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Adolescents and Eating Disorders: Gender, Racial, Ethnic, Sociocultural, and Socioeconomic Issues

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Little is known about the incidence and prevalence of eating disorders among adolescents of color who are poor or identify themselves as gay or lesbian. Among American women, eating disturbances are equally as common among Native, Asian, or Hispanic Americans as they are among Caucasians. African Americans were at higher risk of developing eating disorders than were Hispanic and Asian Americans. Media and gender-role body stereotype and body dissatisfaction are strongly linked and have been shown to be the strongest predictors of disordered eating. As these youth adopt Western values about beauty, they may be at increased risk for developing eating disorders.

Keywords: *eating disorders; racial issues; gender issues; socioeconomic issues; adolescents*

The previous absence of minority populations and people of color from around the world as participants in research on eating disorders and disordered-eating patterns is interesting given that research on eating disorders has been the focus of considerable attention. As researchers begin to explore the continuum of eating behavior in an effort to discover the etiological and maintaining variables for eating disorders, they are starting to publish work that addresses the existence of disordered eating and eating disorders among these formerly excluded groups. In view of the earlier trends, this review on eating disorders addresses issues of gender, race, ethnicity, socio-

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cultural, and socioeconomic factors and their relationship to the preponderance of data on Caucasian upper middle-class women who live in Western countries. First, we briefly reviewed the common assumptions and knowledge about eating disorders. Next, we reviewed and compared recent research that is beginning to address underrepresented groups of color. We conclude with a brief statement of our findings, the implications of eating disorders on a national level, and the raising risk to teenagers.

HISTORICAL AND CURRENT TRENDS

Historically, researchers have focused on convenience participants, primarily Caucasians. Specifically, participants were recruited from inpatient or outpatient settings or from college or university settings. In general, researchers believed only Caucasian, upper middle-class women who lived in industrialized or westernized countries developed eating disorders. The historical exclusion of minorities, men, and people from nonwestern or nonindustrialized countries as research participants was based on Fenwick's (1880) original observation that anorexia nervosa (AN) was more commonly found in wealthier classes of society than among laborers or lower classes (as cited in Gard & Freeman, 1996).

Current research supports this conclusion for AN but not for bulimia nervosa (BN) or the newly proposed binge-eating disorders (BED). Women of color around the world and male athletes are increasingly being diagnosed with BN and BED. These disorders occur more frequently than does AN in these special populations (Comerci & Greydanus, 1997; Striegel-Moore, Wilfley, Pike, Dohm, & Fairburn, 2000; Warheit, Langer, Zimmerman, & Biafora, 1993).

Because of the previously mentioned trend, most of the literature available today examines concerns associated with Caucasian American adult women with eating disorders who attend college, who are seen in inpatient and outpatient treatment settings, or who live in areas where large university-based research-oriented hospitals operate (e.g., Minnesota or New York). Today, studies on people of color (men or women) or about subgroups (adolescents or homosexuals) are emerging that focus on the incidence of eating disorders and maladaptive eating patterns. We know little about how eating patterns effect the development of eating disorders in these special populations.

Recent literature shows that the detection of eating disorders (full syndromes or partial syndromes) and disordered patterns of eating have increased among people of color (men and women) and among prepubertal girls in all social classes and within all regions of the United States and coun-

tries around the world (Golden, 1997; Morande', Celada, & Casas, 1999; Mukai & McCloskey, 1996; Nadaoka, Oiji, Takahashi, Morioka, & Kashiwakura, 1996; Rosenvinge & Gresko, 1997; Striegel-Moore, 1995).

GENDER

A total of 90% to 95% of patients diagnosed with eating disorders are women (American Psychiatric Association, 2000). The remaining 5% to 15% of men are given a diagnosis of either AN or BN. Of the men diagnosed, adolescent boys and young adult men account for 0.2% of cases of eating disorders (Carlat & Camargo, 1991; Golden, 1997). Given that men do not have one of the major symptoms for AN, namely amenorrhea, they are often excluded from investigation (Ziesat & Ferguson, 1984). This exclusion has a significant negative impact on detection rate of AN among men.

Leon, Fulkerson, Perry, and Early-Zald (1995) conducted a 3-year study of predominately Caucasian (89%) female (843) and male (797) students who lived in a Minnesota suburb and were in Grades 7 through 10. They concluded that (a) once a student is initially identified as being at high risk, that risk status remains stable over time for all participants; (b) being Caucasian and having poor interoceptive awareness at Year 2 were significant predictors of disordered eating at Year 3 for women; and (c) a significantly greater proportion of girls than boys endorsed behaviors that were similar to behaviors that met diagnostic criteria for eating disorders (Leon et al., 1995).

Data from studies of adult men diagnosed with eating disorders indicated that the onset tends to occur at a later age than for women, that they have a higher prevalence of premorbid obesity, and that they are less concerned with strict weight control (Carlat & Camargo, 1991). Olivardia, Pope, Mangweth, and Hudson (1995) also found that men with eating disorders have characteristics that appear strikingly similar to those of women with eating disorders. For example Sharp, Clark, Dunan, Blackwood, and Shapiro (1994) reported that around half of the male sufferers endorsed bingeing and vomiting behavior coupled with frequent endorsement of excessive exercising. Depressive and obsessive symptoms and a strong family history of affective disorders and alcohol abuse were also endorsed (Sharp et al., 1994).

SEXUAL ORIENTATION

Data on the relationship between homosexuality and eating disorders come from studies with adult gays and lesbians. However, little is known

about the incidence and prevalence of eating disorders among adolescents who identify themselves as gay or lesbian, and the overall relationship between eating disorders and homosexuality among adults or adolescents remains unclear.

Bradford, Ryan, and Rothblum (1994) analyzed data for the National Lesbian Health Care Study (1984-1985). Information was collected on 1,925 lesbians from all 50 states. The researchers examined eating behaviors of adult lesbians. These women were more likely to report overeating and vomiting (approximately 66%) than undereating (33%). Of the entire sample, 4% said they binged and purged. It is interesting that African American lesbians reported a much higher rate (19%) of bingeing and purging. Reports of undereating were more likely to occur among younger African Americans as well as with women from lower incomes (Bradford et al., 1994).

Siever (1994) and Bergeron and Senn (1998) presented views on the relationship between eating disorders and sexual orientation from a different perspective. Siever contended that homosexual men and heterosexual women diagnosed with eating disorders share concerns about physical attractiveness and thinness based on a desire to attract and please men. He posited that such concerns make these two populations more vulnerable to eating disorders. However, Bergeron and Senn analyzed data that looked at lesbian and heterosexual male relationships and eating disorders and found that lesbians and heterosexual men were less concerned with physical attractiveness as a way of pleasing men. Therefore, they were less vulnerable to developing eating disorders (Siever, 1994).

Unfortunately, like most research that focuses on this population, important links between eating disorders and "homosexuality" have been overlooked for two reasons (Remafedi, 1994). First, political forces might be at work to suppress the collection or publication of information that has been perceived to benefit homosexual communities. Second, adolescents may keep their sexual orientation hidden, therefore identifying representative samples of gays, lesbians, and bisexuals has been difficult in the climate of American society.

GENDER ROLE

Cantrell and Ellis (1991) included older adolescents in their study of gender role and eating disorders. They studied 103 male and 134 female undergraduate student volunteers, ranging in ages from 17 to 33 years (modal age 18 years): Of this population, 85.9% were unmarried Caucasians. These investigators concluded there was a relationship between gender and gender

role. They suggested that masculine women had the greatest risk of manifesting eating dysfunction versus any other gender role group (Cantrell & Ellis, 1991). The authors also suggested that the preponderance of women diagnosed with eating disorders may not be a function of their being female but may be significantly affected by the complex transitions of the female role in our culture (Cantrell & Ellis, 1991).

RACE

Zhang and Snowden (1999) analyzed epidemiological data and found lower rates of AN among African Americans compared with Caucasians. However, African Americans were at higher risk of developing eating disorders than were Hispanic and Asian Americans. There were no differences in rates of AN between Caucasian and Asian Americans (Zhang & Snowden, 1999). Crago, Shisslak, and Estes (1996) supported these findings by concluding that AN and eating disorders were less common among African Americans than among Caucasian Americans, but eating disorders are equally as common among Native Americans and Hispanics as among Caucasians (Crago et al., 1996). Other researchers found a higher incidence of eating disorder symptoms among African American women compared with women belonging to other ethnic groups (Langer, Warheit, & Zimmerman, 1992; Warheit et al., 1993). Pumariega, Gustavson, and Gustavson (1994) concluded that African American women are more likely to develop BM than AN and are more likely to purge with laxatives than by vomiting.

Fitzgibbon, Spring, Avellone, and Blackman (1998) compared the severity and correlates of binge eating in Caucasian (55), African American (179), and Hispanic American (117) women. They concluded that binge-eating symptoms were more severe in Hispanic Americans versus African Americans or Caucasian women. All participants who binged more were heavier and more depressed and preferred a slimmer body than those who did not (Fitzgibbon et al., 1998). The severity of symptoms was predicted by weight and depression in Hispanic Americans and by depression in Caucasians. The authors found that none of the factors they examined significantly influenced binge-eating symptoms in African Americans (Fitzgibbon et al., 1998).

Striegel-Moore, Wilfley, and colleagues (2000) studied more than 5,000 women, including 1,500 African American women, and found that African American and Caucasian women engaged in binge-eating behavior at approximately the same rate (8% for each group). Although the researchers acknowledged that binge-eating behavior is not the same as binge-eating disorder, their data provide a much needed picture of eating patterns among a

large sample of women, especially women of color. African American women and Caucasian women have the same rates (3%) of either BN or BED (Striegel-Moore, Wilfley et al., 2000). African American women who binge eat suffer similar emotional problems as do Caucasian women who binge eat (Striegel-Moore, Wilfley et al., 2000). Researchers have not adequately studied eating disorders in ethnic groups such as Hispanic or Asian Americans.

An analysis of the National Heart, Lung, and Blood Institute Growth and Health Study allowed researchers to look at adolescent female students enrolled in high schools (public and parochial) in Berkeley, California; Cincinnati, Ohio; Rockville, Maryland; and Bethesda, Maryland (Striegel-Moore, Schreiber et al., 2000). The researchers examined the longitudinal cohort of risk factors for their participants: African American (11,212 in Year 1 and decreased to 5,995 by Year 7) and Caucasian (1,166 Year 1 and decreased to 907 by Year 7). The Eating Disorders Inventory (EDI; Garner, Olmsted, & Polivy, 1983) was used as the main assessment instrument. Results indicated that African American women scored different from Caucasian women on all EDI subscales. As those participants in both race groups who remained in the study became older, their scores on all but two subscales (Body Dissatisfaction and Drive for Thinness) decreased significantly as measured by the EDI. African American girls were heavier, had higher Body Mass Index (BMI) scores, and were more advanced in terms of sexual maturation than Caucasian girls. There were significant race differences at each age level, which became more pronounced with increasing age. This study revealed that scores on Body Dissatisfaction and Drive for Thinness increased with increasing age. However, this trend applied only to Caucasian girls. In addition, after the researchers adjusted the data for age, parental education, and BMI, they found significant race effects on all eight EDI subscales (Body Dissatisfaction, Drive for Thinness, Bulimia, Interoceptive Awareness, Interpersonal Distrust, Ineffectiveness, Maturity Fears, and Perfectionism). African American girls were different from Caucasian girls, and these differences were not accounted for by racial differences. Results demonstrated that African American girls had significantly higher Bulimia scores than did Caucasian girls and African American girls who engaged in binge eating. They also had higher scores on personality traits, including maturity fears, interpersonal distrust, higher levels of perfectionism, and more disturbance regarding interoceptive awareness. The authors concluded that researchers must consider body weight and demographic characteristics when comparing different race or ethnic groups (Striegel-Moore, Schreiber et al., 2000; Striegel-Moore, Wilfley et al., 2000).

ETHNICITY

Although individuals from minority groups suffer from eating disorders, they were generally overlooked in research on this topic (Lester & Petrie, 1998; Rand & Kuldau, 1990). One major factor may be that the characteristic features of eating disorders (obsession with weight, desire for thinness, and weight phobia), as described among Caucasian or European participants, are quite low or absent among adolescents, homosexuals, and people of color (Hall, 1995; Hsu, 1990, 1996; Hsu & Lee, 1993; Rand & Kuldau, 1990). The documented symptoms of eating disturbances often involve symptoms that do not meet the current criteria for an eating-disorder diagnosis but represent partial syndromes. If researchers include compulsive eating as a symptom of disordered eating, then the prevalence of eating disorders might be as high as 20% of men and women (Littlewood, 1995; Nadaoka et al., 1996; Santonastaso, Zanetti, Sala, & Favaretto, 1996; Rand & Kuldau, 1990; Striegel-Moore, Wilfley et al., 2000).

With the inclusion of the newly proposed BED classification in the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association, 2000), research into BED and symptoms of disordered eating patterns has increased. During the past decade, researchers have documented increased instances of "disordered eating," "disturbed eating," and eating disorders in a variety of adolescent populations (high school and college students, adult gays and lesbian youth, inpatient and outpatient populations, and among youth of color) around the world. Epidemiological studies with these populations were conducted in various regions of the United States and in other parts of the world such as Zimbabwe, Germany, Sofia, Israel, India, Italy, Japan, China, Australia, the Mediterranean, the Caribbean island of Curacao, Fiji, the Pacific Islands and Sao Miguel Island, and Azores (Crago et al., 1996; deAzevedo & Ferreira, 1992; Khandelwal, Sharan, & Saxena, 1995; Lester & Petrie, 1998; Matsuura, Fujimura, Nozawa, Iida, & Hirayama, 1992; Mitrany, Lubin, Chetrit, & Modan, 1995; Nadaoka et al., 1996; Santonastaso et al., 1996; Stein et al., 1997). Many of these researchers have focused their attention on investigating the relationship between ethnocultural identity and eating disorders.

Ethnocultural Identity

Harris and Kuba (1997) contended that a complex relationship exists between ethnocultural identity, eating practices, and cultural convergence. This interaction crosses boundaries of nationality, ethnicity, culture, and

immigration status and can result in the development of aberrant eating patterns among those who are attempting to adjust to the world around them. Root (1990) examined these issues and found that regardless of racial or ethnic group status, most individuals are subject to the standards of the dominant culture, particularly when their culture or racial/ethnic group of origin is devalued by the dominant culture. Under these conditions, cultural and ethnic identity and social, familial, and individual factors contribute to determine whether disordered eating symptomatology occurs.

Traditionally, detection of these symptoms is impeded because of the belief that eating disorders do not exist among people of color and because of the social stereotypes that being plump or obese is "normal" for African, Hispanic, Native, and Asian Americans. When these individuals present for evaluation or therapy in inpatient or outpatient settings, most clinicians do not even examine issues around food and body image as potential sources of mental health concerns (Root, 1990). Littlewood (1995) offered that eating disorders do exist among women in South Asia but may be related to "personal agency"; for example, some women may starve themselves as a means of exerting some control over their lives. Detection may also be a problem for Japanese American women, specifically because the stereotype of "thinness" may be an obstacle that prevents clinicians from exploring the presence of eating disorders in this population (Littlewood, 1995; Root, 1990). Harris and Kuba (1997) cited several studies that supported the notion that a separation from one's primary ethnoculture correlates with eating disorder symptoms such as self-starvation or binge eating among people of color.

Nakamura, Hoshino, Watanabe, and Honda (1999) studied 3,032 female high school students in Japan and found a low prevalence of eating problems among the Japanese female population. However, they did discover that older age, higher BMI, distorted body image, obsessive-compulsive tendency, and some familial issues were independently related to eating problems within the Japanese female population. Lee and Lee (2000) also studied Asian (Chinese) high school girls (Grades 10 and 11) and further analyzed regional differences between three communities in China. They found that among high school girls (Grades 10 and 11), although adolescents from Hong Kong were slimmer than were those from Rural Hunan and Shenzhen, they still desired a lower BMI and reported more body dissatisfaction. The students from Hong Kong had higher body fat and dieting concerns. Body dissatisfaction was a significant predictor of fat concern for those students (Lee & Lee, 2000). The authors contend that the consistent gradient of fat concerns they found across the three communities supports the notion that societal modernization fosters disordered eating in women (Lee & Lee, 2000). They further offered that the predictable rising rate of eating disorders that follows global change will

pose a growing public health challenge to Asian countries (Lee & Lee, 2000). Crago et al. (1996) and Leung, Geller, and Katzman (1996) offered the same concerns for American minorities who are younger, heavier, better educated, and more identified with the White/Caucasian, middle-class values represented in the United States. The urbanization of rural areas in this country has also been affected by this trend.

SOCIOCULTURAL ISSUES

Western and/or Industrialized Countries Versus Non-Western Countries

In the United States, the incidence and prevalence of eating disorders are highest in urban areas. Perhaps this is an artifact, as most treatment programs and subspecialty health care clinicians are typically in urban areas where large teaching hospitals and research institutions are most often located. However, the risk for eating disorders may be greater in rural areas than was previously believed. In one study, students (ages 11 through 18 years) in five public schools in East Tennessee were assessed for their risk of eating disorders. These researchers found that 19.8% of women and 3.7% of men obtained scores that indicated they were at high risk for developing an eating disorder, suggesting the risk for developing eating disorders may be greater in rural areas than was previously believed (Miller, Verhegge, Millar, & Pumariega, 1999).

In Western or industrialized countries, being overweight or obese has negative connotations and may result in biases. Those biases affect hiring and promotion practices, peer relationships, dating opportunities, self-esteem, stigmatizing experiences, and dieting (Feingold, 1990; Marlowe, Schneider, & Nelson, 1996; Neumark-Sztainer, Story, & Faibisch, 1998; Pingitore, Dugoni, Tindale, & Spring, 1994). In Western cultures and in the United States in particular, thinness is associated with attractiveness, fitness, and health, whereas obesity is associated with poor health, lack of will power or self-control, and unattractiveness (Feingold, 1990; Marlowe et al., 1996; Pingitore et al., 1994; Popkin & Udry, 1998; Stunkard, 1996). Female adolescents in particular are more likely to be affected and influenced by other women's views of attractiveness (Graziano, Jensen-Campbell, Shebilske, & Lundgren, 1993). This variable might account for the increase in incidence of dieting among adolescent women.

AN and related eating disorders are rare in non-Western cultures (Khandelwal et al., 1995). One theory regarding the lower incidence of eating

disorders among women in Asia (China, India, and Japan) and other non-Western countries is that these groups have a greater acceptance of higher body weights. Slimness or being thin is not considered important for attractiveness and fatness or plumpness is accepted more easily and even encouraged among some ethnic groups and cultures in the non-Western world (Cunningham, Roberts, Barbee, Druen, & Wu, 1995; Khandelwal et al., 1995; Lee, 1991). Srinivasan, Suresh, and Jayaram (1998) suggested that whereas fatness or plumpness may be considered a sign of beauty in these cultures, it is at most accepted in some cultures but not valued. In recent times, the blending of what constitutes beauty across different socioeconomic levels, different cultures, different races, and different ethnic groups may make plumpness less desirable in all regions of the world.

Alternatively, the low incidence of AN and related eating disorders in non-Western cultures could be artifacts of how data on eating disorders are collected in these areas. Detection is generally measured using screening instruments, case studies, and clinical opinions. Although a few studies have employed case register methods, screening tests, diagnostic interviews, self-report, and clinical records comparable to studies conducted in the Western world, most do not. Most surveys used in these studies must be translated from English to other languages and then are "adapted" from the original instrument.

Two major problems may occur as a result of these practices: First the translated questions may not actually convey the intended concept or ask the intended questions. Second, when a valid instrument is adapted, it no longer has the validity of the original instrument. Tests or surveys developed for Western cultures may not detect eating disorders as they are manifested in other cultures. Therefore, once an instrument has been translated, it must be validated again on the new subject pool.

In many non-Western cultures, health care is directed at curing and preventing diseases. Therefore, eating disorders may not be viewed as a critical illness in need of medical treatment (unless the patient is dying). Likewise, psychotherapy for eating disorders, like many mental illnesses, may be deemed a family problem and not a problem to be addressed by mental or medical health care professionals (Patel, Phillips, & Pratt, 1998).

Many researchers believe that as ethnic minorities and women from non-Western cultures (a) adopt Western ideals of beauty and (b) embrace thinness as an integral part of beauty, they separate from their primary ethnocultural values of beauty (Harris & Kuba, 1997; Hall, 1995; Khandelwal et al., 1995; Littlewood, 1995; Mumford, Whitehouse, & Platts, 1991; Nadaoka et al., 1996; Nassar, 1986). The acceptance of Western ideals of "thinness" as the only form of beauty can create conflicting cultural demands for people from

varied ethnic backgrounds that can result in increased manifestation of disordered patterns of eating. Additionally, as people of color move in this direction, the incidence of eating disorders among these groups will increase (Harris & Kuba, 1997; Hall, 1995; Khandelwal et al., 1995; Littlewood, 1995; Mumford et al., 1991; Nadaoka et al., 1996; Nassar, 1986).

Perceptions of Obesity

The influence of shape and weight on self-esteem was unrelated to actual shape but was related to perception of being overweight (Drewnowski & Yee, 1987; Geller et al., 1998; Halpren, Udry, Campbell, & Suchidran, 1999; Schur, Sanders, & Steiner, 2000). Basing one's self-worth on shape is independent of having a particular body shape and weight. A study of the physical, psychological, and societal correlates of symptoms of bulimia in African American college women showed that body mass, body dissatisfaction, and low self-esteem were significantly related to symptoms of bulimia (Lester & Petrie, 1998).

Obesity and dieting are common among youth in the United States. In a 1998 study of adolescents, 66% of women and 20% of men reported they had tried to lose weight during the 30 days prior to the study (Middleman, Vazquez, & Durant, 1998). Data from the Adolescent Health Survey shows that Asian and Hispanic Americans were more than twice as likely to be obese as were other youth (Popkin & Udry, 1998), whereas African and Hispanic American women (adults and children) were more likely to be obese than were Caucasian women (adults and children). Although obesity has increased among all adolescents during the past 30 years, it has increased 150% in African American girls compared with 40% in Caucasian girls (Troiano, Flegal, Kuczmarski, Campbell, & Johnson, 1995). If one was to equate obesity with an eating disorder, then this data on obesity among youth in the United States would lead one to believe that the preponderance of eating disorders would occur more frequently among African, Hispanic, and Asian Americans. (It should be noted that obesity does not necessarily indicate an eating disorder.) It is interesting that although Caucasian adolescent women were thinner than adolescent women of color, they were almost twice as likely to perceive themselves as overweight when compared with African American adolescent women. Caucasian adolescent women were also six times more likely to use pills and vomiting to control their weight and three times more likely to use dieting and exercise as a method of weight management (Neff, Sargent, McKeown, Jackson, & Valois, 1997).

Research suggests that dieting is a risk factor for BN, yet little is known about the predictors of dieting. In a large study of adolescent girls, research-

ers found that body mass, pressure to be thin, thin-ideal internalization, body dissatisfaction, and binge eating were positively correlated with dieting and that bingeing predicted increased dieting (Stice, Killen, Hayward, & Taylor, 1998). Other researchers supported these factors, but they also suggested that dieting may be a response to bulimic pathology (Stice, Mazotti, Krebs, & Martin, 1998).

The Role of the Media

Today's aesthetic ideal is extremely thin and physically fit, which represents contemporary values of self-control, success, and acceptance in the United States (Bergeron & Senn, 1998; Brownell, 1991; Cunningham et al., 1995; Stice, Mazotti, et al., 1998). Erroneously, the body is seen as malleable, which implies that anyone who uses the right combination of exercise, diet, and self-control can have the "perfect body." The media implies that for those who attain this lofty goal, vast rewards await. However, a person's attainable healthy body weight and shape are strongly influenced by biological predisposition, particularly genetics. Adolescents who do not understand or accept these limitations may experience extreme distress and subsequently employ drastic methods to attain their unrealistic "ideal self" (McKenzie, Williamson, & Cubic, 1993; Nowak, 1998). In addition, postpubertal girls and girls who are dating or physically involved in heterosexual relationships may be more vulnerable to developing eating disorders because they internalize the notion that thinness represents beauty and increases their ability to attract dating partners (Cauffman & Steinert, 1996; Levine & Smolak, 1992; Smolak, Levine, & Gralen, 1993).

Tiggemann and Pickering (1996) postulated that media, gender role, body stereotype, and body dissatisfaction are strongly linked; they further contended that youth internalize media stereotypes that affect body dissatisfaction. Print and electronic media promote the unrealistically thin physique or body ideal for both men and women, especially adolescents and young adults. This is thought to be a major cause of body dissatisfaction. Those youth who watch the most television (especially soap operas and movies) express increased dissatisfaction with their bodies (Tiggemann & Pickering, 1996). Although investigators have postulated that the "thin ideal" for women as espoused in the media is related to high rates of eating disorders among women, few studies have examined the relation between media exposure and eating pathology. Their analysis of the data from 238 female undergraduates found a direct effect of media exposure on eating disorder symptoms. Results support the assertion that the more youth adopt their society's predominate view of beauty, the more likely they are to be unhappy with their

predisposed body type; second, they are also more likely to adopt disordered patterns of eating and behavior to attain the “thin ideal” of their society (Stice, Schupak-Neubert, Shaw, & Stein, 1994).

Mok (1998) found that mass media sources have a potentially detrimental effect on people of color. The media is a potent source of information as to how attractiveness is defined and measured. Moreover, beauty and attractiveness are consistently equated with being Caucasian in this society (Mok, 1998). As portrayed through the media, standards of beauty in America are primarily based on Caucasian American and European ideals. Thus, people furthest from this ideal, specifically women of color, may suffer the psychological effects of low self-esteem, poor body image, and eating disorders. As Asian and minority women become more acculturated, they may begin to take on the “dysfunctional” behaviors of Caucasian women in American society (Hall, 1995; Matsuura et al., 1992; Mukai & McCloskey, 1996; Mumford et al., 1991; Nadaoka et al., 1996; Tiggemann & Rothblum, 1997). As we become a more globalized society, the impact of the modern Caucasian American and European standard of beauty can be devastating to the maintenance and valuing of the ethnic and cultural identities of people of color.

Dr. Anne Becker, a researcher of Harvard Medical School, and colleagues (as reported in “Eating Disorder Symptoms,” 1999, in Reuters’ *Health News*) studied the impact of television on the eating patterns of adolescents (average age 17 years) in a nonindustrialized country. In 1995, before television was introduced to the island of Fiji, only 3% of Fijian teen girls interviewed reported that they induced vomiting to lose weight. By 1998, after television was introduced to the island, 15% of participants admitted to inducing vomiting to lose weight. The authors do not attribute causation to the introduction of television but do suggest there is some correlation between that event and the increase in self-induced vomiting. They also support that the introduction of Western values and images accelerates social change and erodes the long-prized value of robust body shapes held in Fiji (“Eating Disorder Symptoms,” 1999).

Body Dissatisfaction

Despite the fact that many women strive to achieve medial images of the “thin ideal,” Martz, Handley, and Eisler (1995) found increased levels of stress among women with eating disorders as they rigidly attempt to adhere to the traditional feminine gender role and images of beauty. It is interesting that men may be more distressed or experience body dissatisfaction as a result of being too thin in contrast with the problem of being too heavy for women

(DiPietro, Williamson, Caspersen, & Eaker, 1993; Drewnowski, Kurth, & Krah, 1995).

Prior to puberty, gender differences are noted with respect to eating, dieting activity, and body image. Specifically, men tended to have stable body images, whereas women showed marked changes that began at ages 10 and 11 years (Mintz & Kashubeck, 1999; Sands, Tricker, & Sherman, 1997). As girls developed a stronger drive for thinness, body dissatisfaction increased and dieting was more likely (Mintz & Kashubeck, 1999; Sands et al., 1997). Leon, Fulkerson, Perry, and Cudek (1993) found that early puberty was not associated with increased risk of vulnerability to personality or behavioral problems, but girls who were dissatisfied with their bodies, who had experienced negative emotions, and who lacked good self-image were at higher risk for developing such problems. Self-esteem, health, and masculinity were positively related to body attitudes (Wilcox, 1997). Body dissatisfaction is different from the impaired body perception described among individuals diagnosed with AN. Fernandez-Aranda, Dahme, and Meermann (1999) found no evidence for a serious impairment of body perception (size estimation) in eating disordered patients but rather for a disturbance in the emotional aspect of body image as expressed in negative body attitudes or body dissatisfaction.

Several studies found that body dissatisfaction was not limited to middle and upper class girls (Drewnowski & Yee, 1987; Halpren et al., 1999; Schur et al., 2000). Moreover, investigators revealed the presence of eating disorders among the homeless. Investigation also revealed that the measures of BMI were the strongest independent predictor of increased body dissatisfaction in all three ethnic groups—Whites, Hispanic, and Asian girls (Robinson et al., 1996). Increased body dissatisfaction results in an increase in restrained eating (Barbara, 1998). Striegel-Moore, Schreiber et al. (2000) found a low tolerance for thinness among African American adolescents, which they found ironic given the higher prevalence of obesity and the low prevalence of AN.

Killen et al. (1996) found that during a 4-year period, girls with high scores on a measure of weight concerns were more likely to develop partial syndrome eating disorders. Graber, Brooks-Gunn, Paikoff, and Warren (1994) found that their adolescents participants (from predominately Caucasian, well-educated, upper middle-class families) exhibited patterns of eating problems that were associated with additional concerns, including (a) earlier pubertal maturation and higher body fat, (b) concurrent psychological disturbances, (c) subsequent eating problems, and (d) other long-term adjustment outcomes such as depressive affect in young adults.

Robinson et al. (1996) compared levels of body dissatisfaction between Hispanic, Asian American, and Caucasian adolescents (sixth and seventh grades). It is interesting that the Hispanic and Asian American participants, who were among the leanest 25% of girls, reported significantly more body dissatisfaction than did the Caucasian participants. Caucasian girls who were shorter in height and Asian American girls who were taller in height than their peers were also more likely to be unhappy with their body type. It is surprising that parents' education level and socioeconomic status (SES) were not significantly associated with body dissatisfaction. The authors concluded that BMI was the strongest independent predictor of increased body dissatisfaction for all subjects (Robinson et al., 1996).

SES

Gard and Freeman (1996) reviewed the literature on the relationship between eating disorders and SES and concluded that existing research fails to support that eating disorders (especially AN) primarily occur among individuals in high SES groups. For example, they documented a higher prevalence rate of eating disorders among homeless individuals than was found in the general population (Gard & Freeman, 1996). The authors found a higher prevalence of BED among women of lower socioeconomic class and concluded there was, in fact, evidence of a relationship between BN and lower SES (Gard & Freeman, 1996).

Gard and Freeman (1996) further offered that research in this area is limited due to the fact that (a) participants from varied SES groups were rarely included in the subject pools, (b) conclusions about SES of individual participants and assignment to SES groups were often made based on a clinician's opinion, (c) many researchers failed to adequately separate AN from BN when referring to common predisposing factors, (d) many studies include small numbers of participants, (e) only severe cases of eating disordered participants were studied, and (f) many participants were from tertiary referrals. These factors biased data collected on the relationship between SES and eating disorders; such practices mean that most data reported on SES, prior to Gard and Freeman's work, is most likely skewed.

CONCLUSION

A review of the literature supports the existence of all forms of eating disorders among diverse people, in particular, adolescents of color from around

the world. AN remains a disorder predominantly diagnosed among Caucasians; however, as more diverse populations are included in the research on incidence and prevalence, this fact may change. As youth adopt Western concepts of beauty and attractiveness as being ultra thin, as they lose their ethnic identity, and as they become more dissatisfied with their own bodies and engage in dieting or purging behaviors to attain that unrealistic "thin ideal," they will be at increased risk of developing maladaptive eating patterns and ultimately eating disorders. Even among adolescents who are not overweight, few are satisfied with their body type (Centers for Disease Control, 1997; Hick & Katzman, 1999; Kann et al., 1998; Nowak, 1998; Schur et al., 2000).

If youth in this culture adopt the unrealistic images of beauty, fitness, health, and success and if they use drastic measures to reach their "ideal self," they may be at increased risk for developing an eating disorder (Brownell, 1991; Killen et al., 1996; Nakamura et al., 1999; Wang, Ho, Anderson, & Sabry, 1999). As men, women of color, immigrants, and individuals from non-Western or nonindustrialized countries adopt Westernized views of beauty, fitness, health, and success, they will be at increased risk for developing disordered eating patterns and developing eating disorders.

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