associated with improved body experiences (McKinley & Hyde, 2006).

While a greater part of empirical research regarding OBC has focused on college-aged and above populations, one study sought to develop a measure of OBC that was developmentally appropriate for adolescents (Lindberg et al., 2006). Based on a sample of 319 youth (mean = 11.2 years), this study developed the OBC-Youth scale and found strong empirical support for the scale's reliability and validity for youth ages 10 and up. Findings provided evidence that both boys and girls had lower levels of OBC when

compared to adult samples. However, even in this young sample, gender differences in OBC emerged—where girls had higher levels of OBC than boys.

There is clearly a need to further study, test, and examine OBC in younger populations because there exists very little work in this area. The study conducted by Lindberg and colleagues (2006) mentioned above evaluated OBC in young girls. They found that as young girls' bodies mature and develop, these young women are likely to experience increasing amounts of sexual objectification. While many make the intuitive connection that bodily changes during puberty foster an atmosphere of self-consciousness in adolescent populations, OBC goes beyond the normative adolescent experience of self-consciousness and is distinct from public self-consciousness (an individual's awareness of themselves as social being and their concern with self presentation). Over time, chronic objectification can lead some girls to internalize others' perspectives and develop OBC (Lindberg et al., 2006).

Adolescent Sexual Behavior

A fundamental aspect of human development and one of the most intimate concerns of adolescence is the emergence of sexual behaviors (Mallet, Apostolidis, & Paty, 1997). Sexual behaviors are often measured in the social sciences by examining the following variables: age at first intercourse, number of sexual partners, contraceptive self-efficacy, and often pregnancy (or impregnating someone) and sexually transmitted diseases. The influence of peers and family members has been shown to impact adolescent sexual behavior as well (Fitzharris & Werner-Wilson, 2004). As can be

expected, lower age at first intercourse, multiple sexual partners, and poor contraception self-efficacy are cause for concern in adolescent populations.

A vast majority of the literature about youth's sexual behavior brings to light the common societal view that sexual behavior during adolescence is unacceptable (Slicker, Patton, and Fuller, 2004). The literature shows that there is a perpetuation and spread of misinformation among peers regarding sexuality, and that the rates of premarital pregnancy are rising, likely as a result of this spread of misinformation (Rozema, 1986). Data from a number of national surveys indicate that sexual activity among American adolescents has increased dramatically over the past two decades (Kotchick et al., 1999). In addition, changing societal norms have shifted toward a more accepting attitude towards adolescent sexual behavior. As the age of puberty declines, so does the age at which teenagers lose their virginity (Slicker, 2004). One of the main reasons speculated why teens are having sex at earlier an age is because it is a natural drive that manifests during and after biological and cognitive maturation (Lehr, Demi, DiIorio, & Facteau, 2005). Western nations are disturbed at the declining average age at first intercourse, regardless of the causality.

In industrialized nations, pregnancy and transmission of STDs is another serious cause of concern regarding adolescent sexuality. Sexual behaviors, including initiation of sexual intercourse and failure to use contraceptives (or using them incorrectly), place many adolescents at risk for pregnancies and STDs, such as HIV, HPV, Herpes, and more (Cubbin, Santelli, Brindis & Braveman, 2005). Traditionally, adolescents tend to engage in sexual activities in a series of monogamous sexual relationships that are of fairly short

duration—coined “serial monogamy” by researchers (Kotchick et al., 1999). These adolescents often do not report themselves as having multiple sex partners—they believe this terminology only applies to those having more than one sexual partner during a particular time period (Hutchinson, 2002). Also, many teens believe that engaging in types of sexual behavior other than sexual intercourse allows one to retain their virginity. Thus, many adolescents feel as though they are immune to risks of sexual activity because of the false beliefs perpetuated in their social context (Kotchick et al., 1999).

A further perpetuation of misinformation is found in the creative (and vastly ineffective) methods of contraception, such as picking a low-risk partner or “pulling out,” often employed by adolescents. Studies have shown that condom use is rarely consistent among the adolescent age group. Often teenage girls will employ other strategies in lieu of condom use, such as choosing low-risk partners, which is much less effective. Female adolescents are at an even greater risk of contracting STDs than are their male peers and older adult women because teenage girls are more likely to be unmarried, have multiple sex partners, and have unprotected sex. And it is not just social factors that make female adolescents more likely to have and transmit sexually transmitted diseases and infections—they are also biologically vulnerable. This is a cause for major concern because undiagnosed and untreated STDs in women may result in a variety of more serious health problems such as pelvic inflammatory disease, increased risk of ectopic pregnancy, infertility, congenital infections in infants born to infected women, and cervical cancer (Hutchinson, 2002).

Social environment, community, and race have been linked to adolescent sexuality. Youth with lower socio-economic status are particularly prone to engaging in sexual activity early in their youth. In studies based on nationally representative data, teens that come from lower income and poorer neighborhoods are more likely to be sexually experienced than their higher-income counterparts, and African American teenagers are more likely to be sexually experienced than White teenagers (Cubbin, 2005). In addition, perceptions of peers' behavior affect adolescents' decisions to engage in sexual activity. Adolescents who talked more often with their peers were more likely to have engaged in intercourse and to have liberal sexual values regarding adolescents and sex (Fitzharris & Werner-Wilson, 2004).

This literature presents a compelling argument that any sexual activity in adolescence can be risky because of the immense magnitude of misinformation and the belief held by many youth that they themselves are immune to the perils of risky sexual behaviors. Adolescents in general are at higher risk than adults for unwanted pregnancy and low contraceptive self-efficacy. When comparing genders, female adolescents are at a higher risk than their male counterparts. The current, and somewhat bleak, view of female adolescent sexuality highlights the need to study the sexual development of females, in effort to create a model of positive sexual health.

Body Image and Sexuality

While there is no clear universal definition of body image in current literature, body image generally refers to the way in which one views one's physical self. Some researchers distinguish different types of body image, such as contextual body image and

general body image evaluation, as well as variety in the severity of body image beliefs (Yamamiya, Cash & Thompson, 2006). Often, body dissatisfaction refers to a less severe manifestation of body image than body shame. In general, studies that investigate both body image and sexuality examine an older population than will be examined in the current study. For the purposes of this literature review, the focus will be on the existing literature in an attempt to highlight the importance of pursuing research with comparatively younger populations.

Body image has been linked to sexual experiences in young women (Yamamiya, et al., 2006). College aged women with body dissatisfaction reported fewer and less satisfying sexual relationships, a tendency to avoid sexual activities, that they perceive themselves as sexually unskilled, and have more sexual distress. In addition, body image beliefs have been associated with eating behaviors (such as dieting or restricting food intake) and amount of exercise (McKinley, 2006a). Women in general have been found to diet more often than men (48% vs. 20%, respectively) and have a stronger desire to lose weight than their male counterparts (75% and 42% respectively).

Both body image beliefs and OBC have shown to be related to dieting behavior. As Katzman and Lee eloquently stated, “fear of fatness is the primary motivation for voluntary starvation” (1997, p. 385). This suggests that women and girls will often restrict their eating in order to control their appearance. One particular study found connections between mothers’ and adolescent daughters’ disordered eating (Lindberg et al., 2006). Surprisingly, mothers’ OBC was not positively correlated with their preadolescent children’s OBC. This suggests that although there does exist a connection

between mother's OBC and children's OBC, the disordered eating behaviors passed from mother to child is only part of a larger picture of body objectification.

Research has consistently documented a link between body image and weight. Studies have shown that women are becoming more concerned about their weight at younger ages than ever before, with girls as young as five expressing concern about weight and body shape (Sinclair, 2006). Researchers often examine participants desired BMI and their actual BMI to determine body image satisfaction/dissatisfaction (McKinley, 2006a). In the study by McKinley (2006a) discussed previously, although BMIs increased over time for both men and women, women were more likely to have stability in their body dissatisfaction. A superficial evaluation would suggest that for a woman, as her BMI increases, her body image satisfaction will decrease. However, this was not the case in this sample. The author suggests that as women's bodies mature (and their BMIs increase), they become less concerned with fitting into the idealized feminine body type. So, even though their bodies are at a BMI that would warrant dissatisfaction in earlier years, the expectations of their own body fitting into the idealized feminine body type have lessened. Thus, women remain at a relatively stable level of body satisfaction or dissatisfaction over time. However, this also suggests that women's body dissatisfaction proportional to their body type would peak in adolescence or early adulthood, further highlighting the need to further study these populations.

The link between body image and weight has been investigated in a sexual context as well. Research conducted by Wiederman (2000) found that about 35% of women of 198 college-aged women (M = 18.89) in two separate studies experienced

body image self consciousness during intimacy with a partner, while only 12% and 7% of the samples, respectively, were actually overweight according to national standards. Follow up questions in the aforementioned study asked participants to rate their ability as a sexual partner. The statistics showed that women's sexual esteem is at least moderately correlated with the body image self consciousness scale, suggesting that there is a facet of women's sexual esteem that is uniquely related to the more specific experience of body image self consciousness during physical intimacy with a partner.

Empirical evidence found significant positive relationships between frequency of objectification experiences and both body surveillance and body shame are a strong argument in support of the distinct relationship between sexual objectification and a woman's relationship to her body (Sinclair, 2006). In general, women with comparatively more objectification experiences will have higher rates of body shame and body surveillance. This relationship has been documented in adolescent populations as well. Researchers found that young women with negative body images are more likely to engage in risky sexual behaviors such as inconsistent condom use and a larger number of recent sexual partners (Yamamiya et al., 2006). In the study by Lindberg and colleagues (2006) on a sample of adolescent girls, pubertal development, sexual harassment, appearance-related teasing were each positively related to body shame and body surveillance,.

In addition to the aforementioned associations of body image and sexuality some researchers found that one potential negative ramification of internalized objectification in adults is sexual dysfunction (Dove & Wiederman, 2000; Cash et al., 2004). In 2004,

researchers found that body-exposure anxiety/avoidance in a sexual context were inversely associated with sexual functioning (defined in the particular study as less consistency and quality in sexual arousal and orgasm) (Cash et al., 2004). When women were asked to recall their first sexual experience with their current partner, it was expected that body image evaluation would predict the quality of her sexual experience. The results support this notion; body dissatisfaction moderately and contextual body image strongly predicted women's ambivalence about and emotional engagement during first-time sexual encounters with contextual body image (Yamamiya et al., 2006).

There is suggestive evidence that women's body image (including body dissatisfaction, contextual and general body image, diet and exercise behaviors, and the differential between actual and desired BMI) and sexuality (including specific aspects like quality of sexual experiences, sexual assertiveness, and sexual functioning) are interrelated (Yamamiya et al., 2006). However, the majority of these constructs have yet to be empirically examined in adolescent populations.

Mental Health and Sexuality

Little research exists that evaluates the relationship between adolescent sexuality and mental health. Considerably more studies have examined relationship between mental health and sexuality in adult populations (see Hyde & Durick, 2000; Meston, Rellini & Heiman, 2006). Therefore, for the current study, the existing literature connecting adolescent sexuality and mental health will be reviewed along with existing work that has connected sexuality and mental health in adults.

The National Commission on Adolescent Sexual Health released a consensus statement on adolescent sexuality in 1995 endorsed by 50 national organizations and over 35 professional organizations—including the American Psychological Association, the Society for the Scientific Study of Sex, and the Society for Adolescent Medicine (Tolman, Striepe & Harmon, 2003). The Commission's statement expresses one of the most thorough approaches on adolescent sexuality to date and includes the abilities: (a) to develop and maintain meaningful interpersonal relationships; (b) to appreciate one's own body; (c) to interact with both genders in respectful and appropriate ways; and (d) to express affection, love, and intimacy in ways consistent with one's own values. According to this model, achieving sexual health requires the integration of mental, physical, societal, cultural, educational, economic, and spiritual factors; these factors describe sexual health as a normative aspect of adolescent development, and help to identify the interplay between the developmental processes of adolescence and sexuality. However, this view of adolescent sexuality is a sharp distinction from previous models of sexual health as well as most of the literature regarding adolescent sexual health, which focus on negative aspects of sexual development, such as avoiding unwanted pregnancy and disease.

Being able to effectively communicate with one's partner is a trait of those with sound mental health. But, when braving discussions on "taboo" topics like sexuality, many adolescent girls find discussing sexuality problematical. One study found that girls that scored who high on measures of self-objectification had a difficult time describing their sexual feelings and appeared to feel more comfortable discussing sexuality in an

indirect manner (Hirschman, Impett & Schooler, 2006). These researchers also found that the less self-objectified young women in their studies were more competent in communicating both sexual desires and boundaries, while the more-objectified peers, on average, had trouble communicating with their partner.

In addition to struggles being able to communicate with their partner about sexuality, many young women have a fear that they must hide their sexuality to avoid upsetting their parents (Hirschman, Impett, & Schooler, 2006). This can lead one to believe that most young women aren't seeking out their parents to have a conversation about sex. But, parents aren't seeking their children out to have conversations about sex either. Research has shown that parents often prefer to be the primary source of from which their children learn about sexuality, but many do not even approach the subject until after their child is already engaging in sexual behaviors (Somers & Gleason, n.d.). Perhaps this is because parents may believe that talking to their adolescents about sex will ignite thoughts about sex in their children that were not there before the discussion; however, the majority of research in both European American and African American households suggests that communication about sex translates into safer sex behavior (Guzman et al., 2003). There is a pattern of avoidance on the part of the parents as well as the adolescents that perpetuate a communication gap; this can be very confusing for all family members make the characteristics of sound mental health regress.

In order to make sense of confusion, many individuals will develop what researchers call "schemas"—a mechanism that serves to disrupt or facilitate the processing of information, in addition to helping an individual regulate cognitions,

affects, and behaviors (Meston, Rellini & Heiman, 2006). In the empirical literature, a self-schema is a mechanism by which an individual perceives, organizes and understands self-relevant information. Perceptibly, sexual self-schemas were developed to "assess cognitive generalizations about sexual aspects of oneself" (Meston et al., 2006, p. 229). While there exists no literature to date concerning sexual self schemas in adolescents, in adult populations, sexual self schemas have been used to explain the differences in sexual dysfunction of women who have experienced childhood sexual abuse and those that had not. Researchers found that women with a history of childhood sexual abuse, on average, have higher levels of negative sexual affect when compared to women that had not experienced childhood sexual abuse. One could posit that these findings in an adolescent population would be similar, or perhaps more apparent, given the shorter time span between the abuse and time of data collection. However, there is no empirical evidence to support this notion.

Further examination of sexuality and mental health reveal a rather limited literature base regarding the concept of "erotic plasticity" in adult populations. Erotic plasticity is defined as "women . . . [being] more malleable in their sexuality—more influenced by social and cultural factors—than men are" (Hyde & Durik, 2000, p. 375). Baumeister (2000) attributed this gender differential to both evolutionary and biological forces. However, subsequent researchers posited an alternative; they developed a multicultural, sociological model based on the assertions that: (a) men have more power than women on various levels, including institutional and interpersonal, (b) education increases women's power, (c) groups with less power are more adaptive to groups with

more power, and (d) gender roles powerfully shape behavior (Hyde & Durik, 2000). While this topic appears to be more about gender roles than sexuality, examining the research carefully reveals a connection in women's mental health and their internalization of sexuality.

One final look at some aspects of mental health and sexuality reveals another relatively small literature base concerning distraction during sex. Distraction during sex is generally understood in the literature to mean non-sexual thoughts during sexual activity (Meana & Nunnink, 2006). This would include thought about one's appearance, especially negative thoughts about one's body that is likely to lead to "self-spectatoring", which is focusing on one's self instead of sexual activity or the partner. In women, appearance based distraction during sexual activity was predicted by negative body image, psychological distress, and not being in a relationship. Women's higher levels of distractibility support the notion that female sexual arousal may be easily derailed by both internal and external distracters of a non-sexual nature, including concerns about their body and their sexual performance.

These are only a few illustrations of the relatively new concept of OBC. When paired with a thematic examination of a various aspects of adolescent sexuality, this review highlights the need to study these two concepts together. It is evident from this brief review that a relationship between OBC and adolescent development is probable, but has yet to be fully considered empirically.

This study will examine to what extent operationalizations of the latent construct of OBC (through measures of body surveillance, body shame, and appearance control

beliefs), impact sexuality, mental health, and body image in adolescent youth. It is expected that this research conducted in a different cultural context will yield results that are consistent with previous research in American adult and adolescent populations.

RESEACH QUESTIONS AND HYPOTHESES

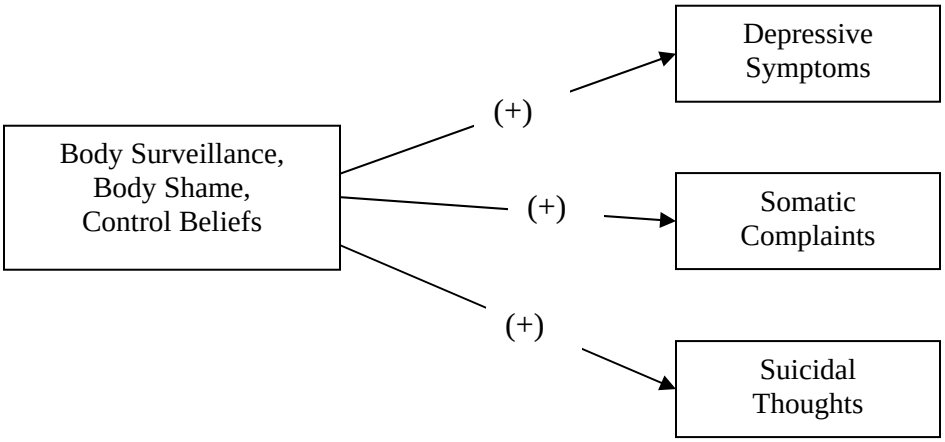
Hypothesis 1

The current study will examine to what extent indicators of OBC (body surveillance, body shame, and control beliefs) predict indicators of mental health symptoms (depressive symptoms, somatic complaints and suicidal thoughts). Based on theoretical work by McKinley as well as empirical evidence, largely from adult populations:

a.) It is expected that higher rates of body surveillance, body shame, and control beliefs will be positively associated with depressive symptoms

b.) It is expected that higher rates of body surveillance, body shame, and control beliefs will be positively associated with somatic complaints

c.) It is expected that higher rates of body surveillance, body shame, and control beliefs will be positively associated with suicidal thoughts

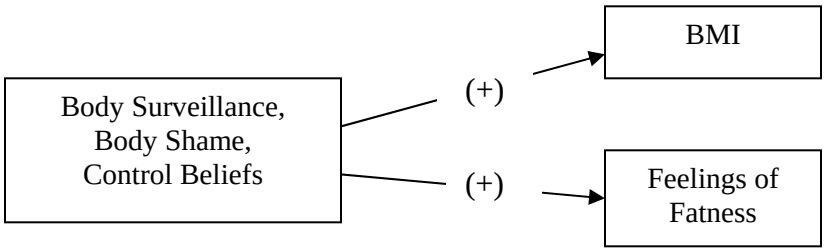


Hypothesis 2

To what extent are indicators of OBC (body surveillance, body shame, control beliefs) associated with measures of low body image (BMI, feelings of fatness/thinness)?

a.) It is expected that a higher rates of body surveillance, body shame, and control beliefs will be positively associated with BMI

b.) It is expected that a higher rates of body surveillance, body shame, and control beliefs will be positively associated with feelings of fatness/thinness



Hypothesis 3

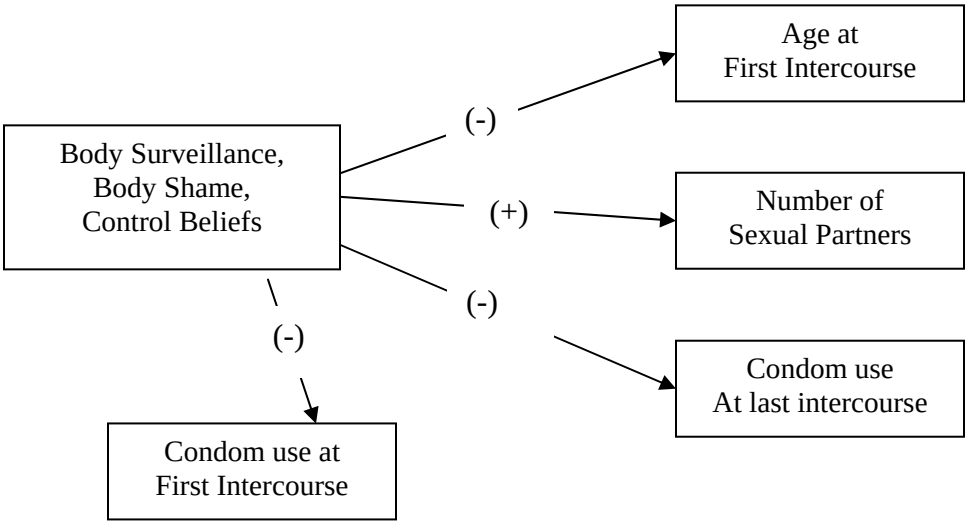
To what extent are indicators of OBC (body surveillance, body shame, and control beliefs) associated with measures of risky sexual behaviors (age at first intercourse, number of sexual partners, and condom use at last intercourse)?

a.) It is expected that higher rates of body surveillance, body shame, and control beliefs will be negatively associated with age at first intercourse

b.) It is expected that higher rates of body surveillance, body shame, and control beliefs will be positively associated with number of sexual partners

c.) It is expected that higher rates of body surveillance, body shame, and control beliefs will be negatively associated with condom use at last intercourse

d.) It is expected that higher rates of body surveillance, body shame, and control beliefs will be negatively associated with condom use at first intercourse



METHODS

Sample and Procedures

In 2002, the SMASH (Swiss Multicentric Adolescent Survey on Health) questionnaire, a self-administered anonymous survey of 565 items, was used to collect data in Switzerland. This questionnaire was based on the original 1992 SMASH survey and was updated from research about adolescent health during the past decade prior to administration. The participants were a randomly selected national sample of both males and females (mean age=17.6; 48.6% females). Each of the 26 Swiss Cantons were offered the opportunity to take part in this study. The cantons the agreed to participate cover the three language areas and 80% of the resident population in the country. All public educational institutions were included, though private schools were excluded. Language area (n = 3), type of school (n = 2) or apprenticeship (n = 9), and year of study (up to 4) were used as stratification criteria. Classes were used as the primary sampling unit in a complex iterative random cluster sample, where classes were drawn without replacement. This sampling process was completed three times, and once a sampling cluster (class) was selected, all students in that class were included in the study. The final sample included 8,740 youth (4,014 girls and 4,726 boys) (Jeannin et al., 2005).

For the purposes of the current study, only the female participants will be used in these data analyses. The survey covered topics such as health determinants (socio-

economic background, current education track, family structure, peer and family relationships, etc.), health status (participant's view of his or her own health, well being, and behavior), health behavior (sexual activities, contraception, substance use, eating behaviors, delinquent behaviors, suicidal ideation, etc.) and health care behaviors (awareness and utilization of medical and health service, and medication use). After students completed the survey, they discussed the interest and relevance of topics, the wording of questions and other problems encountered in answering the questions. From these discussions, modifications were made to the final version. Of the schools and cantons included in the data collection process, there was a 99.8% return rate (only 16 individuals refused to complete the survey).

Measures

Although McKinley's (2006; see Appendix E) measure of OBC was not included in the current study, the same three main constituent constructs that indicate OBC were. All measures can be found in Appendix A.

OBC. Three OBC indicators were assessed, namely body surveillance, body shame, and control beliefs.

Body Surveillance. Body surveillance was assessed using three items that measured how satisfied an adolescent was with her body. Adolescents were asked a series of three questions (i.e. "I am content with my body"). Responses were given on a 4 point Likert-type scale: 1 = completely agree, 2 = agree, 3 = disagree, and 4 = completely disagree. A scale score was computed by averaging the responses to these three items.

Body Shame. Body Shame was assessed by a desire to change the body related to weight concerns and indicators of eating behaviors scale, again focused on weight issues or concerns. The first two-part question asked adolescents “Do you want to do anything to change your body? If yes, what do you do to lose weight?” Part 1 was used to assess body shame. Responses for part one included: 1 = yes, I would like to lose weight, but that is not my biggest concern; 2 = yes, I would like to lose weight and I think about it constantly; 3 = yes, I would like to gain weight, but this is not my biggest concern; 4 = yes, I would like to gain weight and I think about it constantly; and 5 = no. For the current analysis, these responses were recoded into 0 = does not wish to change body and 1 = wishes to change body. The eating behaviors scale consisted of 6 items. For example, “Over the past few months, have you feared gaining weight;” responses were given on a 4 point Likert-type scale: 1 = never, 2 = rarely, 3 = sometimes, and 4 = often.” These reponses were recoded into 0 = no fear of gaining weight and 1=feared gaining weight.

Control Beliefs. Control Beliefs were assessed by 2 sets of questions that asked the teen about dieting behaviors. The first one included the second part of the two-part question, “Do you want to do anything to change your body? If yes, what do you do to lose weight?” Responses for the second part included: 1 = nothing, 2 = sports or physical training, 3 = diet, 4 = drink herbal teas, 5 = take medication. Participants rated the following statement: “Have you gone on one or multiple diets to lose weight?” Responses they could give included yes = 1, no = 0. If a participant answered yes, she was asked to provide her age (year and month) of her first diet. For the current study, the responses for the first set of questions were coded into 0 = nothing or 1 = does something to lose

weight. For the second set of questions, only the responses to the question “Have you gone on one or multiple diets to lose weight?” were used in analyses.

Mental health symptom Measures. Three indicators of mental health symptoms were assessed, namely depressive symptoms, somatization (physical complaints) and suicidal thoughts. Eight questions assessed adolescents’ depressive symptoms, for example, “I am frequently depressed and don’t know why.” Responses were given on a 4 point Likert-type scale where 1 = completely agree, 2 = agree, 3 = disagree, and 4 = completely disagree. Eight items assessed adolescents’ physical complaints on somatization. Participants were asked, for example “In the past 12 months, have you had any problems with your back.” Responses were given on a 4 point Likert-type scale: 1 = never, 2 = rarely, 3 = sometimes, and 4 = often. Suicidal thoughts were assessed using a set of five items such as “In the last 12 months have you contemplated suicide?” The responses were: 1 = yes, 0 = no. Scale scores were computed by averaging the responses to each item, both for depressive symptom and somatization items. For the suicidal ideation measure, a index was computed by simply summing the responses to each item.

Body Image. There are three items used to assess the participant’s body image—height, weight, and feelings of fatness or thinness (also referred to in text as body satisfaction/dissatisfaction). Participants were asked to provide their height in centimeters and weight in kilograms. From these measures, each participant’s BMI was calculated. The third item, feelings or fatness or thinness, was assessed by asking participants to pick an answer to complete the following phrase “At this time, do you feel,” with answer choices ranging from “1 = thin, 2 = a little thin, 3 = just right, 4 = a little overweight, 5 =

overweight." This item was recoded into the following categories: 1 and 2 = 1 (too thin, thin) 3 = 2, (normal/average), and 4 and 5 = 3 (fat, too fat). Then, calculations of BMI were categorized into three groups for the purpose of crosstabulations (but for subsequent model tests) 1 = underweight (BMI less than 18), 2=normal/average (BMI = 18-24), and 3=overweight (BMI greater than 24). Crosstabulations were then used to investigate discrepancy scores between actual body composition and perceived body composition, as measured by the feelings of fatness/thinness item. These measures can be found in Appendix D.

Risky Sexual Behavior. Four items (age at first intercourse, number of sexual partners, condom use at first intercourse, and condom use at last intercourse) were used to develop a risky sexual behavior score. Age at first intercourse was assessed using the single question, "How old were you at the time of first sexual intercourse?" The participants were asked to write in the year and month of their age at the time of first sex. Number of sexual partners was assessed using the question "How many partners total have you had since you first had intercourse?" where the participant was asked to write in her answer. Condom use at first intercourse was assessed using the question, "Did you use a condom the first time you had sexual intercourse?" with the answer sub-scale including the responses "yes or no." Condom use at last intercourse was assessed using the question, "Did you use a condom the last time you had sexual intercourse?" with the answer sub-scale including the responses "yes or no." Each item was re-coded into a dummy variable, with 1 representing engagement in risky sexual behavior (namely, being younger than 15 at first intercourse, having more than 3 sexual partners, not using a

condom at first intercourse with present partner, and not using a condom at last intercourse), and 0 representing that the participant has not engaged in risky sexual behavior (for example, being older than 15 at age of first intercourse, having less than 3 sexual partners total, using a condom at first intercourse with present partner, and using a condom at last intercourse). Thus, scores for risky sexual behavior ranged from 0 to 4, where 0 represented that the participant did not engage in risky sexual behavior and 4 that the participant engaged in all indicators of risky sexual behavior. The items used to develop the risky sexual behavior score can be found in Appendix B.

PLAN OF ANALYSIS

As a first step, descriptive analyses were completed for all items and scales. Next, reliabilities were conducted for each of the scales (see Table 1). Then, path analysis was used with the manifest variable of objectified body conscience, consisting of measures of body shame, body surveillance, and appearance control beliefs. Each of the hypotheses were then evaluated using AMOS 16.0 statistical software (Arbuckle, 2007) to examine the direct effects of (1) OBC and measures of mental health symptoms; (2) OBC and measures of body image; and (3) OBC and an index of risky sexual behavior. Because these analyses are based on mostly manifest variables, the focus will not be on path coefficients and the amount of variance explained rather than model fit (Tabachnik & Fidell, 1996).

RESULTS

The means, standard deviations, and Cronbach's alpha (or range where appropriate) report the results of the descriptive analysis and are summarized in Table 1. In sum, there were N = 4,014 participants used in this study. The young women had an average age of 17.14 years (sd = 4.18). In addition the participants had an average BMI of 20.88 (sd = 2.84), which is consistent with the commonly reported BMI range in the United States for this young adult group (18 to 24 years old; Department of Health and Human Services, 2008). The most of participants (73.5%) were in this range of normal BMI, with about equal percentages of the rest of the participants being either under- or overweight (14.1% and 12.3%, respectively). Seventy three percent of the young women resided with two-parents in the same household at the time of data collection. Father's level of education was used to asses participants socio-economic status, which ranged from 0 to 5, with a mean of 3.38 (sd = 1.01). According to this measurement, 1 = never went to school; 2 = mandatory education (i.e., 9 years) or a few years of education; 3 = apprenticeship (9 years, plus 3 or 4 years apprenticeship training; 4 = business school or technical school; 5 = university or college.

Cross-tabulations were utilized to examine the participant's actual body composition using a calculation of BMI, and perceived feelings about her body. Each of these variables was categorized into three groups. BMI was broken down into underweight groups (BMI = below 18), normal weight (BMI = 18-24) and overweight

(BMI = over 24). Feelings/perceptions of fatness/thinness were divided into three groups, namely participants that thought of herself as thin or too thin, participants that thought of herself as okay or normal, and participants that thought of herself as overweight, or very overweight. Consistent with the literature, more young women felt overweight (n = 2,085) than actually were (n = 492). Of the portion of the sample that felt overweight 51.3% (n = 1,507) actually fell under the normal weight range. About one quarter (23.9%) of the underweight participants (n = 528) thought of themselves as fat or too fat. Only 118 participants were classified as underweight, though 195 reported feeling thin or too thin. Of these 195, 77 participants were normal weight and none were overweight. The findings from this sample are consistent with OBC theory in that, of the 74.2% (n = 2,937) of young women part of the sample that were categorized as normal weight 51.3% (n = 1,501) considered themselves as overweight, 46.1% (n = 1353) as normal weight, and only 2.6% (n = 77) as underweight.

Table 1

Descriptive Statistics for OBC, Mental health symptoms, Body Image, Risky Sexual Behavior, and Demographic Variables

Scales/Indices	# of items	α/range	Mean	SD
Family Structure	1	0-1	.74	.44
SES	1	0-5	3.38	1.01
Age	1	13-24	17.14	4.18
OBC				
Body Surveillance	3	.68	1.89	.52
Body Shame	7	.74	.39	.29
Appearance Control Beliefs	6	0-6	1.98	1.30
Risky Sexual Behavior	4	0-4		
Age at first intercourse	1	8-24	16.12	1.51
Number of Sexual Partners	1	0-98	1.72	3.09
Condom Use at first intercourse	1	0-1	.13	.34
Condom Use at last intercourse	1	0-1	.59	.49
Mental health symptoms				
Depressive Symptoms	8	.90	1.83	.73
Somatic Complaints	8	.65	1.97	.50
Suicidal Ideation	5	0-5	.14	.25
Body Image				
Present feelings of fatness/thinness	1	0-1	.48	.59
Body Mass Index	2	13 - 43.82	20.88	2.84

Hypothesis 1

The first model examined the relationships between OBC and measures of mental health symptoms. Factor loadings of the components of the latent variable (OBC) were .79 for body shame, .69 for body surveillance, and .62 for appearance control beliefs (see Table 2).

Table 2
Factor Loadings of the Components of OBC

			Body Shame	Body Surveillance	ACB
OBC	→	Hypothesis 1	.79	.69	.62
OBC	→	Hypothesis 2	.76	.66	.67
OBC	→	Hypothesis 3	.82	.65	.62

ACB = appearance control beliefs.

Results from the analysis indicated that, consistent with expectations, the relationships between OBC and each of the measures of mental health symptoms (namely, depressive symptoms, somatic complaints, and suicidal ideation) were all statistically significant. Findings from path analysis indicated that OBC accounted for 20% of the variance in depressive symptoms, with direct effect of $\beta = .45$. In addition, OBC accounted for 19% of the variance in somatic complaints, with a direct effect of $\beta =$

.44, and 10 % of the variance in suicidal ideation (β = .31). These results are summarized in Table 3.

Table 3

SEM Analyses on the relationships between OBC and Mental health symptoms, Risky Sexual Behavior, and Body Image

				b	SE	β	p-value
Hypothesis 1	OBC	→	Depress	1.47	.06	.45	<.001
	OBC	→	Somatic	1.01	.04	.44	<.001
	OBC	→	Suicide	.36	.02	.31	<.001
Hypothesis 2	OBC	→	Body	1.92	.05	.69	<.001
	OBC	→	BMI	5.14	.24	.40	<.001
Hypothesis 3	OBC	→	Risky Sex	.22	.10	.05	.028

Depress = Depressive Symptoms, Somatic = Somatic Complaints, Suicide = Suicidal Ideation, Body = Body Satisfaction/Dissatisfaction.

Hypothesis 2

The second model examined the relationship of OBC to measures of body image (Hypothesis 2). As expected, results indicated that the relationships between OBC and measures of body image (namely, feelings of body satisfaction/dissatisfaction, and BMI) were statistically significant. BMI was computed by using self-reported measurements of height (in cm) and weight (in kg). Scores above 50 and below 5 were not examined (n =

3836). Factor loadings of the components of the latent variable of OBC were similar with the previous model; these loadings were calculated to be .76 for body shame, .66 for body surveillance, and .67 for appearance control beliefs (see Table 2). Results from the analyses designated that 16 % of the variance in BMI (direct effect $\beta = .40$) and 48 % of the variance in feelings of body satisfaction/dissatisfaction ($\beta = .69$) were accounted for by OBC.

Hypothesis 3

The third and final model examined the relationship between OBC and an index of risky sexual behavior (Hypothesis 3). The index for risky sexual behavior was developed by summing four different variables commonly used to assess risky sexual behavior (age at first sex, number of sexual partners, condom use at first intercourse with present partner, and condom use at last intercourse. The each measure was re-coded into a dummy variable, with 1 representing engagement in risky sexual behavior (namely, being younger than 15 at first intercourse, having more than 3 sexual partners, not using a condom at first intercourse with present partner, and not using a condom at last intercourse), and 0 representing that the participant has not engaged in risky sexual behavior (for example, being older than 15 at age of first intercourse, having less than 3 sexual partners total, using a condom at first intercourse with present partner, and using a condom at last intercourse). Thus, scores for risky sexual behavior ranged from 0 to 4 with 0 representing that the participant did not engage in any risky sexual behavior, and 4 representing that the participant engaged in all measures of risky sexual behavior included in this analysis. Factor loadings of the components of the latent variable of OBC

were again similar to previous models with the calculated values being .82 for body shame, .65 for body surveillance, and .62 for appearance control beliefs (see Table 2). Consistent with expectations, the results from path analysis point out that the relationship between OBC and risky sexual behavior is statistically significant ($p = .028$). However, path analysis reveal the relationship is not as strong, with the direct effect of OBC on the risky sexual behavior index being less than 1% ($\beta = .05$).

DISCUSSION

There have been very few studies linking the concept of OBC to adolescent development, and very few studies concerning OBC at all. The purpose of this study was to examine the course of adolescent sexual development using a nationally representative probability sample of Swiss adolescent females. The relationship between OBC and mental health symptoms, OBC and body image and, OBC and sexuality (using measures of risky sexual behavior), were assessed to provide support that these relationships do, in fact, exist. While many may suppose, and previous research that inspected different components of OBC would agree, that these aspects of development are related, the topic has yet to be studied empirically in an adolescent population outside of the United States.

Several key findings were made in the current investigation. Consistent with expectations, significant relationships were found in each of the hypotheses. Accordingly, it was not surprising that this analysis supported the strong consensus that has been established through previous empirical research that pathological behaviors regarding one's appearance are likely to develop during adolescence for females (McKinley, 2006a; McKinley, 2006b; McKinley & Hyde, 1996, Lindberg et al., 2006; Weiderman, 2006; Schooler et al., 2006; Tolman et al., 2006). This support will be outlined and organized by each hypothesis tested in the current study. First, the relationship between OBC and mental health symptoms will be discussed, followed by a discussion of the relationship

between OBC and body image, and finally, the relationship between OBC and risky sexual behavior will be explored.

It was interesting to find OBC was strongly related to each of the mental health symptoms measures. While depressive symptoms had the strongest relationship of the measures of mental health symptoms (β =.45), measures of somatic complaints were almost equally as strong (β =.44). Even the weakest relationship between the OBC latent construct and a mental health symptoms variable—suicidal ideation—was still remarkable (β =.31). The results, consistent with expectations from Hypothesis 1, were comparable to results found in previous literature. In a study that considered the link between mental health symptoms and feminine ideology in adolescent girls, Tolman et al. (2006) found a strong positive relationship between body objectification and depression ($r = .54$, $p < .05$). Based on a sample of college age men and women (n = 115 women), McKinley (2006 a) found moderate negative associations between self-acceptance and weight dissatisfaction (r = -.27) as well as between self-acceptance and dieting behaviors (r = -.37). Additional support was found in a study by Farrand, Parker, and Lee (2007) of 968 adolescents, ages 13-16 years. These researchers found through self-reported survey questions that 57% (n = 251) of females reported depressive symptoms, and a staggering 76% of females (n = 315) wanted advice about changes to her body.

Analyses testing Hypothesis 2 provided evidence of a strong relationship between OBC and body image. In fact, the relationship between OBC and a current perceptions of self on a scale ranging from “too fat” to “too thin” was the largest one found in the present study (β = .69). This is consistent with the only study to date that had tested the

OBC youth scale (Lindberg et al., 2006). In this study, the correlation between body shame and BMI was strong (r = .52), and other relationships, such as that between current/past dieting and BMI (r = .30/.34) or the relationship between body esteem and BMI (r = .30) were also in the expected direction. Although no other studies exist that have explicitly tested the link between OBC and body image, additional empirical work exists that has tested elements part of OBC and body image. For example, Schooler et al. (2005) looked at body shame and sexual decision- making and found a strong association between Body Image Self Consciousness (comparable to the perceptions of fatness/ thinness scale used in this study) and Body Comfort/Body Modesty scale (r = -.69).

In addition, when examining the other relationship predicted as part of Hypothesis 2, namely the link between OBC and BMI, a strong and positive relationship was found (β = .50). These findings (though the study was conducted with a comparatively younger population) are consistent with the limited amount of research that has tested the OBC concept in college-age and older populations. Based on a ten-year longitudinal study of two samples of adult women, McKinley found a statistically significant association between body esteem and appearance control beliefs in the younger cohort (mean age = 29; r = .42,) and in the older cohort (mean age = 57; r = .24). It is important to note that this study did not examine OBC as a singular, higher order construct, as the current study did. The same study also found associations between body shame and BMI in the older cohort (r = .37) as well as BMI and body surveillance or body shame in the younger cohort (r = .19; r = .32, respectively).

Additional empirical support for the relationship between OBC and body image (as conceptualized by actual body composition and feelings/perceptions about one's body) was found in Weiderman's 2006 study regarding body image self-consciousness during intimacy with a partner. Over one-third of the women in the both Study 1 and Study 2 felt body image self-consciousness when with a partner (i.e. feeling "fat" or unattractive during acts of intimacy). However, much smaller percentages (12.1% and 7.2%, respectively) of the total sample of women had a BMI of greater than 27, and thus were considered obese. This is consistent with the predictions of this study that young women are still quite concerned about their body in various contexts, regardless of the body's actual size. In this same study, there were strong correlations between measured BMI and body image self-consciousness ($r = .33$) as well as correlations between body dissatisfaction (akin to the perceptions of fatness/thinness measure that informed this study) and BMI ($r = .52$).

The results of this study are consistent with feminist ideology that has framed and organized this analysis; they are also particularly consistent with the feminist psychodynamic developmental framework. While both young men and women are subject to body objectification and pressures to conform to a socially constructed ideal, young women are particularly susceptible to cognitively developing feelings of shame about her body, thinking that others are judging her body, and the notions that she should be able to control her body in such a way that she is able to forge herself into a cultural ideal. It is important to recognize, however, that FPDF supports the notion that there is a differential between objectification experiences for men and women. It would be quite

interesting to see in future research comparisons of levels of OBC in adolescent males and females, but more importantly perhaps, whether developmental processes, namely the patterns of associations observed in the current female sample, are similar or different in a male sample.

This study has the advantage of utilizing a nationally representative probability sample, allowing the results to be generalized to the populations of Swiss adolescent females. Considering that each of the relationships tested here were found to be statistically significant, and some with quite a large effect size, studies like this and others that are similar could have important implications in future research of adolescent development. In addition this study is unique in that there are very few studies concerning OBC, even less concerning OBC and youth, and none to date that makes use of such a sample.

In conclusion, the findings from the current analysis are notable in that they provide strong evidence of a link between OBC and different aspects of adolescent development. The three pieces operationalized here as part of the construct of objectified body consciousness, namely body shame, body surveillance, and appearance control beliefs, seem to have a strong association with one another. When examined as latent construct, these variables appear to be highly related to internalizing problems (such as depressive symptoms, somatic complaints, suicidal ideation, and perceptions of fatness/thinness) and actual body composition (as measured through BMI). While these findings are remarkable, they encourage and delineate new questions to provide a roadmap for next steps, namely, more conceptual and empirical work on the origins of

OBC and additional work that considers the relationship to other aspects of adolescent development known to account for variability in sexual development in youth. For instance, future research could contribute to the literature by including younger populations, or using a longitudinal research design in effort to determine causality and find out when OBC first develops, or both. Also, future research should address measuring attitudes toward sexual behavior instead of actual sexual behavior (which is likely to be considerably less in child populations versus adolescent populations). Furthermore, while this study examined the women in the sample as a whole, future research could categorize women into different typologies according to the differential between their BMI (actual body composition) and perceptions of self—for example: normal weight but perceives herself as overweight, or underweight and perceives herself as normal or overweight, etc. It would be worthy of note to see in future research comparisons of levels of OBC in different typologies of this differential, but more importantly perhaps, this type of research would garner some very interesting findings on risk and resiliency factors concerning OBC, and whether these factors are similar or different in among these typologies.

Although this research has garnered some important new evidence to empirical tests of OBC in an adolescent population, this investigation is not without limitations. First, though statistically significant relationships of large magnitude were found when examining OBC and mental health symptoms, and OBC and body image, the magnitude of the effect of OBC on sexual development was rather modest, as measured by participant's self-reported risky sexual behavior. While it was expected that having

higher levels of OBC would be related to more engagement in risky sexual behavior, some other studied suggest that body dissatisfaction is related to fewer and less satisfying relationships (Faith, Cash, Schare & Hangen, 1999). Other studies of a similar nature found that, in fact, those with higher body dissatisfaction tended to avoid sexual activity all together (Faith & Schare, 1993). Measuring sexuality in youth by assessing their risky sexual behavior is quite common in empirical studies, but perhaps these types of measurements were unable to fully inform this study about the complexities of adolescent sexual behavior, particularly sexual avoidance.

Second, it is also important to discuss briefly that the specific model involving OBC and body image includes some redundancy. More specifically, the relationship examined using a path analysis model found these two variables to be related in the conceptually expected direction. The rather large magnitude of the relationship between perceptions of feelings of fatness/thinness and OBC is not surprising. However, one could make the argument that body image (operationalized here as feelings of one's body compared to actual body composition) can be conceptualized as part of the latent construct of OBC. Future research could add a component that conceptualized actual body composition to OBC in order to provide an even more comprehensive picture of adolescents' cognitions about their own body.

In addition, since this study was based on a cross-sectional sample, no causal inferences can be made. The study was also exclusively based on adolescent self-reports, which introduces the potential for biased or inaccurate reporting. However, at the same time, only adolescents themselves can report on their perceptions about their bodies and

insecurities related to them. Future empirical work on this topic should include a longitudinal research design to examine potentially causal relationships between the main study constructs. And finally, future studies should also include early adolescents, perhaps even children, as some empirical work has suggested that weight-related concerns and dieting behavior begin as early as 5-years old (Sinclair, 2006). This would require developing an age appropriate scale of OBC for children and early adolescents.

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APPENDIX A
Body Objectification Measures

Body Surveillance.
How do you currently think about your body?
1 = Completely Agree, 2 = Agree, 3 = Disagree, 4 = Completely Disagree
a.) I am content with my body
b.) I would like to change one of two things about my body
c.) I want to change many things about my body

Body Shame.
Do you want to change anything about your body?
a.) yes, I would like to lose weight, but that is not my biggest concern
b.) yes, I would like to lose weight and think about it constantly
c.) yes, I would like to gain weight, but this is not my biggest concern
d.) yes, I would like to gain weight and think about it constantly
e.) no

Over the past few months . . .
1=never, 2=rarely, 3=sometimes, and 4=often
a.) Are you afraid to gain weight?
b.) Do you feel unattractive when you eat too much?
c.) Do you think about food a lot?
d.) Do you enjoy the feeling of having an empty stomach?
e.) Do you eat a lot and have problems stopping?
f.) Do you vomit?

Appearance Control Beliefs.
Do you want to change anything about your body? If yes, what do you do to lose weight?
a.) nothing
b.) sports or physical training
c.) go on a diet
d.) drink herbal teas, homeopathic or other plant-based supplements
e.) medication

Have you gone on one or multiple diets to lose weight?
0 = no, 1 = yes

APPENDIX B

Risky Sexual Behavior Items

Age at first intercourse

How old were you at the time of first sexual intercourse? (year and month)

Number of sexual partners

How many partners total have you had since you first had intercourse? (number)

Condom use at first intercourse

Did you use a condom the first time you had sexual intercourse? 0 = no, 1 = yes

Condom use at last intercourse

Did you use a condom the last time you had sexual intercourse? 0 = no, 1 = yes

APPENDIX C

Mental Health Symptom Measures

Depressive Symptoms
1 = Completely Agree, 2 = Agree, 3 = Disagree, 4 = Completely Disagree

a.) I am frequently depressed and don't know why
b.) Once in a while, I feel that everything is so hopeless that I don't feel like doing anything at all
c.) Once in a while, I think that I have nothing that gives me pleasure
d.) I am frequently sad without knowing why
e.) I find my life is pretty sad
f.) Recently, I have thought about death a lot

Somatic Complaints
Have you had any problems with . . ?
1=never, 2=rarely, 3=sometimes, and 4=often

a.) back
b.) weight
c.) headaches
d.) stomachaches
e.) legs
f.) sleeping
g.) gynecological (menstruation, vaginal infection)
h.) dizziness, fainting (low blood pressure, etc.)

Suicidal Thoughts
In the last 12 months . . .
0 = yes, 1 = no

a.) have you contemplated suicide?
b.) were there moments when you wanted to commit suicide?
c.) would you have committed suicide if the opportunity had presented itself?
d.) have you thought about the method through which you could have committed suicide?
e.) have you had a suicide attempt?

APPENDIX D
Body Image Measures

Height.
What is your height (in meter)?

Weight.
What is your weight (kilograms)?

Present feelings of fatness/thinness
Presently, I feel . . .
1 = thin, 2 = a little thin, 3 = just right, 4 = a little overweight, 5 = overweight

APPENDIX E

McKinley's OBC Youth Measure

Body Surveillance

1. I often compare how I look with how other people look
2. During the day, I think about how I look many times.
3. I often worry about whether the clothes I am wearing make me look good.
4. I often worry about how I look to other people.

Body Shame

5. I feel ashamed of myself when I haven't made an effort to look my best.
6. I feel like I must be a bad person when I don't look as good as I could.
7. I would be ashamed for people to know what I really weigh.
8. When I'm not exercising enough, I question whether I am a good person.
9. When I'm not the size I think I should be, I feel ashamed.

Control Beliefs

10. I think I am pretty much stuck with the looks I was born with.
11. I think I could look as good as I wanted to if I worked at it.
12. I really don't think I have much control over how my body looks.
13. I think my weight is mostly determined by the genes I was born with.
14. I can weigh what I'm supposed to if I try hard enough.