

## Article 25

### **A Population At Risk: College-Aged Females and Eating Disorders**

Kayla P. Walsworth and Gerra W. Perkins

Walsworth, Kayla P., recently graduated with her master's in Clinical Mental Health Counseling from Northwestern State University in Natchitoches, Louisiana. Walsworth worked in the Counseling Center while a student at NSU and has a special interest in the issues of college students.

Perkins, Gerra W., is an Associate Professor at Northwestern State University in Natchitoches, Louisiana. Dr. Perkins is a former school counselor and continues to be interested in issues related to the efficacy of school counseling, counseling children, adolescents, and young adults, and play therapy.

Eating disorders are a major concern within the United States and other developed countries. It is imperative for counselors to understand the prevalence, the populations at greatest risk, and factors which contribute to the development of these disorders. This article provides an overview of each of the eating disorders referenced in the *Diagnostic and Statistical Manual of Mental Disorders* (5<sup>th</sup> ed., *DSM-5*; American Psychiatric Association, 2013) as well as three measures of disordered eating. Finally, the article discusses populations at risk, as well as a unique subset of this population, and how to intervene.

Statistics, such as those reported by the Healthcare Cost and Utilization Project, state that between the years of 2008 and 2009 the number of hospital stays attributed to eating disorders reached approximately 30,000, with anorexia being the number one killer of females between the ages of 15 and 24 (Zhao & Encinosa, 2011). However, these numbers do not encompass the complete number of individuals who suffer from eating disorders. When looking at the lifetime prevalence of eating disorders, Hudson, Hiripi, Pope, and Kessler (2007) reported that an average of 40.2% of people received treatment for their eating disorders. This means that almost 60% of people in their study with eating disorders did not receive treatment; therefore, the number of individuals suffering from an eating disorder might possibly be much higher than the 29,533 reported by Zhao and Encinosa (2011).

Although not all sufferers seek treatment for their eating disorders, those that do spend both time and money seeking treatment. On average, in years 2008–2009, inpatients stayed in the hospital an average of 8.1 days and spent around \$9,400 per discharge (Zhao & Encinosa, 2011). Total costs for eating disorder hospitalizations in the United States during 2008–2009 averaged around 277 million dollars (Zhao & Encinosa,

2011), while research for eating disorders for the year 2013 cost a total of 31 million dollars (National Institutes of Health, 2014). These numbers show that eating disorders are not only very harmful, but also very costly.

Eating disorders are characterized by disturbances in eating behaviors, such as restriction and overeating as well as a preoccupation with body shape and weight (National Institute of Mental Health, n.d.). Predisposing factors include, but are not limited to, being female, low self-esteem, and falling between the ages of adolescence and young adulthood (Garner, 2004). Some of the precipitating factors of eating disorders include trying to lose weight by dieting and pressure to be thin in one's profession or area of recreation, such as modeling or athletics (American Psychiatric Association, 2013; Garner, 2004).

The *DSM-5* identifies three eating disorders: (1) anorexia nervosa, (2) bulimia nervosa, and (3) binge eating disorder. Anorexia nervosa is characterized by restricted food intake, abnormally low body weight, a fear of weight gain, behaviors that inhibit weight gain, and distortions in how an individual views their weight and/or shape (American Psychiatric Association, 2013). In contrast, bulimia nervosa is characterized by eating more than normal in one sitting and then inappropriately compensating for the overeating through actions such as purging or excessive exercise in order to control the individual's weight or shape (American Psychiatric Association, 2013). Similar to bulimia nervosa, binge eating disorder is also characterized by seemingly uncontrollable spells of overeating; however, unlike those with bulimia, individuals with binge eating disorder do not recurrently compensate for their behaviors in order to maintain their weight (American Psychiatric Association, 2013).

Individuals suffering from these eating disorders are susceptible to developing severe medical issues that may even lead to death (National Alliance on Mental Illness, 2013). Unfortunately, according to the National Alliance on Mental Illness (2013), these disorders are frequently underdiagnosed despite their possibly fatal consequences. Counselors must rely on their ability to recognize and diagnose eating disorders based on an individual's presenting signs and symptoms, yet some individuals who suffer from pathological eating behaviors do not always meet the criteria for an eating disorder (Meyer, 2005; National Alliance on Mental Illness, 2013).

In a study consisting of 294 female undergraduate students, it was found that 11% of these students suffered from an eating disorder while an additional 25% experienced symptoms of disordered eating (Meyer, 2005). Although not all of these students met the criteria for having an eating disorder, it is apparent nonetheless, that some students still suffered sub-clinically, and most of these students suffered from some symptoms of bulimia (Meyer, 2005). For example, those suffering sub-clinically may have been bingeing and compensating (purging, fasting, etc.,) every other week while the criteria for bulimia nervosa states that these behaviors must occur weekly at minimum (American Psychiatric Association, 2013). Understanding the factors that are correlated with eating disorders helps counselors understand how to target signs of the behaviors before they reach levels which require more professional help.

Being able to identify the at-risk populations is key for counseling professionals. Two studies (Gravener, Haedt, Heatherton, & Keel, 2008; Keel, Heatherton, Baxter, & Joiner, 2007) used subscales from the Eating Disorder Inventory. This inventory measures the cognitive, behavioral, and psychological traits of individuals suffering from

anorexia and bulimia (Atlas & Kagee, 2007; Garner & Olmsted, 1989). The studies looked at subscales, such as drive for thinness and bulimia, and found that females are more prone to disordered eating behaviors in their late teens and early twenties (Gravener et al., 2008; Keel et al., 2007). Both studies also found that these disordered eating behaviors decrease with age (Gravener et al., 2008; Keel et al., 2007). Likewise, Zhao and Encinosa (2011) found the majority of hospitalizations due to eating disorders occurred for individuals between the ages of 19 and 30, with the second highest age group ranging from 30–45 years old. Individuals ages 60 and older have significantly lower rates of bulimia nervosa and binge eating disorders (Hudson et al., 2007). Therefore, at-risk populations are more likely to consist of females whose ages range from late adolescence to middle age, with several studies identifying the earlier half of this age range as the higher risk group (Garner, 2004; Gravener et al., 2008; Keel et al., 2007).

Race and ethnicity are other factors that may be examined when identifying at-risk populations. According to the *DSM-5*, anorexia nervosa and bulimia nervosa are seen primarily in Caucasian Americans while binge eating disorder is prevalent across cultures (American Psychiatric Association, 2013). Baugh, Mullis, Mullis, Hicks, and Peterson (2010) observed that although Caucasian women had significantly higher occurrences of body dissatisfaction than did African-American women, African-American women did exhibit some levels of body dissatisfaction.

Other minority populations are at risk for eating disorders as well. In a study conducted at a university in China, it was found that Chinese undergraduate female students were also subject to suffer from disordered eating behaviors such as body dissatisfaction and restrained eating (Fanchang et al., 2013). Many international students attend colleges within the United States; therefore, counselors looking to inform the public and aid in prevention of disordered eating should be aware and direct their efforts beyond just European American and African American students.

## **Eating Disorders**

Individuals with eating disorders often exhibit abnormal eating related behaviors as well as distortions in how they view their body shape and weight (National Institute of Mental Health, n.d.). Eating disorders are seen in both males and females, yet they are more likely to occur with females (Garner, 2004; National Institute of Mental Health, n.d.). According to the National Alliance on Mental Illness (2013), eating disorders are potentially deadly mental illnesses that often go undiagnosed.

### **Anorexia Nervosa**

Anorexia nervosa is a very dangerous eating disorder with a particularly high mortality rate (American Psychiatric Association, 2013; Birmingham et al., 2005; Signorini et al., 2007); the average age of onset is 19 years old (Hudson et al., 2007). One of the most common anorexia-related deaths is suicide, while another common cause of death is medical complications that develop as a result of the eating disorder itself (American Psychiatric Association, 2013).

Anorexia nervosa is characterized by a below normal body weight, an extreme fear of gaining weight, distortions in the individual's body appearance as related to shape

and weight, and excessive efforts to control or lose weight (American Psychiatric Association, 2013). This disorder has two subtypes, one of which is the restricting subtype in which the individual reaches a lower weight through methods such as restrictive eating and excessive exercise. The second subtype is the binge-eating/purging type in which the individual participates in episodes of overeating or purging (American Psychiatric Association, 2013).

### **Bulimia Nervosa**

Bulimia nervosa is an eating disorder with an average age of onset at 20 years and is less commonly seen among individuals 60 years and older (Hudson et al., 2007). This disorder has been found to cause severe digestive, muscle, and heart problems such as acid reflux disorder or an imbalance of electrolytes which contributes to the chance of suffering a heart attack (American Psychiatric Association, 2013; National Institute of Mental Health, n.d.). Furthermore, individuals who diet to lose weight and/or who are under a lot of stress are at risk of developing this disorder. Not unlike anorexia nervosa, bulimia nervosa also increases the chances of suicide risk including suicidal ideation and behaviors (American Psychiatric Association, 2013).

Individuals with bulimia nervosa experience periods of seemingly uncontrollable excessive food consumption usually consumed in secret (American Psychiatric Association, 2013; National Institute of Mental Health, n.d.). Following the binges, individuals compensate for the excessive food intake by self-induced vomiting, excessive exercise, etc. (American Psychiatric Association, 2013). These compensatory behaviors occur because individuals suffering from bulimia nervosa are often unhappy with their weight and shape and, unlike individuals with anorexia nervosa, those with bulimia nervosa tend to retain a normal or slightly heavy weight overall (American Psychiatric Association, 2013).

### **Binge Eating Disorder**

Binge eating disorder has an average age of onset at 20 years of age (Hudson et al., 2007) and is most prevalent in individuals pursuing treatment for weight loss (American Psychiatric Association, 2013). Compared to bulimia nervosa and anorexia nervosa, binge eating disorder has the highest rates of remission (American Psychiatric Association, 2013). Individuals with binge eating disorder are typically overweight or obese, the latter which increases the risk of hypertension and heart disease (National Institute of Mental Health, n.d.)

Similar to bulimia nervosa, binge eating disorder is also characterized by seemingly uncontrollable bouts of consuming abnormally large amounts of food (American Psychiatric Association, 2013). However, these episodes are not followed by excessive and unhealthy attempts at weight loss or weight control (National Institute of Mental Health, n.d.). According to the *DSM-5*, these binge episodes must meet at least three criteria which include eating faster than normal, eating past the feeling of fullness, eating a lot when not hungry, eating alone, and feelings of disgust, depression, or guilt after the binge episode. Those with bulimia are highly distressed about their bingeing episodes (American Psychiatric Association, 2013).

## **Disordered Eating**

There are three measures that characterize disordered eating as identified by the Eating Disorder Inventory-3 Referral Form (EDI-3 RF; Garner, 2004). One measure is being dissatisfied with one's body (Garner, 2004) which is a psychological component of disordered eating (Alexander, 1998). Another measure identified by Garner (2004) is drive for thinness. This measure is a behavioral component of disordered eating (Alexander, 1998). The third measure is bulimia (Garner, 2004) which, like drive for thinness, is also a behavioral component of disordered eating (Alexander, 1998). These three measures are all used on the EDI-3 RF which is used to identify individuals who are at risk for eating disorders (Garner, 2004).

### **Body Dissatisfaction**

There are several disordered eating behaviors seen among traditional-aged college females. One measure of disordered eating is body dissatisfaction (Alexander, 1998). Body dissatisfaction may be a major risk factor for eating disorder behaviors (Garner, 2004). For example, a study found that when females are less satisfied with their bodies they are more likely to become chronic dieters and control their intake of food (Gingras, Fitzpatrick, & McCargar, 2004; Özgenç & Kışaç, 2009). Body dissatisfaction can originate from several different areas. One of these areas consists of being aware of, and internalizing, the Western thin ideal (Gilbert, Crump, Madhere, & Schutz, 2009).

According to Garner (2004), one of the predisposing factors of eating disorders is living in Western society. The Western thin ideal incorporates the standards that Western society holds concerning appearance, specifically beauty or attractiveness (Gilbert et al., 2009). This ideal tells women that in order to meet these standards they must be thin (Harper & Tiggemann, 2008). Basically, these standards which society places on females cause females to become less satisfied with their own bodies (Gilbert et al., 2009). When they are less satisfied with their bodies, they are predisposed to develop disordered eating behaviors.

The messages that "thin is in" are found everywhere in Western societies (Klaczynski, Goold, & Mudry, 2004). Females receive these messages in many different ways, some of which include parent or peer comments and expectations as well messages from media such as magazines, commercials, and underwear ads (Harper & Tiggemann, 2008; Klaczynski et al., 2004; Lin & Kulik, 2002). The ideals regarding thinness are made to seem like attainable goals which every female in Western culture should be able to meet; not being able to meet these ideals can predispose females to feel dissatisfied with their bodies and to feel as if they have failed to meet cultural appearance standards (Warren, Gleaves, Cepeda-Benito, del Carmen Fernandez, & Rodriguez-Ruiz, 2005).

Another area which is correlated with body dissatisfaction is physical self-concept. Cook-Cottone and Phelps (2003) found that how an individual feels about their physical skills, height, weight, and well-being along with other physical qualities define that individual's physical self-concept. These researchers observed that having a good physical self-concept raises the chances of being satisfied with one's body.

In addition to physical self-concept, body dissatisfaction is also, to a lesser degree, affected by social self-concept (Cook-Cottone & Phelps, 2003). An individual's

social self-concept includes the feelings that individual has in regards to their social self (Cook-Cottone & Phelps, 2003). This concept is developed through past experiences of social interactions, whether or not they were good or bad, and what type of reinforcements the individual received (Bracken, 1992). How someone feels about their social self can play a role in body dissatisfaction, which makes social situations an important factor when looking at disordered eating tendencies. For example, the more capable and competent individuals feel in social situations, the less likely they are to be dissatisfied with their bodies (Cook-Cottone & Phelps, 2003). Another reason social situations are relevant is because females experience body dissatisfaction when they compare themselves to peers who are thinner (Lin & Kulik, 2002).

### **Drive for Thinness**

Another measure of disordered eating is drive for thinness. A drive for thinness is characterized by strong desires to be thinner, concerns about dieting, and extreme preoccupation with weight loss (Garner, 2004). Drive for thinness is positively correlated with body dissatisfaction (Cook-Cottone & Phelps, 2003). Therefore, the more dissatisfied a young adult female is with her body, the more likely she is to try and be thin. This is dangerous because drive for thinness is one of several disordered eating behaviors (Alexander, 1998). Much like body dissatisfaction, drive for thinness is affected by internalization of the Western society's thin ideal (Gilbert et al., 2009). When women are exposed to this Western cultural ideal of thinness, they may be inclined to engage in behaviors which affect their physical size, such as restrictive eating behaviors or dieting (Pokrajac-Bulian, Ambrosi-Randić, & Kukic, 2008).

In a study by Pokrajac-Bulian et al., (2008), females who experienced higher levels of social influence such as exposure to media information regarding appearance norms and criticism from parents or peers were more likely to internalize the thin ideal which, in turn, increased their desire to be thin. It was also found that social influence directly affected a female's desire to be thin, as exhibited by higher scores on factors such as dieting and fear of getting fat (Pokrajac-Bulian et al., 2008).

Two other factors have been found to have an impact on the young adult female's drive for thinness: peer dieting and marriage/motherhood. Gravener et al. (2008) found the level of peer perceived dieting impacts a female's drive for thinness, while Keel et al. (2007) observed that females who were married and/or had children had significantly lower bulimia and drive for thinness scores.

Both Gravener et al. (2008) and Keel et al. (2007) observed that drive for thinness is highest among young adult females whose ages range from the late teens to early twenties. According to the U.S. Department of Education, National Center for Education Statistics (2012), 76% of undergraduate college females fall in this age range.

### **Bulimia**

The third measure of disordered eating is bulimia (Alexander, 1998). Like body dissatisfaction and drive for thinness, bulimia is correlated with several different areas. For example, Muehlenkamp and Saris-Baglama (2002) found a direct relationship between self-objectification and bulimic symptoms. Therefore, females who objectify themselves may be predisposed to suffer from bulimic symptoms. A study by Tylka and Sabik (2010) observed that females who were sexually objectified or who perceived that

they were being sexually objectified by others were at increased risk of developing disordered eating symptoms such as vomiting after meals. According to Bartky (1990), sexual objectification occurs when a woman's body or body parts are seen as separate from her as if they were objects used to represent her.

In addition to binge eating, bulimia also includes weight control behaviors such as misusing laxatives, exercising too much, and self-induced vomiting (American Psychiatric Association, 2013). Keel et al. (2007) found that symptoms of bulimia decrease as women age on account of new life roles such as motherhood or marriage. According to the *DSM-5*, these symptoms peak in older adolescents and young adults and then seem to dissipate over the long-term (American Psychiatric Association, 2013). Abebe, Lien, and von Soest (2012) observed that females who were less satisfied with their weight as well as with certain areas of their bodies, such as their lower, mid, and upper torso, exhibited significantly more bulimic symptoms. It was also found that these symptoms began to diminish at 16 years of age (Abebe et al., 2012).

Additionally, much like body dissatisfaction and drive for thinness, bulimia is affected by internalization of the thin ideal (Gilbert et al., 2009). When the females in a study by Gilbert et al. (2009) acknowledged and accepted the Western cultures' standards of beauty, they were more likely to think about and take part in binge eating behaviors. One of the criteria for bulimia states that an individual's evaluation of themselves is heavily influenced by the shape and weight of their body (American Psychiatric Association, 2013). This self-evaluation along with the constant barrage of "thin" media can greatly affect the way an individual feels about their body and in turn affects their self-esteem (American Psychiatric Association, 2013; Gilbert et al., 2009).

### **Sorority and Non-Sorority Females**

Sorority females are part of exclusive college university Greek letter societies which include members of their choosing. Sororities consist only of females and their members share a strong bond of sisterhood which usually supports some type of philanthropy (Sutton, 2012). Young adult females are part of an age group which are most at risk for developing disordered eating behaviors (Gravener et al., 2008; Keel et al., 2007; Webster & Tiggemann, 2003). Therefore, both sorority and non-sorority females are at risk for disordered eating behaviors because they fall within this age range. However, one factor that narrows the at-risk population further is the influence of same-sex peers on thinness, which negatively affects body satisfaction in females who have the tendency to compare their physical appearance with other females (Shomaker & Furman, 2007). McKee et al. (2013) found that after comparing their physical appearances, females whose friend groups are more homogenous experience more envy than those whose sets of friends are more heterogeneous. Essentially, females who are pressured by and compare themselves to similar peers tend to experience negative behaviors and emotions.

Sorority members are a unique subset of the population of undergraduate females (Sutton, 2012). Studies have shown sorority female norms to consist of being more conscious of their bodies and physical appearance (Allison & Park, 2004; Rolnik, Engeln-Maddox, & Miller, 2010; Schulken & Pinciario, 1997). For example, a study by Rolnik et al. (2010) found that college females who went through rush scored higher on

measures of self-objectification, which has been found to have a direct relationship with disordered eating behaviors (Muehlenkamp & Saris-Baglama, 2002). Rolnik et al. also found BMI to be negatively associated with satisfaction of participant's rush experience.

Several studies have shown sorority females to be at higher risk for disordered eating behaviors than non-sorority females (Allison & Park, 2004; Rolnik et al., 2010; Schulken & Pinciario, 1997). They have a higher drive for thinness than their non-sorority counterparts (Allison & Park, 2004; Schulken & Pinciario, 1997). In the study by Allison and Park (2004), it was observed that, over time, sorority females gained a few pounds as opposed to their non-sorority counterparts. This interesting finding may or may not contribute to the fact that their scores in drive for thinness were higher than the non-sorority college females.

Peer pressure is another reason sorority females often experience this need to be thin. As opposed to non-sorority females, sorority females experienced a significantly higher amount of social pressure related to eating, social interaction, and appearance (Basow, Foran, & Bookwala, 2007) and same sex peers have the greatest effect when it comes to influencing their peers (Shomaker & Furman, 2007). Consequently, sorority females who are frequently surrounded by their sorority sisters are apt to experience social pressure to conform to certain appearance norms. Females with a higher BMI may not fit these appearance norms and this can negatively affect their self-esteem (Pilafova, Angelone, & Bledsoe, 2007).

### **Identification and Intervention**

It is important for colleges to design methods in which they can identify students for disordered eating, whether of a clinical or sub-clinical nature. Aside from potentially being able to identify these individuals based on their physical appearance (e.g., unhealthy body weight, etc.), it can be challenging to recognize someone who is suffering from symptoms of disordered eating. One method of identification is a screening process. In a study by Eisenberg, Nicklett, Roeder, and Kirz (2011), the online screening of a random sample of students from a large university showed that 13.5% of the females sampled suffered from symptoms of eating disorders. Therefore, a college or university might find it beneficial to screen new students during a freshman orientation class through completion of a short eating disorder symptom survey. Eisenberg et al. also found that issues such as, depression, anxiety, binge drinking, and self-injury were associated with symptoms of eating disorders. Therefore, college counseling centers should be encouraged to screen for eating disorders when clients present with these other, possibly related issues.

The National Eating Disorders Association conducted a study involving 165 U.S. colleges and universities (National Eating Disorders Association, 2013). The purpose of the study was to identify current eating-disordered programs and services offered to students and to look at how well these programs and services meet the identified needs of their campus populations (National Eating Disorders Association, 2013). Some of the eating-disordered programs and services identified by college counseling and wellness staff included residential assistant and peer support trainings, academic courses, awareness programs within the Greek letter societies, screening and referrals within the

athletic department, and annual or bi-annual awareness programs focused on education and prevention (National Eating Disorders Association, 2013).

In addition to raising awareness at the university-wide level, it is also important to understand how to intervene with students who are considered at-risk. Yager and O'Dea (2008) conducted a review of several intervention studies related to eating disorders and identified three effective intervention types: (1) media literacy and dissonance-based programs focusing on educational approaches that teach students to be more critical in their assessment of thin-ideal messages and reducing the thin-ideal internalization; (2) the incorporation self-esteem building through health education activities; and (3) computer-based programs which offer online support groups, allow for anonymity, and cater to a generation of frequent Internet users.

### **Summary**

Body dissatisfaction is positively correlated to disordered eating among college females (Fanchang et al., 2013). The females most at risk to experience negative feelings in correlation with physical appearance are those with more homogenous groups of friends (McKee et al., 2013; Shomaker & Furman 2007), such as those in sororities, because peer influence impacts how females perceive their bodies (Shomaker & Furman, 2007). Although many college females have clinically diagnosable eating disorders, others are found to suffer only sub-clinically (Meyer, 2005). Those suffering sub-clinically may be harder to identify but still need the professional help and support of counselors.

In order for counselors to be effective in their work with clients diagnosed or suffering sub-clinically with eating disorders, they must understand the signs and symptoms of these disorders. They must also understand who is at risk and why. As with most all disorders and medical issues, prevention, when possible, and early intervention are key to the long-term success and well-being of the client.

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