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A Qualitative Exploration of Adolescent Girls' Experience  
in an Eating Disorder Prevention Curriculum

Jill L. Smedley

A thesis submitted to the faculty of  
Brigham Young University  
in partial fulfillment of the requirements for the degree of  
Education Specialist

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August 2011

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## ABSTRACT

### A Qualitative Exploration of Adolescent Girls' Experience in an Eating Disorder Prevention Curriculum

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Eating disorders are a widespread problem that affects millions of people each year in the United States. Research-based prevention programs are becoming more and more important as this number rises. This study qualitatively examined the effectiveness of a prevention program called *Eating Disorders: Physical, Social, and Emotional Consequences, A High School Curriculum about Anorexia, Bulimia, and Compulsive Eating* (EDPSEC). Study participants included 10 female students in a ninth grade health class in a junior high school in Utah. The integrity of curriculum administration was analyzed and interviews were conducted. The aim of the interviews was to determine what students who received the curriculum felt about the program and eating disorders in general. Results indicate that while treatment integrity was considered low (45%), students still found value in the curriculum and enjoyed participating in it. While a wider sample size and concurrent quantitative data are needed to further support these findings, this student indicates that the EDPSEC program is a viable option for implementing an eating disorder prevention curriculum in the secondary school setting.

Keywords: Eating Disorders, School curriculum, Prevention

## ACKNOWLEDGMENTS

First, I have to thank Dr. Lane Fischer. He was the fuel behind this entire project. He pushed me when I needed to be pushed, held my hand when I needed it, and always had the perfect words of encouragement. He always had an open door and a kind heart. He was more than just a thesis chair; he was a mentor. I will forever be grateful to him for all he has done for me.

I would like to thank my committee, Dr. Scott Richards and Dr. Dianne Neilson. Their encouragement, support, and guidance were greatly appreciated. They were always willing to help in any way possible. This project could not have been accomplished without their vital input and contributions.

I would not have been able to do all of this without the support of the other three-quarters of the Fantastic Four: Jennalee Murray, Rachel Doyle, and Janine Stickney. Working with these three has been such a blessing. Doing this four-part study was a wonderful experience and I learned so much from all of them. Their love and support got me through many anxious moments with this project and life in general.

And last, but certainly not least, I would like to thank my family: my dad Steve, my mom Deb, and my sister Kira. They are my very best friends. My parents have always given me such support and encouragement throughout my life. They are my inspiration in everything I do. I am so blessed to have such a wonderful support system and I know I would not be where I am today without all they do for me. I will never be able to tell them how grateful I am for them and how much I love them.

Thank you!

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## Introduction

Eating disorders have been a major concern to families, communities, and schools. The problem seems to be increasingly prevalent and affects more people than ever before. The issues that arise from eating disorders are extensive, causing problems in a wide range of areas in the sufferer's life. Because of this, schools are becoming further invested in preventing eating disorders.

*The Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision* (DSM-IV-TR) (APA, 2000) lists Anorexia Nervosa (AN) and Bulimia Nervosa (BN) as two specific diagnoses for eating disorders. If an individual does not meet the criteria for either AN or BN, they may be diagnosed with an Eating Disorders Not Otherwise Specified (EDNOS).

Approximately 11 million Americans suffer from an eating disorder and millions more are struggling with a binge eating disorder (National Eating Disorders Association [NEDA], 2008). Because of the secretive nature of eating disorders, the number of reported cases is likely a gross underestimate of the actual number of people suffering from an eating disorder.

Once an eating disorder develops, it tends to affect a wide range of aspects of the sufferer's life. For example, it has been shown that girls with high levels of body image and eating concerns had friendships with negative aspects, such as alienation, conflict, and social anxiety (Schutz & Paxton, 2007). Beyond relationship issues, physical health and survival are also implicated.

Of all the mental disorders, eating disorders have the highest mortality rates, with estimates that range from 3.3% to 18% (Herzog et al., 2000). It is clear that this is a significant issue and it seems as though the problem will only continue. There seems to be a clear need to prevent the occurrence of eating disorders.



The majority of those suffering from an eating disorder developed it between the ages of 15 and 19. It has been shown that the incidence of eating disorders increases significantly during the adolescent years (Duncan, 2005). It has also been shown that if an eating disorder prevention program is implemented during the high school years, the rates of incidence of eating disorders decreases (Favaro, Zanetti, Huon, & Santonastaso, 2005).

The Center for Change, a treatment center in Utah that specializes in treatment for adolescent and adult women living with an eating disorder, has developed an eating disorder prevention program to be implemented in the secondary school setting. The prevention curriculum, *Eating Disorders: Physical, Social, and Emotional Consequences, A High School Curriculum About Anorexia, Bulimia, and Compulsive Eating* (EDPSEC), was implemented and the effectiveness of the curriculum was evaluated. This curriculum was specifically developed to be implemented in the school systems at a time when the incidence of eating disorders begins to increase.

The purpose of this study was to estimate the effectiveness of an eating disorders prevention curriculum (EDPSEC) on a sample of ninth grade students enrolled in public school health classes in a western state. After the curriculum was implemented and completed, qualitative interviews were conducted to estimate the effectiveness of the program.

## **Review of Literature**

Eating disorders are a major issue in our nation and in our school systems. Millions of people are affected by eating disorders every year, and many of those affected are students. The effects of eating disorders impact these students in many different ways. In order to help these students and all sufferers, we must first understand the course of eating disorders, the physical, social, and emotional damages, and the prevention efforts that have already been tested. The following is an overview of the literature available on these topics followed by the purpose of this study.

### **Diagnosis of Eating Disorders**

The *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR)* (APA, 2000) is the source that mental health professionals turn to when diagnosing an eating disorder. It specifies two eating disorder diagnoses: Anorexia Nervosa (AN) and Bulimia Nervosa (BN). It also includes a category for those who do not meet the diagnostic criteria for either AN or BN: Eating Disorders Not Otherwise Specified (EDNOS).

In order to be diagnosed with Anorexia Nervosa, the DSM-IV-TR requires that an individual must meet all of the following diagnostic criteria:

1. Refusal to maintain body weight at or above a minimally normal weight for age and height.
2. Intense fear of gaining weight or becoming fat, even though underweight.
3. Disturbance in the way in which one's body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, or denial of the seriousness of the current low body weight.

4. In postmenarcheal females, amenorrhea, i.e., the absence of at least three consecutive menstrual cycles.

There are two different subtypes of Anorexia Nervosa, the *restricting type* and the *binge eating/purging type*. The restricting type is where individuals do not engage in binge eating or purging behaviors and weight loss is achieved primarily by dieting, fasting, or exercising excessively. The binge-eating/purging type is where eating excessively large amounts of food occurs but is followed by vomiting, misuse of laxatives, or other purging methods.

In order to be diagnosed with Bulimia Nervosa according to the DSM-IV-TR, an individual must meet all of the following diagnostic criteria:

1. Recurrent episodes of binge eating. An episode of binge eating is characterized by both of the following: eating, in a discrete period of time (e.g., within any 2-hour period), an amount of food that is definitely larger than most people would eat during a similar period of time and under similar circumstances, and, a sense of lack of control over eating during the episode (i.e., a feeling that one cannot stop eating or control what or how much one is eating).
2. Recurrent inappropriate compensatory behavior in order to prevent weight gain, such as self-induced vomiting; misuse of laxatives, diuretics, enemas, or other medications; fasting; or excessive exercising.
3. The binge eating and inappropriate compensatory behaviors both occur, on average, at least twice a week for 3 months.
4. Self-evaluation is unduly influenced by body shape and weight.
5. The disturbance does not occur exclusively during episodes of Anorexia Nervosa.

There are two subtypes of Bulimia Nervosa: the *purging type* and the *nonpurging type*. The purging type is characterized by the use of behaviors such as self-induced vomiting or the misuse of laxatives, diuretics, or enemas. The nonpurging type is characterized by the use of behaviors such as fasting or excessive exercising in place of purging behaviors in trying to prevent weight gain.

Examples of Eating Disorders Not Otherwise Specified:

1. For females, all of the criteria for Anorexia Nervosa are met except that the individual has regular menses.
2. All of the criteria for Anorexia Nervosa are met except that, despite significant weight loss, the individual's current weight is in the normal range.
3. All of the criteria for Bulimia Nervosa are met except that the binge eating and inappropriate compensatory mechanisms occur at a frequency less than twice a week or for a duration of less than 3 months.
4. The regular use of inappropriate compensatory behavior by an individual of normal body weight after eating small amounts of food (e.g., self-induced vomiting after eating a small slice of pizza).
5. Repeatedly chewing and spitting out, but not swallowing, large amounts of food.

The diagnostic criteria for eating disorders are specific and precise. By following the guidelines provided in the DSM-IV-TR, eating disorders can be effectively diagnosed. Although the criteria are helpful in diagnosing eating disorders, they may be too rigid for many people suffering from some form of eating disturbance. Often times, patients who do not meet all of the criteria are identified with a subclinical diagnosis.

A study by Bunnell, Shenker, Nussbaum, Jacobson, and Cooper (1990) looked at subclinical diagnoses versus clinical diagnoses of eating disorders. They examined 60 females who had been referred to an eating disorder clinic for treatment of an eating disorder (Bunnell, Shenker, Nussbaum, Jacobson, & Cooper, 1990). Based on the clinical criteria for diagnosing an eating disorder, 35% of those referred were categorized as subclinical anorexia nervosa and 13% were categorized as subclinical bulimia nervosa.

The researchers also found that even when patients were categorized as having a subclinical eating disorder, the sufferers showed comparable levels of psychological disturbance to those who were diagnosed with a clinical eating disorder (Bunnell et al., 1990). A very significant number of patients do not fully meet the diagnostic criteria but are still suffering the devastating effects of the disorders.

### **Base Rate/Epidemiology**

Eating disorders are a significant problem in the United States, and incidence rates continue to grow. In the U.S. alone, a total of 11 million people are currently diagnosed, with nearly 10 million girls and women and nearly one million men suffering from an eating disorder (NEDA, 2008). Due to the nature of this disorder, the numbers are likely a gross underestimate. Eating disorders are characteristically secretive, which contributes greatly to the underreporting of eating disorders.

A meta-analysis was conducted by Hoek and van Hoeken (2003) on the prevalence and incidence of eating disorders. They found an average prevalence rate of 0.29% for anorexia nervosa; while the number may seem small, 0.29% of the population translates to millions of sufferers. One reason that the prevalence rate is so low is because of the strict diagnostic criteria

of the DSM-IV-TR. When partial syndromes of anorexia nervosa were taken into account, the prevalence rates of most studies were much higher.

Throughout the United States there are at least eight incidences, or new cases in the general population, of extreme anorexia nervosa per 100,000 of the population per year. When it comes to bulimia nervosa, there are at least twelve new cases per 100,000 people per year (Hoek & van Hoeken, 2003). While there is a debate on whether or not the true incidences of eating disorders in the twenty-first century are rising, there is definitely a rise in the number of incidences being reported. This means that there is an increase in the demand for care for those diagnosed with an eating disorder.

A study by Sancho et al. (2007) looked at the prevalence rates of early adolescents in a school population in Spain. The ages of participants ranged from 9.4 to 13.5 years old. A number of assessments were given at the beginning and end of the two year study, including the Children's Eating Attitudes Test (ChEAT), the Eating Attitudes Test (EAT), and the Diagnostic Interview for Children and Adolescents (DICA). They found that the estimated prevalence rates for any eating disorder, according to the DICA, were 3.44%-3.81% (Sancho, Arija, Asorey, & Canals, 2007). One thing that influenced the prevalence rates was that the researchers included "non-full-blown" syndromes in their prevalence rates. In fact, non-full-blown syndromes were the most often diagnosed syndromes in all of the participants. One of the biggest findings that the researchers identified was that less severe forms of eating disorders often began in the early ages. In females especially, if they were diagnosed with a less severe disorder at an early age, the disorder was likely to persist and increase in severity as they got older.

## **Consequences of Eating Disorders**

There are many consequences of eating disorders. These consequences can range from mild to severe. They are also greatly encompassing, affecting nearly every aspect of the individual's life to some degree.

**Social.** In a social respect, those who have an eating disorder are often faced with deteriorating interpersonal relationships. In a study by O'Mahony and Hollwey (1995), it was found that as eating disorders become more severe, relationships suffer simply due to the toll that managing the eating disorder takes on the patient and those around them. At one point, it was thought that the reason eating disorders damaged relationships was because of the neurotic personality type often associated with those suffering from an eating disorder. This study showed that time and energy put into maintaining the eating disorder itself was a large factor in the ruined relationships of patients.

**Educational.** Adolescent and young adult patients with eating disorders can also see their schooling affected by their disordered behavior. A study by Rosval, Steiger, Bruce, Israel, Richardson, and Aubut (2006) looked at impulsivity, attention, and response inhibition in those with an eating disorder. They found that compared to the control group, participants with any type of eating disorders were shown to have attentional difficulties, and those with BN and AN-binge purge subtype also had elevated levels of impulsivity. These deficiencies in attention and impulsivity control can have a negative effect on an adolescent's schooling (Rosval et al., 2006). The Center for Change has further shown that students with eating disorders display an "inability to successfully engage in school work. Their ability to think and concentrate on school subjects is decreased, distorted, and sometimes completely destroyed as a result of their eating disorders" (Harper, Ford, Berrett, Hardman, & Richards, 2001, p. 95).

**Physical.** The physical damage that comes from eating disorders is astonishing. The damaging effects associated with sustaining an eating disorder are severe and long lasting. A study by Becker, Grinspoon, Klibanski, and Herzog (1999) looked at the effects of eating disorders on the body. They found that those who had either AN or BN were likely to develop problems in many areas, including but not limited to, orofacial, cardiovascular, gastrointestinal, reproductive, neurological, metabolic, hematologic, endocrine, and integumentary problems. The effect of starvation is one of the top two leading causes of death in patients diagnosed with an eating disorder; the other is suicide (Keel, Dorer, Eddy, Franko, Charatan, & Herzog, 2003).

The mortality rate for Anorexia Nervosa is the highest of all mental illnesses. Estimates of the mortality rate for AN range from 3.3%-18% (Herzog et al., 2000). Suicide plays a large factor in this number. A study by Franko and Keel (2006) found that anorexic patients were more likely to die as a result of suicide than bulimic patients. It has also been shown that while AN sufferers may complete suicide more frequently than BN sufferers, BN sufferers attempt suicide at least as often, if not more.

One study suggests that because the rates of suicide are so high in eating disorder patients, the threshold for hospitalization of patients should be lowered to accommodate a larger number of at-risk sufferers. This lower threshold has the possibility of reducing the rates of death in these patients (Keel et al., 2003). This study also showed that those patients who have a fatal outcome are more likely to be “unemployed, unmarried, and living with their parents at the time of death” (Keel et al., 2003, p. 179). This is a sign of poor psychosocial functioning, a factor that researchers believe predicts mortality in AN patients (Keel et al., 2003).

The damage caused by eating disorders is extensive and severe. It may span all aspects of its sufferers' lives. A person diagnosed with an eating disorder is likely to face complications in



their interpersonal relationships, their health, and in their schooling. Unfortunately, death is also a possible consequence.

### **Longitudinal Course**

The course of eating disorders is something that has been studied extensively. Research has shown who is most susceptible to developing an eating disorder, as well as the ages at which one is most at risk to develop an eating disorder. Using this information, it seems as though it would be possible to determine who is the most at risk and who would benefit most from an eating disorder prevention program.

The pressures from society to be thin are increasing. They are affecting children and youth at younger and younger ages. A study by Skemp-Arlt, Rees, Mikat, and Seebach (2006) looked at the body dissatisfaction of 261 of third, fourth, and fifth grade boys and girls. They found that there was a strong desire from both girls and boys to be thinner, despite being of normal weight. Overall, 50.6% of the children were dissatisfied with their body shape. Of all the boys interviewed, 48.9% were dissatisfied with their bodies and 38.9% wished to be thinner. Of all the girls interviewed, 50% were dissatisfied with their body shape and 45.1% wished to be thinner. There has been significant pressure on both boys and girls to be thin. These pressures are affecting these children at such young ages, which may predispose them to developing an eating disorder.

A study by Reijonen et al. (2003) looked at the course of eating disorders in the adolescent population. They found that the peak period for developing an eating disorder is between the ages of 15 and 19 years old. Younger adolescents are more likely to present symptoms of anorexia nervosa while adolescents between the ages of 17 and 21 years old are more likely to present symptoms of bulimia nervosa.

Hoek and van Hoeken (2003) found that the incidence rates for anorexia nervosa were highest between the ages of 15 to 19 years old. Of all cases of anorexia nervosa, 40% are constituted by this 15 to 19 year old age group. The risk of developing an eating disorder between the ages of 15 and 19 has increased significantly since 1935 (Reijonen, Pratt, Patel, & Gredanus, 2003). This increase shows that today's adolescents are more at risk of developing an eating disorder than ever before.

A study by Heatherton et al. (1997) showed that after the college years were completed and individuals left the college atmosphere, chronic dieting, body dissatisfaction, eating disorder symptoms were significantly diminished. The researchers believe that as we age, we tend to get further away from "the enormous social influences that emphasize thinness (such as being on a college campus)" (Heatherton et al., 1997, p. 124). This helps dramatically reduce the risk of developing an eating disorder.

Research also shows that between the ages of 14 and 16, there is a statistically significant increase in eating disturbances (Duncan, 2005). Winters (2005) discovered that the risk of an eating disorder in undergraduate women, as measured by the Eating Attitudes Test 26 (EAT 26), steadily decreased across the college years. Another longitudinal study showed that body dissatisfaction of undergraduates decreased over the course of their four years of college (Wiechmann, 2007).

Together, all of this research shows that the ages in which the risk for developing an eating disorder are at the beginning of the high school years, increasing until the freshman year of college, and then decreasing throughout the remainder of the college years. By knowing the longitudinal course of eating disorder development, an eating disorder prevention program can

be implemented at the appropriate age to reduce the risk of adolescents developing an eating disorder.

### **Prevention**

Based on all of the previous research that has been conducted, it would be most beneficial for an eating disorder prevention program to be implemented when the risk of eating disorders is low, but is beginning to escalate. According to research done by Duncan (2005) and Weichman (2007), an eating disorder prevention program may be most effective if implemented during the ninth grade year.

The literature on eating disorder prevention is lacking. While there is not much literature on the subject, what research has been conducted has been shown to be effective. A meta-analysis of research on eating disorder prevention programs looked at the effectiveness of prevention programs and the possibility of iatrogenic effects (Fingeret, Warren, Cepeda-Benito, & Gleaves, 2006). Overall, the findings suggested that eating disorder prevention programs effected “problematic eating attitudes and behaviors related to the development of eating disorders” in a positive way (p. 201). The programs also significantly increased the participants’ knowledge related to eating disorders.

The possibility of iatrogenic effects is a large concern when conducting an eating disorder prevention program. Over the years, many people have claimed that prevention programs will only be harmful. A meta-analysis by Fingeret et al. (2006) disputes that claim. The research has shown there is no evidence to support the claim that prevention programs create iatrogenic effects. The studies reported no harmful overall effects from participating in an eating disorder prevention program (Fingeret et al., 2006).

A study by Favaro et al. (2005) looked at the effectiveness of eating disorder prevention programs in a school setting. They looked at the effectiveness of including teachers in the programs. The study took teachers and gave them training about eating disorders and a prevention program that was developed by psychologists and psychiatrists who had expertise on the subject.

The researchers looked at nine classes in a vocational training school near Venice, Italy and had the trained teachers present to three of the nine classes. The other six classes were used as a comparison group. In all, 141 16- to 18-year-old girls participated in the initial assessment and 129 girls participated in the initial assessment and the one-year follow-up (Favaro et al., 2005). They found that those students who had been in the intervention group had significantly lower rates of developing an eating disorder at the one-year follow-up. Compared to the control group, the intervention group had a substantially lower percentage of new eating disorder cases. Other effects were also found. Compared to the control group, the prevention group had fewer girls develop strict diets. The prevention group girls also reported that body shape or weight was important to their self-esteem less often than the control group girls did.

Using teachers in the implementation of an eating disorder prevention program was a major factor in this study. What the results have shown is that it is effective to use teachers to implement the program, as long as they have detailed training and have been provided with facts (Favaro et al., 2005). Other benefits of using teachers for implementing a program is that it is efficient and teachers in close contact with students are likely to be one of the first to notice if a problem arises.

## **Summary**

The literature that is available shows that eating disorders continue to be a problem in this country and in our schools. The damages that come along with having an eating disorder are severe and far reaching. However, there appears to be a limited amount of information available about effective prevention programs. The purpose of this study was to estimate the effectiveness of an eating disorders prevention curriculum (EDPSEC) in a sample of ninth grade students enrolled in public school health classes in a western state. After the program was implemented and completed, qualitative interviews were conducted to estimate the effectiveness of the program.

## **Method**

### **The Intervention Curriculum**

The Center for Change developed a new program titled Eating Disorders: Physical, Social, & Emotional Consequences (EDPSEC). This program was designed to be implemented in the secondary school system and has many teaching options. The teaching option that was selected for this study includes five 75-minute lessons. However, 75-minute lessons were too long for the junior high schedule. Instead, nine lessons lasting 45 minutes each were conducted. Each session of the EDPSEC curriculum includes objectives for instruction, handouts, DVD segments, and homework assignments as seen in Table 1 (Harper et. al, 2001).

Following the program's completion, students were asked to volunteer to participate in qualitative interviews about their experience with the program and their ideas and views about eating disorders in general. Following ethical guidelines, assent from the students and consent from the students' parents were acquired.

With participant consent, the interviews were audio recorded and then transcribed for analysis. The interviews were transcribed and stored on a secured computer and were only accessible to the researchers, auditors, and the supervising faculty member. Once the transcriptions of the interviews were completed and stored, the audio recordings were destroyed.

### **Setting and Participants**

Participants in the qualitative interviews were 10 ninth-grade females from a local Utah school who completed the EDPSEC program. All 39 female participants who completed the EDPSEC program were given the opportunity to volunteer for the interviews. The research team

Table 1

*EDPSEC Curriculum*

Session	Objectives	Topics	DVD Sections	Handouts/ Homework
Session 1	<p>1- Introduce students to the subject of eating disorders.</p> <p>2- Help students understand and explore the use of coping mechanisms in their own and other people's lives.</p> <p>3- To help them recognize that eating disorders are an especially destructive coping mechanisms.</p>	<p>1- Introduction</p> <p>2- Coping with Stress</p> <p>3- Turn-About Experiences</p> <p>4- Professional Perspective on Eating Disorders</p>	<p>1- "Professional Perspectives"</p> <p>Health care professionals giving information about eating disorders and how they impact lives of their victims.</p>	<p>1- Eating Survey (ES)</p> <p>2- "Dealing with Developmental Blocks"</p> <p>3- "My Personal Developmental History"</p> <p>4- Homework: Interview of Relative or Friend regarding a painful experience.</p>
Session 2	<p>1- To help students recognize the subtle process of becoming trapped by a negative coping mechanism and to give students a model of the process by examining the development of an eating disorder.</p> <p>2- To introduce students to the danger of an eating disorder as a coping mechanism by examining the physical consequences of an eating disorder.</p>	<p>1- Recognizing the Signs of an Eating Disorder.</p> <p>2- Developing an Eating Disorder</p> <p>3- The Physical Consequences of Eating Disorders</p>	<p>1- "Entrapment" Helping students recognize subtle ways disordered eating comes into people's lives.</p> <p>2- "Physical Consequences" Shows people with eating disorders and informs them of physical consequences.</p>	<p>1- "Eating Disorder Criteria"</p> <p>2- "What Eating Disorders Are and Are Not"</p> <p>3- "Eating Disorder Statistics"</p> <p>4- "Eating Disorder Characteristics"</p> <p>5- "Physical Consequences of Anorexia and Bulimia Nervosa"</p> <p>Homework: Interview peers about eating habits.</p>

Table 1 Continued

*EDPSEC Curriculum*

Session	Objectives	Topics	DVD Sections	Handouts/ Homework
Session 3	1- Continue to educate students about the negative impact of an eating disorder by examining emotional and social consequences	1- Eating Disorders as an Emotional Shut-off Valve 2- The Emotional and Social Consequences of Eating Disorders 3- The Social Impact of Eating Disorders	1- “Emotional Consequences” Shows people with eating disorders and informs them of emotional consequences. 2- “Social Consequences” Shows people who have had an eating disorder and the social impact it has on their lives.	1- “Emotional Consequences of an Eating Disorder and other Coping Mechanisms” 2- “Social Consequences of an Eating Disorder” 3- Homework: Observe negative messages from the media and discuss potential impact of these messages.
Session 4	1- To give students an awareness of the importance of accurate beliefs about life, food, and food use and to examine how inaccurate beliefs lead one to the use of coping mechanisms like an eating disorder. 2- To teach students to recognize the signs and symptoms that reveal that someone is already trapped by an eating disorder, and 3- To utilize proper techniques for helping the sufferer.	1- Getting Trapped and Getting Free 2- Personal Beliefs that can Trap 3- Signs and Symptoms of an Eating Disorder 4- How to Help Someone with an Eating Disorder	No DVD Sections	1- “Common Myths about Life and Eating Disorders” 2- “Myths I Am Dealing With in My Life” 3- Eating Disorders: Signs & Symptoms” 4- “How to Help” 5- Homework: Formulate a plan of how to help a friend displaying behaviors of an eating disorder.
Session 5	1- To introduce students to characteristics of a healthy life by examining these characteristics in recovered eating disorder sufferers. 2- To guide students in determining how to implement the characteristics in their own lives.	1- Conclusion 2- Advice on living healthy lives and having healthy thoughts 3- Participating in healthy behaviors	1- “Freedom from Eating Disorders” Discusses recovery from disordered eating and unhealthy coping mechanisms.	1- “What About Me? A Personal Look at My Course in Life” 2- “Getting Help, Procedures and Sources” 3- Eating Survey (ES)



decided that conducting 10 interviews would yield a sufficient amount of data, as it would give us the thoughts and feelings of more than a quarter of all of the female participants.

An interview sign-up sheet was presented to all of the female participants, with 10 interview slots available to sign-up for. The volunteers were selected based on the order in which they had signed up to participate in the interviews. Those who participated in the interviews were compensated. Incentives for participating were \$10 gift certificates to Wal-Mart or a local movie theater, whichever one the participant preferred.

### **Interviews**

The interviews were conducted by a graduate-level researcher. Researchers were particularly interested in seeing how the program affected participants' thoughts and feelings about eating disorders. The interview consisted of open-ended questions about participants experiences with the EDPSEC program. The semi-structured interview consisted of the following open-ended questions that lead to discussion and follow-up questions within the context of the interviews.

1. What was your experience with the program like?
2. What were your thoughts and feelings about eating disorders before you participated in this program?
3. What are your thoughts and feelings about eating disorders now that you have completed the program?
4. How beneficial do you think it was to have this program as part of your school curriculum?

## **Data Construction**

Qualitative research methods assume that the data obtained as well as the results that flow from those data are constructed by the researcher and often co-constructed with the participants.

The data was constructed and analyzed using the following procedures.

1. The interviewer transcribed interviews. Because the interviewer is constructing the data, it is important that she create the transcription.

Transcribing involves translating from an oral language, with its own set of rules, to a written language with another set of rules. Transcripts are not copies or representations of some original reality, they are interpretive constructions that are useful tools for given purposes. Transcripts are decontextualized conversations (Kvale, 1996, p. 165).

2. Transcribed interviews were tagged with emergent themes.
3. Emergent themes were processed with two auditors who read the transcripts and provided feedback as to the trustworthiness of the constructed themes. The auditors included one expert in the field as well as a peer auditor.
4. Final themes were organized into a written report.

## **Results**

The data gathered for this study were acquired through interviews with ninth grade girls who had participated in the EDPSEC curriculum in their health class at a local Utah junior high school. A graduate level researcher conducted interviews. A semi-structured interview was carried out with each subject, audio recorded, and later transcribed by the interviewer.

### **Treatment Integrity**

The EPDSEC curriculum was split into nine 45-minute sessions (the curriculum was originally five 75-minute sessions) in order to fit into the schedule at the junior high school. However, the health teacher ended up only teaching eight 45 minute sessions using the curriculum. Two researchers made observations that the health teacher discussed only some parts of the original session four, and that the original session five was eliminated completely. Both researchers independently came to the conclusion that the students did not receive the entire curriculum.

Throughout the course of the EDSPEC curriculum, the health teacher used materials that were not included in the curriculum. On one occasion, the health teacher asked students to read out of their class health book regarding eating disorders. He also created a quiz that was not a part of the curriculum and administered it to students. Some of the questions that were asked were “name two physical signs of an eating disorder,” “what are two emotional signs of an eating disorder,” “how much pressure is on you as a person to succeed and how does that affect an eating disorder,” etc.

The students in the health class also had journals that were used throughout the course to record their feelings. During the course of the EDPSEC curriculum, the health teacher asked students record their feelings and experiences in their personal journals in addition to the class

discussions outlined in the curriculum. Although a major portion of section four discusses how to look for signs and symptoms of eating disorders in friends and family, the health teacher also made this a focus throughout the majority of the sessions.

At the conclusion of the program administration, the two researchers compared treatment integrity notes and were in agreement about the inclusion of core principles of the curriculum. It was determined that the health teacher was successful in teaching most of the core principles that were presented in the curriculum, although most of session four and all of session five were not covered. Both researchers agreed that sessions one through three generally met all of the learning objectives prescribed by the curriculum with the health teacher presenting the information in his own style.

One objective that was neglected in sessions one and two was recognizing negative coping mechanisms. During session four, it was observed that the objective of being aware of signs and symptoms in others was not completely fulfilled. Researchers determined that the health teacher did not go as in-depth as the curriculum calls for, and thus the objective was only partially fulfilled. Lastly, students were not exposed to the materials in session five and consequently none of session five's objectives were met.

Researchers observed that 0% of the homework were given from the curriculum. The health teacher did not assign or discuss any of the four homework assignments that were included in the EDPSEC curriculum (see Table 1). The exam that was included in the curriculum was not administered to students at the completion of the curriculum.

Based on researchers' observations, it was determined that nine out of seventeen handouts were presented and discussed with students in class. On several occasions, handouts were put on the overhead projector rather than being given to each student in paper form. Of the

nine handouts that were given to students or put on the overhead projector, the class discussed each one at length.

Eight of the seventeen handouts were not given to students. The breakdown of handouts that were not given out to students is as follows: one from session three (“Social Consequences of an Eating Disorder”), all handouts in session four, and all handouts in session five (see Table 1). In session five, two the handouts were not given to students although they were partially discussed as a class. These two handouts were “What to Do to Help and What Not to Do to Help” and “Eating Disorders: Signs and Symptoms.” While these topics were discussed, researchers agreed that the discussions that took place did not go into the depth that the curriculum prescribes and thus it did not constitute having covered the handout. The class did discuss some of the negative signs and symptoms of an eating disorder and how you can help your friends if they have an eating disorder.

Of the six DVD segments that were integrated into the curriculum, researchers observed that five were shown to the class. The segment that was not shown to the class was “Freedom from Eating Disorders,” which discusses recovery from eating disorders and changing unhealthy coping mechanisms. While 83% of DVD segments were shown, the class discussed only 60%, or three out of five, of those that were shown. The two segments that were not discussed as a class were “Emotional Consequences” and “Social Consequences.” These segments involved individuals who have eating disorders and mental health professionals discussing the social and emotional consequences of eating disorders. These two segments were shown back-to-back at the end of the class. Before the second segment could finish, class ended leaving no time for a discussion about the video clips.

Overall, researchers determined that level of treatment integrity in administration of the EDPSEC curriculum was 45%, which is considered low. After having two researchers observe all sessions, it was found that 5/6 DVD segments were shown to the class, 9/17 handouts were used, 0/4 homework assignments were assigned, and 0/1 posttests were administered. Session objectives from sessions four and five were not fully covered and portions of sessions one and two were also incomplete. Additional materials and information that was not part of the curriculum was introduced to the students, while some of the DVD segments were not discussed as a class. The handouts, DVD segments, objectives, and topics that were introduced to the class appeared to be presented in an effective and efficient manner. It was also observed that the health teacher is a skilled and experienced instructor, but he did make several modifications to the curriculum which affected the integrity of this study.

### **Themes**

After reviewing the interviews, the researcher was able to identify 8 themes. Three of these themes had an additional, more specific sub-theme. The themes that were identified are as follows:

- Theme 1: The students didn't really know what eating disorders were before this program
  - Sub-Theme: The program helped the students better understand what eating disorders are
- Theme 2: The program was an eye-opener for the students
  - Sub-Theme: The program helped the students realize that eating disorders are a dangerous or serious problem
- Theme 3: The program helped the students feel like they can help others
  - Sub-Theme: The program helped the students better recognize eating disorder symptoms (or unhealthy eating attitudes and behaviors) in friends and peers and self
- Theme 4: The students' actions can impact others
- Theme 5: It would have been helpful to have people with personal experiences talk with the class
- Theme 6: The students enjoyed it
- Theme 7: This program was beneficial

- Theme 8: Sharing of personal and peer experiences with eating disorder issues and concerns

The themes will be individually discussed below.

**Theme 1: The students didn't really know what eating disorders were before this curriculum.** One theme that was repeated frequently was that students really didn't know what eating disorders were before they participated in this curriculum. Nearly every interview produced a comment that went along with this theme. In some form or another, it came across that these students really hadn't been educated on what eating disorders are and the effects that they can have on a person.

One of the main focuses of this curriculum is to educate students about eating disorders so that they will be aware of the threat and be prepared to face that threat in a positive way. If students aren't informed about eating disorders, it is likely that they will be less able to deal with the threat of these disorders in an effective manner. It was surprising that so many of the students that were interviewed reflected this same viewpoint.

As examples, students said "I really didn't know what it was," "I didn't like, know anything about them really," and "I didn't really know what they really were just that they were a threat to teenage girls." One student in particular said,

I was actually really surprised actually, just everything, I had no idea. I knew about anorexia but I didn't really know about the other two, bulimia and bingeing and purging or whatever, so I was just like really surprised at the numbers and stuff and what people are actually doing and how much you can really influence people to do what they do.

This was a sentiment that was expressed several times. Many students found the information that was presented in the curriculum to be novel. Several participants indicated that they had never had a class on the topic of eating disorders.

In addition to this theme, a sub-theme was identified. Students expressed that the curriculum helped them better understand what eating disorders are. As mentioned above, many of the students were truly unaware of eating disorders. In addition to informing students that eating disorders were in existence, the curriculum also informed students of what exactly eating disorders are and how they can affect a person suffering from one. One student said that she knows “more than I knew before.”

Another student told about her limited knowledge of eating disorders before participating in the curriculum when she said “Well I had heard about them but I didn’t know exactly what they were and how to classify which one is which.” During the course of the program these things were covered and the students were taught the specifics of eating disorders.

**Theme 2: The curriculum was an eye-opener for the students.** As mentioned above, many of the students were truly unaware of eating disorders. In addition to just learning about what eating disorders are, many participants felt that this program was a big eye-opener. Such ideas were expressed repeatedly throughout almost all of the interviews, with a few participants repeating this idea multiple times.

Participants expressed how shocked they were by the information that was presented to them during the course of the program. Some of the comments that were expressed were “I’m a lot more aware. Like, it’s a big deal,” “I knew it was kinda like a thing, but I didn’t know it was that big,” “It was a big eye-opener for me,” and “It was really surprising to me.” One student



stated her feelings on the subject by saying, “I just know that personally, it put a different view in my mind, because like I never really quite got it, you know?”

Additionally, a sub-theme stating that the curriculum helped the students realize that eating disorders are a dangerous or serious problem was identified. Not only did this curriculum make students more aware of eating disorders, but participants also reported that the program made them realize how dangerous eating disorders are. Many participants stated that they didn’t understand how dangerous eating disorders actually are. On this topic, one participant said the following:

Well I realize that they are a lot more serious than I thought and that um, I knew that they were bad, like I know now that they’re like, really, really bad, and that they can, like, kill you and stuff.

Another revelation that was made throughout the program was how serious and prevalent a problem eating disorders are. When asked what part of the program had the biggest impact on her, one participant responded by saying, “Probably, like, the percentages and stuff and, like, knowing how many people actually do it.” This is something that was seen in several of the interviews. Another participant said, “I was really surprised with all the, how high the numbers are, especially, like, in Utah and how many teenagers have it.” Another participant reported that she was also surprised by the number of people in Utah who are suffering from an eating disorder: “I still think the big thing is that ‘this can’t happen here’ whatever, but it does.”

**Theme 3: The curriculum helped the students feel like they can help others.**

Based on the interviews, several participants indicated that one of the most valuable outcomes of this program was that it made them feel like they were capable of helping others who are having eating disorder issues. It seems as though participation in the program gave them

a sense of a confidence in their abilities to have an impact on those with an eating disorder. One participant said, “I can help friends and family members if they’re going through it and I can say ‘K, you’re having this problem, let’s try to get you back on the right track again.’” When asked if they thought the program was beneficial, the same participant also said the following:

I thought it was very beneficial, because I know, like, if I’m gonna help a friend then I know what to look for and I know what, like, they might be thinking a little bit, and I can help them more.

This type of sentiment was repeated in multiple interviews. Students appeared to feel as though this program had prepared them to effectively deal with a friend or family member who has or are at risk of developing an eating disorder. A different student had the following to say on this topic:

I think it really benefited because it brought people’s attention, if they really had one or not, and if they had friends or family that have eating disorders that they can help them from what they learned from the program.

Helping students feel like they are capable of helping others around them appeared to be something that was very important to these students and something that they saw value in. Based on the comments in the interviews, it seemed as though this curriculum was able to provide this capability to the students.

A sub-theme was identified for this theme as well. Students mentioned that the program helped them better recognize eating disorder symptoms (or unhealthy eating attitudes and behaviors) in friends, peers, and self. Being able to identify unhealthy eating habits and other eating disorder symptoms in both themselves and others around them was another benefit of the curriculum that the students reported was valuable. Several students said that not only did they

feel that they were more capable of helping those around them, they were able to recognize the symptoms beforehand. Many participants reported that by understanding eating disorders and their signs and symptoms, they would be able to spot these things in those around them.

When asked if she had any personal experiences with eating disorders, one student said “Now that I’m looking back and seeing all these signs that never really registered in my brain then.” The student talked about how she was able to recognize the signs and symptoms of an eating disorder (or unhealthy eating attitudes and behaviors) retroactively.

Another student said that after participating in this curriculum, she was able to recognize that one of her friends has unhealthy eating habits and possibly even an eating disorder. She said,

I see it often because my best friend was bulimic and so, like, is just yeah... just learning signs about it, it is, like, oh yeah I saw that it explains so much, and ... it [is] just ... a concern here ... at school.

**Theme 4: The students’ actions can impact others.** Many of the students who participated in the post-curriculum interviews reported that they came to the realization that their actions not only affect themselves but that they can have a great effect on those around them. One particular video in the curriculum had an interview with a patient with anorexia who described a comment that was made to her when she was young. She revealed that this one little comment was the beginning of her long battle with the disease.

Several students brought this concept up during the course of their interviews. One student said about the curriculum and its effects, “I think it will make everyone more aware of what they are saying about people and, like, how they can affect people.” Another student echoed this opinion: “you realized how much, like, little comments, like, with the stories and how just one comment or one rude thing can send someone’s life completely out of control.”

Students appeared to recognize the importance of their actions and words and the effects that they can have on those around them. Students seemed to understand this concept more than they ever have before. One student reported that participating in the program “makes me watch what I am saying, just, like, the influence I have on them. Like, I could change someone else’s life.”

**Theme 5: It would have been helpful to have people with personal experiences talk with the class.** While students thought that the curriculum was good, several of the interviewees mentioned that they believed that it would have been beneficial if someone who had a personal experience with an eating disorder was able to come into the classroom and talk with the students. When asked what could be done to improve the curriculum, one student responded by saying, “maybe more speakers or something.” She mentioned that her favorite part of the curriculum was the videos of girls with eating disorders that were shown to the class. This student went on to say that she felt that having a guest speaker talk with the class would add to the effectiveness of the curriculum. She said, “The statistics are nice maybe as an introduction but that doesn’t really reach you. Remembering numbers isn’t really going to do anything for you.” She believed that this was a good curriculum and she enjoyed it, but she thought that this addition would have made it even better.

Other students believed that having a speaker come and address the class would have added to their overall experience with the curriculum. A different student said, “I think it’s good to, like, give experiences [that] show how real it is.” For this student, having someone come in and share their personal experiences with the class would have helped her understand the reality and seriousness of eating disorders.

**Theme 6: The students enjoyed the curriculum.** The overall reaction of the students was that they really did enjoy the curriculum. Interviewees reported that they liked the curriculum and enjoyed being a part of it. Some of the comments that were made by students were “I really liked it,” “I related to it and I was glad to learn about it so, I liked it,” and “I loved coming to class, it was one of my favorite parts of this class so far. It’s just really fun and nice to know.”

**Theme 7: This program was beneficial.**

Based on the interviews that were conducted, it appears as though the students felt that this program was beneficial and worthwhile. Nearly all interviewees were asked whether or not they thought the curriculum was beneficial for them and/or the class. The response was overwhelmingly positive. One student said, “I think it was very beneficial, especially going into high school next year.”

Several of the interviewees were also asked if they thought this curriculum was worthwhile enough to use again in the future. When another student was asked this question, she responded by saying,

Oh yeah. Yes, yes, yes, yes. This is a really big thing. And I actually think, see everyone knows about drugs, everybody knows about alcohol, but and you know about eating disorders, but you don’t *know*. Like you don’t *know*.

Students appear to have thought that this curriculum was something that was helpful and something that they and other students needed to be exposed to. Another student responded to this same question by saying “I think it should. . . . definitely be used in the future.” Students felt that using this curriculum was something that should be continued.

**Theme 8: Sharing of personal and peer experiences with eating disorder issues and concerns.**

Several of the students who were interviewed opened up to the interviewer and shared some of their personal or peer experiences with eating disorder issues. Students opened up and shared personal thoughts and feelings with the interviewer. One student shared with the interviewer her personal revelation about eating disorders: “I’ve always been very self conscious, but just, with like, with this program it’s just kinda, like, you finally see that these people aren’t happy.”

Another student shared how as the class was progressing through the curriculum, she was affected by the things that she was learning about. She said “personally, actually when, um they were showing it, um, I kind of related with some of the stuff”. She was able to recognize her own unhealthy attitudes and eating habits.

**Conclusion**

Overall, the information gathered from the interviews appears to support the effectiveness of the program. Student’s expressed similar sentiments that resulted in the formation of eight different themes. These themes seem to suggest that there was progression towards understanding eating disorders among participants. The themes also suggest that gaining this understanding was viewed as beneficial by the participants themselves.

## Discussion

The purpose of this study was to estimate the effectiveness of an eating disorders prevention curriculum (EDPSEC) on a sample of ninth grade students enrolled in public school health classes in a western state. After the program was completed, qualitative interviews were conducted to estimate the effectiveness of the curriculum.

### Major Findings

There was a large variance in the amount of information that was produced in each interview. Some interviews produced an abundance of information while others produced minimal information. Some volunteers were very willing to open up to the interviewer and share their personal thoughts and feelings, while others had very little to say and answered the questions with minimal elaboration. One explanation of this variance is due to differences in personality and the participants' comfort level with sharing personal thoughts and feelings with the interviewer. Another possible explanation is that the student's level of interest in and attention to the curriculum could be a factor. The interviewer noticed that several of the students who shared more in the interviews were students who were actively engaged throughout the curriculum. Several of the students who shared the least in the interviews were those who sat in the back of the classroom and were often seen talking to their male peers during instruction. Their lack of engagement likely contributed to the brevity of their answers during the interview. Although the shorter interviews seemed less insightful, they were still very worthwhile and provided interesting and important information

Another interesting observation was that, for the most part, students seemed very interested in the curriculum and enjoyed learning about the subject. This was something that was definitely reflected in the interviews. Every volunteer reported that they did, in fact, enjoy the

curriculum, even those that were less actively engaged in the class. Most of the students seemed to be interested in what was being presented to them without being bored.

Students seemed to be interested in this curriculum because they were truly uninformed about eating disorders prior to the intervention. As many of the interviews suggested, students were shocked at the prevalence and severity of eating disorders. The students in the class had not received much instruction on this topic. The majority of the information covered in the curriculum was new to them and very surprising. Thus the case can be made that a prevention program is beneficial and critical to these students.

The prevalence of eating disorders, whether full-blown disorders or simply unhealthy eating habits and attitudes towards food, is something that appears to be vastly underestimated in the junior high school population (Sancho, Arija, Asorey, & Canals, 2007). Researchers were surprised to learn how prevalent the volunteer interviewees felt that this problem was at their school. The majority of those interviewed indicated that this was either a problem for them personally or that they knew someone in school that had this type of problem. It may be that many of the adults and authority figures in the school are unaware of the prevalence of eating disorders, but once the students were learned to it they identified it broadly within the school.

Overall, the students believed that this curriculum was beneficial to them to and should be used again in the future. Students felt that they learned much from participating in the curriculum and that it was important for them to have been educated about eating disorders. They became more aware of the dangers and the possibilities of an eating disorder.

The biggest revelation throughout the interviews was the impact of the peer culture on eating disorders. The peer culture, as defined by Coraso (1997), is “a stable set of activities or routines, artifacts, values, and concerns that children produce and share in interaction with peers”



(p. 110). The importance of the peer culture was revealed throughout the course of the interviews. There were several aspects of the peer culture that are relevant to eating disorders in the schools.

Many of the students seemed to think that this curriculum was not necessarily preventative in nature, but that it was an informative curriculum. They felt that participating in this curriculum would not prevent them personally from developing an eating disorder. These adolescents seemed to have a common development block of the *personal fable* and *immortality* that suggests that they are immune to things that could be dangerous or harmful to them (Elkind, 1967). It is likely that they did not see their own susceptibility to developing an eating disorder.

While the students did not see the possibility that this program would help prevent them personally from developing an eating disorder, many students reported that one of the most important features of the curriculum was that they felt that they were in a better position to recognize signs and symptoms in their friends. Based on this fact, it is possible to see that because these students are more able to recognize a developing pattern of eating disorders they are more able to prevent the development of full blown eating disorders in those around them. Thus the conclusion can be drawn that this curriculum, in one form or another, is a preventative curriculum.

Perhaps the most interesting thing that came out of the interviews was the fact that some of the students realized that what they say and do can affect others around them. It appears that some of these adolescent girls realized that their actions can affect their peers in a significant way. The video segment entitled "Entrapment" involved a young woman with an eating disorder discussing the effects of having the disease on her life. While this young woman is being interviewed, she tells a story of how she developed an eating disorder. She recalls that while she

was young, one of her peers said something to her about her weight and that led her to spiral out of control and to develop an eating disorder. This particular video clip appeared to have had a profound impact on many of the students. The idea of a contagion or suppression effect of their own behaviors became something very real to these students and something of a revelation to them.

These students are at the point in their development when they are beginning to mature and become less egocentric. Perhaps these students have reached that point and are now beginning to see a larger picture beyond themselves. They can now see that they are part of a system rather than simply an organism on its own surrounded by other organisms on their own. They see the interaction between each individual organism and how they all relate to each other and affect each other in profound ways that they never saw before.

This implication is significant. If this program was able to bring that knowledge to the forefront in their minds, then it is well worth the time and effort. By being aware of the possible implications of their own words and actions, students can become more sensitive to those around them and more careful in the way they deal with their peers. This could possibly reduce the incidence of eating disorders within the adolescent population. While this will likely not stop all eating disorders from developing within in the school system, it will likely have a positive effect on the overall occurrence.

All of the findings together would suggest that the EDPSEC curriculum is beneficial and worthwhile to the students who received it. For the most part, students both enjoyed and appreciated the curriculum and the many things that it taught them. Hopefully one day others will also see the importance of eating disorder prevention in the school system and this curriculum will be used widely and frequently with much success.

## **Limitations**

There were limitations to this study. As discussed earlier, treatment integrity was fairly low with this study. This could have had an impact on the overall effectiveness of the curriculum. The teacher did not completely follow the prescribed format as laid out in the curriculum. However, the teacher was fully engaged in the topic and was able to keep the class involved with the topic as well, even if it was in his own unique way.

Another limitation to this study was that it was broken down into nine 45-minute sessions to fit into the junior high school schedule. By doing this, some of the information was missed or cut short in order to better fit into the schedule. The chopiness of the schedule also may have prevented the students from being able to fully delve into their own personal beliefs and feeling about the subject. Allowing students to have an hour and a half for each session allows students to become more fully engulfed by the topic rather than scratching the emotional surface each 45-minute session.

## **Suggestions for Further Research**

There are many different avenues for further research. Using different populations would likely produce very different results. Giving the curriculum to both older and younger populations would give an interesting contrast to this study. It is possible that replicating the study in a different location would also produce different results.

## **Conclusion**

In conclusion, this study appears to give us some valuable insight into adolescent girls' experiences with the EDPSEC curriculum. Overall, it seems as though the girls learned a lot and gained a lot of insight throughout the course of the curriculum. They also endorsed the

importance and benefits of having this course as part of their school curriculum. While there is still need for further research, these initial results seem promising.

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