

NURTURING HEALTHY EATING
AND POSITIVE BODY CULTURE AT SCHOOL

A Project

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by

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Graduate and Professional Studies in Education

Abstract
of
NURTURING HEALTHY EATING
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by
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Eric J. Vernon-Cole

This review is based on a body of literature surrounding eating disorders, students' relationship with food and the wider impact of food culture on development and academic performance of students within the United States. It illuminates the trend of child and adolescent populations toward disordered eating, trouble with dieting and details how individual's natural hunger and satiety cues diminish. It brings awareness to current rates of eating disorders including Anorexia, Bulimia, Binge Eating Disorder and Eating Disorder Not Otherwise Specified, and discusses western society's view of beauty, the need for media literacy and a more positive body psychology.

This literature review is the basis for development of a professional training module that helps educators conceptualize and implement healthy eating and body image culture programming within their school. A case is made for educators as disseminators of information through their role as leaders and sources of knowledge for children. The multi-dimensional influence internal and external realities have on student health is illustrated via Catherine Cook-Cottone's (2006) Attunement Model and is succeeded by

introduction to 3 axioms of student health and wellness: intuitive eating and nutrition, healthy physical activity and mindfulness and self-care. The axioms also provide educators guidelines on prevention, assessment, identification, and intervention of disordered eating and components of a quality program.

_____, Committee Chair
Catherine Christo, PhD

Date

DEDICATION

Audrey K. Larkin dedicates this thesis project to her father, Craig Larkin, the smartest man she has ever known. “You have given me the unwavering love, support, and guidance I have needed to follow my dreams. This one's for you, Dad.”

Eric J. Vernon-Cole dedicates this thesis project to the community of men who battle messages of inadequacy, struggling to accept the body they were given. “A shift in perspective is on the horizon.”

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SOFTWARE SPECIFICATIONS

The project appendices contain note pages within the presentation slides. There is also a compact disc included with this project that contains the project slides in Microsoft® PowerPoint format. The notes are provided as a guide, for use during a workshop presentation.

Chapter 1

INTRODUCTION

A student's relationship with his or her body and with the food that he or she eats is a significant component of personal wellness and impacts not only physical health, but also has far-reaching effects on students' self-esteem, academics, and sense of self. It is in this realm of food and image, however, that conflicting or erroneous societal messages within policy, entertainment, home and school make it difficult for our students to navigate their personal development in a healthy way. Such topics have begun to gain attention, especially in schools, as changes in federal policy and a growing awareness of the inter-related roles nutrition, well-being and academics have on student success.

The Need for Healthy Eating and Positive Body Culture in Schools

School is an undeniable force in the regulation and promotion of messages that ultimately shape student choice. Regretfully, there is a trend in America reflected by our students and our schools, and supported by legitimate statistics indicating eating disorders and obesity are becoming an increasing concern. The Center for Disease Control and Prevention (CDC) states that health factors have direct and indirect effects on educational outcomes, including standardized test scores. Such factors include having healthy food options and opportunities for physical activity. The CDC also found associations between physical activity and academic performance, representing measures of academic achievement, academic behavior, and cognitive skills and attitudes

To address this concern, the authors have detailed a conceptual approach to defining and creating a culture supportive of healthy eating and body image. Research

suggests that schools are ideal settings for the dissemination of knowledge to children. Therefore, this workshop was created to inform educators about the current issues and suggested methodology for creating positive change in their schools.

Description of Project

The structure of this workshop is as follows. The project is a half-day, 3-hour Power Point training workshop for educators with additional content to extend the training into a 6-hour, full-day workshop. The workshop is designed to be given in two sessions with a combination of direct instruction, small and large group discussions, as well as interactive activities. Each presentation slide includes a notes section with sample presentation language that can be used by a presenter as well as occasional directions to aid the presenter with facilitation, if needed.

The information and content of this presentation utilizes terminology that can be easily understood by individuals in a variety of positions in education such as general and special education teachers, counselors, principals, educational aides, cafeteria and playground staff as well as the wide array of other support staff employed. The first session of this training workshop introduces attendees to current trends and considerations in the realm of eating, health, and body image in children. This session will also introduce concepts such as intuitive eating, mindfulness, and self-care. The second session will provide attendees in-depth information on how they can use the aforementioned topics to help students. Activities will be lead to further develop educators' understanding of concepts and application to the school setting.

Definition of Terms

Eating Disorder (ED): A disorder characterized by a persistent disturbance of eating or eating-related behavior that results in the altered consumption or absorption of food and that significantly impairs physical health or psychosocial function (American Psychiatric Association [APA], 2013).

Anorexia Nervosa: A disorder characterized by distorted body image and excessive dieting that leads to severe weight loss with a pathological fear of becoming fat (APA, 2013).

Bulimia Nervosa: Bulimia nervosa is defined by frequent episodes of binge eating followed by inappropriate behaviors such as self-induced vomiting to avoid weight gain (APA, 2013).

Binge Eating Disorder: Defined by recurring episodes of eating significantly more food in a short period of time than most people would eat under similar circumstances, with episodes marked by feelings of lack of control (APA, 2013).

Eating Disorder Not Otherwise Specified: This category applies to presentations in which symptoms characteristic of a feeding and eating disorder that cause clinically significant distress or impairment in social, occupational, or other areas of functioning predominate but do not meet the full criteria for any of the disorders in the feeding and eating disorders diagnostic class (APA, 2013).

Obesity: A weight and height ratio that has been associated with substantial health risk (Flegal, Carroll, Ogden & Curtin, 2010).

Mindfulness: Cultivation of awareness of the present moment and acceptance of our experiences, both internal and external, interpersonal and environmental events (Burke, 2010; Schonert-Reichl & Lawlor, 2010; Siegel, 2010).

Mindful Awareness: The state of being present and attentive (to body sensations, perceptions, cognitions, and /or emotions) and free from reaction judgment, or attachment in one's moment-to-moment experiences (Dorjee, 2010; Grabovac, Lau & Willet, 2011; Kemp, Bui & Grier, 2011; Shapiro & Carlson, 2009).

Emotional Regulation: Involves awareness, identification monitoring, and negotiation of emotional experience (Macklem, 2008).

Self-care Practices: Include nutrition, hydration, exercise, self-soothing, and rest (Linehan, 1993).

Body Mass Index (BMI): Body Mass Index (BMI) is a number calculated from a person's weight and height. BMI is a fairly reliable indicator of body fatness for most people (Centers for Disease Control and Prevention [CDC], n.d.).

Attunement Representational Model: Theoretical model illustrating the individual and ecological variables that can lead to disordered eating (Cook-Cottone, 2006).

Internal Self: A component of the Attuned Representational Model that negotiates what happens inside a person and what is going on outside of a person (Cook-Cottone, 2006)

External Self: A component of the Attuned Representational Model that negotiates family, friends, school, community, and culture (Cook-Cottone, 2006).

Limitations

This project is designed to equip educators and school staff with knowledge on issues and practices regarding the healthy eating and positive body image of students. The dissemination of this knowledge is intended to be useful in implementing positive school-wide practices which will promote greater physical and mental health in childhood and throughout the lifespan. The authors were not able to review all current curricula on the topic, and this project should not be viewed as the sole source of information on promoting healthy eating and body image. This project is intended to guide educators on how to implement policies, procedures and practices appropriate for their individual school.

Statement of Collaboration

This project was developed collaboratively by Audrey K. Larkin and Eric J. Vernon-Cole, both graduate students in the California State University, Sacramento School Psychology Program. Each co-author had equal responsibility in the research, collection, and data gathering. The subsequent titles and subtitles were divided equally between the two individuals in order to create a comprehensive project. All tasks performed in the development of the project and training workshop were shared equally.

Chapter 2

REVIEW OF RELATED LITERATURE

Introduction to the Problem

In the United States, 20 million women and 10 million men suffer from a clinically significant eating disorder at some time in their lives, including anorexia nervosa, bulimia nervosa, binge eating disorder, or an eating disorder not otherwise specified (Wade, Keski-Rahkonen, & Hudson, 2011). These are serious conditions that can have lasting negative effects on one's life. Consider the findings of a review of nearly fifty years of research that confirms anorexia nervosa as having the highest mortality rate of any psychiatric disorder (Arcelus, Mitchell, Wales, & Nielsen, 2011). Further, a study published in the *American Journal of Psychiatry* in 2009 suggests mortality rates of 4% for anorexia nervosa 3.9% for bulimia nervosa and 5.2% for eating disorder not otherwise specified (Crow et. al, 2009). Regarding the implications for educators and schools, rates suggest that 23.9% of students may struggle at some point with a clinical-level disorder associated with eating (Cook-Cottone, Tribole, & Tylka, 2013).

Comorbid consequences of eating disorders include physical and emotional health issues, problems with self-esteem, low sense of competence and control, and potential life-threatening consequences. In the following text, the authors have included a brief description of the 4 central "Feeding and Eating Disorders," as recognized by the American Psychological Association in the *Diagnostic and Statistical Manual of Mental Disorders -5th ed.* (DSM-5) (APA, 2013). These disorders are Anorexia Nervosa,

Bulimia Nervosa and Binge Eating Disorder, as well as the more recent classification of Eating Disorder Not Otherwise Specified. For a detailed description of the diagnostic criteria for these and other disorders of eating, it is recommended to reference the DSM-5.

Eating Disorders

Anorexia Nervosa

Individuals with Anorexia Nervosa see themselves as overweight, even when they are clearly underweight. Individuals with Anorexia may repeatedly weigh themselves, portion food carefully, and eat very small quantities of only certain foods. In fact, eating, food, and weight control become obsessions. Some people with Anorexia may also engage in binge-eating followed by extreme dieting, excessive exercise, self-induced vomiting, and/or misuse of laxatives, diuretics, or enemas (National Institute of Mental Health (NIMH), n.d.). This disorder reportedly affects less than 1% of the population and has a greater prevalence rate among females than males. Of the highest risk are females ages 15-19. Recovery rates of those experiencing Anorexia include 59% at five years, 12% at 10 years, and 30% at 12 years (Cook-Cottone et al., 2013).

Bulimia Nervosa

Those with Bulimia Nervosa have recurrent and frequent episodes of eating unusually large amounts of food and feeling a lack of control over these episodes. This binge-eating is followed by behavior that compensates for the overeating such as forced vomiting, excessive use of laxatives or diuretics, fasting, excessive exercise, or a combination of these behaviors (NIMH, n.d.). Bulimia is reported to affect about 1% of

the population of females. Although the prognosis for Bulimia is generally better than for sufferers of Anorexia, those with Bulimia may struggle for many years. One study found that 15% of participants still met the criteria for Bulimia 5 years later (Cook-Cottone et al., 2013).

Binge Eating Disorder

With Binge-Eating Disorder a person loses control over his or her eating. Unlike bulimia nervosa, periods of binge-eating are not followed by purging, excessive exercise, or fasting. As a result, people with Binge Eating Disorder often are overweight or obese. People with Binge Eating Disorder who are obese are at higher risk for developing cardiovascular disease and high blood pressure. They also experience guilt, shame, and distress about their binge-eating, which can lead to more binge-eating (NIMH, n.d.). Studies have found that Binge Eating Disorder prevalence rates vary, but are most likely between 1 and 4.5% of the population. In contrast to Anorexia and Bulimia, Binge Eating Disorder has been reported to improve over time with up to 78% of sufferers having no ED diagnosis after 6 years. However, one study noted that at a 5-year follow-up, those with Binge Eating Disorder were less likely than those with Bulimia to have received treatment.

Other Specified Feeding or Eating Disorder

The diagnosis of Other Specified Feeding or Eating Disorder is given to individuals who show symptoms of eating disordered behavior but do not meet the criteria for Anorexia or Bulimia. Although this “catch-all” diagnosis has less-restrictive

diagnostic criteria it can pose a serious threat to individuals and has a comparable mortality rate to other ED's (Cook-Cottone et al., 2013).

Each of the eating disorders is significantly comorbid with many other DSM-5 disorders (Hudson, Hiripi, Pope, & Kessler, 2007). Some of the most commonly comorbid disorders are anxiety, depression, impulse-control problems, and substance use. Prognosis for eating disorders varies and can be difficult to determine, as patients with eating disorders often conceal or deny they have a problem until it is severe and avoid professional help (Smith, Shelley, Leahigh & Vanleit, 2006). Timely and appropriate response improves the likelihood of positive treatment outcomes.

Obesity

Obesity is not an official DSM-5 diagnosis. This term reflects a weight and height ratio that has been associated with substantial health risk, arising from a chronic disruption of the energy balance (energy intake vs. expenditure) (Cook-Cottone et al., 2013).

There is an increasingly worrisome and costly trend in America regarding rising obesity rates, specifically in children. According to the Center for Disease Control and Prevention (CDC), childhood obesity has more than doubled in children and quadrupled in adolescents in the past 30 years (National Center for Health Statistics, 2012; Ogden, Carroll, Kit & Flegal, 2014). Between 1988-1994 and 2009-2010 the prevalence of obesity among preschool-age children 2-5 years of age increased from 7% to 12%. Between years 2009 and 2010 almost one in five children older than 5 years age was obese. In 2012 alone, more than one third of children and adolescents were overweight

or obese (Ogden, et al., 2014). Among school-aged children and adolescents, there was an increase from 11% to 18% during the same years (CDC, 2010). Another study suggests the rate of obesity among school-age children has become a national concern, with the number of overweight children aged 6 to 11 more than tripling over the past three decades (U.S. Government Accountability Office, 2005). These numbers are concerning when understanding that excess body weight in children is associated with excess morbidity in childhood and adulthood (Dietz, 1998).

Obesity is commonly assessed by calculating an individual's Body Mass Index (BMI), of which there are numerous methods of calculation, and the results are then interpreted by various criteria such as the Center for Disease Control's Body Mass Index Categories (Cook-Cottone et al., 2013).

Though it has been used for years in the schools, there is a social concern with assessing BMI on campus. The problem lies not in the calculation, but the way in which it is performed in the school, which can increase chances of weight-related teasing. In their text, Cook-Cottone, Tribble, and Tylka (2013) strongly advocate against calculating children's BMI in schools as they are rarely private events (e.g., BMI calculation during gym class) and can lead to social stressors such as weight stigma, weight-related teasing, and bullying.

The numbers for all disorders mentioned are troubling. Why is this happening? Regarding obesity, Ogden, Lamb, Carroll and Flegal (2010) found the multiple factors contributing to obesity were diet, physical inactivity, genetic factors, environment, and health conditions. Sedentary behavior, such as watching television and playing video

games, has been cited as contributing to rising obesity rates among children (CDC, 2011). As for eating disorders, eating becomes *disordered* when the primary motivation for and/or function of eating and eating-related behavior is consistently and frequently something other than nourishing the body (Cook-Cottone et al., 2013).

It can be concluded with certainty that our students (and western society as a whole) need to experience a revolutionary and lasting change in the relationship with our bodies and food.

Conceptual Approach

A new way of engaging with food and our bodies to promote a healthy eating and positive body culture at school can be addressed through the understanding and adherence to three main theoretical beliefs. These beliefs are a variation adapted from the 3 Pillar conceptual model defined in Cook-Cottone, Tribole, and Tylka's (2013) book *Healthy Eating in Schools*. These teachings consist of (a) Intuitive Eating and Nutrition (b) Healthy Physical Activity and (c) Mindfulness, Emotion-Regulation, and Self-Care.

Intuitive Eating and Nutrition

Dieting behaviors are causally linked to obesity and eating disorders (Haines, Neumark-Sztainer, & Thiel, 2007), suggesting that it is counter-productive to emphasize dieting when teaching about health habits. Research demonstrates that infants and very young children have the ability to naturally regulate their food intake by using innate hunger satiety cues (Birch, Johnson, Andersen, Peters, & Schulte, 1991). For example, infants turn away from bottles when no longer hungry. Toddlers have been shown to eat sporadically but naturally regulate their food intake by eating more at certain times and

less at others, but still consuming the same amount of calories each day (Birch, et al., 1991). Replacement of the innate ability to regulate food intake with external rules is associated with weight gain, and eating in the absence of hunger and in response to emotional and situational variables (Birch & Fisher, 2000; Birch, Fisher, & Davison, 2003). A person's ability to be in tune with one's own body signals such as hunger and satiety is thought to be innate, but is often stifled by societal messages that a restrictive diet is needed in order to be healthy or lose weight (Rogers, 1964; Tribole & Resch, 1995).

The shift away from the innate ability to regulate one's own food intake appears to start around the age of 5, when children start to eat for external reasons such as the presence of food, the smell of enjoyable foods, and emotional distress (Rolls, Engell, & Birch, 2000). In response, many caregivers start restricting access to certain high calorie foods. This restriction of foods leads to children's preoccupation with them, even if the foods were not highly sought after before the restriction (Fisher & Birch, 1999). Children may eat these foods in secret even when not physically hungry, leading to weight gain (Fisher & Birch, 2002) Restricting access to calorie dense foods cause children to stop relying on their internal hunger mechanisms and rely on external cues, such as the amount of food on their plate (Fisher & Birch, 2002). Children's reliance on internal hunger mechanisms may help children resist eating when not physically hungry and eat an appropriate amount of food to maintain their weight (Satter, 2005). Many parents also attempt to force nutrient dense foods, and in turn, children end up disliking the foods they are forced to eat (Batsell, Brown, Ansfield & Paschall, 2002; Galloway, Fiorito, Francis,

& Birch, 2006). Fortunately, children who are detached from their natural hunger satiety mechanisms can learn how to self-regulate again (Johnson, 2000).

Intuitive eating is the practice of eating in response to physical hunger and satiety cues, with a low preoccupation with food (Tribole & Resch, 1995). There are three essential components of intuitive eating; (a) unconditional permission to eat when hungry, (b) eating for physical rather than emotional reasons, and (c) reliance on internal hunger and satiety cues to determine when and how much to eat (Tylka, 2006). There is empirical support that intuitive eating is a healthful approach to food. Research has shown that those who have rigid restriction on the foods they are allowed to eat are more likely to overindulge when they feel that they have broken their diet (Polivy & Herman, 1999). Conversely, those who give themselves open permission to eat what they would like are less likely to binge eat and over-indulge (Polivy & Herman, 1999). The practice of eating for physiological rather than emotional reasons reflects a more adaptive method of eating which is for a physical function rather than to cope with difficult emotions. Research has shown that individuals who engage in intuitive eating are more likely to stop eating when satiated (Herman & Polivy, 1983). They also eat less when anxious or depressed, due to physiological symptoms of distress, whereas those following a diet eat more and with less inhibition when experiencing anxiety or depression (Herman, Polivy, Lank, & Heatherton, 1987). Further, a study by Tylka and Wilcox (2006) found that two components of intuitive eating (i.e., eating for physical rather than emotional reasons and reliance on internal hunger and satiety cues) contributed toward aspects of well-being.

People who practice intuitive eating tend to make more healthful nutritional choices (Hawks, Madanat, Hawks & Harris, 2005; Tylka, 2006).

Healthy Physical Activity

Physical activity has been shown to have positive impacts on students. Specifically, physical activity has a positive impact on cognitive skills, attitudes, increased concentration and attention, and improved classroom behavior (CDC, 2010). Many factors influence children's level of physical activity.

Increased levels of body dissatisfaction are negatively correlated with physical activity (Haines & Neumark-Sztainer, 2006), suggesting the importance of promoting positive body image for children of all shapes and sizes (Avalos & Tylka, 2006).

Research has shown that obesity bias, which is the negative treatment toward overweight students, is prevalent during physical activity settings. This negative treatment is a barrier for students, resulting in lower levels of physical activity. Weight-related teasing is associated with a myriad of negative psychological symptoms and perpetuates a cycle of inactivity due to internalization of beliefs of overweight students that their bodies have limitations and disenjoyment of physical activity (Rukavina & Li, 2008).

Students are more likely to engage in physical activity they find enjoyable. In addition, the more often students engage in physical activity, the more they are likely to find it enjoyable. Programs designed to increase physical activity in students were only found successful if the students found the activity enjoyable (Schneider & Cooper, 2011).

School environment is a variable that also influences students' physical activity levels. Adequate space and facilities is shown to increase physical activity, but only if

adult supervision is present (Sallis et al., 2001). Schoolyard interventions such as painting the schoolyards, providing game equipment and increasing the quantity of balls can be effective in increasing physical activity of students. Multi-colored paint on school yards has been associated with higher physical activity level (Anthamatten et al., 2011). Safety also plays a role in physical activity. A study found that opening a safe play space in a low-income inner city neighborhood increased the number of children outdoors by 84% (Farley et al., 2007).

Personal factors such as gender and age also impact a student's physical activity. Research has shown that physical activity decreases as children move into their teenage years (Wall, Carlson, Stein, Lee, & Fulton, 2011). More specifically, females' level of activity greatly decreases as they reach puberty (Davison, Cutting, & Birch, 2003). A study that explored barriers to physical activity in teenage girls found support from parents, peers and teachers, and self-perception were all important factors, suggesting that interventions should include increasing social support, addressing time barriers, and helping girls feel better about themselves and in their physical activity skills (Neumark-Sztainer, Hannan, Story, Croll, & Perry, 2003).

Self-Care and Mindfulness

Mindfulness is the practice of cultivating a non-judgemental awareness to the present moment (Dorjee, 2010). Mindful awareness is, "the state of being present and attentive (to body sensations, perceptions, cognitions, and/or emotions) and free from reaction, judgment, or attachment in one's moment-to-moment experiences" (Dorjee, 2010, p. 152). Mindfulness has been found to be effective in stress reduction as well as

pain-management in various physiological conditions (Wanden-Berghe, Sanz-Valero & Wanden-Berghe, 2010). Mindfulness is thought to have four mechanisms of action, (a) self-regulation, (b) values clarification, (c) cognitive, emotional, and behavioral flexibility, and (d) exposure to thoughts and emotion (Shapiro, Carlson, & Astin, 2006). Emerging research has found promising applications of mindfulness practice to eating disorder symptomatology (Wanden-Berghe et al., 2010). Since binge eating and restrictive eating are often done in an effort to regulate negative emotions, self-regulation and exposure to thoughts and emotion may be the most important aspects of mindfulness to consider (Baer, Fischer, & Huss, 2006). Although the quantity of studies is still small, emerging research shows that mindfulness-based programs have yielded a decrease in binge-eating behaviors among participants (Baer, et al., 2006; Kristeller & Hallet, 1999; Smith, Shelley, Leahigh, & Vanleit, 2006), and that mindfulness has promising application for treatment of various types of eating disorders (Wanden-Berghe et al., 2010), suggesting that mindfulness may be a foundational skill in the development of a healthy, adaptive eating lifestyle.

Research has shown that emotional-regulation skills are tied to a child's level of emotional eating. Emotional regulation is the practice of cultivating awareness, identification, monitoring, and negotiating one's own emotional experience (Macklem, 2008). A study found that external and unhealthy eating is positively correlated with low ability to regulate emotions (Harrist, Hubbs-Tait, Topham, Shriver, & Page, 2013). This suggests that prevention and intervention programs for maladaptive eating should include basic emotion-regulation training for children. Emotional-regulation training should

consist of self-care practices such as nutrition, hydration, exercise, and self-soothing, all positively correlated to physiological stability and, in turn, emotional stability (Linehan, 1993).

Body appreciation is key when considering motivations to take care of one's body. Positive psychology, which focuses on using and fostering strengths of individuals, can be used as a foundation when understanding how to improve one's relationship with his or her body. Positive psychology emphasizes appreciating one's own body, seeing beauty within oneself, and a shift away from attention to negative qualities towards positive qualities. Research has shown that there is a positive correlation between healthy, balanced eating and body appreciation (Avalos & Tylka, 2006). This demonstrates the power of instilling body appreciation over body criticisms in a school culture when considering fostering a healthy lifestyle. This can be done by developing gratitude toward the functions and strength of the body.

One's attitude towards his or her body is greatly influenced by the surrounding environment. The Western view of how a beautiful body looks is narrow; a thin body for a woman and a muscular body for a man (Tylka, 2011). Body acceptance from others such as peers and educators can help promote positive body image (Avalos & Tylka, 2006). Furthermore, students who accept their bodies also proactively shape their social networks by seeking out friends who also have positive body images (Frisen & Holmqvist, 2010). The potential consequences of this cycle are many, especially when considering the influence that peers have on one another during adolescents.

Media literacy, which has an influence on how individuals view their body, can be taught in the school setting. The skills of how to thoughtfully analyze and critique images, messages, and motives the media uses to persuade and entertain society are correlated with a healthy body image (Frisen & Holmqvist, 2010). Filtering information in a body protective manner involves taking in appearance-related media messages and others' comments, and choosing whether to accept each piece of information (Wood-Barcalow, Tylka & Augustus-Horvath, 2010). Although this method is not foolproof, Wood-Barcalow et al. (2010) found that developing a protective filter with which to take in outside messages successfully allowed some individuals to shift from a negative body image to a positive one.

Psychological Components of Healthy Eating

An individual's relationship with healthy eating is psychologically and physiologically complex. There appears to be multiple dimensions, which have been explained in the literature, using both theoretical and empirical models. The Attunement Model is useful in understanding the factors that impact children and their relationship with eating. The Attuned Representation Model is a model by Cook-Cottone (2006) that integrates factors in eating that addresses cultural, individual and interface issues. In this model, the healthy attunement of the self-system can be used to effectively guide treatment and prevention efforts. The Attuned Representation Model illustrates the intersection of two systems: the Internal System and the External System.

Internal System

The Internal System is the self-system, which is composed of three dimensions that evolve throughout development; the physiological (body) self, emotional (feeling) self, and cognitive (thinking) self (Cook-Cottone, 2006). Within the Internal System the Cognitive domain, in the context of disordered eating, has etiological factors such as self-concept, self-efficacy, perfectionism, and distorted body image (Jacobi, Hayward, de Zwaan, Kraemer, & Agras, 2004). Also in the Internal System, the Emotional domain encompasses etiological factors such as emotional self-regulation, mood disturbance, and difficulty with negative affect. Physiological factors are also a part of the Internal System, with etiological ties to dieting, low interoception (sense of the body's physiological state), and onset of puberty (Jacobi et al., 2004; Littleton & Ollendick, 2003; Wisniewski & Kelly, 2003).

External System

The External System is facilitated by the Representational Self, which is the self that is presented to the external world. This can relate to how individuals interact with other persons in their family and community (Cook-Cottone, 2006). Within the External System, the microsystem, or family, has been linked with disordered eating in areas such as low parental caring, poor parent-child attunement, low familial communication, and physical and sexual abuse (Wonderlich et al., 2001). Research has also found protective factors such as encouragement in self-regulation and problem solving skills (Byely, Archibald, Graber, & Brooks-Gunn, 2000; Wisniewski & Kelly, 2003). Within the External System, research has emphasized family and cultural risks over community level

factors (Cook-Cottone, 2006). Culturally, studies have found linkage with variables such as acculturation and media exposure (Jacobi et al., 2004); Littleton & Ollendick, 2003). Gender differences have been found, in that most cases are female (Austin et al., 2004) but can also be culture-specific, with certain subgroups having increased focus on weight. For example, a study found that there are elevated levels of eating-disordered symptoms in gay-male communities, which may place an importance on appearance and thinness (Austin et al., 2004).

The School Setting

The success of students in school is multi-faceted and evidence has determined that student health is closely associated with education. The Center for Disease and Prevention states that Health factors have direct and indirect effects on educational outcomes, including standardized test scores. Such factors include having healthy food options and opportunities for physical activity. The CDC also found associations between physical activity and academic performance, representing measures of academic achievement, academic behavior, and cognitive skills and attitudes. Basch (2010) states that one of the most powerful social institutions shaping the next generation of youth is the context of school, as 50 million students spend a significant portion of their lives there. Providing more context to this perspective is that children ages 5 – 17 spend about 13 years and much of their waking hours at school, often eating breakfast, lunch and sometimes 2 snacks a day at school. Early prevention allows for the delivery of foundational messages before problems develop. Also, schools typically have a stable attendance of children, making delivery consistent and reliable. Educators have strong

relationships with children over time, and are trained to be effective disseminators for information. This makes educators reliable sources of information and leaders for children. Furthermore, educators have the ability to reinforce these same messages to caregivers due to their ties to the school community. Schools also allow for peer mentoring, due to the older students' contact with younger students (Cook-Cottone, et al., 2013). It makes sense that the prime environment to begin this revolutionary and lasting change in our students' relationships with their bodies and food is school.

Existing Programs

There are several programs that exist for school personnel to prevent negative body image and eating problems from emerging in children. The existing primary prevention programs have overlapping themes and messages which promote characteristics empirically shown to increase healthy behaviors in children.

One primary prevention program is *Media Smart*, developed by Simon Wilksch and Tracey Wade (Wilksch & Wade, 2010; Wilksch & Wade, 2009b). *Media Smart* provides lesson plans, activities, a student workbook, background information on body image, methods for challenging media messages, and ideas for students on how to handle the pressures encountered in adolescence. *Media Smart* has been empirically proven effective for both female and male students in eighth grade (Wilksch & Wade, 2009a).

Another primary prevention program is *Healthy Body Image* (Kater, 2012) curriculum, designed by Kathy Kater. The mission of the program is to help students appreciate their health and their bodies. There are broad themes such as understanding the biology behind eating and body shape/size, recognizing what they have control over,

and media literacy/cultural resiliency. The desired outcomes are body acceptance, body tolerance, eating for health, development of a fun, physically active lifestyle, self-esteem, confidence, and critical thinking abilities. Educators who administer this program are encouraged to read the facilitator guide in order to develop a consistent message, avoiding toxic cultural fallacies and understanding their own prejudices. The curriculum has been proven to increase positive body image, knowledge of unrealistic media images, and understanding the hazards of dieting (Kater, Rohwer, & Londre, 2002). The curriculum has been updated and is now called *Teaching Kids to Care for Their Bodies: A Comprehensive Curriculum for Addressing Concerns with Body Image, Eating, Fitness, and Weight in Today's Challenging Environment*.

A third primary prevention program is *Full of Ourselves*, an upbeat program for girls. This program helps girls identify their self-worth by focusing on strengths beyond how they look. The program also teaches assertiveness skills, how to combat media culture, how to identify and avoid emotional eating, and how to maintain healthy relationships. *Full of Ourselves* has been successfully implemented in schools, summer camps, Girl Scouts meeting, and after-school programs. The program is empirically shown to increase body esteem and knowledge about health and nutrition, weightism, and media literacy (Sjostrom & Steiner-Adair, 2005).

Another primary prevention program is *Everybody's Different*, which teaches about self-esteem, body acceptance, health, and nutrition (O'Dea, 2007). The program is targeted toward both boys and girls, from fifth grade and above. The main message involves celebration of uniqueness and valuing individual differences. The activities are

administered by educators, but scripts and detailed lessons are not provided. Various activity ideas and handouts provide educators the opportunity to lead the program according to individual needs and resources. *Everybody's Different* has been shown to improve body image for both boys and girls (O'Dea & Abraham, 2000).

Conclusions

There is a worrisome trend in America being reflected in our students and our schools as shown through statistics on eating disorders and obesity. To address this concern, the authors have detailed a conceptual approach to defining and creating a culture supportive of healthy eating and body image. This approach employs three main ideas including intuitive eating and nutrition, healthy physical activity and mindfulness and self-care. In addition to these three main ideas is an introduction to the Attuned Representation Model that can be used to understand how students' relationships with food and their bodies can become a concern, as well as a framework to effectively guide treatment and prevention efforts.

Educators have a unique advantage to promoting a healthy eating and positive body culture through their access to and relationship with such a large body of students over time. Equipped with the knowledge to aid in conceptualization and implementation of a healthy eating and positive body culture at their school, educators have the opportunity to make a lasting change in the lives of the students on a very personal and promising level.

The Current Project

This project will investigate the current literature on factors contributing to children's healthy approach toward eating and positive body image. The research will be used to create a training workshop for educators on how to create a school culture that encompasses healthy approaches to eating and body image. The workshop will consist of a PowerPoint presentation and materials that will aid in disseminating information. Activities to practice skills learned will be presented. Educators will gain a better understanding of the importance of healthy eating and positive body culture for their students, as well as gain skills to use at their school site.

Chapter 3

METHODS

Research

Several techniques were utilized in researching this project as well as creating this training workshop. The Academic Search Premier and Education Resource Information Center (ERIC) databases were the two primary search engines for peer reviewed journal articles. Key words that were used for the search include “eating” and “body image.” These keywords were used in conjunction with other terms such as students, children, schools, and education. Furthermore, specific terminology and techniques were searched for within the database such as intuitive eating, mindfulness, and the attuned representation model. The articles found were categorized, outlined and summarized by the authors in order to identify the trends of the current literature.

Workshop Development

This training workshop is intended for staff members at k-12 schools. Research suggests that schools are ideal settings for the dissemination of knowledge to children. Therefore, this workshop was created to inform educators about the current issues and suggested methodology for creating positive change in their schools.

Chapter 4

FINDINGS AND INTERPRETATION

Results

This project was created as a tool for educators on the topic of healthy eating and positive body image of students. The information gathered from the literature review was used to guide the creation of the workshop presentation. The workshop is comprised of both a presentation and activities to aid in the understanding of how to practically apply the skills taught. The presentation provides enough material to administer a full-day workshop if the instructor intends to use all recommended activities. The PowerPoint presentation is meant to be projected and explained by a workshop presenter. The presenter may use the presenter's manual and suggested presentation language as well as recommended resources to educate his or herself on the materials.

The first portion of the workshop provides an overview of the current issues surrounding healthy eating and body image. This section allows for those unfamiliar with the topic to understand the importance of these factors in student's mental and physical health. The second section of the workshop offers a theoretical framework for addressing these issues, along with practical tips and activities that can be done in school. Lastly, as an optional activity, the workshop presenter can lead the attendees in creating their own school policies and procedures related to the information learned in the workshop.

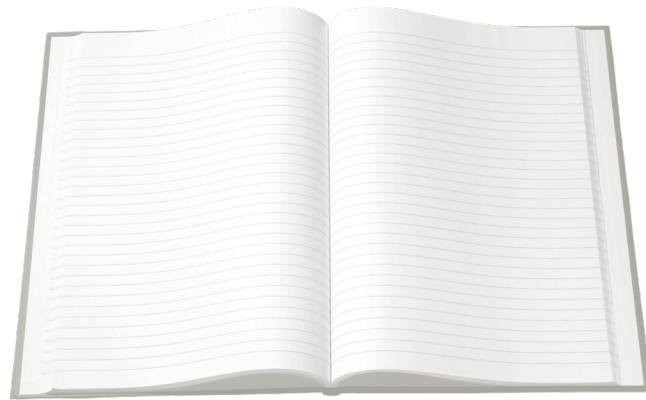
Discussion

It is understandable given the unfamiliarity of the topic of healthy eating and body image that a workshop is needed in order for educators to be aware of the issues at hand. This workshop is recommended for educators who believe their school would benefit from a culture shift that will promote a healthier lifestyle physically and mentally. The format of this workshop allows for any educator from any background to understand how to present it to their school. The principles taught in this workshop are intended to empower students with a healthy mindset that will apply to childhood and throughout the lifespan.

APPENDIX A
Presenter's Manual

Nurturing Healthy Eating and Positive Body Culture at School

Presenters Manual



Authored by

Audrey K. Larkin

Eric J. Vernon-Cole

INTRODUCTION

A student's relationship with his or her body and with the food that he or she eats is a significant component of personal wellness and impacts not only physical health, but also has far-reaching effects on students' self-esteem, academics, and sense of self. It is in this realm of food and image, however, that conflicting or erroneous societal messages within policy, entertainment, home and school make it difficult for our students to navigate their personal development in a healthy way. Such topics have begun to gain attention, especially in schools, as changes in federal policy and a growing awareness of the inter-related roles nutrition, well-being and academics have on student success.

This manual and PowerPoint presentation is designed to provide educators with a guideline and understanding of why it is important to nurture healthy eating and positive body culture in students. It is also intended to provide tips to implement at school.

Guidance to Presenters

The presentation is designed to last at least three and a half hours. The presenter may wish to segment the presentation into three 70 minute sessions, with breaks in between. Some of the presentation is instructional, while other parts require a great deal of interaction and discussion with attendees. It is important to provide ample opportunities for discussion and question. The presenter may wish to educate his or herself on the topic by researching using the recommended resources provided at the end of this manual.

The training workshop presentation is presented as a series of Microsoft PowerPoint slides. Each slide has all general information needed to discuss each slide. The presenter's notes are included and labeled as Sample Presentation Language. This will help to guide the verbal explanations of the information provided on the slides.

Prior to the workshop, the presenter will need to make copies of the PowerPoint slides and handouts for each participant. In addition, the presenter should provide copies of the activity worksheets and handouts as well as necessary materials such as pens and paper.

Should the presenter wish to extend this presentation to be a full day workshop, it is suggested that the remaining 2.5 hours be spent doing collaborative planning. The participants may be asked to brainstorm ideas from the workshop they wish to implement in their own school. Ideally, participants will agree upon several ideas by taking a vote. The group may be assigned an idea and will use the skills learned during the presentation to create a plan of implementation for their school. At the conclusion, each group may present their plan to the large group and allow for further discussions and questions. This exercise will allow the workshop attendees to start the action process at their school to implement meaningful changes. The presenter is expected to use his or her knowledge of the group at hand in order to best facilitate feasible plans for the school.

RECOMMENDED WORKSHOP TIMELINE

Slides	Topic	Duration (in minutes)
#1-3	Workshop Overview	5
#4-23	Problem Definition	20
#24-25	Group Discussion	10
#26-38	Attunement Model	15
#39-42	Implications for Schools	5
#43-55	Axiom A: Intuitive Eating & Nutrition	15
#56-57	Axiom A: Discussion	10
#58-64	Axiom B: Healthy Physical Activity	10
#65-66	Axiom B: Discussion	5
#67-73	Axiom C: Self-Care	15
#74	Axiom C: Activity 1	10
#75	Axiom C: Activity 2	15
#76-78	Axiom C: Self-Care	5
#79-80	Axiom C: Activity 3	10
#81-82	Axiom C: Mindfulness	5
#83-86	Axiom C: Activity 4	20
#87-91	Ensuring Quality Programs	10
#92-93	Group Discussion	10
#94-96	Conclusion and Questions	15

RECOMMENDED RESOURCES FOR PRESENTERS

Cook-Cottone, C. (2006). The attuned representation model for the primary prevention of eating disorders: An overview for school psychologists. *Psychology in the Schools*, 43, 223-230. doi:10.1002/pits.20139

Cook-Cottone, C.P., Tribole, C., & Tylka, T.L. (2013). *Healthy eating in schools: evidence-based interventions to help kids thrive*. Washington DC: American Psychological Association.

National Institute of Mental Health. (n.d.). Eating Disorders. Retrieved from:
<http://www.nimh.nih.gov/health/topics/eating-disorders/index.shtml>.

APPENDIX B
Presentation Slides

Slide 1



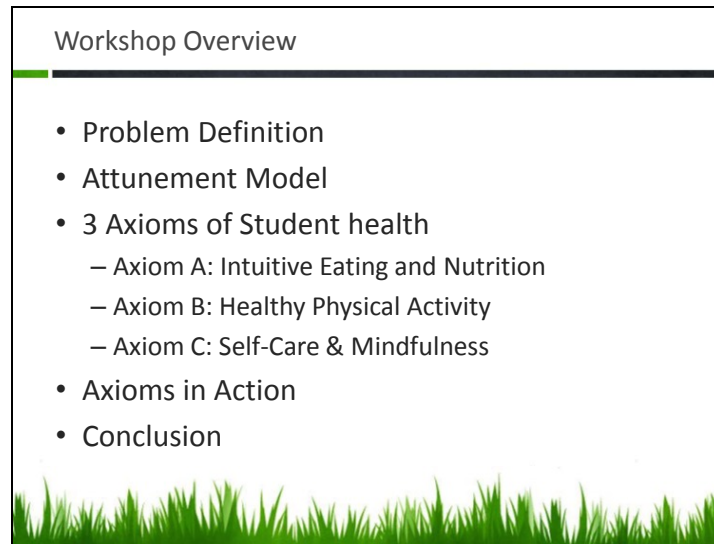
Sample Presentation Language: *The purpose of this presentation is to provide educators and school staff with a professional training module through which they will acquire a sufficient knowledge base to aid in the conceptualization and implementation of a healthy eating and positive body culture at their schools. It will also add to a wider conversation amongst ourselves on how the school can support healthy eating and students' positive relationships with their bodies.*

Following the presentation, you will be able to:

- *Describe the evidence supports the link between healthy eating, physical activity, and improved academic achievement.*
- *Identify key messages and benefits of addressing healthy eating and physical activity in schools to improve academic achievement and motivate stakeholders to take action.*
- *Identify at least three actions that can be implemented by states, school districts, schools, parents, and/or students to support healthy eating and physical activity in schools and improve academic achievement.*
- *Identify at least two resources that can be used to explain the relationship between healthy eating, physical activity, and academic achievement.*

Before we talk about the evidence, we will provide a rationale for health and education working together to ensure that students are healthy and ready to learn.

Slide 2



Workshop Overview

- Problem Definition
- Attunement Model
- 3 Axioms of Student health
 - Axiom A: Intuitive Eating and Nutrition
 - Axiom B: Healthy Physical Activity
 - Axiom C: Self-Care & Mindfulness
- Axioms in Action
- Conclusion

Sample Presentation Language: *We will begin today by defining the problem that this training module is attempting to solve. This will include a discussion on the significance, prevalence, and effects of maladaptive eating behaviors as well as a discussion on dieting, media and implications for the school.*


*Next, an approach to understanding the cause of maladaptive eating behaviors, and defining and creating a positive body culture will be provided through a discussion of three pillars adapted from Catherine Cook-Cottone's text *Healthy Eating in Schools*.*

Within each of these three pillars, information about practical application of these principles to your school will be provided.

Slide 3

Workshop Goals

1. Increase knowledge about current issues surrounding eating and body image.
2. Develop an understanding of the need for a cultural shift that starts at school.
3. Provide tools, resources and ideas to implement at your school.



Sample Presentation Language: *There are three goals for attendees that drive this workshop, they are to (a) increase knowledge about current issues surrounding eating and body image (b) develop an understanding of the need for a cultural shift that starts at school (c) provide tools, resources and ideas to implement at your school.*

Slide 4




Slide 5

Problem Definition: Opening Statement

A student's relationship with his or her body and with the food that he or she eats is a significant component of personal wellness and impacts not only physical health, but also has far-reaching effects on students self-esteem, academics, and sense of self.

It is in this realm of food and image, however, that conflicting or erroneous societal messages within policy, entertainment, home and school make it difficult for our students to navigate their personal development in a healthy way.

Navigating the relationships with our bodies and with food is surely not a difficult task just for young students. As adults, these relationships are still with us, impacting how we see ourselves.




Sample Presentation Language: *In order to understand what we need to fix, we need to have a good understanding of the problem. Please follow along as I read this passage put forth by Larkin & Vernon-Cole that briefly contextualizes our work today.*

Slide 6

Problem Definition: User-friendly Version

“Eating becomes *disordered* when the primary motivation for and/or function of eating and eating-related behavior is consistently and frequently something other than nourishing the body.” (Cook-Cottone, Tribole, & Tylka, 2013)



Sample Presentation Language: *The DSM-5 has definitions and criteria for accurate diagnosis of ED’s by clinicians. For today’s presentation, a more user-friendly definition used by Catherine Cook-Cottone has been used.*

“Eating becomes disordered when the primary motivation for and/or function of eating and eating-related behavior is consistently and frequently something other than nourishing the body” (Cook-Cottone, Tribole, & Tylka, 2013)

Slide 7



Group Discussion

1. What are some of the conflicting or erroneous messages that students may receive growing up?
2. How are these messages often conflicting?

Sample Presentation Language: *To begin to facilitate our thinking regarding the development of our relationship with food, lets discuss the following questions as a group.*

What are some of the messages children may receive growing up regarding food and body image?

Sample answers: Be thin, trim and fit. Eat everything on your plate. Low-nutrition food is not unhealthy, etc.

Where might these messages come from?

Sample answers: Media, family, culture, community, friends, peers, etc.

How are these messages often conflicting?

Sample answers: Commercials for high-calorie, low-nutrition food and standards for thinness. Promotion of relaxation and sedentary lifestyles but maintain trim, fit bodies. Enjoy low-nutrition food, few vegetables and yet stay physically healthy

How could these make it difficult for students to navigate a relationship with food or with body image?

Sample answers: These messages set children up for failure, can begin to find unhealthy ways to manage weight, learn to dislike the true, natural form of their body, children may feel that fitness comes without effort.


Directions: Complete activity. Possible answers to help guide the discussion are included.

Slide 8

Problem Definition: Eating Disorders

Most common eating disorders

- Anorexia Nervosa
- Bulimia Nervosa
- Binge Eating Disorder
- Eating Disorder Not Otherwise Specified



Sample Presentation Language: *Among the six feeding and eating disorders which the The American Psychological Association has definitions for, we will focus on the four most common ones today. They are Anorexia Nervosa (Anorexia), Bulimia Nervosa (Bulimia), Binge Eating Disorder (Binge Eating Disorder) and Eating Disorder Not Otherwise Specified (Eating Disorder Not Otherwise Specified).*


For a detailed description of the diagnostic criteria for these and other disorders of eating, inform attendees it is recommended to reference the DSM-5.

Slide 9

Problem Definition: Eating Disorders, cont.

- 20 million women and 10 million men suffer
(Wade, Keski-Rahkonen, & Hudson, 2011)
- Primarily occurs among females
(American Psychological Association, 2013)
- 23.9% of students may struggle with a clinical-level disorder
 - In a 1,000 student school, that is 239 students

This Does not include the hundreds of students with subclinical disorders.” (Cook-Cottone, Tribole, & Tylka, 2013)



Sample Presentation Language: *Current estimates of eating disorder rates fluctuates and, as stated before, is difficult to accurately determine. Current estimates for the United States are that upwards of 20 million women and 10 million men suffer from a clinically significant eating disorder at some time in their life (Wade, Keski-Rahkonen, & Hudson, 2011).*

This is definitely a greater concern for females, as estimates suggest 90% of cases occur among females.


Slide 10

Problem Definition: Eating Disorders, cont.

Anorexia Nervosa

- Highest mortality rate (4%)
- Affects <1% of US population
- Highest risk are females ages 15-19

(National Institute of Mental Health (NIMH), n.d.)



Sample Presentation Language: *Anorexia Nervosa: Individuals with Anorexia see themselves as overweight, even when they are clearly underweight. Individuals with Anorexia may repeatedly weigh themselves, portion food carefully, and eat very small quantities of only certain foods. In fact, eating, food, and weight control become obsessions. Some people with Anorexia may also engage in binge-eating followed by extreme dieting, excessive exercise, self-induced vomiting, and/or misuse of laxatives, diuretics, or enemas (National Institute of Mental Health (NIMH), n.d.).*


Slide 11

Problem Definition: Eating Disorders, cont.

Bulimia Nervosa

- 3.9% mortality rate
- Affects about 1% of US female population

Prognosis for BN is generally better than for sufferers of AN (Cook-Cottone, Tribole, & Tylka, 2013)



Sample Presentation Language: *Bulimia Nervosa: Those with BN have recurrent and frequent episodes of eating unusually large amounts of food and feeling a lack of control over these episodes. This binge-eating is followed by behavior that compensates for the overeating such as forced vomiting, excessive use of laxatives or diuretics, fasting, excessive exercise, or a combination of these behaviors (Cook-Cottone, Tribole, & Tylka, 2013).*


Slide 12

Problem Definition: Eating Disorders, cont.

Binge Eating Disorder

- Affects between 1 and 4.5% of the population
- Higher risk for cardiovascular disease and high blood pressure (NIMH, n.d.)

Improves - up to 78% of sufferers have no ED diagnosis after 6 years (Cook-Cottone, Tribole, & Tylka, 2013)




Sample Presentation Language: *With BED, a person loses control over his or her eating. Unlike BN, periods of binge-eating are not followed by purging, excessive exercise, or fasting. As a result, people with BED often are overweight or obese (NIMH, n.d.). This disorder affects between 1 and 4.5% of the population. Those suffering from BED have a higher risk for cardiovascular disease and high blood pressure. Furthermore, feelings of guilt and shame often lead to more binge-eating. Thankfully, this disorder can improve over time - with up to 78% of sufferers having no ED diagnosis after 6 years (Cook-Cottone, Tribole, & Tylka, 2013)*

Slide 13

Problem Definition: Eating Disorders, cont.

Eating Disorder Not Otherwise Specified

- Affects about 5.2% of population (NIMH, n.d.)
- Less-restrictive diagnostic criteria (Cook-Cottone, Tribole, & Tylka, 2013)
- Comparable mortality rate to other ED's (Cook-Cottone, Tribole, & Tylka, 2013)




Sample Presentation Language: Eating Disorder Not Otherwise Specified: *The diagnosis of EDNOS is given to individuals who show symptoms of eating disordered behavior but do not meet the criteria for AN or BN (NIMH, n.d.). This diagnosis has less-restrictive criteria than the others, however it is important not to underestimate its severity as it has a comparable mortality rate to other ED's.*

Slide 14

Problem Definition: Eating Disorders, cont.

Common dual-diagnosis

- Anxiety
- Depression
- Deficits in impulse-control
- Substance use (Hudson, Hiripi, Pope, & Kessler, 2007)




Sample Presentation Language: *Eating disorders often occur alongside many other disorders defined in the DSM-5 (this is also known as a dual-diagnosis). The most common of these is anxiety, depression, deficits in impulse-control, and substance use (Hudson, Hiripi, Pope, & Kessler, 2007).*

Slide 15

Problem Definition: Eating Disorders, cont.

Prognosis

- Varies and can be difficult to determine due to denial, concealment and avoidance
(Smith, Shelley, Leahigh & Vanleit, 2006)
- Timely and appropriate response improves the likelihood of positive treatment outcomes
(American Psychological Association, 2013)




Sample Presentation Language: *The prognosis for eating disorders varies significantly with each case and can be difficult to determine, as patients with eating disorders often conceal or deny they have a problem until it is severe and will avoid professional help (Smink, 2012).*

As with most disorders, timely and appropriate response improves the likelihood of positive treatment outcomes (American Psychological Association, 2013).

Slide 16

Problem Definition: Obesity

- Not an official DSM-5 diagnosis
- Doubled in children; quadrupled in adolescents over 30 years (National Center for Health Statistics, 2012)
- From 2009 to 2010, one in five children over age 5 was obese (Ogden, Carroll, Kit & Flegal, 2014)



Sample Presentation Language: *Contrary to popular belief, obesity is not an official DSM-5 diagnosis. This term reflects a weight and height ratio that has been associated with substantial health risk, arising from a chronic disruption of the energy balance (energy intake vs. expenditure) (Cook-Cottone, et al., 2013).*


There is an increasingly worrisome and costly trend in America regarding the rising obesity rates, specifically regarding children. According the Center for Disease Control and Prevention, childhood obesity has more than doubled in children and quadrupled in adolescents in the past 30 years. Between years 2009 and 2010 almost one in five children older than 5 years age was obese (National Center for Health Statistics, 2012; Ogden, Carroll, Kit & Flegal, 2014).

These numbers are concerning when understanding that excess body weight in children is associated with excess morbidity in childhood and adulthood (Dietz, 1998).

Slide 17

Problem Definition: Obesity, cont.

- In 2012, more than one-third of children and adolescents were overweight (Ogden, Carroll, Kit & Flegal, 2014)
- Excess body weight in children associated with excess morbidity in childhood and adulthood (Dietz, 1998)



Sample Presentation Language: *Contrary to what is often thought, obesity is not an official DSM-5 diagnosis. This term reflects a weight and height ratio that has been associated with substantial health risk, arising from a chronic disruption of the energy balance (energy intake vs. expenditure) (Cook-Cottone, et al., 2013).*


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These numbers are concerning when understanding that excess body weight in children is associated with excess morbidity in childhood and adulthood (Dietz, 1998).

Slide 18

Problem Definition: Trend Dieting

- Linked to obesity and eating disorders (Haines, Neumark-Sztainer, & Thiel, 2007)
- Stifling of natural satiety signals (Rogers, 1964; Tribble & Resch, 1995)
- Creates reliance on external hunger cues (Birch & Fisher, 2000)



Sample Presentation Language: *It is counter-productive to emphasize dieting while teaching about health habits as there are studies stating that dieting behaviors are actually causally linked to obesity and eating disorders (Haines, Neumark-Sztainer, & Thiel, 2007). Most often, this is due to an individual no longer trusting our bodies to tell us when and what to eat, and become reliant on restrictive diets and fads to help us maintain the body image that we think we need to have.*

Research demonstrates that infants and very young children have the ability to naturally regulate their food intake by using innate hunger satiety cues (Birch, Johnson, Andersen, Peters, & Schulte, 1991). For example, infants turn away from bottles when no longer hungry and toddlers have been shown to eat sporadically but naturally regulate their food intake by eating more at certain times and less at others -still consuming the same amount of calories each day (Birch et al., 1991).

A person's ability to be in tune with one's own body signals such as hunger and satiety is understood to be innate, but is often stifled by societal messages that a restrictive diet is needed in order to be healthy or lose weight. The shift away from the innate ability to regulate one's own food intake appears to start around the age of 5, when children start to eat for external reasons such as the presence of food, the smell of enjoyable foods and emotional distress. Fortunately, individuals who are detached from their natural hunger satiety mechanisms can learn how to self-regulate again (Rolls, Engell, & Birch, 2000).


When we diet, we replace of the innate ability to regulate food intake with external rules (which is associated with weight gain), eat in the absence of hunger and in response to emotional and situational variables.


This is not meant to impress judgment on individuals who require a specialized diet for health reasons.

Slide 19

Problem Definition: Reasons for Eating

- Nourishment
- Energy
- Stress
- Peer Pressure
- Cultural Norms
- Tradition
- Emotional
- Distraction
- Special Events
- Boredom

Your thoughts? 




Sample Presentation Language: *Another way to clarify the condition our relationship with food is to ask ourselves “why do we eat what we do?” At first it may seem simple “we eat because were hungry” or “we eat because its dinner time.” These may be some of the reasons, but researchers and professionals agree that this question of “why we eat” gets complicated. There are times when we may not even be able to definitively state why we ate what we did. This question also nicely fits with the concerns over dieting and may provide insight into how external distractions sidetrack us from what our bodies need, distancing us from our internal hunger and satiety cues.*

DIRECTIONS: As a group, discuss some of the reasons for eating that may be present in our lives or the lives of those we know.

Slide 20

Problem Definition: Media & Television

- Food choice influenced by TV advertisements
- Most of these foods have little to no nutritional value
- One advertisement per every 5 min of Saturday Morning cartoons.
- In the US, children average 20 hours of TV per week
 - Over the course of a year, this is more time than they are in school. (CDC, 2010)



Sample Presentation Language: *One large component of the battle for healthy eating and positive body culture is that students food choices are influenced by television advertisements of foods with little nutritional value. The CDC states that young people see about one food advertisement for every 5 minutes of Saturday morning children's shows, and most of the foods advertised during this time are high in fat, sugar, or sodium. There are little to no advertisements for healthy foods such as fruits and vegetables.*

The CDC further concluded that when compared to students who watch little to no television, those who did watch more television are more likely to have unhealthy eating habits and unhealthy conceptions about food, ask their parents to buy foods advertised on television, and eat more fat. Television was even found to be directly associated with obesity in a number of studies.

Putting it into perspective, think about the fact that students average more than 20 hours of television watching per week. This is more time over the course of the year than they are in school (Centers for Disease Control and Prevention, 2010).

Slide 21

Problem Definition: U.S. Culture & Body Image

- Emphasis on appearance, especially thinness, over health
- Abundance of calorie dense, low nutrition foods



Sample Presentation Language: *In mainstream culture, children and adults are constantly being told to emphasize appearance. This fosters an environment where health is forgotten about or misunderstood as synonymous with thinness.*

At the same time, stores and restaurants a wide variety of high calorie, low nutrition foods. Processed foods are more readily accessible. For example, fast food drive thrus have a high level of advertising and low prices.

Slide 22

Problem Definition: U.S. Culture & Body Image, cont.

- Marketing is aimed primarily at females
- However, males are also starting to become targets




Sample Presentation Language: *Usually when we think about the impact that the media has on body image, we tend to think about the impact on women and girls. However, men are also starting to feel pressure to be thin and muscular.*

Slide 23

Why Educators?

- It is a powerful social institution with effective disseminators for information.
- 56 million students eat breakfast, lunch and 2 snacks a day at school
- Students ages 5 – 17 spend about 13 years and much of their waking hours at school (1300hr/yr).



Sample Presentation Language: *Educators are by nature of their job, in a prime role to effectively disseminate information and nurture a healthy eating and body culture. Specifically, schools can reach almost all children and adolescents. They provide opportunities to practice healthy eating. More than one-half of youths in the United States eat one of their three major meals in school, and 1 in 10 children and adolescents eats two of three main meals in school (135). Schools can teach students how to resist social pressures. Eating is a socially learned behavior that is influenced by social pressures. School-based programs can directly address peer pressure that discourages healthy eating and harness the power of peer pressure to reinforce healthy habits. In schools, skilled personnel are available.*

Slide 24



Group Discussion

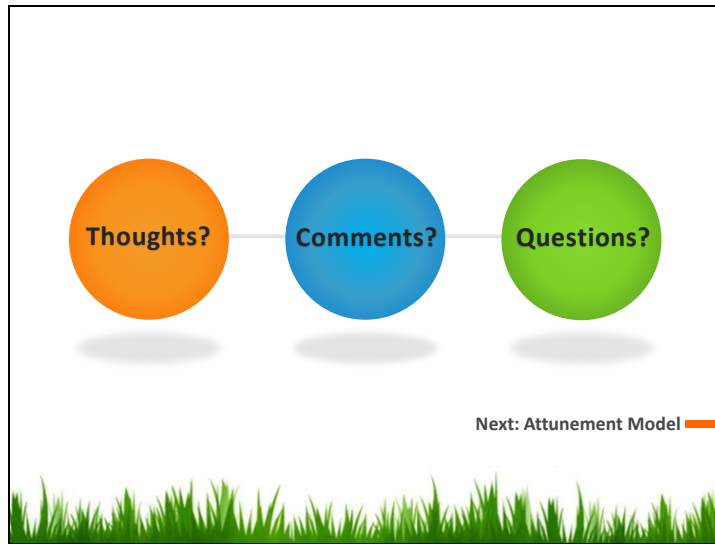
1. What are some other sources of information about body image?
2. How does your role as an educator influence the type of messages conveyed to students?

Sample Presentation Language: *What are some other sources of information about body image?*

After being presented with the information on eating disorders and implications for schools, how do you view your role as an educator? Discuss this with 2 or 3 people in your immediate area.

DIRECTIONS: Discuss these questions as a group.

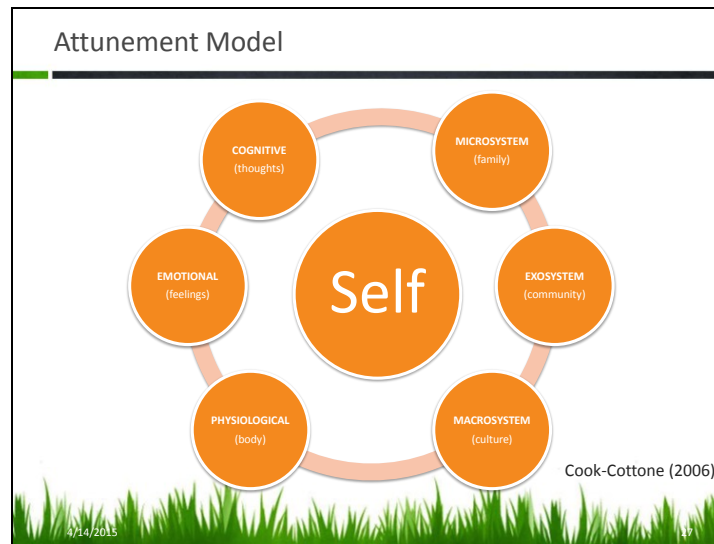
Slide 25



Slide 26



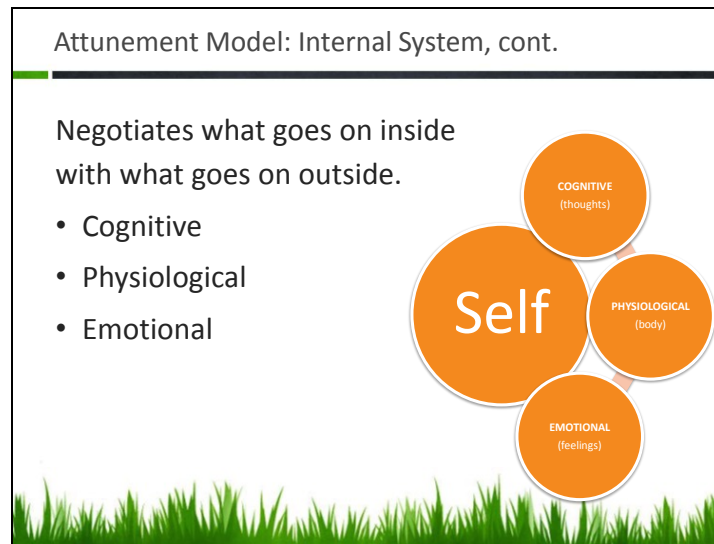
Slide 27



Sample Presentation Language: *Now that we have discussed the problem, let's take a look at one possible theory as to the basis for such problems as eating disorders. Based on the Attuned Representational Model by Catherine Cook-Cottone (2006), it details variables of each individual (self) which, when not operating within the symbiotic nature they are meant, can lead to disordered eating.*

When functioning healthily, the Attunement Model illustrates a symbiotic relationship between its two systems: the Internal System and the External System. When one or more elements is disrupted, the symbiosis is thrown out of balance and concerns with disordered eating begin to develop.

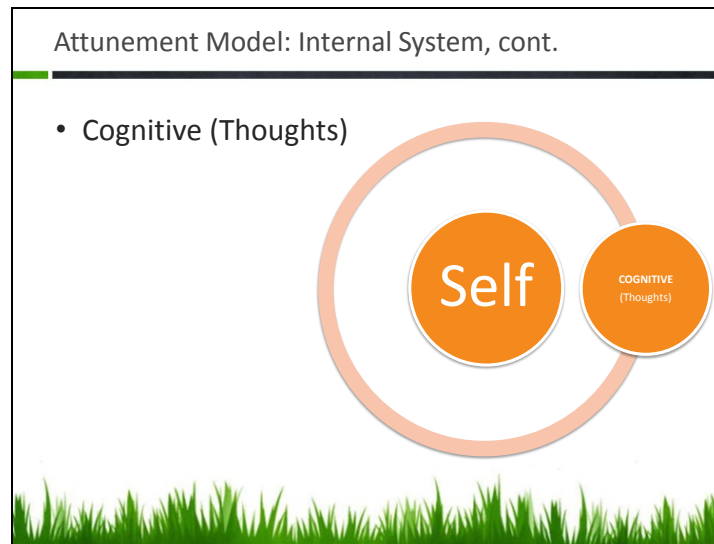
Slide 28



Sample Presentation Language: *The Internal System is the “self” and it is composed of three dimensions that evolve throughout development: the cognitive (thinking), physiological (body) and emotional (feeling) self. Within the Internal System, the Cognitive domain, in the context of disordered eating, has etiological factors such as self-concept, self-efficacy, perfectionism, and distorted body image.*

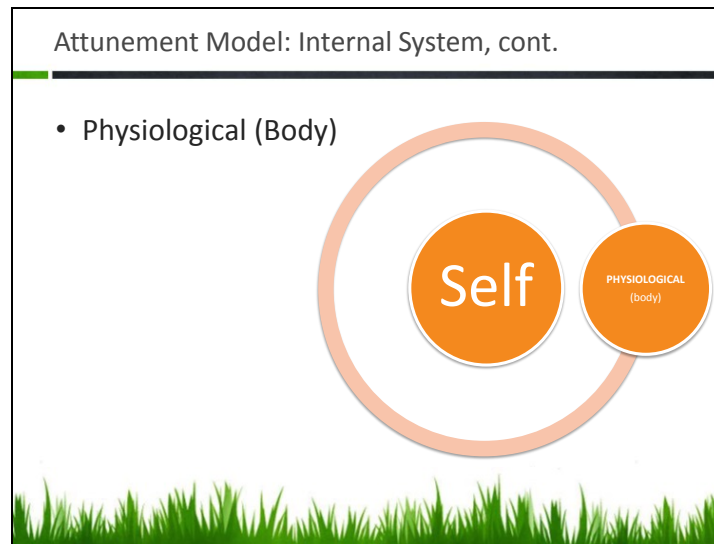
Also in the Internal System, the Emotional domain encompasses etiological factors such as emotional self-regulation, mood disturbance, and difficulty with negative affect. Physiological factors are also a part of the Inner Network, with etiological ties to dieting, low introspection (sense of the body’s physiological state), and onset of puberty.

Slide 29



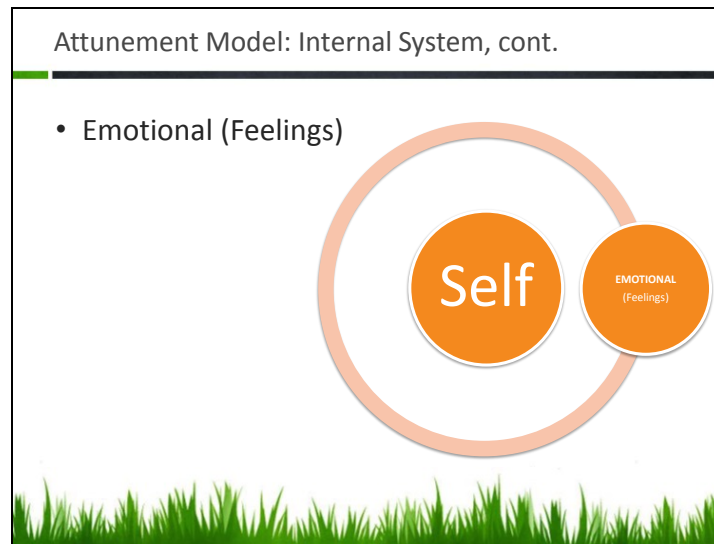
Sample Presentation Language: *The cognitive domain pertains to our internal thoughts. These are the things we say to ourselves and the way we make sense of the world.*

Slide 30



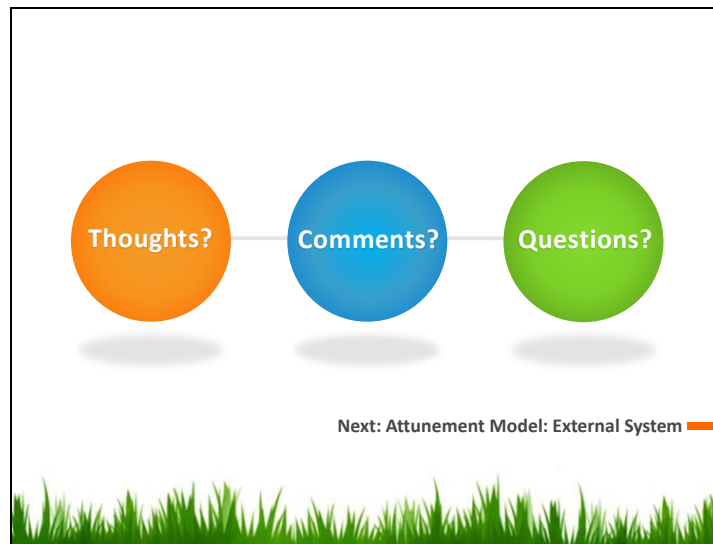
Sample Presentation Language: *The physiological domain is the biological happenings of our bodies. This can relate to our physiological development such as hormonal factors like puberty. This also relates to our biological needs and our body's drive to meet them.*

Slide 31



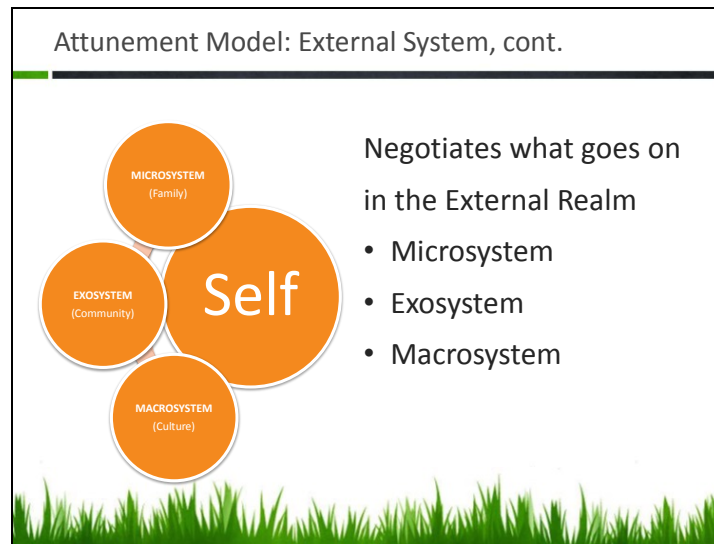
Sample Presentation Language: *Our emotional self refers to the way we feel. The way we regulate our emotions and experience negative and positive emotions.*

Slide 32



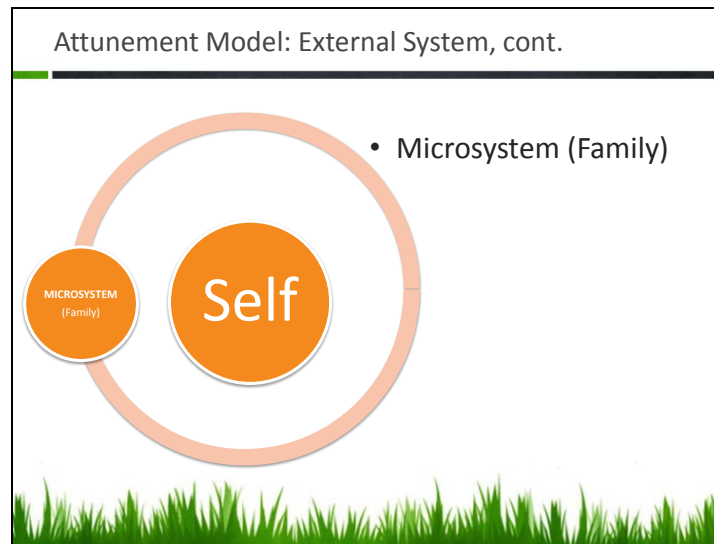
Sample Presentation Language: *All of these factors together is what formulates our whole internal selves.*

Slide 33



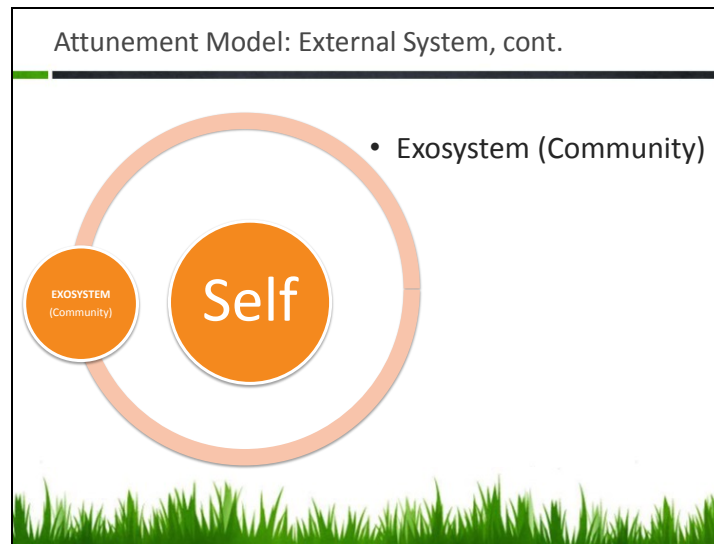
Sample Presentation Language: *The External System negotiates the external realm of an individual and includes ones family (microsystem), community (exosystem) and culture (macrosystem).*

Slide 34



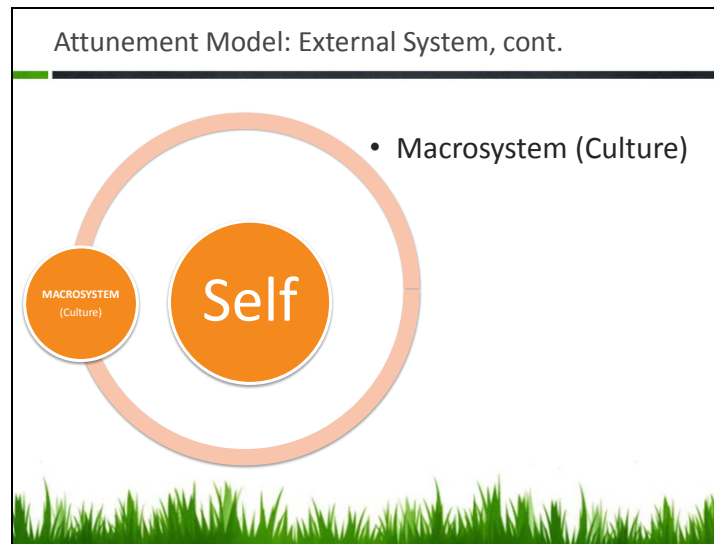
Sample Presentation Language: *The microsystem is your family. The family unit has its own culture, expectations, and values.*

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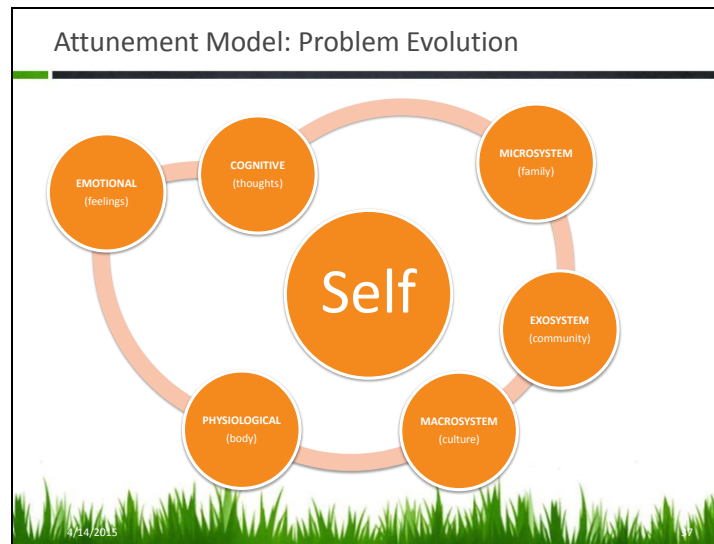
Sample Presentation Language: *The exosystem is the community, which has its own expectations and values.*

Slide 36



Sample Presentation Language: *The macrosystem is the wider culture that encompasses various communities. This has to do with the various cultural expectations and customs.*

Slide 37



Sample Presentation Language: *This illustrates the misalignment of inner and outer networks that occurs from a disruption of one or more variables of self.*

Slide 38



Slide 39

Implications for Schools

- Student mood, behavior and thinking
- Health, growth, and intellectual development
- Missed instruction time
- Academic performance
- Time, money, effort (CDC, 2010)



Sample Presentation Language: *The effects of eating and body image in the schools impacts several domains. Firstly, the negative effects of eating disorder dramatically alters mood, behavior, and thinking which may affect academic performance. They are also irritable and have difficulty concentrating, which can interfere with learning. There is also the time money and effort spent dealing with prevention, intervention and recovery. When discussing missed instructional time, consider the findings of the CDC that more than 50 million hours of school time are lost annually because of dental problems or dental visits alone.*


Furthermore, when children are hungry or undernourished; they have difficulty resisting infection and therefore are more likely than other children to become sick, to miss school, and to fall behind in class. They have low energy, which can limit their physical activity. Thankfully, school-based nutrition education can improve dietary practices that affect young persons' health, growth, and intellectual development (Centers for Disease Control and Prevention, 2010).

Slide 40

Implications for Schools, cont.

(Centers for Disease Control and Prevention, 2010)

- Health education
- Health services
- Counseling
- Psychological/Social services
- Integrated school and community efforts
- Physical education
- Nutrition services and school-based health promotion for faculty and staff



Sample Presentation Language: *The Implications for your school can also be understood by looking at what long-term efforts of preventions and intervention requires. In each of these areas time, money and energy is spent to prevent or intervene in students relationships with food (Centers for Disease Control and Prevention, 2010).*

Slide 41

Implications for Schools, cont.

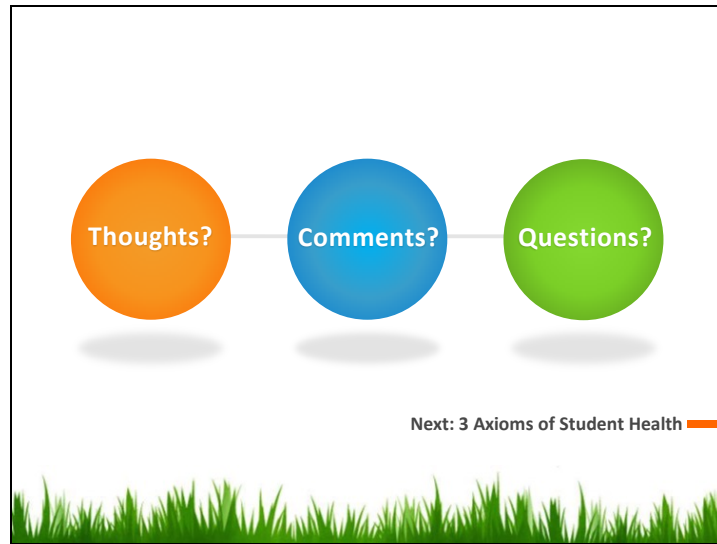
- Out of growing concern comes policy
 - But the unhealthy trend continues...

We need another way to address this.



Sample Presentation Language: *Out of growing concerns for the wellbeing of students comes policy. However, we see in our own adult lives, the lives of our students, and scientific studies that there is still this continuing concern with the multidimensional relationship with food. We need another way to address this.*

Slide 42



Slide 43



Sample Presentation Language: Consider these 3 axioms of student wellness. Aligned with the Attunement Model and pulling from Catherine Cook-Cottone's 3-pillar approach, the 3 axioms of student health guides educators creating an environment conducive of a healthy student. These axiom's are: *Axiom A: Intuitive Eating and Nutrition*, *Axiom B: Healthy Physical Activity*, *Axiom C: Self-Care, Emotion-Regulation & Mindfulness*.


Slide 44



Slide 45

Axiom A: Intuitive Eating & Nutrition

“A strong understanding of what, when, and how much food the body needs to be nourished, and appropriate response to physical hunger and satiety cues.”



Sample Presentation Language: *Intuitive eating is defined as “A strong understanding of what, when, and how much food the body needs to be nourished, and appropriate response to physical hunger and satiety cues.”*


Slide 46

Axiom A: Intuitive Eating & Nutrition, cont.

(Cook-Cottone, 2013)

In same developmental period as age 5 shift

- Caregivers begin restricting access to certain foods
- Children begin disliking foods they're forced to eat
- Low nutrition foods used as a reinforcement



Sample Presentation Language: *During the Shift from internal to external cues at age 5, there is a dynamic change in adult response to children's food choices. Caregivers now have a tool to use in shaping their child's behavior, and they begin to restrict access to certain high-calorie food. Often these foods are used as reinforcements for good behavior/removal for bad behavior. Caregivers may also force nutrient dense foods, and in turn, children end up disliking the foods they are forced to eat.*

Replacement of the innate ability to regulate food intake with external rules is associated with weight gain, and eating in the absence of hunger and in response to emotional and situational variables


Slide 47

Axiom A: Intuitive Eating & Nutrition, cont.

(Cook-Cottone, 2013)

In same developmental period as age 5 shift

- Replace intuitive intake with external cues
- Eating in the absence of hunger
- Eat in response to emotion and situation



Sample Presentation Language: *Replacement of the innate ability to regulate food intake with external rules is associated with weight gain, and eating in the absence of hunger and in response to emotional and situational variables.*

Slide 48



Group Discussion

1. What could be an un-intended effect of instilling the motto **“Finish all the food on your plate”** within a child?


DIRECTIONS: Discuss the questions with the group.

Slide 49

Axiom A: Intuitive Eating & Nutrition, cont.

Components of intuitive eating

1. Unconditional permission to eat when hungry
2. Eating for physical rather than emotional reasons
3. Reliance on natural hunger and satiety cues to determine how much to eat



Sample Presentation Language: *There are three components of intuitive eating. The first is Unconditional permission to eat when hungry. The second is eating for physical rather than emotional reasons. The third is Reliance on natural hunger and satiety cues to determine how much to eat.*

Slide 50

Axiom A: Intuitive Eating & Nutrition, cont.

It is not...

1. Obsessive
2. Compulsive
3. Filled with rules



Sample Presentation Language: *Intuitive eating is not like a diet. It is not obsessive or compulsive, meaning that a person does not need to ruminate on what to eat. It is also not filled with rigid rules that one must follow. The idea behind intuitive eating is that these rigid rules and obsessive thoughts are not necessary when you are listening to your body's own internal cues.*



Slide 51

Axiom A: Intuitive Eating & Nutrition

Food in the absence of hunger?

- Food as reward

What ideas do you have for reinforcement or reward other than food?



Sample Presentation Language: *How many of you use food as a reward for good behavior? Especially for younger children, we tend to want to reward them with treats such as candy when children show good behavior. It is an easy reward, but we should also think about why we use food and not other items. This can send the message that food is meant to be for pleasure and reassurance rather than for nutrition. When we get used to eating when we are not hungry, we become less in touch with our true physiological reason for eating, which is to fuel our body when hungry. What are some rewards you use in your classroom other than food?*

What ideas do you have for reinforcements other than food at school?


DIRECTIONS: Discuss as a group the instances when children may be asked to eat when they aren't really hungry. Sample Answers: lunch time, breakfast, birthdays when food is brought to classroom, using food as rewards, etc. Also discuss what ideas the attendees may have for reinforcement at school.

Slide 52

Axiom A: Intuitive Eating & Nutrition

Teach an understanding of what food is used for

- Our body uses food for a purpose
- Not to meet emotional needs
- What are you really hungry for?




The image shows a young boy with short brown hair, wearing a blue long-sleeved shirt, sitting at a table. He is looking directly at the camera with a thoughtful expression, his hands raised in a questioning gesture. On the table in front of him is a plate of food, possibly a sandwich or pizza, and a bowl filled with various fruits like apples, oranges, and bananas. The background is plain white.

Sample Presentation Language: *We can teach our students what food is used for by talking about the fact that our body uses food for a specific purpose - to fuel us with energy. We don't use food to make us feel better when we are sad. When we want food, it is important to ask ourselves why. Children can learn to identify their emotions better and to realize they are not really hungry for food, but something else such as affection, approval, or even physical activities and hobbies.*

Slide 53

Axiom A: Intuitive Eating & Nutrition

- Teach students about vegetables and fruits
- Can be incorporated into science lessons
- Teach how to grow vegetables which require little space and light
- Encourage home gardens
- Enjoy eating what you grow



Sample Presentation Language: *School gardens can be a fun way for students to learn about healthy eating. This can be incorporated into science or health lessons as well, to learn the biology behind growing plants. When working with a low-socioeconomic or urban population, it may be most helpful to teach students how to grow vegetables that require very little space and light. This can teach a skill that they can bring home. When growing, prepare it in an appetizing way for students to appreciate the flavor and freshness of the food. With older students, you can also teach them simple ways to prepare vegetables.*

Slide 54

Axiom A: Intuitive Eating & Nutrition

L.A. Sprouts Program

- Pilot study (2010)

“Significant improvements in measures of health, dietary intake and food preferences”

Does your school have a school garden?




Sample Presentation Language: *L.A. Sprouts is a program being implemented in Los Angeles. The program emphasizes gardening, cooking, and nutrition, and is aimed at a population considered high-risk for obesity, Hispanic children. The program included 90-minute, culturally tailored, interactive classes for 12 consecutive weeks during spring 2010 at a nearby community garden. Compared to the control group, the students had an increase of fiber intake, reduction of body mass index, and less weight gain.*

Do you have a community or school garden? (Discussion on what exists, options for space at school where one could be started)

Davis, J.N., Ventura, E.E., Cook, L.T., Gyllenhammer, L.E., & Gatto, N.M. (2011). LA Sprouts: a gardening, nutrition, and cooking intervention for Latino youth improves diet and reduces obesity. *Journal of the American Dietetic Association*, 111(8), 1224-1230.

Slide 55

Axiom A: Intuitive Eating & Nutrition

h

To facilitate intuitive eating

- Provide healthy food choices
- Eliminate “competitive foods”
- Reduce low nutrition foods
- Provide a stress-free mealtime environment
 - Pleasant atmosphere
 - Ample Time
 - California Department of Education guidelines



Sample Presentation Language: *One way to facilitate nutritious eating habits is to simply allow for more exposure to healthy foods. This often starts at the policy level, with deciding what kinds of food the school offers to students.*

Competitive foods are foods that children may select over healthful options. For example, if your school sells soda, chips, and candy, a student is less likely to choose the more healthy options such as vegetables or fruit. With competitive foods, children fill themselves up on the unhealthy options.

Another factor that we can influence at school is the environment that students are in when eating. A pleasant atmosphere allows students to tune in to the food they are eating. This helps to facilitate intuitive eating, due to less distractions and stressors in the environment.

Directions: Provide handout to attendees. Handout will have info from <http://www.cde.ca.gov/ls/nu/sn/timetoeat.asp>

Slide 56



The slide features a grey header bar at the top. Below it, on the left, is a large orange circle with a white highlight and a soft shadow. To the right of the circle is the title "Group Discussion" in bold black text. Below the title is a single bullet point: "1. Other ways to facilitate intuitive eating at school?". At the bottom of the slide is a decorative border of green grass.

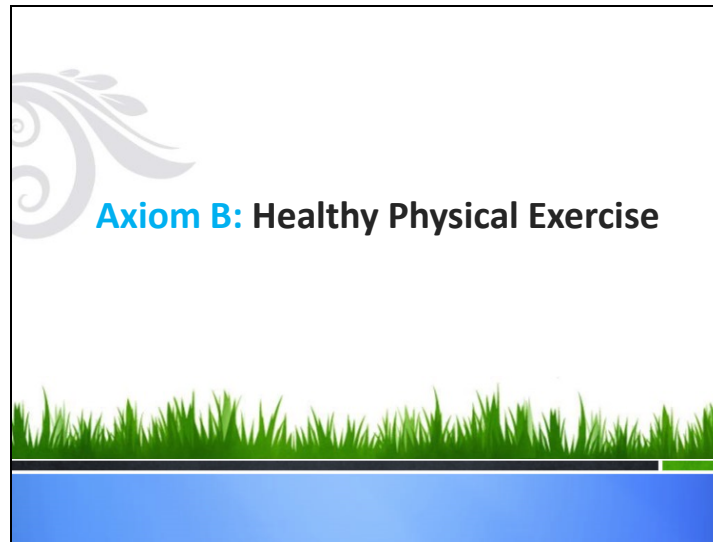
Group Discussion

1. Other ways to facilitate intuitive eating at school?

Slide 57



Slide 58




Sample Presentation Language: *Axiom B is Healthy Physical Activity.*

Slide 59

Axiom B: Healthy Physical Exercise

- U.S. children spend 75% of their day being inactive.
- In 1969, 87% of children walked or biked to school.
 - Today that number is 15%
- Improves behavior
- Improves cognitive skills
- Increased attention and concentration (CDC,2010)



Sample Presentation Language: *Physical activity has been proven to have many benefits for students. Studies have shown that increased physical activity improves behavior, improves cognitive skills, and increases attention and concentration. With this in mind, consider the fact that children in the United States spend 75% of their day being inactive, and that a 2005 study found only 15% of school-age children walked or biked as a means of getting to school. In 1969, the number using active transportation was 87%.*

When children and adolescents participate in the recommended level of physical activity—at least 60 minutes daily—multiple health benefits accrue.


The articles in this review suggest that physical activity can have an impact on cognitive skills and attitudes and academic behavior, all of which are important components of improved academic performance. These include enhanced concentration and attention as well as improved classroom behavior.

Slide 60

Axiom B: Healthy Physical Exercise, cont.

Influential Factors

- **Body dissatisfaction** (Haines & Neumark-Sztainer, 2006)
 - Students who don't appreciate their bodies do not like to use them
- **Obesity bias**
 - Students who are obese are embarrassed to participate due to how they are treated by peers and teachers, which feeds into the cycle (Rukavina & Li, 2008)



Sample Presentation Language: *There are many factors that influence the amount of physical activity that children engage in. For example, those who have higher levels of body dissatisfaction are less likely to participate in physical activity. When a person is ashamed of their body, it makes sense that they are less enthusiastic about using it.*

In addition, obesity bias is an important factor to consider. In physical education classes, students with obesity experience poorer treatment by their teachers and peers. They are often shunned for not being as athletic, or excluded from activities. This in turn creates a negative association with physical activity that can stay with them throughout the lifespan. Instead of being interested in physical activity, students avoid it, in turn becoming more unhealthy and feeding in to the same cycle.

If the student finds the activity enjoyable, they are more likely to participate in it.

The school environment can also be influential. Schoolyard interventions such as painting the schoolyards, providing game equipment and increasing the quantity of balls can be effective in increasing physical activity of students. Multi-colored paint on school yards has been associated with higher physical activity level (Anthamatten et al., 2011).

Personal factors such as age and gender also come into play. For example, females' level of activity greatly decreases as they reach puberty (Davison, Cutting, & Birch, 2003).


Slide 61

Axiom B: Healthy Physical Exercise, cont.

Influential Factors

- Enjoyment (Schneider & Cooper, 2011)
- School environment (Anthamatten et al., 2011)
- Gender & age (Davison, Cutting, & Birch, 2003)

What other factors may impact students engagement in physical activity?




Sample Presentation Language: *There are several factors that we know influence physical activity for children. First of all, the more they enjoy the activity, the more likely they are to engage in it. Secondly, the school environment we provide has a large impact. Lastly, there are personal factors such as gender and age that come into play as well. We will talk a little more about each of these. Can you think of any other factors?*

Slide 62

Axiom B: Healthy Physical Exercise, cont.

How can we increase the physical activity levels of our students?

1. Playground environment
 - ✓ Plenty of equipment
 - ✓ Diverse types of equipment
 - ✓ Adequate supervision
 - ✓ Safe




Sample Presentation Language: *Now that we have talked about what types of factors influence physical activity, let's use what we know to formulate ideas of how to increase physical activity at school.*

The first thing we need to look at is the playground environment. It is important to make sure there is plenty of equipment and all different types of it. Safety is also key in helping students enjoy physical activity, so providing adequate supervision is important.

Slide 63

Axiom B: Healthy Physical Exercise

2. Provide opportunities throughout the school day for activity
 - ✓ 15+ minutes of recess daily
 - ✓ 20 minutes of play time after lunch
 - ✓ Activity breaks during class
3. Provide activities of all skill levels that emphasize enjoyment rather than competition



Sample Presentation Language: *Secondly, it is important to provide plenty of opportunities throughout the day for activity. At least 15 minutes of recess a day and plenty of time to play at lunch is the minimum. However, there are also ways to incorporate physical breaks during class. This can be especially useful when attention starts waning. Stretch breaks and yoga are simple activities that require little space.*


Third, it is important to offer activities that emphasize enjoyment rather than competition. Competition can create negative associations with physicality especially for students who are less athletic. Activities that incorporate all skill levels are ideal.

Slide 64

Axiom B: Healthy Physical Exercise

4. Facilitate an organized program

- ✓ After school activity program
- ✓ Female-friendly activities
- ✓ Provide students an opportunity to participate in the Presidents Challenge Active Lifestyle Award
(<https://www.presidentschallenge.org/challenge/active/>)



Sample Presentation Language: *Fourth, you can create program at your school that centers around physical activity. You can create an after school program, or simply provide supervision for children to play on the playground after school. You can also start a program with the purpose of involving female students. Lastly, involving your school in the President’s Challenge Active Lifestyle Award can be a fun way to challenge your students. It is program that challenges students to be active with activities they choose, eat healthy, set goals, and track progress. Students can earn a reward after just 2 months. For more information, visit their website.*

Slide 65



Group Discussion

1. What is your schools policy on physical activity or exercise?

Slide 66



Slide 67




Slide 68

Axiom C: Self-Care

Self-care serves as a foundation in how we view and treat our bodies.

- Nutrition
- Hydration
- Exercise
- Self-soothing practices
- Sleep and rest

If these practices aren't prioritized, our mental health is impacted.



Sample Presentation Language: *Self-care is a general term to describe the things we do to take care of ourselves both mentally and physically. It is foundation upon which our mental and physiological state is based.*

Some are obvious to us such as drinking water and sleeping. However, some practices such as self-soothing and coping mechanisms can be challenging to practice, especially for children. Children have not yet learned many strategies of how to take care of themselves. During childhood, we learn what coping mechanisms work for us, and sometimes they are not healthy.

As educators, we can help students sooth themselves during difficult times by teaching them healthy ways of dealing with emotions.

Slide 69

Axiom C: Self-Care

Positive body psychology

- Body appreciation
- Body acceptance and love
- Broadly conceptualizing beauty
- Inner positivity
- Protective filtering of information



Sample Presentation Language: *Positive Psychology offers a useful mindset to use when fostering a positive body image. Positive the scientific study of the strengths that enable individuals and communities to thrive. The field is founded on the belief that people want to lead meaningful and fulfilling lives, to cultivate what is best within themselves, and to enhance their experiences of love, work, and play.*


The core features of positive body image include body appreciation, body acceptance and love, broadly conceptualizing beauty, inner positivity, and protective filtering information in a body-protective manner. Unconditional acceptance, media literacy, and spirituality promote and maintain positive body image. Confident and prosocial behavior, self-care, and befriending others who like their body emerge from positive body image.

Slide 70

Axiom C: Self-care, cont.

Positive body psychology

- Promote Positive Body Psychology
 - Unconditional body acceptance
 - Media literacy
 - Spirituality
- From this comes
 - Confident and prosocial behavior,
 - Self-care
 - Befriending others who like their body



Sample Presentation Language: *Unconditional acceptance, media literacy, and spirituality also maintain and promote a positive body psychology.*


Benefits of having a more positive body psychology include confident and prosocial behavior, better self-care, and the befriending of others who like their body as well.

Slide 71

Axiom C: Self-care, cont.

Body Appreciation at School

- Avoid body shaming
 - Do not publicly weigh students
 - Weight should be treated as any other confidential health information!
- Focus on health rather than weight
- No tolerance policy on weight-related teasing



Sample Presentation Language: *Other factors can impact what nutrition choices we make. Body appreciation and acceptance is shown to be a huge factor in what makes people want to take good care of their bodies. If you don't appreciate your body, you are less likely to think about how to care for it properly. This is why it is important to help facilitate this appreciation in children.*

One aspect of this is avoiding opportunities when children may become publicly shamed for their weight or appearance in general. What is your current school policy on weighing students? When is it done and what level of confidentiality is used?

Weight can be a sensitive topic for children and adults, which is why it should be treated the same as any other confidential health information. Weighing students should happen in private, and should not be overemphasized. The focus when talking about eating, health, and physical activity should always be health, rather than weight.


In addition, your school can develop a zero-tolerance policy on weight, or appearance-related teasing. This sends the message to students that this type of treatment is unacceptable and allows all administrators to be on the same page about the school rules.

Slide 72

Axiom C: Self-care, cont.

Body Appreciation at School

- Shift from a narrow to broad perception of beauty
- Filter information in a body protective manner
 - TV shows
 - Magazines
 - Internet
- Develop a force field



Sample Presentation Language: *In our culture, beauty is considered to be very specific. We have certain ideals, and anything outside of it is not considered beautiful.*

One component of self-care is the care of our body image. We can teach children to actively filter what information they expose themselves to. We can also inform parents about how to choose what kind of messages children are exposed to via TV shows, magazines, and the internet.

We can teach children to develop a “force field” where negative body messages are shielded and do not penetrate their mind.

What are some other sources of information about body image?

Directions: Discuss places students may obtain both negative and positive messages about their body.

Sample answers: Parents, friends, teachers, movies, books, etc.

Slide 73

Wonderful Body
Activity

1. Students trace their bodies on large pieces of butcher paper
2. Write the positive things they can do with each part of their body

Keep for reference!




Figure 1 : Los Angeles Team Mentoring, Retrieved 4/6/2015

Sample Presentation Language: *Here is another activity that can help build body esteem. This is also in your handout packet for your reference.*

The activity requires butcher paper and markers. Students can take turns tracing their bodies on to the paper. Each student will then color and decorate the image with positive things they can do with each part of their body. For example, legs can be used for walking to school, eyes are for seeing, fingers are for playing the piano.


This activity is a great way to focus on what the body offers rather than what is wrong with it.

Image from

http://www.latm.org/latm/index.php?option=com_content&view=article&id=238:self-esteem-and-healthy-relationships&catid=53:events&Itemid=172

Slide 74

P.E.R.M.A. self-care plan	Activity
<p style="text-align: right;"><small>Seligman, (n.d.)</small></p> <p>Using Dr. Martin Seligman's framework for wellness, outline your personal self-care plan.</p> <p>Define what each acronym means for you:</p> <ul style="list-style-type: none"> Positive Emotion: Engagement: Relationships (positive): Meaning: Accomplishment: 	



Sample Presentation Language: *Now I'd like to do an activity related to self-care. We are all individuals and we each need different things in order to take care of ourselves in the most effective way. Positive psychology uses a framework called PERMA, which stands for positive emotions, engagement, positive relationships, meaning, and accomplishments. Using each category at least once, please take a few minutes to write your own self-care plan. Here are some examples:*

Positive emotion - Watching a comedy

Engagement - Reading a book

Positive relationships - Spending time with a friend

Meaning - Volunteer work

Accomplishments - Training for a 5k

Directions: Allow participants to work for 8 minutes. This is an activity that can be used with children to help them identify how to engage in self-care. Students may need more help from you or their parents in figuring out what works for them and their specific plan.

Slide 75

Write a Letter to Your Body	Activity
Letter should include	<p>Dear body,</p> <p>I love the way you put me together. No I do not hate you Not even I bit. thank you eyes for letting me see, thank you mouth for letting me talk, thank you left arm for when my right arm is sore. And thank you right arm for me to right. thank you every thing I love you body! Just the way you are</p>
1. Everything your body can do that you're grateful for.	
2. Thank your body for all it does for you	
Keep for reference!	

Sample Presentation Language: *One activity that can be useful in building body appreciation is writing a letter to your body. The information about this activity is included in your handouts. The letter writer should start the letter with "Dear Body," and include mentioning what things their body does that they are grateful for and thanking your body for what it does. This can be an extremely powerful exercise as a way to reflect on positives. The letter can be kept at home or somewhere handy, so that when the child is having a bad day, he or she can pull it out and remind himself or herself how grateful they are.*

Now let's try this activity. Please take a few minutes to write down your letter to your body. (Provide about 10 minutes or wait until most people are done)

Does anyone want to share his or her letter? What was it like writing the letter?

Slide 76

Axiom C: Self-Care, cont.

Emotion-regulation: The practice of cultivating awareness, identification, and negotiation of one's own emotional experience

A decorative border of green grass blades is located at the bottom of the slide content area.

Sample Presentation Language: Emotion-regulation is the practice of cultivating awareness, identification, monitoring, and negotiating one's own emotional experience.

Slide 77

Axiom C: Self-Care, cont.

Triggers for emotional eating & restrictive food intake:

- Emotional vulnerability,
- emotional unawareness,
- difficulty negotiating emotion
- emotional distress (Dorjee, 2010)



Sample Presentation Language: Triggers for emotional eating include vulnerability, emotional unawareness, difficulty negotiating emotions and emotional distress are triggers for emotional eating and restrictive food intake.

Slide 78

Axiom C: Self-Care, cont.

Can ice cream...

- Give you love
- Solve problems
- Take away anger
- Provide social support

Ice cream's for when...


- You're hungry for ice cream
- Healthier food won't satisfy
- You can really savor & enjoy it.



Sample Presentation Language: We are constantly bombarded with messages from advertisements that food can provide some emotional support. Take a look at this ice cream ad. It states, “feel the love”. These are the messages that children receive on a daily basis. That’s why it is important to discuss what food is and isn’t used for. When emotions get overly connected to food, this is when emotional eating can occur. Emotional eating does not honor the physiological reasons for eating, but rather searches to fill an emotional void with food. This slide provides some discussion points to have with students about what food is for.

There are effective ways to regulate emotions that do not involve food...

Slide 79

Axiom C: Self-Care, cont.	Activity
<p>Pathway to emotional eating:</p> <ol style="list-style-type: none">1. Triggering Event/Thought2. Negative emotional Reaction3. Negative interpretation of the event4. Emotional Eating/Food Restriction <p>Use the worksheet provided in the appendix and create a scenario (steps 1-4) that results in emotional eating.</p> 	

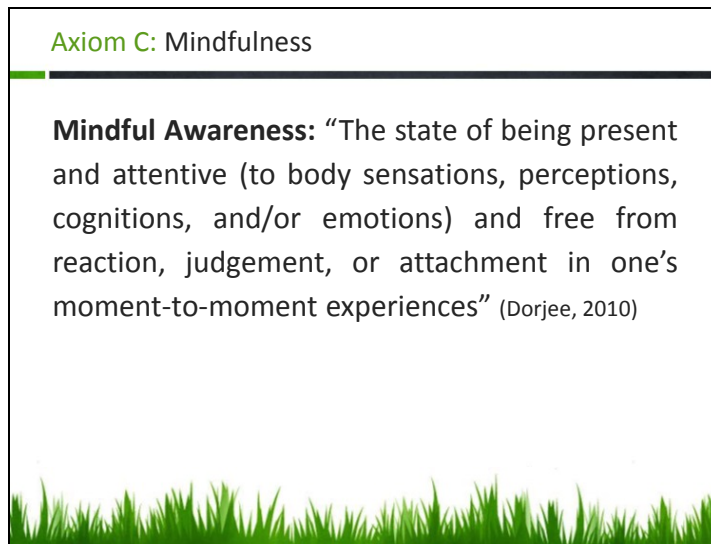
Sample Presentation Language: *The pathway to emotional eating begins with a triggering event or thought that leads to a negative emotional reaction and negative interpretation of the event, which in turn leads to emotional eating or the restriction of food.*

The pathway to emotional eating activity is meant to help you identify the cognitive process that takes place from a triggering event to what results as emotional eating and/or food restriction. Each individual should either use a hypothetical situation or one that they have experienced in real life.

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Sample Presentation Language: *Now, before we get started talking about mindfulness, what do you already know about this topic? (Discussion)*

Mindfulness helps with connecting students with their needs. Mindful awareness is, "the state of being present and attentive (to body sensations, perceptions, cognitions, and/or emotions) and free from reaction, judgment, or attachment in one's moment-to-moment experiences" (Dorjee, 2010). What this means is that mindfulness involves focusing on the present moment and all the components of it, rather than focusing on the past or future.


It has been proven effective in treating eating disorders. But more importantly, it is a skill that children can be taught as a self-care mechanism. It can help with intuitive eating since being more aware allows more attunement to physical cues.

Other benefits include increased attention, concentration, and social and emotional competence

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Axiom C: Mindfulness, cont.

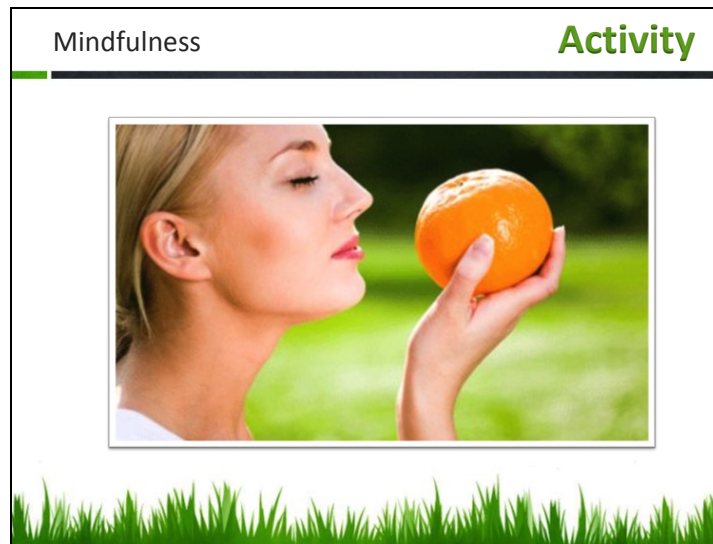
- Effective in treating eating disorders
- Foundational skill in prevention and intuitive eating
- Improves attention and concentration
- Also improves social and emotional competence



Sample Presentation Language: *It has been proven effective in treating eating disorders. But more importantly, it is a skill that children can be taught as a self-care mechanism. It can help with intuitive eating since being more aware allows more attunement to physical cues.*

Other benefits include increased attention, concentration, and social and emotional competence

Slide 83



Sample Presentation Language: Now we are going to do an activity that involves tuning in to your senses and being mindful.

(Pass out chocolate candies and lead through this exercise using a slow and calm voice)

- Take a few deep breaths to relax your body. You want to start your chocolate meditation as physically relaxed as possible. Close your eyes, if you feel comfortable with it.
1. Finally, take a small bite of your chocolate. Let it sit on your tongue and melt in your mouth. Notice the flavors from the chocolate, becoming completely absorbed in what you're experiencing *right now*. Continue your deep breathing, and concentrate on the sensations in your mouth.
 2. As you swallow, focus on how it feels going down. Notice how your mouth feels empty. Then, as you take a second bite, try to even notice how your arm feels as you raise the chocolate to your mouth, how it feels between your fingers, and then in your mouth. Again, focus on the sensations you are feeling in the present moment.
 3. If other thoughts come into your mind, gently refocus your attention to the flavors and sensations associated with the chocolate. The idea is to stay in the present moment as much as you possibly can. Savor this feeling. When you're done savoring your chocolate, take a few moments to reflect on it.

Slide 84

Mindfulness, cont.	Activity
<ul style="list-style-type: none"> • Was it difficult to focus at any time during this exercise? • Was it difficult to practice restraint when savoring the chocolate? • Did you notice anything about the chocolate that you haven't before? • How did your body react to the chocolate in your mouth? • What are some of the thoughts that came into your mind throughout the exercise? 	

Sample Presentation Language: After the mindfulness exercise has been completed, use these questions to prompt a group discussion. Use the answers below to help guide the participants to a full understanding of the purpose and potential benefit of incorporating mindfulness into daily activities.

Was it difficult to focus at any time during this exercise? Could this activity be useful in facilitating greater attention and concentration? How so?

Participant answers will vary. Facilitate the discussion toward the need to practice if it is difficult to exercise attention and concentration and what various environments it may be needed.

Was it difficult to practice restraint when savoring the chocolate?

Participant answers will vary. Facilitate the discussion toward the need to practice restraint in various environments.

Did you notice anything about the chocolate that you haven't before?

Perhaps they have a new sensory experienced with chocolate. Has this changed how they view or interact with chocolate in the future?

How did your body react to the chocolate in your mouth?

Discuss how participants' bodies physically reacted to the chocolate. What are some other situations we may notice our bodies physically reacting to any given experience? What messages do you think the body is sending each time?

Slide 85

Mindfulness, cont.	Activity
<ul style="list-style-type: none"> • What different senses were heightened as you progressed through this exercise? • How might this change how you eat chocolate in the future? • How might the practice of mindfulness be used in other daily activities besides eating? • What do you see as some of the potential benefits of mindfulness exercises? • How might mindfulness aid in the prevention of emotional eating and increase in intuitive eating? 	

Sample Presentation Language:

What are some of the thoughts that came into your mind throughout the exercise?

Gathering a sample of participants thoughts as they conducted this exercise can prompt further discussion and allow for a clearer understanding of how the participants are following the exercise.

What different senses were heightened as you progressed through this exercise?

Not unlike question 4, this question should prompt a discussion of the various senses that were heightened as they progressed through the exercise. Are there other times we see similar heightened senses? What messages are our bodies sending at these times?

How might this change how you eat chocolate in the future?

After this exercise, do participants have any new ideas about chocolate? Has this changed how they will think of chocolate in the future? What benefits might this have?

How might the practice of mindfulness be used in other daily activities besides eating?

What do you see as some of the potential benefits of mindfulness exercises?

Do the participants have ideas of where they might be able to practice mindfulness as they head back into the schools? It would be possible to record these answers to help aid in a future action plan.

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Slide 88

Ensuring Quality Programs

1. Policy: Adopt a coordinated school nutrition policy that promotes healthy eating through classroom lessons and a supportive school environment.
2. Curriculum for nutrition education: Implement nutrition education from preschool through secondary school as part of a sequential, comprehensive school health education curriculum designed to help students adopt healthy eating behaviors.



Sample Presentation Language: *The CDC offers 7 guidelines for schools to ensure quality nutrition programming. Guidelines are based on the available scientific literature, national nutrition policy documents, and current practice.*


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- *Curriculum for nutrition education: Implement nutrition education from preschool through secondary school as part of a sequential, comprehensive school health education curriculum designed to help students adopt healthy eating behaviors.*

Directions: Provide attendees with handout on ensuring quality programming.

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Ensuring Quality Programs, cont.

3. Instruction for students: Provide nutrition education through developmentally appropriate, culturally relevant, fun, participatory activities that involve social learning strategies.
4. Integration of school food service and nutrition education: Coordinate school food service with nutrition education and with other components of the comprehensive school health program to reinforce messages on healthy eating.



Sample Presentation Language: *The CDC offers 7 guidelines for schools to ensure quality nutrition programming. Guidelines are based on the available scientific literature, national nutrition policy documents, and current practice.*


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Directions: Provide attendees with handout on ensuring quality programming.

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Ensuring Quality Programs, cont.

5. Training for school staff: Provide staff involved in nutrition education with adequate preservice and ongoing in-service training that focuses on teaching strategies for behavioral change.
5. Family and community involvement: Involve family members and the community in supporting and reinforcing nutrition education.

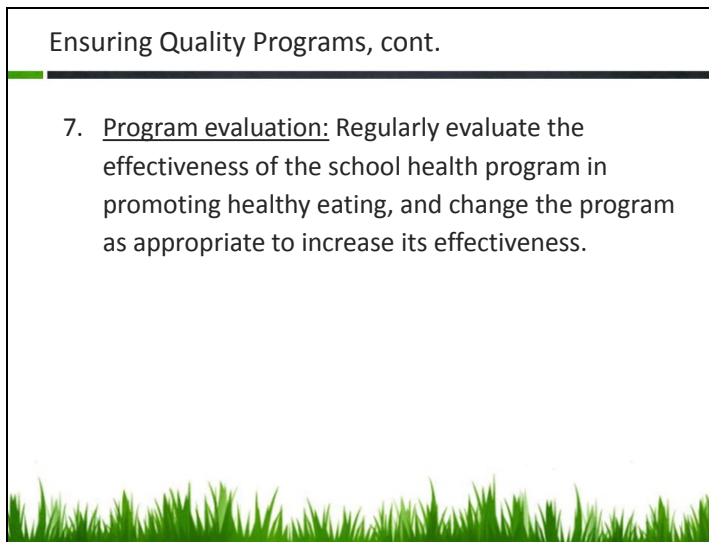


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Sample Presentation Language: *The CDC offers 7 guidelines for schools to ensure quality nutrition programming. Guidelines are based on the available scientific literature, national nutrition policy documents, and current practice.*

- *Program evaluation: Regularly evaluate the effectiveness of the school health program in promoting healthy eating, and change the program as appropriate to increase its effectiveness.*

Directions: Provide attendees with handout on ensuring quality programming.

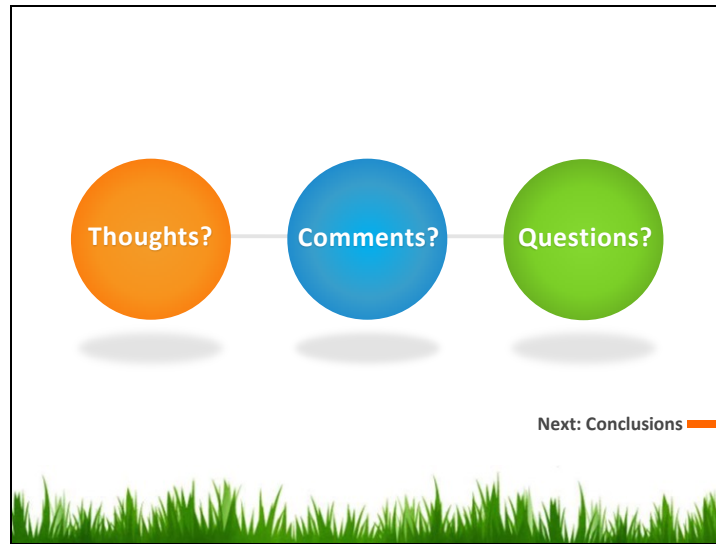
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Group Discussion

1. How feasible does implementing a quality program nurturing healthy eating and body culture seem?
2. What are some of the barriers and the supports already in place?

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Conclusion

- Worrisome trend in America being reflected in our students
- Attunement Model
 - Helps understand students relationships with food and their bodies
 - Provides a framework to effectively guide treatment and prevention efforts
- 3 Axioms of student health
- Quality Programs



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APPENDIX C

Workshop Handouts

Center for Disease Control and Prevention

Ensuring Adequate Time to Eat Best Practices

Points of Service

- Upgrade or add points of service to speed up or shorten the lunch line
- Rearrange or spread out points of service for better access for students
- Place grab and go carts at exits to encourage students on open campuses to eat a meal before they leave
- Speed up service with barcode scanners, photo IDs, lanyards with lunch cards, etc.
- Have students line up alphabetically

Lunch Periods

- Add a lunch period or institute staggered/overlapping lunches
- Lengthen the lunch period by adding time at the end of the school day
- Discontinue morning recess and add that time to the lunch period

Supervision at Lunch

- Add additional staff to supervise in the cafeteria or on the lunch line
- Ask for parent volunteers to help provide lunchtime supervision
- Have the principal on daily lunch duty to improve student behavior and school morale
- Assign students to sit at the same table daily

Recess or Free Time

- Implement recess before lunch
- Alternate lunch and recess: some students are out playing while others eat
- Split the lunchtime recess: students have 15 minutes of play, eat lunch, and then have another 15 minute recess
- Provide a few minutes of free time before lunch to allow middle and high school students to expend some energy before eating

Ensuring Seat Time

- Dismiss students individually instead of allowing them to get up and leave when finished
- Require a specific amount of time for sitting and eating before going out to play
- Encourage children to finish their meal by having a few minutes of quiet time at the end of the eating period
- Install timers in the cafeteria that start when the last student in line sits down; students must stay seated until the timer counts down to zero

Additional Solutions

- Promote collaboration at the school and district level; school administration and nutrition staff can work together to ensure all students have enough time to eat
- Award front of the line passes to students at the end of the line or as an incentive for good behavior
- Reward students with extra time added onto a lunch period
- Improve food quality and variety, pay attention to student preference
- Cut up fruits and vegetables to make them easier to eat
- Implement a local school wellness policy (LSWP) that supports time to eat

Self-Care Plan Worksheet

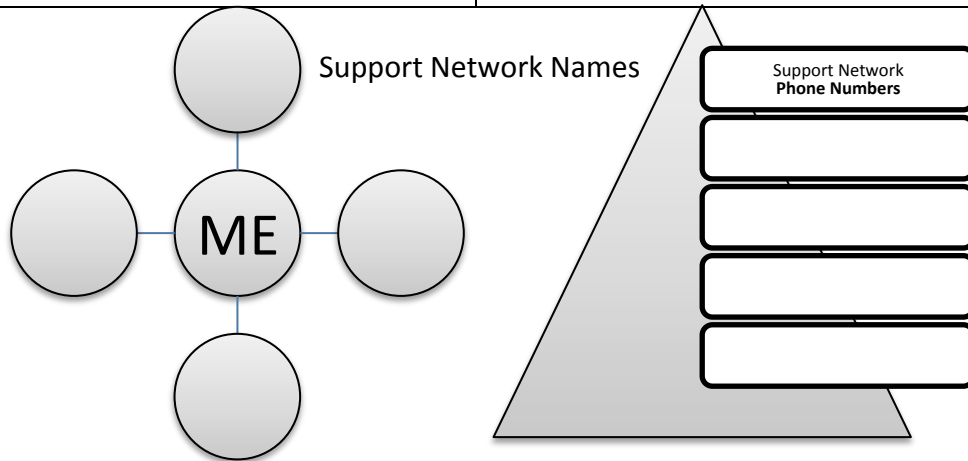
When Confronted with Obstacles...

Ways my thoughts change

Ways my feelings change

Ways my behaviors change

Stressors	Management Plan



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