

Copyright
by
Ariel Sarah Trost
2006

**The Dissertation Committee for Ariel Sarah Trost certifies that
this is the approved version of the following dissertation:**

**The Healthy Image Partnership (HIP) Parents Program:
The Role of Parental Involvement in Eating Disorder Prevention**

Committee:

Lucia A. Gilbert, Co-Supervisor

Eric M. Stice, Co-Supervisor

Gary D. Borich

Leslie A. Moore

Kristin Neff

**The Healthy Image Partnership (HIP) Parents Program:
The Role of Parental Involvement in Eating Disorder Prevention**

by

Ariel Sarah Trost, B.A.; M.A.

Dissertation

Presented to the Faculty of the Graduate School of

The University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

Doctor of Philosophy

The University of Texas at Austin

August, 2006

The Healthy Image Partnership (HIP) Parents Program: The Role of Parental Involvement in Eating Disorder Prevention

Publication No. _____

Ariel Sarah Trost, Ph.D.

The University of Texas at Austin, 2006

Supervisors: Lucia A. Gilbert and Eric M. Stice

Afflicting 16% of adolescent girls, threshold or subthreshold bulimia nervosa is one of the most common psychiatric problems facing this population. Research suggests that an adolescent's body image and dieting behaviors are closely related to those of her parents. Guided by the literature on the inclusion of parents in drug use and obesity prevention programs, the current study assessed the impact of educating parents as mental health agents in the pursuit of reducing the perceived sociocultural pressure to be thin, thin-ideal internalization, body dissatisfaction, dieting behaviors, negative affect and bulimic pathology of their adolescent daughters and improving parent-daughter communication. 81 parents of middle school girls with body image concerns were randomly assigned to either the Healthy Image Partnership (HIP) Parents Program or to a measurement-only waitlist condition. Parents assigned to the HIP Parents Program attended three weekly

90-minute workshops designed to facilitate; a) greater differentiation of the thin-ideal and the healthy-ideal; b) increased understanding of the ways parents communicate the thin-ideal to their daughters and; c) alternatives to these interactions and discourses, so as to help these parents to help their daughters improve their body image. The findings provided evidence that the HIP Parents Program reduced parent participants' thin-ideal internalization, body dissatisfaction and dieting behaviors as compared to the waitlist condition, with the first two of these reductions persisting at the 3-month follow-up assessment point. Results also indicated that daughter participants evidenced significant reductions in thin ideal internalization, dieting behaviors and bulimic symptoms, though these effects did not reach significance across condition. Findings suggest that this intervention did not significantly improve communication between parents and daughters nor did it decrease negative affect among participants. Parents participating in the HIP Parents Program did report significant reductions in applied pressure to be thin, though these reductions did not reach significance across condition. Contrary to hypotheses, daughters of these participants did not report reductions in perceived pressure to be thin. The significant yet modest results of this three-session workshop represent a much-needed first step in the direction of providing wrap-around programs for the prevention of eating disorders in adolescent females.

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION	1
1.1 BACKGROUND	5
1.2 THE EATING DISORDER SPECTRUM	9
1.2.1 Diagnostic Features.....	9
1.2.2 Epidemiology	10
1.2.3 Body Image Disturbance.....	11
1.3 THEORETICAL PERSPECTIVES AND MODELS	13
1.3.1 Developmental Models	14
1.3.2 Sociocultural Models	16
The Dual-Pathway Model.	18
1.3.3 Feminist Discourse Models.....	18
The Role of “Fat Talk”	21
“Fat Talk” and the Thin-Ideal	23
“Fat Talk:” More than Just Talk	25
1.3.4 Social Learning Theory.....	28
1.4 TREATMENT AND PREVENTION RESEARCH	30
1.4.1 Treatment Modalities	30
1.4.2 Prevention Trials	32
1.4.3 Dissonance Theory and Prevention	35
1.4.4 Dissonance-Based Intervention and Discourse Theory	39
1.5 PARENTAL IMPACT	41
1.5.1 Social Reinforcement.....	44
1.5.2 Modeling	48
1.5.3 Prevention and the Role of Parents	49
1.5.4 The Role of Parents in Disrupting the Dominant Discourse.....	53
1.6 CONCLUSIONS	54
CHAPTER 2: CURRENT STUDY	55
2.1 OVERVIEW	55
2.2 SPECIFIC AIMS	56

2.3 HYPOTHESES	57
CHAPTER 3: METHOD	59
3.1 PARTICIPANTS	59
3.2 DESIGN.....	59
3.3 PROCEDURE	59
3.4 INTERVENTION	61
3.5 MEASURES	62
3.5.1 Adolescent Self-Report Survey.....	62
3.5.2 Parent Self-Report Survey	66
CHAPTER 4: STATISICAL ANALYSES	68
4.1 PRELIMINARY ANALYSES.....	68
4.2 OUTCOME ANALYSES	68
4.3 EXPLORATORY ANALYSES	69
CHAPTER 5: RESULTS	70
5.1 CHARACTERISTICS OF PARTICIPANTS	70
5.1.1 Parent Participants	70
5.1.2 Daughter Participants.....	71
5.2 ATTRITION.....	72
5.3 PRELIMINARY ANALYSES.....	72
5.4 MAIN EFFECTS OF EXPERIMENTAL MANIPULATION	73
5.4.1 Effects of Intervention on Daughter’s Perceived Pressure to be Thin and Parental Model of Eating Disturbances.....	75
5.4.2 Effects of Intervention on Parents’ Thin-Ideal Internalization, Body Dissatisfaction, Dieting Behaviors and Negative Affect	76
5.4.3 Effects of Intervention on Daughters’ Thin-Ideal Internalization, Body Dissatisfaction, Dieting Behaviors and Negative Affect ..	78
5.4.4 Effects of Intervention on Bulimic Symptoms	80
5.4.5 Effects of Intervention on Familial Communication	81
5.5 EXPLORATORY EFFECTS.....	82

CHAPTER 6: DISCUSSION	84
6.1 MAIN EFFECTS OF EXPERIMENTAL MANIPULATION	84
6.1.1 Effects of Intervention on Daughter's Perceived Pressure to be Thin and Parental Model of Eating Disturbances.....	84
6.1.2 Effects of Intervention on Parents' Thin-Ideal Internalization, Body Dissatisfaction, Dieting Behaviors and Negative Affect	86
6.1.3 Effects of Intervention on Daughters' Thin-Ideal Internalization, Body Dissatisfaction, Dieting Behaviors and Negative Affect ..	89
6.1.4 Effects of Intervention on Bulimic Symptoms	91
6.1.5 Effects of Intervention on Familial Communication	92
6.2 EXPLORATORY EFFECTS	93
6.3 STRENGTHS AND LIMITATIONS	94
6.4 CLINICAL IMPLICATIONS AND FUTURE DIRECTIONS	97
6.5 CONCLUSION	98
APPENDICES	100
REFERENCES	143
VITA	157

CHAPTER 1: INTRODUCTION

In the original edition of the landmark women's health book, *Our Bodies, Ourselves*, published in 1973, the authors wrote, "Our bodies are the physical bases from which we move into the world; ignorance, uncertainty – even, at worst, shame – about our physical selves creates in us an alienation from ourselves that keeps us from being the whole people that we can be" (excerpted in Schneir, 1994, p. 359). Radical for its time, the claim that body image is linked to psychological well-being has been well-supported in the more recent literature on the impact of body image disturbance on the lives of girls and women. Studies have found that adolescent body image disturbance may be related to low self-esteem and is a risk factor for both depression, and eating disorders (e.g. Koff & Rierdan, 1991; Stice & Bearman, 2001).

Women's roles and attitudes toward their bodies have long contributed to a complex relationship with food, underscored by evidence that eating disorders have existed for centuries (Bell, 1985; Brumberg, 1988). Within recent decades, the constellation of attitudes and behaviors that comprise eating disorder diagnoses has become more common and now negatively impacts the lives of anywhere from 3-10% of women in this country (Fairburn & Beglin, 1994; Lewinsohn, Striegel-Moore & Seeley, 2000). Eating disorders are associated with numerous negative sequelae, including academic failure, interpersonal isolation, comorbid psychopathology, medical complications and early mortality (Bruch, 1978; Herzog et al., 2000; Thompson, 1994; Wilson, Heffernan & Black, 1996).

This recent rise in prevalence rates of threshold and subthreshold eating disorders coincides with America's increased internalization of the ultra-thin beauty ideal. Today, the average supermodel weighs 23% less than the average woman; a generation ago, she weighed only 8% less (Garner et al, 1980; Kilbourne, 1994). As ideals of beauty become increasingly inaccessible to the average woman, the costs of pursuing them become greater. According to Stice's (1994) dual-pathway model, sociocultural pressures (from media, peers and parents) lead to an internalization of this "thin-ideal," which in turn leads to the body dissatisfaction associated with the dietary restraint and/or negative affect that serve as the proximal pathways to bulimic symptoms.

Given the current proportions of these threats to mental and physical health, the development of prevention programs that aim to circumvent these disorders is both necessary and ethically compelling. The recent literature on prevention trials, while more promising than in the past, suggests that there remains much to learn (see Stice & Shaw, 2004 for review). To date, many of these efforts have been psychoeducational, providing information regarding the dangers of eating disorders. The few interventions that have been more successful in reducing eating disorder symptoms have had an interactive and participatory format and have focused their aims specifically on reducing the thin-ideal internalization that is thought to occur early in the causal chain of eating pathology (Stice et al., 2000, 2001, 2003).

Increasingly, mental and physical health researchers are advocating a more ecological approach to prevention. In their extensive review of the prevention of mental disorders in children, Greenberg and colleagues (2001) conclude with recommendations

for effective prevention programming. Among others, this list includes the assertion that successful interventions will seek to alter the social environment as well as the individual and will provide multiple components in order to promote positive changes in those domains that most influence children, such as home and school. These findings support Striegel-Moore and Steiner-Adair's (1998) claim that eating disorder prevention research should follow a feminist approach and thus attempt to create systemic changes. These authors write that "feminist approaches to prevention take into account the role and responsibility of adults in children's lives and therefore include parent education" (p. 7). As yet, only Brown and colleagues (2004) have published an eating disorder prevention study with a parental component. In this particular study, the parent module was both optional and delivered via the Internet.

By exploring current etiologic models of eating disorders and by highlighting significant findings within the prevention literature, this introduction offers evidence of the importance of altering the role that parents play as mental health agents. By emphasizing the costs of disordered eating and body image disturbance in conjunction with the more obvious psychological and physical consequences of clinical eating disorders, this chapter makes the case for broader prevention needs within at-risk populations. This chapter will focus specifically on the theoretical and empirical support for theories regarding the sociocultural transmission of the thin-ideal and the dominant discourses that perpetuate it. This review of the literature concludes with an examination of the parental variables associated with body image disturbance and disordered eating

and provides evidence from prevention programs in other domains that supports the development and inclusion of a parent-focused program.

In chapter two, I propose a research study that aims to strengthen the current prevention literature by including parents in efforts to reduce the thin-ideal internalization and consequent body dissatisfaction of their adolescent daughters. This study will compare the effects of a parent intervention with a waitlist control condition in a randomized experimental paradigm. The three-part parent intervention, targeting parents of middle and high school girls with parentally-reported body image concerns, will aim to illuminate and then alter parental participation in the dominant discourses that contribute to the perpetuation of the thin-ideal. Though operating largely outside conscious awareness, dominant discourses are the “medi(a) that provide the words and ideas for thought and speech, as well as the cultural practices involving related concepts and behavior” (Hare-Mustin, 1994 quoted in Gilbert & Scher, 1999 p. 80). When related to women’s bodies, these discourses maintain a status quo that associates female value with appearance and female beauty with thinness. Unchallenged, these social discourses limit the potential of adolescent girls by reducing them to their objectified bodies. By bringing these discourses to “conscientization” (Freire, 1970 quoted in Piran, 2001), this intervention will provide parents with the opportunity to create meaningful alternative discourses and will reduce the extent to which parents model and reinforce the thin-ideal, thus improving their daughters’ body and food-related attitudes and behaviors, while increasing daughters’ perceptions of familial communication.

The effectiveness of focusing on parents in this prevention program will be determined by comparing the differences in effect sizes with regard to reduction of daughters' perceived sociocultural pressures to be thin and their thin-ideal internalization, which should also indicate similar reductions in body dissatisfaction, dietary restraint, negative affect and bulimic pathology. Research has shown significant effects for the adolescent-only intervention (Stice, Trost & Chase, 2003); through the creation and evaluation of a module that can later be applied in tandem with the adolescent intervention, this study is the first step towards implementing and experimentally testing a program that offers a wrap-around approach to eating disorder prevention.

The purpose of this dissertation is to contribute to the prevention literature by developing and testing the first in-person eating disorder prevention module aimed exclusively at parents. The creation and implementation of this program is consistent with the field's commitment to increasing the ecological focus of prevention efforts.

1.1 BACKGROUND

Appearance, not accomplishment, is the feminine demonstration of desirability and worth. In striving to approach a feminine ideal, by corsetry in the old days or by a cottage-cheese-and-celery diet that begins tomorrow, one arms oneself...Because she is forced to concentrate on the minutiae of her bodily parts, a woman is never free of self-consciousness. She is never quite satisfied, and never secure, for desperate, unending absorption in the drive for a perfect appearance – call it feminine vanity – is the ultimate restriction of freedom of the mind. (Brownmiller, 1984, pp.50-51)

Approximately 16% of females will suffer from threshold or subthreshold bulimia nervosa during adolescence (Fairburn et al, 2000; Stice, Killen, Hayward & Taylor, 1998), making it one of the most prevalent psychiatric problems faced by young women.

These young girls and women suffer the physical and psychological consequences of a disease that ravishes the body and the spirit simultaneously. Because bulimia is unremitting and is associated with medical complications and comorbid psychopathology, including affective disorders, anxiety disorders and substance abuse (Garfinkel et al., 1995; Johnson, Cohen, Kasen & Brook, 2002; Keller et al., 1992; Wilson, Heffernan & Black, 1996), much attention has been devoted to developing prevention programs. The literature on eating disorder prevention trials suggests, however, that they are rarely successful (Stice & Shaw, 2004; Striegel-Moore & Steiner-Adair, 1998).

Because it is the individual who displays the behavioral and attitudinal manifestations that comprise eating disorder diagnoses, it is the individual woman who is labeled “ill.” These symptoms originate, however, within a broad social context that apotheosizes thinness, considers dietary restraint a virtue and normalizes female body dissatisfaction. Restricting concern for those women who fall within the definitional confines of mental illness limits an appreciation for the damages incurred by those women and girls whose concerns and behaviors society considers normative.

If we expand our perspective to include the scope of the *body image disturbance* epidemic, the costs to individuals and to the society they comprise become even more staggering than when considering only those who are diagnosed eating disordered. Research suggests that body dissatisfaction is one of the most powerful predictors of eating disorders, depressive symptoms and major depression (Killen et al., 1996; Rierdan, Koff & Stubbs, 1989; Stice & Bearman, 2001). Such findings indicate the importance of

recognizing the subjectivity inherent in diagnostic criteria, and instead embracing the less reified and more fluid lines drawn by continuity models of health (Albee, 1969; Drewnowski, Yee, Kurth & Krahn, 1994). In doing so, we can begin to see overlap between the risks of normative body dissatisfaction and pathological disordered eating. Our analyses and efforts can then encompass a wider circle of women consumed with the thoughts and behaviors that sap their financial, temporal and energy resources. Exploring the causes and costs of these symptoms will encourage further efforts to stem the consequences facing this growing population. Prevention programs that utilize such etiologic findings can have lasting social impact.

To date, most eating disorder prevention programs have focused their efforts on educating and transforming the individual. Ranging in length from one to eighteen sessions, these interventions have sought to teach girls and women how they can critically evaluate social messages, more healthily employ weight management techniques, and work to increase their self-esteem (e.g. Huon, 1994; Kaminski & McNamara, 1996; Killen et al., 1993; Moreno & Thelen, 1993; Moriarty et al., 1990; Paxton, 1993; Shisslak et al., 1990). For the few successful programs, and the even fewer whose success has remained at follow-up assessment points, the question remains: What will happen when these girls or women re-enter their real-world social contexts? Will these new skills and attitude shifts remain? Do any of these programs have the power to stand up to the constant stream of social messages reinforcing the very ideals and behaviors most dangerous to this population? As these programs have been refined and have become more successful in the short-term (Stice et al., 2000, 2001, 2003),

answering these questions becomes more important. Shifting the individual perspective will not alone transform a society steeped in the images of thinness.

Within the eating disorder prevention literature, there remains a gap between theory and practice. Many of the prevention interventions have not had firm roots in the etiologic models; many others have suffered methodological limitations that limit their ability to inform and improve etiologic models. In sum, there has been limited forward momentum. Randomized prevention trial methodology more definitively informs etiologic models in that it experimentally tests whether a specific risk factor leads to the psychiatric disorder in question. Randomized experiments allow for a greater ability to establish causal inference, though only when they are designed in a focused manner. This study targets parents in an attempt to redirect their role as intermediators and transmitters of these harmful discourses and ideals. Focusing on parents provides the opportunity to see the effects of manipulating only one proposed risk factor, which can inform causal models and strengthen the future prevention efforts based upon them. This module will be one piece of a wrap-around approach that bolsters and builds upon individual change.

Beginning with a discussion of the disordered eating continuum, this chapter will then provide an overview of the current explanations for why eating disorders and their associated risk factors develop and how they are maintained. Next, this chapter will provide a theoretical lens through which to view the developmental process of young girls, the changing nature of their familial and peer relationships and the sociocultural context containing these experiences. Finally, this chapter will conclude with an

examination of recent prevention efforts and will provide evidence that supports the creation of an alternative mode of resisting the disorders that threaten adolescent girls and young women.

1.2 THE EATING DISORDER SPECTRUM

1.2.1 Diagnostic Features

As described in the DSM-IV (American Psychiatric Association, 1994), there are three distinct diagnoses for those suffering from an eating disorder: anorexia nervosa, bulimia nervosa, and eating disorder not otherwise specified (EDNOS).

The first, anorexia nervosa, is characterized by a rigid refusal to maintain normal body weight or the refusal to make developmentally appropriate weight gains. One can only meet this criterion if one's body weight is below 85% of what would be considered to be one's medically ideal weight. Consequent to this low body weight and also part of the diagnostic criteria is the three-month duration of amenorrhea – i.e., loss of menses. This failure to maintain or achieve normal weight comes as a result of the individual's "irrational" fear of being or becoming fat and is accompanied by one's weight being the most important aspect of self-evaluation.

The diagnosis of bulimia nervosa is met when an individual's ongoing engagement in a binge-purge cycle of behavior occurs, on average, twice a week for three months. According to diagnostic criteria, a binge is the consumption of what most people would consider to be a very large amount of food in concert with a feeling of being out of control and unable to cease eating. After bingeing, individuals with bulimia engage in inappropriate compensatory behaviors – behaviors intended to prevent weight gain

caused by the preceding binge. Compensatory behaviors common to this illness include self-induced vomiting, laxative and diuretic abuse, fasting and excessive exercise. In order to meet diagnostic criteria for bulimia, individuals engaging in this behavioral cycle must also experience an undue influence of shape or weight in their self-evaluations.

Eating Disorder not otherwise specified, EDNOS, classifies those individuals who display clinical characteristics of anorexia or bulimia yet do not meet full diagnostic criteria. Falling under this category, binge-eating disorder includes recurrent binge episodes in the absence of the compensatory behaviors. These binges are often followed by feelings of guilt, disgust or depression.

1.2.2 Epidemiology

While morbidity has dropped in all other age brackets, the past two decades have seen an 11% increase in adolescent death due, in part, to suicide, substance abuse, STDs and eating disorders (Millstein, Petersen & Nightingale, 1993) suggesting that the risks facing these children demand address.

There is widespread debate regarding the prevalence rates of eating disorders within the United States, with most estimates suggesting that approximately 10% of young females are afflicted. When one adds subthreshold sufferers – those individuals meeting all but one criterion - the numbers double (Striegel-Moore & Steiner-Adair, 1998). Once thought to pose risks only to Caucasian females with mid to high socioeconomic status, there is evidence that eating disorders are becoming increasingly prevalent in ethnic and socioeconomic populations previously considered at low-risk (Crago, Shisslak, & Estes, 1996; Drewnowski, Kurth, & Krahn, 1994; Rand, & Kuldau,

1992; Robinson et al., 1996; Striegel-Moore, Schreiber, Pike, Wilfley, & Rodin, 1995; Thompson, 1994). What remains constant, however, is that these disorders afflict young women in the greatest numbers, with males comprising only 5% of those diagnosed (Rand & Kulda, 1992; Whitaker, et al., 1990; Wilson, Becker & Heffernan, 2003). These disorders are the third leading chronic illness among adolescent females in Western societies (Fisher et al., 1995); and, with the highest mortality rate of any mental illness (Herzog et al., 2000; Theander, 1992) they demand the increased attention of psychologists interested in prevention. Research indicates that among those individuals seeking treatment for anorexia, mortality expectancies are 6-13 times greater than among the general population, with suicide accounting for 58 times more deaths than expected in the population at large (Herzog et al., 2000).

1.2.3 Body Image Disturbance

As noted earlier, disturbed body image is necessary but not sufficient in order for one to meet diagnostic criteria for either bulimia or anorexia. Like most mental illnesses, eating disorders are composed of a constellation of attitudes and behaviors. Although fasting, bingeing and purging are relatively easy to identify in the eating disordered, the attitudes held by these women are more difficult to measure. With body image being defined as the way in which an individual subjectively experiences her body, clinicians and researchers label this image “disturbed” if weight and shape comprise an undue influence over an individual’s evaluation of herself. Regardless of whether these attitudes precipitate such self-injurious behaviors, their implications alone are damaging.

It is normative within American culture for women to be displeased with the size and shape of their bodies (Rodin, Silberstein & Striegel-Moore, 1985). Studies have shown that many normal weight women feel dissatisfied with their bodies and that the goals of most women are not to be within the normal weight range, but rather to be underweight (Koff & Rierdan, 1991; Paxton et al., 1991; Wardle & Marsland, 1990). This raises the question: At what point does body image disturbance become an appropriate label? Presuming that most of these women are not engaging in the dangerous behaviors that plague their eating disordered sisters, what are the consequences of these disturbed self-perceptions?

Dissatisfaction with one's body has many physical and psychological repercussions. In this society of chronic dieters (Fraser, 1997; Polivy & Herman, 1985), studies indicate that 80% of 4th grade girls claim to have been on diets, helping to fuel the next generation of consumers who currently support a diet industry grossing \$33 billion a year (Kilbourne, 1994; Wolf, 1991). It is theorized that restrained eating plays a causal role in the onset of eating disorders (Polivy & Herman, 1985) and dieting has also been shown to be a precursor to more dangerous weight-loss endeavors, including plastic surgery and the use of unregulated diet pills.

Restrained eating does more than just physical damage. Whereas body image scores are positively correlated with self-esteem (Usmiani & Daniluk, 1997), studies have shown that dieting is associated with low self-esteem and depression (Drewnowski, Yee, Kurth & Krahn, 1994; Polivy & Herman, 1985) both of which, among adolescent

females, predict academic failure, substance abuse and promiscuity (Steiner-Adair, 1990).

These deleterious consequences of negative feelings regarding one's body size and shape support the claim that many non-pathological adolescents are not immune to a number of the risks facing those who are clinically diagnosed as eating disordered. Given the vast numbers of these subclinical, or even "average" girls, the body image disturbance from which they— along with their anorexic and bulimic contemporaries — suffer necessitates a prevention design that respects the damages incurred by the narrow body focus of so many girls and women. Such efforts will challenge this focus that leads to normative body dissatisfaction and will seek to replace it with a broader perspective of what constitutes female worth and value.

1.3 THEORETICAL PERSPECTIVES AND MODELS

Within the psychological community, theoretical camps have engendered multiple conceptualizations regarding the causes of these illnesses — most of which fall into one of three categories: developmental, sociocultural and biological. These categories are helpful in that they help structure specific etiologic understandings of these illnesses thereby facilitating the process of developing prevention and treatment interventions. Unfortunately, by emphasizing either the individual or the social factors related to eating disorder onset, these models do not take full advantage of the intersection of these two realms. The dual-pathway model, however, in conjunction with gender theory and discourse models helps to bridge the divide between the earlier developmental and sociocultural theories. These latter models recognize the way individual developmental

factors overlap with sociocultural factors and thus best emphasize the relationship between the individual and her social context. In concert with the principles of social learning theory, these models serve as solid theoretical footing for prevention programs that focus on the role that the most proximal agents of these social messages – the family – play in the development and maintenance of the eating disorders and their related risk factors.

1.3.1 Developmental Models

Developmental models seek to explain why these illnesses strike when they do, positing that the confluence of various developmental stressors during adolescence contributes to the onset of eating disorders. Adolescence is marked by profound biological and psychological transitions (Brooks-Gunn & Warren, 1985). For females, puberty brings with it an increase in unexpected and unwelcome body fat. Coupled with changes in family and peer relationships, most often marked by a greater need and desire for social acceptance, these physiologic changes can induce heightened preoccupation with thinness and dieting. For those girls lacking adequate coping resources, these changes can be overwhelming and can lead to deviations in the normal developmental process (Smolak & Levine, 1996).

Feminists in the psychoanalytic and object-relations traditions have approached these disorders from a developmental perspective that focuses on the family in a highly deterministic manner. Using the body as a text and a symbol, they theorize that the rejection of food inherent in both anorexia and bulimia symbolizes the profoundly complicated relationship with the mother – whose body provided primary sustenance

(Chernin, 1981, 1983, 1985). For these thinkers, the rejection of food – and thus the mother - is a result of the daughter's quest for identity. Within this body of literature, difficulties in the female individuation process arise when mothers are either enmeshed with the lives of their daughters or are reluctant, distant and providing no unconditional love for the daughter to internalize (Benjamin, 1988; Bruch, 1978; Bruch, 1988; Chodorow, 1989; Friedrichs, 1988; Orbach & Eichenbaum, 1982). These girls struggle with reconciling their matrophobia – a fear of becoming one's mother – (Rich, 1976) and a survivor's guilt rooted in surpassing one's mother (Chernin, 1985). These results are highly gender-specific– and less problematic for males - because of the psychoanalytic conception that individuating requires separation and differentiation from the mother and thus leads to a more conflicted adolescence for females who must simultaneously reject and become women.

By focusing on the individual and her familial dynamics, these developmental conceptualizations offer one explanation for why eating disorders are seen most frequently in adolescent females. Though these models specify the problematic familial contexts in which these illnesses most frequently give rise, they do so in a manner that only peripherally acknowledges larger social structures and rarely hypothesizes personal agency. Omitting the sociopolitical context in which the family is embedded lends itself to the mother-blaming often associated with psychoanalytic theory because it offers little explanation for the unique struggles of Western mother-daughter dyads. Additionally, the exclusion of agency negates the possibility of alternative ways of being and relating

within these families, rendering these mothers and daughters incapable of creating the options that might free them from these limited relational styles.

1.3.2 Sociocultural Models

Offering an explanation of eating disorders as “culture-bound” (Nasser, 1988), sociocultural models emphasize the causal roles that socially constructed notions of beauty and femininity play in the onset of eating disorders. When females internalize these unattainable ideals, they are at greater risk for employing dangerously excessive weight-loss techniques as a way to gain greater satisfaction with their bodies. This model is supported by the simultaneous increases in eating disorders and decreases in average Miss America and supermodel waist size (Garner, Garfinkel, Schwartz & Thompson, 1980).

Because the “average” woman on television and in magazines is far thinner than the average American woman – who stands 5’4”, weighs 145 pounds and wears a size 12 – those anomalous supermodel bodies become normalized, thus dramatically shifting the goals and expectations of those on the brink of womanhood. Kilbourne (1994) suggests that this thin-ideal represents not only a preferred body type, but also a preferred way of being. These images, matched with print or dialogue, confer control and power, success and popularity. Consequently, anyone who is unable to attain this body becomes the inverse – lazy, alone and lacking the ability to control her own impulses. The acceptance of these tropes has maintained fat prejudice as one of the last remaining socially accepted bases upon which to discriminate, thus further fueling the fear associated with not measuring up to the thin-ideal (Goodman, 1995; Rothblum, 1994).

The sociocultural model relies upon the idea that Western societies are saturated with media imagery; little debate remains about this fact. The typical American household has the television on seven hours per day, with at least 35,000 ads per year viewed through this medium alone (Levine & Smolak, 1998). If you include all advertisements on billboards and on the radio, this number jumps to 1,500 ads per day (Kilbourne, 1994). Studies show that even brief exposure to advertisements promoting the thin-ideal leads girls to feel more dissatisfied with their bodies than does exposure to those advertisements that do not promote this ideal (Richins, 1991; Stice & Shaw, 1994). Watching television programs and reading magazines containing this ideal not only lead to body dissatisfaction; they are also positively correlated with increased eating pathology (Stice, 1994) and depression (Stice & Shaw, 1994). Additionally, the less physically attractive an adolescent female considers herself to be, the more likely she is to compare herself to these media images (Levine & Smolak, 1998).

These sociocultural models improve upon the developmental models by situating the individual within a broader social context. Unlike the earlier models, they do not lead to highly deterministic conclusions and thus leave room for individual and social transformative action – even in the face of such far-reaching institutional oppression. By explaining the mechanisms of familial and sociocultural exchanges and exploring the way individual girls and women are participating in these transactions, these models provide the theoretical space for the potential to subvert them.

The Dual-Pathway Model.

In an attempt to clarify and refine the sociocultural etiologic model, the dual-pathway model of bulimia proposes a set of six integrated risk factors for the development of bulimic pathology (Stice, 1994; Stice, Nemeroff & Shaw, 1996); these include elevated body mass, sociocultural pressures to be thin (i.e., direct/indirect peer and parental pressure), body dissatisfaction, dietary restraint, negative affect, and thin-ideal internalization (Appendix A). This model posits that internalization of the thin-ideal promotes body dissatisfaction, which leads to negative affect and dieting, the two “pathways” to bulimic pathology. Most girls living in Western countries are confronted daily with images perpetuating this thin-ideal, and though many suffer the “normative” consequences, such as body dissatisfaction and dieting, they do not all become debilitated by their contact with these ideals. According to this model, it is necessary, therefore, to explore the disparate ways that these media messages are discursively performed – through reinforcement and modeling - within different families. By focusing on intrafamilial processes as a more immediate proxy for social and political structures, future prevention efforts can simultaneously address personal, familial and social variables.

1.3.3 Feminist Discourse Models

One way to manage this union of the individual and social is to create a space for personal agency within a political context – be it familial or societal. By stating that “the personal is political,” feminist theorists acknowledge the impact that institutionalized sexism and its resultant oppression have on women’s lives. By shifting the locus of

pathology from that which is internal and characterological to that which is external and systemic (Worrel & Remer, 1992), feminist therapy does not conceptualize a socially determined way of being; instead, it emphasizes a contextualized personal agency that leads to individual power. Feminist therapy also advocates social action; action that is necessary if individual change is to be empowering and enduring. Within this model, therapeutic clients and participants in prevention efforts will not be passive recipients of knowledge. Instead, they will actively pursue those changes that hold meaning for them.

The idea that social change is possible informs gender theory and discourse theory, both premised on the notion that reality is socially constructed – and, thus, can be restructured. By recognizing that the significance of sex is a cultural product, gender theorists have rejected the notions of predeterminism that once governed discussions of what it means to be female or male, woman or man. Gender theory represents a radical move away from the collapsing of the terms “sex” and “gender,” with “sex” referring to being born biologically female or male and “gender” referring to “the psychological, social, and cultural forces and characteristics that have become strongly associated with the biological categories female and male” (Gilbert & Rader, 2001). Such distinctions do not minimize the power and scope of culturally defined meaning; rather they suggest the existence of options and alternative ways of being.

Discourse theory refers to the contextual power of language to shape reality. By conceptualizing gender as a process - a dynamic and performative reflection and reinforcement of the culture it simultaneously occupies and creates (Butler, 1990; LaFrance, 2001) – gender becomes “a verb, not a noun,” (Crawford, 2001; p. 231).

Language frames how we think; discourses structure how we are, by creating this gender performance. The words we use, the conversations we have, and the assumptions we make comprise our dominant discourses and muffle alternate ways of speaking and being. These dominant discourses, in turn, reinforce the hegemonies – beliefs and assumptions - that gave rise to them in the first place.

Participation in dominant discourses reflects and reinforces cultural expectations. The “fat talk” prevalent among adolescent girls is one such example of the way that conversations create and maintain gendered ways of being and relating. Nichter and Vuckovic (1994), together with a team of other cultural anthropologists, collected data on “fat talk” as a component of their larger Teen Lifestyle Project, which focused more broadly on female adolescents’ smoking, dieting and body image. The sample of their larger longitudinal study (N = 300) was composed of girls ranging in grade from eighth to twelfth, enrolled in an urban high school and from representatively diverse ethnic backgrounds. Of these 300, 74 girls chose to participate in focus-group interviews. Employing ethnographic research methods – surveys, open-ended interviews, focus groups, and observation – these researchers detected a noteworthy pattern of ritualized speech. Though their methodology illuminates qualitative trends but does not confirm specific quantitative relationships, their findings provide compelling examples of the relationship between these discourses and body dissatisfaction and confirm the theoretical assertions of feminist discourse models.

Nichter and Vuckovic’s (1994) interviews and observations point to an adolescent communication style that signals significantly more than the three key words around

which it is centered: “I’m so fat.” Such “fat talk,” as they termed conversations based on this theme, is a prime example of the American dominant discourses of gender, the body and thinness. More specifically, these dominant discourses relay what it means to be a girl, what it means to become a woman, and the role of embodiment in these identifications.

The “fat talk” these researchers identified encompassed not only the girls’ descriptions of their bodies but also described actions they would take to respond to their perceived body problems. The dieting talk that often followed the fat talk has received the most attention from concerned adults. In fact, though many girls endorse that they are currently dieting, it has yet to be substantiated that they are truly engaging in weight loss behaviors (Nichter et al., 1995). The dieting discourse alone, however, is an exchange that highlights what is normative regarding being female and what this means with respect to the acceptable way to talk and feel about one’s body. The socialization that takes place within the context of “fat talk” and “diet talk” becomes a discursive rite of passage that structures girls’ relationships with their bodies.

The Role of “Fat Talk”

Adolescence is a pivotal transition – a time of heightened possibility and elevated risk (Gilligan, 1989; Tolman & Brown, 2001). It is, paradoxically, a time of increased independence and conformity - a time when self and audience struggle for primacy. Miller (1984) and Gilligan (1989) assert that girls in adolescence experience themselves as a function of their relationships with others – with neither individuation nor connection obviating the other. Though the words of these “fat talk” dialogues appear, on the

surface, to be self-focused, these exchanges serve a somewhat more obscured relational agenda.

Within the dual-pathway model, these discourses fall within the category of “sociocultural pressures to be thin.” Kilbourne (1994) describes one way that these pressures are transmitted when she writes that the role of thinness in advertisements is “one of the clearest examples of advertising’s power to influence cultural standards and consequent individual behavior” (p. 395). She argues that by explicitly linking the thin-ideal to concepts such as freedom, independence and power, the media co-opts the rhetoric of the feminist movement and subverts its goals by replacing them with an ideal that subjugates women. Though the sociocultural pressure risk factor is often assumed to be limited to either broad claims about the impact of the media or is too narrowly defined by direct peer or familial teasing, it involves a far more complicated, and often subtle, set of behaviors, attitudes and exchanges. These nuanced, yet dominant, discourses – captured within “fat talk” - are transmitted perhaps first by the media, then by the family and then by the girls themselves, becoming more transformative with every progression. These discourses serve as reflections and reinforcers of a culture’s ideas regarding womanhood, embodiment and female agency.

Existing both at school and at home, among adolescent girls and older women, the continuity of this discourse from one generation to the next is not accidental. Mothers model and reinforce both this discursive engagement and the behaviors that ensue. Sixty-eight percent of the girls Nichter and Vuckovic (1994) studied reported that their mothers dieted routinely and over 30% described having been told by their mothers that they

themselves needed to lose weight. This last fact is particularly troubling given that, according to these researchers, only 5% of these girls would be described as clinically overweight. Many of the girls told of hearing their mothers use “fat talk,” both with others and with them.

After observing the girls’ own “fat talk” conversations and discussing them with their participants, Nichter and Vuckovik (1994) identified common themes regarding when these conversations were initiated and by whom. In keeping with the premise that discourse is politically performative, these researchers found that girls engaged most frequently in these exchanges when they were seeking to affirm their membership in a social group. This self-directed criticism inevitably prompted other girls to respond with positive assurances that bolstered the sense of affection and acceptance between the two or within the larger group. In initiating this dialogue, the girl has asserted her vulnerability and need for support, while at the same time taking a very minimal risk. Because the “rules” of this particular discourse are known and well practiced, the participants can communicate an emotional state of distress without having to disclose more complicated and intimate fears.

“Fat Talk” and the Thin-Ideal

If the role of these peer and familial conversations is to create a sense of group membership and try on the ways of being that mothers have demonstrated as a part of womanhood, why is body the common theme? What is it about this dominant discourse specifically that it has become a locus of female relating? And, how can girls and women find a sense of membership without using their bodies as the loci of their social

connectedness? Referencing the work of the anthropologist Mary Douglas, Bordo (1993) writes that the female body “is a powerful symbolic form, a surface on which the central rules, hierarchies and...commitments of a culture are inscribed and thus reinforced...a metaphor for culture” (p. 165). What then does this thin-ideal communicate about a shared female culture?

Since ancient Greek philosophers dissociated the mind from the body, men have believed the loftiest of human achievements to be associated with rational thought and action, excluding women from these pursuits and relegating them to an existence informed only by their imperfect, heavy and earth-bound bodies (Bordo, 1993; Brumberg, 1988). Though these associations may seem dated, they remain etched in our collective imagination. Women are their appearances; men are their actions. The male gaze – and women’s participation in the discourses surrounding it - constructs womanhood, maintaining the order of men as subjects and women as objects (Beauvoir, 1952). Thus, the size and shape of a woman’s body has historically expressed her internal (dis)order.

Two of the options available for women’s liberation are: either women distance themselves from their corporeal assignation, or they reevaluate the designation of body as inferior. Operating as individuals, women can more easily accomplish the former. In times of gender re-exploration and redefinition, the thin-ideal is compelling in that it simultaneously demonstrates liberation from domesticity and the motherhood mandate (by a hardening and “masculinizing” of the body) and suggests a containment of the instincts and drives (via dietary restraint and reduced libidinal expression) that were

previously thought to keep women from the rational thought of which only their brothers and husbands were capable. Woman's achievement of the thin-ideal communicates one form of power, control and mastery (Kilbourne, 1994). Pursuit of this thin-ideal has become an accepted way for women to socially achieve the subjectivity that men have historically achieved with their minds (Bordo, 1993).

"Fat Talk:" More than Just Talk

By echoing the words that surround them, adolescent girls are not only giving voice to their preexisting thoughts, they are also creating new thoughts. Nichter and Vuckovic (1994) provide a window into this process when they write that even girls who do not have these "fat feelings" participate in this discourse for fear of no longer belonging. Most psychotherapeutic models provide, within their own frameworks, explanations for how this participation leads to the internalization of these discourses, thus underscoring the impact our language has on our psychological health.

The concept of challenging "automatic thoughts" or "self talk," central to cognitive-behavioral theory, is based on the notion that what we tell ourselves informs our perceptions of and feelings about ourselves. Much like dominant discourses, these automatic thoughts too frequently go unchallenged despite the cracks in their foundations. CBT argues that challenging and replacing these internal dialogues will also alter the client's reality of her/his experience (Beck, 1995). Narrative therapy, directly referencing the central tenets of discourse theory, takes a similar perspective. By providing a framework within which a client can see her/his construction of a narrative of self, the therapist intimates the existence of alternative stories (Freedman & Combs,

1996). The notion that one can reframe events and reinterpret the self in relation to these stories, suggests the power of discourses to create and recreate reality.

Traditional psychoanalysis posited that by free-associating, clients were reflecting what was truly on their minds. According to discourse theory, and supported by CBT and narrative models, our conversations are not only reflections; instead, they help to create and mold our thoughts, feelings and behaviors. It is in this way that “fat talk” becomes most problematic as a discursive performance. Heightened thin-ideal internalization, increased body dissatisfaction and dieting behaviors should be expected within this context.

Based on unrealistic and largely unattainable ideals, the discourse of thinness is complicit in the construction of eating disorders and their associated risk factors. Discourse theory offers a framework by which we can organize a complicated continuum of symptoms – spanning from normative to pathological, distressing to lethal. This theory also offers encouragement. If by perpetuating these dominant discourses, girls, their parents, and their peers are participating in the construction of gender that maintains the status quo, they also possess the power to reconstruct gender.

Adolescence is the ideal time to encourage “healthy resistance” (Gilligan, Rogers & Tolman, 1991 as quoted in Tolman & Brown, 2001) in the service of unseating culturally-bound “disease processes” (Tolman & Brown, 2001). During this critical moment of opportunity and risk, gender differences in coping emerge with girls generally acting upon their pain and confusion in a self-directed and often self-injurious manner while boys are more likely to externalize their aggression (Harris, Blum & Resnick,

1991). Providing these girls with more adaptive and constructive means of facing social challenges satisfies their developmental needs for control, independence and voice. The appropriate honing of these qualities will serve them for life as they learn the value of social critique and the impact they can have to create change in their own lives as well as in the lives of others.

Teaching these girls how to critically evaluate the dominant discourse of female embodiment will encourage them to discover the alternate discourses that emerge only by “exposing the gaps, inconsistencies, and contradictions of meaning within the (dominant) discourse” (Gilbert et al., 1999). At this age, these girls still know that they have more to offer the world than their physical appearance. They know that their minds are full and that their adult bodies are emerging as only more powerful than they once were. They do not have the words to describe this knowledge; instead, they know the rules of the “I’m so fat” talk.

Crawford (2001) writes, “In using language, we create our social reality. By changing language, we can contribute to changing that reality.” By disrupting the dominant discourse and shaping an alternative to it, these girls can begin to change the performance of gender and consequently expand their options for what it means to become women. Few of them will come to this independently. Until they are introduced to these alternate discourses, they will likely continue to engage in that which is familiar. It is essential, therefore, to build a prevention intervention that will initiate these girls into a new discourse that will replace both the meaning and function of that which came before.

1.3.4 Social Learning Theory

Bandura's social learning theory provides one theoretical framework for understanding the transmission of these discourses and the attitudes and behaviors that accompany them. According to this theory, an individual learns behavior through interactions with her or his social environment. Like behaviorists, social learning theorists believe that people learn their behaviors through a system of social reinforcements and punishments; however, social learning theorists also believe that people learn through observation. This observational learning dimension emphasizes the importance of modeling and imitation.

Social reinforcement and modeling are not separate processes; rather, they work in concert. According to social learning theory, one of the main ways that individuals learn new behaviors is through observation. In fact, in many languages "the word for 'teach' is the same as the word for 'show,' and the synonymity is literal" (Reichard, 1938, p.471; quoted in Bandura, 1963). Therefore, the ways that children see their parents behave and the discourses in which they hear them engage are often at least as important as the more direct, explicit and intentional modes of teaching their parents employ.

Imitative or observational learning takes place when a learner is exposed to a model who s/he perceives to be either similar to her/himself or an exemplar of highly valued social qualities. In either case, the learner observes the model's behavior and then attends to the consequences of the action. If the model's behavior is received positively – socially reinforced – the learner is taught through observation how s/he should behave in

similar situations in the future in order to receive similar social rewards. If, in the case of the “fat talk” and “dieting talk”, the daughter-learner witnesses her mother-model’s engagement in these dominant discourses and observes that this is one way to bolster membership within a female camaraderie, she will be likely to imitate this discourse herself. If, when she does this, she is reinforced by her social environment via increased acceptance, she will add this newly acquired performance to her conversational repertoire.

For the sake of social survival, children are astute observers of their environments. Their learning occurs within a social context and is facilitated by their careful attendance to those behaviors that are socially rewarded and thus reinforced and those that are socially rejected or punished. Given the contextual nature of learning, prevention efforts that seek to re-educate must emphasize the deleterious social consequences of the behaviors they aim to reduce and the social rewards of those with which they strive to replace them. Additionally, interventions that target the learner in the absence of the model will have limited success in that the lessons of these programs will be competing with those of much more potent and pervasive social educators. Instead, these efforts must strive to change the models of these behaviors. The development of these programs must also remain cognizant of the fact that the existing behaviors serve specific social purposes and that unless the replacement behaviors and attitudes fulfill similar purposes, the learning will be short-lived.

1.4 TREATMENT AND PREVENTION RESEARCH

Though the focus of the proposed study is eating disorder prevention, a brief review of the literature on treatment options is necessary in order to underscore the importance of primary and secondary prevention. With few empirically validated treatment options, and the current state of minimal health insurance coverage, stemming the rates of eating disorders depends upon the development of effective prevention programs. Though eating disorder prevention efforts have been varied (for review see Rosen & Neumark-Sztainer, 1998; Stice & Shaw, 2004)), none have incorporated those findings that suggest that “active” parenting – defined as parenting that promotes media literacy through analysis of and conversations about the mass media - can reduce many of the negative impacts of the media (Comstock & Paik, 1991; Levine & Smolak, 1998).

1.4.1 Treatment Modalities

Only 25% of those suffering from bulimia nervosa will seek treatment for their eating problems (Fairburn et al., 2000) and among that subgroup, only 40-60% will achieve lasting symptom remission (Agras, Walsh, Fairburn, Wilson & Kraemer, 2000; Telch, Agras & Linehan, 2001). As with addiction recovery, overcoming an eating disorder is only possible with the true and active participation of the addicted. Even in such rare cases where there is a genuine desire for health, overcoming an eating disorder is an arduous and lengthy process.

Though effective in the short-run, pharmacological treatments show poor results after discontinuation of medication (Johnson, Tsoh & Varnado, 1996). Psychotherapy, while not equally accessible or affordable to all, shows somewhat better results.

Cognitive Behavioral Therapy (CBT) is the most widely researched and empirically validated of the binge-eating disorder and bulimia treatments (Spangler, 1999); though, more recent studies of Interpersonal Therapy (IPT) and Dialectical Behavior Therapy (DBT) suggest promising results (Apple, 1999; Fairburn, 1998; Safer, Telch & Agras, 2001; Wiser & Telch, 1999).

Working from the assumption that these disorders are maintained by irrational beliefs regarding body weight expectations and meanings and eating patterns, CBT aims to modify behavior through three specific focuses. In order to encourage a routine eating pattern, CBT strives to reeducate women about proper nutrition. Secondly, CBT attempts to combat the inaccurate cognitions about body weight and shape by encouraging clients to become more aware of these beliefs and thus be better positioned to test their accuracy and eventually challenge them. Finally, CBT offers the client knowledge of the difference between setbacks and relapses (Spangler, 1999).

IPT focuses on the client's problematic relationships rather than her bulimic symptomatology. By spotlighting relationship patterns with respect to role transitions, role disputes, and interpersonal deficits, IPT initially avoids discussion of eating symptoms themselves and instead targets what it considers to be the underlying stressors. Exploring the relational context is thought to help clients to avoid future setbacks and recognize current gains (Apple, 1999).

Finally, DBT uses emotion regulation techniques found to be successful in the treatment of borderline personality traits. The basis of this treatment is the assumption that the origin of bingeing is related to a client's inability to modulate affect. The binge

becomes the individual's coping mechanism in the face of intolerable stress. DBT teaches emotion regulation and distress tolerance with the goal that clients decrease their avoidance of emotional experiences (Wiser & Telch, 1999).

1.4.2 Prevention Trials

Given the expense and limited availability of effective treatment options, prevention efforts have grown in recent years. Differing on the bases of targeted population, structure, duration and theoretical underpinnings, these programs have shown varied rates of success (see Stice & Shaw, 2004 for review).

A review of the prevention literature from the past two decades highlights a number of common limitations within this body of research and recent promising trends. First, many of the early prevention trials focused on primary prevention and offered universal programs. The goal of these programs was to target children before they were deemed "at risk," thus frequently applied with younger children and in school classrooms (Killen et al., 1993; Moreno & Thelen, 1993; Moriarty, Shore & Maxim, 1990; Paxton, 1993). The dearth of positive findings suggests that; a) this young age-group may not be cognitively capable of making the links between the abstract and critical-thinking tasks and their own health behaviors; b) the content of these interventions is most relevant to those participants who are already experiencing some of the discontent associated with specific risk factors – thin-ideal internalization, body dissatisfaction and/or dietary restraint. These considerations informed a shift towards the creation and implementation of secondary, or targeted, prevention programs that restrict their focus to those girls or

women with self-reported body image concerns (Huon, 1994; Kaminski & McNamara, 1996; Stice et al., 2000, 2001, 2003).

A second limitation seen in this research is small sample size. Though this is less of a factor in primary prevention efforts, the nature of secondary prevention restricts the focus population and can therefore create greater recruitment challenges. Of this limited secondary prevention research, few have conducted studies that have yielded sufficient power to detect effects (Stice, 2001, 2003). Huon's (1994) and Kaminski & McNamara's (1996) studies each had total sample sizes of fewer than 30 participants with cell sizes of 12 and 13 participants respectively. Such limited sample size reduces meaningful evaluation and generalization of these prevention efforts.

Third, the content of much of this research has been either psychoeducational in nature or has targeted multiple risk factors. The former is problematic in that it has not been shown to be effective in changing behaviors (e.g. Dalle Grave, De Luca & Campello, 2001; Moreno & Thelen, 1993; Paxton, 1993). The latter approach does not inform etiologic models in that it does not seek to differentiate effects based on targeting specific pathways to eating pathology. Controlled targeted manipulations in an experimental setting are needed to elucidate these etiologic processes.

A fourth consideration in the design of these programs has been structure. Many of the school-based programs have been didactic in nature – delivering curriculum to large groups. The more successful programs have relied on an interactive format with program delivery to smaller groups (Bearman, Stice & Chase, 2003; Chase, 2001; McVey et al., 2003). This collaborative structure allows participants to actively engage

the material, practice new skills and thus experience greater “buy in” to the program’s goals. In sum, those programs that have produced the most robust and persistent effects have been targeted, interactive and theoretically grounded in etiologic models.

One feature of the aforementioned prevention efforts is their shared emphasis on the individual. If, as feminist and social learning models illuminate, behaviors and attitudes are constructed and reconstructed as exchanges between the individual and her social context, prevention efforts will be most effective when they target these social transactions. Offering empirical support for these theoretical claims is Piran’s (1999) successful reduction of body image concerns and eating pathology among 10-18 year-old girls at a residential ballet school. This prevention study targeted not only the students but the staff of the school as well, suggesting that changing social influences aids in eating disorder prevention goals. Additionally, Piran chose to focus on an at-risk population, dispensing with the universal approach of many of the previous studies. Unfortunately, this program has not been evaluated in a controlled trial.

Piran’s study was part of a ten-year participatory action project, which she conceived as a reaction to the literature’s emphasis on “biological and intra-individual psychological factors” (Piran, 2001). Piran’s project took the form of age-specific focus groups in which students worked with Piran and each other to explore themes associated with their body weight and shape preoccupation with the expressed goal of altering their school environment. Through her work with these groups, Piran identified three categories into which most of the conversational themes could be placed: body ownership, societal prejudices, and the social construction of women. Piran argues that

the effectiveness of this project stems from the collective action and empowerment component that was achieved through a cyclical process of reflection, dialogue, action, and back to reflection. Piran (2001) compares this process of “honoring knowledge that develops in dialogue, critically examining the social forces that contextualize the dialogue, and following the commitment to social transformation” (p.236) to those used within consciousness-raising groups and emphasizes the importance of this method to develop “new norms of body-anchored discourse” (p. 233).

Programs like Piran’s are rare because they are resource intensive. Yet even the main tenets of her efforts can be channeled into programs requiring less time commitment. Engaging participants in activities that value their construction of consciousness, emphasize the importance of specific social exchanges in the development and maintenance of eating disorder risk factors and, most importantly, acknowledge individual and collective power can create “a space in the world within which women can begin to move” (Rich, 1986, p.101; quoted in Piran, 2001). Such interventions will be dynamic and interactive and will challenge the existing dominant discourses while offering alternate discourses that serve individuals and communities more functionally. Furthermore, such prevention efforts will recognize the impact of the social environment on children and adolescents and will therefore seek to educate families, schools and other social systems and institutions.

1.4.3 Dissonance Theory and Prevention

Though intervention efforts aimed at educating girls and young women in media literacy and/or the risks of eating disorders have shown limited results, those that seek to

reduce thin-ideal internalization (Stice et al, 2000, 2001, 2003) or increase healthy weight management strategies (Stice, Shaw, Burton & Wade, under review; Stice, Trost & Chase, 2003) have proven more successful. Based on these findings, and supported by studies suggesting that thin-ideal internalization occurs early in the etiologic chain and might therefore contribute to other risk-factors that are themselves deleterious, further strengthening those interventions that have successfully reduced such ideal-driven beliefs would be efficacious.

Avoiding a psychoeducational program content, Stice et al's (2000) prevention intervention sought to reduce the thin-ideal internalization of college-aged women with self-reported body concerns via the application of dissonance theory. Dissonance theory posits that individuals cannot comfortably maintain inconsistent cognitions (Festinger, 1957; Leippe & Eisenstadt, 1994). This cognitive dissonance induces people to change their beliefs, attitudes and behaviors in the service of restoring consistency.

In the initial non-randomized pilot trial, 30 late adolescent females (modal age = 18) with elevated body dissatisfaction from a university and community sample were assigned to either this dissonance intervention or a measurement-only control condition. The intervention resulted in a subsequent decrease in thin-ideal internalization, body dissatisfaction, dieting behaviors, negative affect, and bulimic symptoms relative to the measurement-only control group from baseline to termination, and most of these changes remained at the four-week follow-up.

Although these preliminary findings were encouraging, there were several limitations to this pilot study that decreased the confidence that could be placed in the

results. First, based on an unanticipated recruitment problem, participants were not randomly assigned to intervention and control conditions. Thus, it is possible that the apparent effects of the intervention were due to some preexisting difference between the groups rather than a result of the active intervention. Random assignment of participants to conditions makes it much more likely that the groups are equated on all potential confounding factors. Second, a placebo control condition was not used in the initial pilot. Thus, it is possible that the apparent intervention effects were due to expectations, wherein the intervention participants expected to get better and the controls did not. Finally, this initial pilot study used a relatively small sample, which constrained statistical power and the generalizability of the findings.

Stice and colleagues (2001) conducted a more rigorous test of this prevention program using random assignment to condition, a placebo control condition, and a larger sample size. This trial was conducted with 87 young-adult females with self-reported body image concerns (modal age = 19). Participants were randomly assigned to either this dissonance intervention or a healthy weight management placebo control condition. Participants randomized to the dissonance intervention showed the expected decreases in thin-ideal internalization, body dissatisfaction, dieting behaviors, negative affect and bulimic symptoms. Unexpectedly, however, participants in the placebo control condition reported similar but less-pronounced decreases in several of these outcomes as well.

Stice, Trost and Chase (2003) next evaluated the dissonance intervention along with the promising healthy-weight management intervention against a waitlist control condition in a larger study that focused on younger girls (mean age = 17) and followed

the participants up for a longer period of time. Results indicate that the dissonance intervention again successfully reduced thin-ideal internalization and that participants experienced persistent change in this outcome, still evident at six-month follow-up. It is also noteworthy that the dissonance intervention appeared to produce reductions in body dissatisfaction, dieting behaviors, and negative affect, all of which are documented risk factors for bulimic pathology.

Findings indicated that participants in the healthy-weight management intervention also showed significant decreases in thin-ideal internalization, dieting, negative affect, and bulimic pathology, with many of these effects persisting at follow-up assessments. Though this intervention did not specifically target the reduction of thin-ideal internalization, the content of this program emphasized the importance of health over appearance and attempted to foster realistic expectations based on a lifestyle of exercise and nutritional moderation. The decreases in thin-ideal internalization are not surprising in that this intervention attempted to replace this ideal with a more attainable healthy-ideal. These findings have been supported by a more recent large-scale replication study as well (Stice et al., under review).

In theory, the cognitive dissonance induced by voluntarily taking a stand against the thin-ideal fostered participants' reduced subscription to this ideal. This decrease in thin-ideal internalization is likely to have resulted in improved body satisfaction because these young women were no longer aspiring to achieve such an unattainable body dimension. Moreover, this improved body satisfaction resulted in reduced dieting behaviors. By reducing the extent to which these participants engaged in dietary

restraint, and thus minimizing the cycle of dieting failure, this intervention putatively improved affect. Given the dual pathway and this theoretical chain of events, it is no surprise that participants in this intervention also experienced significant reductions in bulimic symptoms. The consistency of these findings across studies using both college-aged and high school-aged samples suggests that this intervention can be successfully adapted to different age groups. This last point is especially noteworthy given criticism regarding the fact that prevention efforts targeting college-aged women may be coming too late and that prevention efforts should instead be focused on those populations that have not yet reached the modal age of onset for bulimia nervosa.

1.4.4 Dissonance-Based Intervention and Discourse Theory

Though initially premised on Festinger's dissonance theory, Stice et al.'s (2000, 2001, 2003) intervention is also consonant with the underlying tenets of discourse theory. One of the key components of this intervention is participants' engagement in role-playing exercises. During these role-plays, one of the facilitators plays a peer of the participant and engages in the dominant discourses of the female body: claiming that she cannot join the participant at dinner because she's on a new diet, or relaying to the participant that she is sure she will get the date of her dreams if she can only lose those last few pounds, or calling another peer a "fatso." It is incumbent upon each participant to talk the facilitator out of her position of encouraging the thin-ideal and perpetuating "fat talk." The participants are encouraged to use their newly acquired knowledge regarding the consequences of pursuing the thin-ideal in order to highlight the current discourse and shift it to one that will be more constructive and empowering: advocating

that the thin-ideal is not the same as the healthy-ideal, challenging the idea that girls are only liked or valued for their looks.

This dissonance-based intervention uses these role-plays to disrupt the dominant discourses in which most of the participants have unconsciously and uncritically engaged. Of equal or even greater importance, this intervention provides an alternate voice and allows the girls to practice this new discourse in order to be more prepared to use it in their daily lives.

Other significantly less successful prevention interventions have sought to expand upon the knowledge base of their participants – offering information regarding the health risks of disordered eating or the latest facts about the downfalls of dieting. This intervention, on the other hand, has elicited information from the participants about how the thin-ideal directly and immediately affects them: Do they feel better about themselves as they try to lose weight? Who benefits from the feelings of insecurity they experience while looking through magazines or watching popular sit-coms? This newly generated information is the impetus for attitudinal changes and serves as the basis for the role-play exercises that allow them to apply these new ideas to familiar conversations and thereby more fully internalize them.

Each session of the successful dissonance intervention emphasizes ways the participants can integrate their newly-acquired knowledge and attitude shifts into their lives. Role-playing is one way of making this point; and creating and sharing lists of ways they can actively resist the thin-ideal and challenge their own body-related concerns are other such ways. Linking these personal changes to the larger social consequences

promotes the activism and motivation that are central to feminist movements and the feminist model of therapy they inspire. By engaging participants in conversations that expose the “gaps, inconsistencies and contradictions” (Gilbert et al., 1999) of the dominant discourse, this intervention furthers the goal of developing and strengthening the alternative discourses that foster new ways of being.

Stice’s prevention model is unique in that it simultaneously contextualizes participants’ experiences of body dissatisfaction and empowers them to make the individual and social changes that make a difference. In keeping with feminist therapy, this model externalizes the pathology yet identifies the strength of the individual. Unfortunately, as with all eating disorder prevention interventions to date, this intervention targets only one link in the causal chain. The next step in disrupting the dominant discourse must target more than the individual; acknowledging her familial context and bolstering her subscription to the alternate discourse by educating her family would be one such step.

1.5 PARENTAL IMPACT

Because many studies have found an elevated prevalence of eating disorders among family members of treatment-seeking individuals with these disorders (e.g. Strober et al., 1990), the question of which familial factors are salient to predicting eating disorders has received much attention. Though the mother-daughter dyad has been the exclusive focus of some etiologic studies, the last decade has seen increased, though still limited, research on the important role of fathers. According to systems theory, everyone in a family “system” impacts everyone else; as such, neither mothers nor fathers can be

absent from the disordered eating equation. These relationships between parent-child variables are critical to informing the way in which prevention efforts that seek to include a parental wrap-around component are designed.

Numerous correlational studies have reported a relationship between mothers' and daughters' as well as fathers' and daughters' attitudes and behaviors regarding their own and others' bodies. According to McKinley's (1999) study of 151 undergraduate women and their middle-aged mothers, a daughter's perceptions of her mother's approval of her own, as well as her daughter's, appearance is highly correlated with the daughter's own body esteem. Similarly, a daughter's perception of her mother's partner's (regardless of whether this is the daughter's father) approval of her mother's body is also correlated with the daughter's own body esteem. The converse is also true; there is a significant negative relationship between a mother's body shame and her daughter's body esteem (McKinley, 1999). Mothers', mothers' partners' and daughters' responses to their bodies go beyond attitude and affect eating behavior as well. In an effort to show the early age at which girls begin to be affected by these messages, Hill and Weaver (1990) studied 52 ten-year-old girls and their mothers and found a .68 correlation between mothers' and daughters' degree of dietary restraint.

These cognitive, affective and behavioral relationships seem to become more pronounced as daughters enter adolescence. In their 1997 study of 113 middle and high school-age girls and their mothers, Usmiani and Daniluk (1997) found that while mothers and their daughters who had begun menstruating showed positively correlated body image scores, mothers and their non-menstruating daughters did not, suggesting that the

daughter's age and level of pubertal development is an important moderator variable. Additionally, findings from this study suggest that the older the adolescent daughter becomes and the more fully she has developed, the more her body esteem is related to her mother's self-esteem. The correlation between these premenstrual daughters' body image and their mothers' self-esteem was .01, whereas the correlation of these factors among menstrual daughters and their mothers was .56. Given these findings, social reinforcement and modeling would appear to become more salient factors as daughters age and develop.

Based on research suggesting that girls and women with eating disorders reported more distressing relationships with their fathers than did normal control participants, Swarr and Richards (1996) used a survey study to test, both concurrently and longitudinally, these intra-familial relationships. Among a sample of 240 white, suburban, Midwestern girls, those middle school and high school girls who reported feeling close to their fathers also reported lower levels of eating and weight concerns than did those girls who reported experiencing their relationships with their fathers as more distant. The authors argue that time spent with fathers serves as a protective factor in the presence of those factors that put girls at risk, such as early menarche.

These findings support Levine's (1994) assertion that body dissatisfaction, eating disorders and the political control of the female body are not "just women's issues" (p. 108). He argues that the objectification of women and the body image disturbances that ensue are cycles that can be broken if fathers work to explore their attitudes towards women and redefine the father-role within their own families. Levine suggests that men

can help in the fight against the sociocultural risk factors by “confront(ing) the personal and political implications of the various types of sexism that undergird” them (p.110).

The assumption that environmental – and thus familial influences – are paramount in an individual’s learning processes is the basis of social learning theory (Bandura, 1969). This theory posits that individuals learn through observation and that such learning is facilitated by factors related to modeling and reinforcement. Those individuals whom the learner deems most powerful, competent and similar to her/himself become the most potent and influential models. Additionally, those behaviors most rewarded by the learner’s social context become the most reinforced. The foundational assumptions of this theory, therefore, support the idea that children’s eating and weight attitudes will be profoundly influenced by their parents.

1.5.1 Social Reinforcement

Parents are, in many ways, the specific agents of broad social messages (Levine & Smolak, 1998; Striegel-Moore & Kearney-Cooke, 1994). Though children are influenced by the media, parents mediate the social pressures to be thin. Certainly, parents do not serve as vehicles of these messages with any malice. Rather, parents often reinforce these media messages because they want what they think will be best for their children. Well-meaning parents, concerned about obesity and its related medical risks, promote dieting. And, in this culture where a woman’s thinness and physical beauty are shown to be highly correlated with academic and professional success (Feingold, 1992; Striegel-Moore, Silberstein & Rodin, 1986), parents find further reason to promote weight loss. Additionally, because parents are more likely to attempt to control their children’s

behavior in those domains that they value most highly and consider to be of greatest importance (Costanzo & Woody, 1985), a child's appearance often falls under this category.

Though mothers and fathers often work in tandem, communicating their values and priorities to their children (Graber & Brooks-Gunn, 1996; Levine, 1994; Maine, 1991), mothers alone experience the greatest social pressure to improve their children's appearances (Striegel-Moore & Kearney-Cooke, 1994). This cultural expectation helps to explain the fact that mothers are also judged by their families to be the ones responsible for setting and enforcing expectations about physical appearance (Smetana, 1988; Kanakis & Thelen, 1995). Different women meet these pressures and responsibilities differently. Supporting Costanzo and Woody's (1985) claim regarding the importance of considering domain-specific parenting, women who place greater emphasis on their own appearances are significantly more likely to be critical of their children's appearances (Striegel-Moore & Kearney-Cooke, 1994). Further, mothers do not prioritize appearance and weight equally for their daughters and their sons (Striegel-Moore & Kearney-Cooke, 1994). The sex of her child, therefore, influences the mother's assessment of his/her appearance and weight, such that parents consider their daughters to be significantly heavier than they consider their sons to be (Striegel-Moore & Kearney-Cooke, 1994).

Additionally, Pike and Rodin (1991) found that, controlling for Body Mass Index (BMI), mothers of those girls with disordered eating were more likely to believe that their daughters ought to lose weight than were those mothers of daughters without disordered

eating patterns, suggesting a relationship between a mother's expectations of her daughter's appearance and a daughter's eating behavior. These mothers are also more likely to apply pressure to their daughters to diet than were the other mothers (Moreno & Thelen, 1993). Consequently, girls suffering from eating disorders perceive of themselves as less accepted by, and more prone to criticism from both their mothers and their fathers (Swarr & Richards, 1996).

Though the literature on mothers' impact on daughters' body and eating-related attitudes and behaviors is more robust than that on the role of fathers, studies have found support for the importance of this latter variable. In their study of 1,276 mothers and fathers who responded to a magazine survey, Striegel-Moore and Kearney-Cooke (1994) found that there was a relationship between the importance that both mothers and fathers placed on their own appearances and the importance they placed on their children's appearances. This study also found a strong relationship between parents' (again, both mothers' and fathers') own dieting efforts and their encouragement of their children to diet. Respondents to this survey also indicated that, though they praised their daughters' appearance more frequently than their sons', they were less satisfied with their daughters' exercise frequency and weight than they were with their sons'. Research does indicate that adolescent girls show a marked decrease in physical activity, perhaps in part explaining parents' concern. The line between promoting health and promoting thinness is blurry, especially to parents and daughters unaware that such distinctions do exist. Regardless of the explicit or implicit focus on health, this emphasis on weight and attractiveness supports feminist assertions that girls' appearances are more greatly

attended to – whether positively or negatively – than the appearances of boys. In the form of praise or criticism, this attendance teaches girls the high value associated with their looks.

While messages from the media lead to negative affect and reduced body satisfaction, it is parentally based social reinforcement that has been found to predict eating pathology (Stice, 1998; Thelen & Cormier, 1995). From a very early age, the amount that children are fed depends upon the degree to which the child's parents have internalized the thin-ideal (Birch, 1990). Such parental attitudes regarding feeding and appearance have long-lasting consequences. High levels of parental constraint, for example, impede a child's ability to internalize self-restraint; thus, while the child may internalize the parents' anxieties, she will not have developed the "self-mediating" skills necessary for future coping (Costanzo & Woody, 1985).

Many adolescents experience this age as a time to retreat from the values of their parents; however, the social context in which they find themselves provides few alternatives to this hegemony of thinness. Adolescents' behavior is influenced most strongly when the beliefs and expectations of their peers are synchronized with those of their parents (Graber & Brooks-Gunn, 1996; Kandel, 1985). The agreement between adults and adolescents is strong when it comes to the thin-ideal. In high school, "thin is in;" and, in the "real world," the world of these girls' parents, this discourse is no less socially reinforced.

1.5.2 Modeling

The values that parents preach to their children are, in many ways, less salient than those that they practice. Children learn what behaviors are acceptable and preferred from watching the ways that their parents negotiate their worlds. Mothers model for their daughters what it means to be female and fathers similarly model, by the ways that they respond to women, which of these traits are most important to the other sex (Levine, 1994).

There was much debate regarding the 1986 study that found that 80% of 4th grade girls surveyed responded that they had been on a diet (Wolf, 1991). Whether it is true that these young girls had actually reduced their caloric intake is less important than the likely possibility that many of these girls responded this way because the act of dieting is, in their minds, associated with being a grown-up woman – a major component of the discursive performance of being feminine. In fact, parents who diet are significantly more likely to encourage their children to lose weight (Benedikt, Wertheim & Love, 1998; Striegel-Moore & Kearney-Cooke, 1994). Additionally, mothers of daughters with disordered eating began dieting at a significantly younger age and demonstrate greater eating pathology than did those mothers of daughters without disordered eating (Pike & Rodin, 1991).

Similar to the findings regarding social reinforcement, studies suggest that there is no link between media modeling and the onset of bulimic symptoms. Instead, links were found between family and peer modeling and the onset of these symptoms (Stice, 1998), supporting Bandura's (1969) claim that the perceived similarity between individuals and

models increases imitation effects. While there exists much variability among adolescent girls and their internalization of culturally bound beauty ideals, parental attitudes and behaviors play a significant role. It is likely, therefore, that when a mother feels good about her body she models a sentiment that supports the idea of a woman's body being acceptable and beautiful. And, when a daughter sees her mother disgusted by her own physical form, or hears her father make insulting comments regarding her mother's body, her own potential resistance to the thin-ideal will be weakened.

1.5.3 Prevention and the Role of Parents

Many of the leading eating disorder researchers have advocated for prevention programs that incorporate parental involvement (e.g. Graber & Brooks-Gunn, 1996; Piran, 1999; Shisslak et al., 1998; Smolak & Levine, 1994), though to date, only one published study has done so (Brown et al., 2004). Such inclusion is consistent with a more ecological and holistic approach to preventing eating pathology and would represent an acknowledgement of both this need to shift social factors and the potential utility of training parents as mental health educators so as to strengthen the effects of current efforts.

Brown and colleagues (2004) developed and evaluated a web-based educational intervention program for 152 high school females and their parents. Sixty-nine parents agreed to participate and 22 were assigned to the intervention group, which consisted of an unstructured Internet program designed to encourage parents to accept variation in weight and shape. Findings suggest that parents in the active intervention reduced their critical attitudes and behaviors about weight and shape significantly more than parents

assigned to the control group. Parents' improvements were found to have no effect on daughters' weight concerns, eating pathology, perceived pressure or knowledge about eating disorders or healthy weight management. While promising, this study had poor levels of parent participation and limited power.

While most eating disorder prevention efforts have thus far not included the etiological research regarding the impact of parents, the more extensive histories of prevention within the domains of obesity, depression, substance abuse and general adolescent problem behavior have not had the same limited scope (Ary, James & Biglan, 1999; Dishion & Kavanaugh, 2000; Golan, Weizman, Apter & Fainaru, 1998; Greenberg, Domitrovich, & Bumbarger, 2001; Norman & Turner, 1993; Shochet, Dadds, Holland, Whitefield, Harnett & Osgarby, 2001; Stolley & Fitzgibbon, 1997; Wadden et al., 1990; Wodarski & Feit, 1997).

Within the obesity prevention literature (for review see Faith et al., 2001), the results of parental involvement have been mixed. Wadden and colleagues (1990) found that though no significant differences existed between child-only, mother-child together and mother-child separate but concurrent interventions, the frequency with which mothers attended sessions was associated with daughters' success as measured by weight loss. Stolley & Fitzgibbon (1997) found that mothers who participated in a 12-week obesity prevention program with their daughters showed significant decreases in their fat intake as compared to a control group. Though these researchers did not measure the mother-daughter relationship, they argue that it is likely that these mothers' new eating behaviors will be modeled to and internalized by their children. Golan et al. (1998) found

that parent-only programs may be the most potent with respect to encouraging child weight-loss. Plagued by methodological limitations (e.g. small cell sizes and self-report caloric intake measures), this literature represents only a promising first step.

During the latter half of the 1980s, substance abuse prevention programs began to embrace a more community-based emphasis – focusing on school and familial factors (for review see Greenberg et al., 2001; Norman & Turner, 1993). Unlike the obesity prevention programs, which targeted parents because they cook, shop and otherwise directly impact their children's health behaviors, substance abuse prevention programs took a somewhat more indirect approach. These interventions trained parents in communication styles and problem-solving techniques intended to improve upon the poor familial cohesion that has been found to predict adolescent substance use (Wodarski & Feit, 1997). In their review of programs aimed at the prevention of mental disorders in children, Greenberg et al. (2001) point to these improved familial communication patterns and problem solving skills as important factors in the process of simultaneously decreasing risk factors and strengthening protective factors.

Most promising of the research on parental involvement in prevention efforts is Dishion and Kavanaugh's (2000) school-based and family-centered prevention efforts. Aimed to reduce the adolescent antisocial behavior that poses a risk for the development of other serious problems, their Adolescent Transitions Program employs a three tiered (primary prevention, secondary prevention, and treatment) intervention model. Each level targets parents differently: universally providing resources, raising parents' awareness of potential problems, providing assessment and support, encouraging the

motivation to create familial change and providing direct clinical services. The authors found that parents targeted on the secondary prevention tier reported significant reductions in their childrens' behavior problems and improvements in their own parenting.

Grounded in theories emphasizing parent-child communication as well as the impact of parental social reinforcement and modeling, these interventions have sought not only to impact the individual child's behaviors and attitudes, but also to place the parents in the roles of physical and mental health models and educators. According to Hahn (1993), successful parental involvement in prevention efforts is influenced most by their perceptions of the risks as serious, their children as susceptible, and their own participation as beneficial. Efforts to involve parents in eating disorder prevention, therefore, will be successful only if they can communicate the severity of these issues and the potential impact these parents can have.

While Hahn's guidelines are straightforward, they are challenging to implement, especially with respect to the prevention of internalizing disorders where many of the risk factors are considered normative and the impact on the family system is minimal. In Shochet et al.'s (2001) study of a school-based adolescent depression prevention program, the researchers found that only 36% of the parents randomized to the parent intervention attended any sessions and only 10% attended all three sessions. The discouraging nature of this recruitment attempt is compounded by the fact that this program provided free food and childcare as incentives for parental attendance. This study highlights both the costly nature of including parents as well as the difficulty of

successfully communicating the potential seriousness of adolescent “moodiness,” or in the case of eating disorders adolescent body dissatisfaction.

1.5.4 The Role of Parents in Disrupting the Dominant Discourse

Though the research overwhelmingly supports the claim that through modeling and socially reinforcing the thin-ideal parents are contributing to their daughters’ participation in a discourse that contributes to thin-ideal internalization and body dissatisfaction, many parents may be unwitting participants. Though agents of these social messages regarding what constitutes female beauty, these parents have themselves been raised in a media-saturated culture. Many of these mothers may not recognize how many times they suck in their stomachs, express their displeasure with specific body parts or bemoan the fact that their latest diet has been a bust; and those who are cognizant of these expressions may nevertheless be unaware of their potentially detrimental consequences. Likewise, fathers who comment on what constitutes an attractive woman or unconsciously turn their heads to look at women who typify the thin-ideal, are doing so more as a result of having themselves been barraged by media images than because they hope to negatively impact their daughters’ perceptions of themselves.

If teaching girls an alternate discourse reduces thin-ideal internalization, improves their satisfaction with their bodies and reduces the extent to which they engage in disordered eating, what are the possible effects of disrupting the dominant discourse of their parents? Educating these parents in the positive role they can play in mitigating the impact of the media and empowering them to work collectively with their daughters to propagate the alternate discourse of female strength and value will serve as another route

to reduce the onset of eating disorders in an at risk population of adolescent girls. The strength of the dissonance-based intervention lies in its simultaneous advocacy of individually-initiated change and acknowledgment of the systemic nature of gendered oppression. This parentally-focused intervention would similarly honor the interaction of the individual with her context by recognizing the ways that language and relationships operate as exchanges and therefore have the potential to be reconstructed within families and communities.

1.6 CONCLUSIONS

In facilitating parental discussions of the origins and consequences of sociocultural values and ideals, this intervention seeks to teach them the feminist position that the personal is political. By engaging them in explorations of the alternate discourses of female value being based on more than appearance, this intervention aims to elucidate the specific tools for change. Encouraging parents to question the social context that inspires their daughters' (and, in some cases, their own) body image concerns supports the premise that pathology does not originate solely in the individual. Methodologically speaking, this goal is further reinforced by targeting not only the individual, but also the most personally invested of the agents of these messages. Reconceptualizing the derivations of illness forces us to reconsider the goals of prevention. Targeting the family supports the belief that strengthening the individual is not enough; instead, this intervention extend its focus to the socio-familial context that has such a strong impact on girls' attitudes and behaviors.

CHAPTER 2: CURRENT STUDY

2.1 OVERVIEW

Body image concerns and disordered eating begin for many females during adolescence (Fairburn & Beglin, 1994; Lewinsohn et al., 2000; Rand & Kuldau, 1992). Although adolescence is often described as a time when a child's peers replace her parents as her primary models and reinforcers of social ideals, research suggests that an adolescent's body image and dieting behaviors are closely related to those of her parents (Hill & Weaver, 1990; Pike & Rodin, 1991). Guided by the literature on the inclusion of parents in drug use and obesity prevention programs (Ary et al., 1999; Stolley & Fitzgibbon, 1997), and building on the promising findings of the dissonance-based approach to prevention (Stice et al., 2000, 2001, 2003), this study assesses the impact of educating parents as mental health agents in the pursuit of reducing the perceived sociocultural pressure to be thin, thin-ideal internalization, body dissatisfaction and bulimic symptomatology of their adolescent daughters.

Participants are parents of middle school girls with body image concerns. These parents were randomly assigned to one of two conditions: an interactive parenting group that facilitates parental exploration of, and discussions about, the role they play in reinforcing and modeling the thin-ideal, or a measurement-only waitlist condition. Parents' and daughters' bulimic pathology, related behaviors and attitudes and familial relationships were measured pre- and post-intervention and at three months following completion of the program. The parenting group consists of three 90-minute sessions held

at one-week intervals and engages participants in exercises that challenge their assumptions regarding the thin-ideal. By encouraging participants to critically evaluate social ideals and the dominant discourses that perpetuate them, this intervention aims to reduce the extent to which parents communicate these ideals to their daughters and thereby reduce the daughters' bulimic pathology and associated risk factors.

2.2 SPECIFIC AIMS

Specific aims of the study include:

Aim 1. The first aim is to experimentally evaluate the effect of parental participation in an eating disorder prevention program (HIP Parents Program) on an adolescent daughter's perceived sociocultural pressure to be thin and familial modeling of bulimic symptoms. This aim will be accomplished using a randomized experimental design to permit the strongest causal inferences and to rule out third-variable alternative explanations.

Aim 2. The second aim is to determine whether parental participation in the HIP Parents Program results in a reduction of parent and daughter thin-ideal internalization, body dissatisfaction, dietary restraint and negative affect in comparison to assignment to the waitlist condition.

Aim 3. The third aim is to test whether parental participation in the HIP Parents Program results in significant reductions of parent and daughter bulimic symptoms in comparison to assignment to the waitlist condition.

Aim 4. The fourth aim is to determine whether the parents and adolescents assigned to the HIP Parents Program report significant increases in familial communication at termination and follow-up than those assigned to the waitlist condition.

2.3 HYPOTHESES

Specifically, to address the aims outlined above, the following hypotheses were tested:

Hypothesis 1. Adolescent daughters of those parents participating in the HIP Parents Program were expected to show significantly greater reductions in their perceived sociocultural pressures to be thin and familial modeling of bulimic symptoms at termination and follow-up relative to the daughters of those parents assigned to the waitlist condition.

Hypothesis 2. Parent participants assigned to the HIP Parents Program and their adolescent daughters were expected to show significantly greater decreases in their thin-ideal internalization, body dissatisfaction, dietary restraint and negative affect at termination and follow-up relative to the parents and daughters assigned to the waitlist condition.

Hypothesis 3. Adolescent daughters and parents assigned to the HIP Parents Program were expected to show significantly greater decreases in bulimic symptomatology at termination and follow-up relative to the parents and daughters assigned to the waitlist condition.

Hypothesis 4. The parents and adolescents in the HIP Parents Program were expected to report significantly greater increases in familial communication at termination and follow-up relative to the parents and adolescents in the waitlist condition.

CHAPTER 3: METHOD

3.1 PARTICIPANTS

Participants were recruited by a direct mailing that was sent to the families of every middle school female in Eanes, Texas and Napa, California school districts (Appendix B). The Texas letters were mailed during the spring of 2002 and the California letters were mailed in the fall of 2004. Letters were addressed to fathers and mothers, as research has shown the important roles that both parents play in the etiology of eating disorders. Parents who called or emailed to express interest were screened to assess that they met eligibility requirements and that their goals matched the stated objectives of the intervention.

3.2 DESIGN

The current study is a 2 x 3 design, with experimental condition (HIP Parents Program or waitlist control) as the between-subjects factor and time (baseline, termination and 3-month follow-up) as the within-group factor. All participants were randomly assigned to either the HIP Parents Program or the waitlist control condition.

3.3 PROCEDURE

In order to ensure that we were studying the proposed population, the principal investigator or a trained undergraduate clinical assistant conducted a brief phone screen (Appendix C) of those parents who contacted the lab in which the parents were asked: a) their daughter's age; b) whether they believed their daughter had body image concerns; c) whether they would be willing to participate in a three-part workshop on body image

issues; and, d) whether their daughter would be willing to complete three surveys.

Participants who met these criteria were randomly assigned to one of two conditions (detailed below): 1) the Healthy Image Partnership (HIP) Parents Program, or 2) a four-month waiting-list. All adult participants provided written assent (Appendix D) and each adolescent participant provided assent (Appendix E) before the beginning of the first group session.

Prior to initiating the first workshop, we recruited a local group of six Girl Scout mothers to serve as a pilot test sample. This group provided feedback regarding aspects of the intervention (e.g., discussion topics, homework assignments) that were more or less relevant and/or interesting to them and their daughters. This feedback was incorporated into the program.

The HIP Parents Program condition consists of three one and a half-hour meetings held at one-week intervals. There were a total of seven intervention groups of four to seven participants each (four Texas groups and three California groups), depending upon recruitment and scheduling availability. Each session was facilitated by the author (a graduate student pursuing her Ph.D. in Counseling Psychology) and a co-facilitator trained in eating disorder treatment and prevention. Each group leader adhered to the manualized intervention script.

Upon completion of the three-session intervention, parent participants were entered into a raffle with the opportunity to win one of six \$50 gift certificates to local stores/restaurants. Adolescent participants were paid incrementally as they completed assessment phases. Each of the adolescent participants was paid a total of \$30: \$10 in

return for her completion of the pre-test measure before the first intervention, \$10 in return for completion of the post-test measure to be taken after the final intervention session, and a final \$10 for returning the three-month follow-up questionnaire. Letters assuring the confidentiality of daughters' survey responses were included with each mailed questionnaire. Each parent participant assigned to the waiting list was also entered into the raffle after completing all three assessments. Parents assigned to the waiting list were offered the chance to participate in the intervention at the conclusion of the three-month follow-up assessment point. Approximately 30% of the Texas waitlist group attended this delayed intervention. The California waitlist group will be invited to participate in June, 2005.

3.4 INTERVENTION

See Appendix F for a detailed description of the Healthy Image Partnership (HIP) Parents Program.

This intervention was designed to engage the parent participants in exercises that encourage and facilitate: a) greater differentiation of the thin-ideal and the healthy-ideal; b) increased understanding of the ways parents communicate the thin-ideal to their daughters and; c) alternatives to these interactions and discourses, so as to help these parents to help their daughters improve their body image. In the service of these goals, this intervention aims to educate parents about the definition, origin and costs of the thin-ideal, the differences between the thin-ideal and a healthy ideal, the role parents play in their daughters' body image, and the ways that parents can help combat the thin-ideal and improve their daughters' feelings about their bodies.

The intervention rests on three foundational premises. First, by educating parents to be mental health agents they can be trained to do similar work to that accomplished in dissonance-based interventions for adolescents. Second, by engaging parents in exercises similar to those in the dissonance-based interventions, parents themselves will experience reductions in thin ideal internalization, body dissatisfaction, dietary restraint and negative affect and will thus decrease the extent to which they model these attitudes and behaviors to their daughters. Third, engagement in the parent-daughter joint homework assignments will lead to increases in familial communication and expressiveness. Finally, by increasing parental awareness of the impact of their own body and eating related behaviors and attitudes on their adolescent daughters, this intervention will decrease their participation in “fat talk” discourses and will replace them with alternate discourses emphasizing domains other than attractiveness. Because of the social context in which body dissatisfaction and consequent eating pathology arise, this intervention is a primary step in developing a more systemic approach to eating disorder prevention.

3.5 MEASURES

3.5.1 Adolescent Self-Report Survey

(Appendix G):

Demographics and Weight

This measure consists of questions regarding participants’ background information. These questions include: age, grade, ethnicity, father/father figure’s highest education and mother/mother figure’s highest education. Participants were asked to report their current weight and height measurements.

Perceived Sociocultural Pressure

Participants reported the amount of pressure to be thin they perceived from family, friends, dating partners, and the media on the Perceived Sociocultural Pressure Scale (Stice & Agras, 1998). A sample question from this 9-item scale is: "I've perceived a strong message from my family to have a slender figure" to which participants respond using a 5-point scale (1 = none – 5 = a lot), with a possible composite score ranging from 9-36. The internal consistency ($r = .88$) and test-retest reliability ($r = .93$) have been established and are adequate. This scale showed significant correlations with Franzoi and Shields' (1984) Weight Concern Scale ($r = .50$) and the Dutch Restrained Eating Scale ($r = .59$; van Strien, Frijters, van Staveren, Defares, & Deurenberg, 1986) demonstrating construct validity.

Modeling Of Eating Disturbances

A subscale of the Bulimic Modeling Scale (Stice, 1998) was used to assess family modeling of eating disturbance (e.g. binge eating, compensatory behaviors, preoccupation with weight). A sample item from this scale is: "One or more of my family members has dieted to lose weight" to which participants respond using a 5-point scale (1 = never – 5 = often), with a possible composite score ranging from 4-20. For the purposes of this study, only the 4 familial modeling items were used. The test-retest reliability ($r = .82$) for this subscale is acceptable (Stice, 1998).

Thin-Ideal Internalization

The Ideal-Body Stereotype Scale-Revised (IBSS-R; Stice, Ziemba, Margolis & Flick, 1996) was used to measure participants' internalization of the thin-ideal. A sample

statement from this 8-item instrument is: “Slim women are more attractive” to which participants respond on a 5-point scale (1 = strongly disagree – 5 = strongly agree), with a possible composite score ranging from 8-40. This scale had acceptable internal consistency ($\alpha = .88$) as well as convergent, discriminant and predictive validity (Stice, Ziemba, Margolis & Flick, 1996).

Body Dissatisfaction

The level of dissatisfaction that participants have with regard to their bodies was assessed using the Body Dissatisfaction Scale (BDS; Stice & Shaw, 1994). A sample question from this 9-item measure is: “How satisfied are you with your thighs?” to which participants respond based on a 5-point scale (1 = extremely dissatisfied – 5 = extremely satisfied), with a possible composite score ranging from 9-45. Research has demonstrated that this scale has acceptable internal consistency ($\alpha = .94$), temporal reliability (3-week test-retest coefficient = .90) and predictive validity (Stice & Agras, 1998).

Dietary Restraint

Participants’ dieting behaviors were assessed using a composite of the Dutch Restrained Eating Scale (DRES; van Strien, Frijters, van Staveren, Defares & Deurenberg, 1986) and Dietary Intent Scale (DIS; Stice, 1998). A sample question from this 10-item composite is: “Did you take into account your weight when deciding what to eat?” to which participants respond on a 5-point scale (1 = never – 5 = always), with a possible composite score ranging from 10-50. The reliability of the DIS is .94 (internally) and .92 (temporally) and validity of the DIS has been documented by its

strong correlation (.92) with the DRES. Similarly, the DRES has demonstrated high predictive validity in that it explains 20% of the variance of scores found in the relationship between subjects' scores on this measure and their self-reported deviation from required caloric intake (van Strien, Frijters, van Staveren, Defares & Deurenberg, 1986; Stice, 1998).

Negative Affect

Participants' negative affect was measured by the negative affect scale of the Positive and Negative Affect Scale-Revised (PANAS-X; Watson & Clark, 1992). Participants responded to the level of emotional intensity that they had experienced with regard to fifteen specific feelings (e.g. "Sad") on a five-point Likert scale (1 = not at all – 5 = extremely), with a possible composite score ranging from 15-75. The PANAS-X has been shown to have strong convergent and discriminant validity, predictive validity, internal consistency, and test-retest reliability (Watson & Clark, 1992). In addition, self-reported negative affect on the PANAS-X shows acceptable agreement with peer reports (Watson & Clark, 1992).

Bulimic Symptoms

The diagnostic symptoms of bulimia nervosa were assessed with the Eating Disorder Diagnostic Scale (EDDS; Stice, Telch, & Rizvi, 2000), derived from validated structured interviews for assessing eating disorders. A sample question from this 22-item instrument is: "How many times per week on average over the past X months have you used laxatives or diuretics to prevent weight gain or counteract the effects of eating?" All behavioral and attitudinal items were summed to form an overall eating disorder

symptom composite, with a potential range of 0-117. The EDDS has shown high agreement (mean kappa = .83) with the Eating Disorder Examination (EDE; Fairburn & Cooper, 1993), the current gold standard for diagnosing eating disorders, as well as strong internal consistency ($r = .89$) and 1-week test-retest reliability ($r = .87$; Stice, Telch & Rizvi, 2000).

Familial Communication

Participants' perceived familial communication was measured using the Parent-Adolescent Communication Scale (PACS; Olson, McCubbin, Barnes, Larsen, Muxen & Wilson, 1982). A sample statement from this 10-item scale is: "I can discuss my beliefs with my parent without feeling restrained or embarrassed" to which participants respond on a 5-point scale (1 = strongly disagree – 5 = strongly agree), with a possible composite score ranging from 10-50. Internal consistency is .92 internally and .78 temporally; and validity is supported by multiple research studies and qualitative familial descriptions (Olson, McCubbin, Barnes, Larsen, Muxen & Wilson, 1982).

3.5.2 Parent Self-Report Survey (Appendix H):

Similar to the adolescent survey, this questionnaire differs only in the following ways:

Demographics

The parent version of this form includes questions on parents' sex, marital/relationship status, number of children and occupation.

Pressure/Modeling

The Perceived Sociocultural Pressure and Bulimic Modeling Scales were replaced with an adapted form of the Perceived Pressure Scale intended for use by parents.

Table 1: Summary of adolescent self-report scales used in the study, including the number of items on each measure and its coefficient alpha in the current study at each of the three data collection times: baseline, termination, and 3-month follow-up.

Measure name	No. items	Possible range of scores	Baseline Cronbach's α	Termination Cronbach's α	3-month follow-up Cronbach's α
Perceived sociocultural pressure scale	9	9-36	.79	.79	.78
Bulimic modeling scale	4	4-20	.70	.71	.61
Ideal-body stereotype scale-revised	8	8-40	.91	.93	.94
Body satisfaction scale	9	9-45	.95	.96	.96
Dutch restrained eating scale	10	10-50	.94	.94	.94
Positive and negative affect scale-revised	15	15-75	.94	.95	.89
Eating disorder diagnostic scale	18	0-117	.84	.89	.84
Parent-adolescent communication scale	10	10-50	.89	.92	.94

Table 2: Summary of adolescent self-report scales used in the study, including the number of items on each measure and its coefficient alpha in the current study at each of the three data collection times: baseline, termination, and 3-month follow-up.

Measure name	No. items	Possible range of scores	Baseline Cronbach's α	Termination Cronbach's α	3-month follow-up Cronbach's α
Perceived sociocultural pressure scale- revised	9	9-36	.77	.67	.71
Ideal-body stereotype scale-revised	8	8-40	.90	.91	.91
Body satisfaction scale	9	9-45	.89	.94	.93
Dutch restrained eating scale	10	10-50	.87	.91	.91
Positive and negative affect scale-revised	15	15-75	.92	.93	.95
Eating disorder diagnostic scale	18	0-117	.82	.82	.84
Parent-adolescent communication scale	10	10-50	.80	.86	.88

CHAPTER 4: STATISTICAL ANALYSES

4.1 PRELIMINARY ANALYSES

Prior to measuring outcome effects, preliminary descriptive analyses were conducted to test whether the intervention and control groups were equivalent at baseline on demographic factors and outcome variables. One-way analysis of variance (ANOVA) and chi-square analyses models were performed to ensure that randomization resulted in equivalent groups. The same analyses were conducted to assess equivalence between the Texas and California samples.

Preliminary analyses were also conducted to test for attrition biases that might limit the generalizability of the findings. These statistical analyses tested for differences in parent and daughter demographic and outcome variables between those who completed all assessments and those who did not.

4.2 OUTCOME ANALYSES

Repeated measure analysis of variance (ANOVA) models tested whether participants in the HIP Parents Program condition experienced changes in each of the outcome variables over time relative to participants in the waitlist control condition. The primary outcome variables included change in: (1) parental modeling of eating disturbances, (2) perceived pressure to be thin, (3) thin-ideal internalization, (4) body dissatisfaction, (5) dieting behaviors, (6) negative affect, (7) familial communication, and (8) bulimic symptoms. Separate models were carried out for each outcome for both parents and daughters, wherein condition was a two-level between-subjects factor and time was a three-level within-subjects factor. A priori planned comparisons were

conducted to test whether there were significant changes in outcomes over time within each condition relative to baseline values. These analyses were conducted even if the initial time-by-condition interaction did not reach significance to ensure that we did not miss any effects because of the relatively modest power to detect a small time-by-condition interactive effect (Snedecor & Cochran, 1989).

4.3 EXPLORATORY ANALYSES

Exploratory analyses, employing a repeated measure analysis of variance (ANOVA) model, tested the effect of condition on weight change. Separate models were carried out for this outcome for both parents and daughters, wherein condition was a two-level between-subjects factor and time was a three-level within subjects factor. A priori planned comparisons were conducted to test whether there were significant changes in BMI over time within each condition relative to baseline values.

CHAPTER 5: RESULTS

5.1 CHARACTERISTICS OF PARTICIPANTS

Recruitment letters were mailed to approximately 1725 parents in Texas and California – of this number, it is estimated that approximately 500 do not speak English as their primary language. We received phone calls and emails from approximately 140 (8%) parents who expressed interest in receiving more information. Of the initial 140 parents, approximately 60 either could not be contacted again, chose not to participate, could not make the scheduled group times, or called/emailed after recruitment was closed – leaving 81 (5%) to participate. The final sample was comprised of 81 parent-daughter dyads who were randomly assigned to the HIP Parents Program or the measurement-only waiting list. Of these dyads, 80 consisted of mothers and their daughters and one included a father and his daughter. The demographic characteristics of these participants are presented in Table 3.

5.1.1 Parent Participants

Parent participants ranged in age from 27 to 56 ($M = 42.88$, $SD = 4.97$). The ethnic/racial composition of the parent sample was 90% Caucasian, 4% Latina, 1% Asian, and 4% who specified “other” or mixed racial heritage. Education level ranged from grade school (1%) to graduate degree (24%), with a mode of college graduate (38%). Body mass of participants ranged from 17.16 to 41.15 ($M = 23.81$; $SD = 4.97$) at baseline. The mean body mass of participants corresponded to a healthy range (i.e., not overweight) according to age-adjusted, gender-specific cutoff points derived from national growth charts (Kuczmarski, Ogden, Guo, et al., 2000). Typically, overweight is

defined as a body mass index greater than or equal to 25 and less than 30, and obesity is defined as a body mass index of greater than or equal to 30 (World Health Organization, 1998).

5.1.2 Daughter Participants

Daughter participants ranged in age from 10 to 15 ($M = 12.43$, $SD = 1.12$). The ethnic/racial composition of the daughter sample was 81% Caucasian, 7% Latina, 1% Asian, and 10% who specified “other” or mixed racial heritage. Body mass of daughters ranged from 14.47 to 29.70 ($M = 19.54$; $SD = 3.44$) at baseline.

Table 3: Characteristics of sample at baseline

Characteristics		HIP Parents (n=39)	Waitlist Parents (n=42)
Ethnicity (%)	Asian	0	2
	Hispanic	3	5
	Caucasian	95	86
	Other or mixed	3	5
Age (years)	Mean	43.18	42.60
	<i>SD</i>	5.62	4.37
Body Mass Index	Mean	23.64	23.97
	<i>SD</i>	4.92	5.07
Highest Education (%)	Grade School	0	2
	Some High School	0	0
	High School Graduate	13	7
	Some College	15	23
	College Graduate	39	37
	Advanced Degree	28	21
		HIP Daughters (n=39)	Waitlist Daughters (n=42)
Ethnicity (%)	Asian	0	2
	Hispanic	5	9
	Caucasian	80	81
	Other or mixed	13	7
Age (years)	Mean	12.51	12.35
	<i>SD</i>	1.18	1.07
Body Mass Index	Mean	19.48	19.59
	<i>SD</i>	3.35	3.55

5.2 ATTRITION

Though session attendance was high, with 95% of the HIP Parents Participants attending all three sessions, survey completion was significantly lower. Of the 81 parents who completed the baseline survey, 93% completed the termination survey and 85% completed the follow-up survey. Of the 81 daughters who completed the baseline survey, 91% completed the termination survey and 84% completed the follow-up survey.

The high retention rate for the intervention was due, in part, to the fact that participants received reminder phone calls prior to each scheduled session and make-up sessions were provided to those parents who could not attend the regularly scheduled times. Only two parents opted not to return after the first meeting.

We used full information maximum likelihood (ML) estimation to impute missing data because this approach produces more accurate and efficient parameter estimates than list-wise deletion or alternative imputation approaches such as last-observation-carried-forward (Schafer & Graham, 2002).

5.3 PRELIMINARY ANALYSES

Preliminary analyses indicated that the intervention and waitlist groups did not differ significantly on baseline age, ethnicity, weight, education, parental modeling of eating disturbances, perceived pressure to be thin, thin-ideal internalization, body dissatisfaction, dieting behaviors, negative affect, family communication or bulimic symptoms. Analyses also confirmed no significant differences between the Texas and California groups on these demographic and outcome variables. These findings indicate

that random assignment created initially equivalent groups and that site did not moderate the effects.

Preliminary analyses also determined that those daughters and parents who failed to complete all assessments did not differ from those who did on demographic or outcome variables.

5.4 MAIN EFFECTS OF EXPERIMENTAL MANIPULATION

Results from the repeated measure ANOVAs are reported in Table 4. Means and standard deviations for the intervention and control groups at each wave of measurement are reported in Table 5.

Table 4: Results from the repeated measure analyses of variance.

Analyses of Variance						
Parent Dependent Variables	Termination (T2)			3-Month Follow-Up (T3)		
	F	p	η^2	F	p	η^2
Family Pressure	1.220	.273	.015	3.743	.057	.045
Thin-Ideal						
Internalization	9.685	.003*	.108	5.712	.019*	.067
Body Satisfaction	8.172	.005*	.093	4.130	.045*	.049
Dieting Behaviors	6.659	.012*	.077	1.951	.166	.024
Negative Affect	.876	.352	.011	.508	.478	.006
Bulimic symptoms	2.815	.097	.034	1.722	.193	.021
Family Communication	.000	.990	.000	.446	.506	.006
Daughter Dependent Variables	Termination (T2)			3-Month Follow-Up (T3)		
	F	p	η^2	F	p	η^2
Parental Modeling	.118	.733	.001	.072	.789	.001
Family Pressure	.610	.437	.008	.415	.521	.005
Thin-Ideal						
Internalization	2.046	.156	.025	.052	.820	.001
Body Satisfaction	.730	.395	.009	.248	.620	.003
Dieting Behaviors	.874	.353	.011	1.112	.295	.014
Negative Affect	.613	.436	.008	.010	.920	.000
Bulimic Symptoms	1.353	.248	.017	1.011	.318	.012
Family Communication	.023	.880	.000	.026	.873	.000

Note. Asterisks indicate significance at $p < .05$.

Table 5: Means and Standard Deviations for the parent and daughter participants of the HIP Parents Program and the Waitlist Control group on the Dependent Variables and Results from the Pairwise Comparisons.

<u>Dependent variable</u>	<u>Baseline (Week 1) M (SD)</u>	<u>Termination (Week 3) M (SD)</u>	<u>3 Months follow-up (Week 15) M (SD)</u>
<u>Familial modeling</u>			
HIP Daughters	8.60 (3.05) _a	7.90 (3.31) _b	7.77 (2.81) _b
Waitlist Daughters	7.86 (3.29) _a	7.31 (3.15)	7.15 (2.54) _b
<u>Familial pressure</u>			
HIP Parents	14.08 (4.68) _a	12.85 (3.94) _b	12.81 (3.91)
HIP Daughters	15.35 (4.88)	14.68 (4.38)	14.82 (4.82)
Waitlist Parents	13.31 (4.21)	13.35 (3.55)	12.86 (3.30)
Waitlist Daughters	14.47 (4.92)	14.44 (4.86)	14.64 (4.54)
<u>Thin-ideal internalization</u>			
HIP Parents	27.91 (5.35) _a	24.22 (6.00) _b	24.80 (5.70) _b
HIP Daughters	24.33 (6.35) _a	22.00 (7.12) _b	22.99 (6.14)
Waitlist Parents	27.16 (5.37)	26.82 (5.26)	26.79 (5.17)
Waitlist Daughters	24.84 (7.00)	24.14 (6.74)	23.84 (7.78)
<u>Body satisfaction</u>			
HIP Parents	25.79 (6.99) _a	28.19 (6.86) _b	27.73 (7.46)
HIP Daughters	29.33 (8.83)	29.97 (7.81)	28.37 (8.70)
Waitlist Parents	25.16 (7.71)	24.74 (7.90)	23.85 (7.61)
Waitlist Daughters	29.93 (10.53)	29.07 (10.15)	29.86 (9.19)
<u>Dieting behaviors</u>			
HIP Parents	26.43 (8.20) _a	21.18 (7.72) _b	23.38 (7.13) _b
HIP Daughters	19.75 (7.98) _a	17.13 (8.33) _b	15.89 (6.52) _b
Waitlist Parents	26.89 (7.15)	25.11 (7.81)	25.76 (8.08)
Waitlist Daughters	16.87 (9.43) _a	15.31 (7.53) _b	14.51 (6.98)
<u>Negative affect</u>			
HIP Parents	25.85 (9.37)	23.33 (9.29)	27.14 (13.18)
HIP Daughters	28.69 (11.43)	26.85 (11.59)	25.71 (9.78)
Waitlist Parents	26.25 (9.23)	25.40 (8.93)	25.85 (11.23)
Waitlist Daughters	27.89 (12.80)	27.79 (12.43)	24.67 (8.13)
<u>Bulimic symptoms</u>			
HIP Parents	15.14 (10.84) _a	9.97 (9.00) _b	12.78 (10.06)
HIP Daughters	14.15 (11.56) _a	10.81 (10.96) _b	9.37 (10.44) _b
Waitlist Parents	14.79 (11.42)	12.71 (11.30)	14.30 (13.32)
Waitlist Daughters	11.47 (12.69)	10.11 (13.44)	8.66 (9.33)
<u>Familial communication</u>			
HIP Parents	37.36 (4.66)	37.10 (4.77)	37.34 (5.24)
HIP Daughters	35.06 (7.85) _a	33.80 (9.37)	33.23 (9.73) _b
Waitlist Parents	38.23 (5.07)	37.96 (5.81)	38.83 (6.04)
Waitlist Daughters	36.65 (7.00) _a	35.54 (7.95)	34.65 (9.34) _b

Note: Means within the same row with different subscripts were statistically significantly different ($p < .025$). Cell sizes were $n = 39$ for the HIP parents, $n = 39$ for the HIP daughters, $n = 42$ for the waitlist parents, and $n = 42$ for the waitlist daughters.

5.4.1 Effects of Intervention on Daughter's Perceived Pressure to be Thin and Parental Model of Eating Disturbances

A repeated-measures ANOVA model indicated no significantly different change in daughters' perceived pressure to be thin from T1 to T2 for the two conditions ($F [1/80] = 0.610, p = .437, 0.8\%$ variance explained) or from T1 to T3 ($F [1/80] = 0.415, p = .521, 0.5\%$ variance explained). Despite the lack of significant time-by condition interaction, within-group analyses were conducted to gain a further understanding of these relationships. There was no significant within-group change in perceived pressure to be thin from T1 to T2 for participants whose parents attended the active intervention ($t = 1.421, ns$) or for those who did not ($t = .047, ns$). There was also no significant within-group change in perceived pressure to be thin from T1 to T3 for participants whose parents attended the active intervention ($t = .610, ns$) or for those who did not diet ($t = -.256, ns$).

A repeated-measures ANOVA model indicated no significantly different change in parents' applied pressure to be thin from T1 to T2 for the two conditions ($F [1/80] = 1.220, p = .273, 1.5\%$ variance explained) or from T1 to T3 ($F [1/80] = 3.743, p = .057, 4.5\%$ variance explained). Despite the lack of significant time-by condition interaction, within-group analyses were conducted to gain a further understanding of these relationships. There was a decrease in applied pressure to be thin from T1 to T2 for participants who attended the active intervention ($t = 2.329, p = .024$) and not for those on the waitlist ($t = -.093, ns$). There was no significant within-group change in applied

pressure to be thin from T1 to T3 for participants who attended the active intervention ($t = 2.143$, *ns*) or for those who did not ($t = 1.001$, *ns*).

A repeated-measures ANOVA model indicated no significantly different change in family modeling of eating disturbance from T1 to T2 for the two conditions ($F [1/80] = .118$, $p = .733$, 0.1% variance explained) or from T1 to T3 ($F [1/80] = .072$, $p = .789$, 0.1% variance explained). Despite the lack of significant time-by condition interaction, within-group analyses were conducted to gain a further understanding of these relationships. There was a decrease in family modeling of eating disturbance from T1 to T2 for participants in the active intervention ($t = 2.552$, $p = .015$) and not for those on the waitlist ($t = 1.564$, *ns*). There was also significant within-group change in applied pressure to be thin from T1 to T3 for participants in both the active intervention ($t = 2.410$, $p = .021$) or for those on the waitlist ($t = 1.649$, $p = .021$).

5.4.2 Effects of Intervention on Parents' Thin-Ideal Internalization, Body Dissatisfaction, Dieting Behaviors and Negative Affect

As hypothesized, a repeated measure analysis of variance (ANOVA) model indicated that there were significantly greater decreases in thin-ideal internalization among parents in the active condition from T1 to T2 relative to the waitlist condition, as indicated by the significant time-by-condition interaction ($F [1/80] = 9.685$, $p = .003$, 10.8% variance explained) and from T1 to T3 ($F [1/80] = 5.712$, $p = .019$, 6.7% variance explained). Paired t tests revealed that there was a significant decrease in thin-ideal internalization for participants in the HIP Parents Program from T1 to T2 ($t = 5.659$, $p = .000$) and from T1 to T3 ($t = 3.579$, $p = .001$). However, the decreases in thin-ideal

internalization from T1 to T2 ($t = .406, ns$) and from T1 to T3 ($t = .495, ns$) in the waitlist condition were not statistically significant.

As hypothesized, a repeated measure analysis of variance (ANOVA) model indicated that there were significantly greater decreases in body dissatisfaction among parents in the active condition from T1 to T2 relative to the waitlist condition, as indicated by the significant time-by-condition interaction ($F [1/80] = 8.172, p = .005$, 9.3% variance explained). This significantly different change in body dissatisfaction was also present from T1 to T3 for the two conditions ($F [1/80] = 4.130, p = .045$, 4.9% variance explained). Paired t tests revealed that there was a significant decrease in body dissatisfaction for participants in the HIP Parents Program from T1 to T2 ($t = -3.014, p = .005$) and not from T1 to T3 ($t = -1.531, ns$). The decrease in body dissatisfaction from T1 to T2 ($t = .706, ns$) and from T1 to T3 ($t = 1.311, ns$) in the waitlist condition was not statistically significant.

As hypothesized, a repeated measure analysis of variance (ANOVA) model indicated that there were significantly greater decreases in dieting behaviors among parents in the active condition from T1 to T2 relative to the waitlist condition, as indicated by the significant time-by-condition interaction ($F [1/80] = 6.659, p = .012$, 7.7% variance explained). A repeated-measures ANOVA model indicated no significantly different change in dieting behaviors from T1 to T3 for the two conditions ($F [1/80] = 1.951, p = .166$, 2.4% variance explained). Paired t tests revealed that there was a significant decrease in dieting behaviors for participants in the HIP Parents Program from T1 to T2 ($t = 4.766, p = .000$) and from T1 to T3 ($t = 2.906, p = .006$).

However, the change in dieting behaviors from T1 to T2 ($t = 2.224, ns$) and from T1 to T3 ($t = 1.278, ns$) in the waitlist condition was not statistically significant

A repeated-measures ANOVA model indicated no significantly different change in negative affect from T1 to T2 for the two conditions ($F [1/80] = .876, p = .352, 1.1\%$ variance explained) or from T1 to T3 ($F [1/80] = .508, p = .478, 0.6\%$ variance explained). Despite the lack of significant time-by-condition interaction, within-group analyses were conducted to gain a further understanding of these relationships. There were no decreases in negative affect from T1 to T2 for participants in the active intervention ($t = 1.765, ns$) or for those on the waitlist ($t = .767, ns$). There was also no significant within-group change in negative affect from T1 to T3 for participants in the active intervention ($t = -.649, ns$) or for those on the waitlist ($t = .295, ns$).

5.4.3 Effects of Intervention on Daughters' Thin-Ideal Internalization, Body Dissatisfaction, Dieting Behaviors and Negative Affect

A repeated-measures ANOVA model indicated no significantly different change in daughters' thin-ideal internalization from T1 to T2 for the two conditions ($F [1/80] = 2.046, p = .156, 2.5\%$ variance explained) or from T1 to T3 ($F [1/80] = .052, p = .820, 0.1\%$ variance explained). Despite the lack of significant time-by condition interaction, within-group analyses were conducted to gain a further understanding of these relationships. Paired t tests revealed that there was a significant decrease in thin-ideal internalization for participants in the HIP Parents Program from T1 to T2 ($t = 2.812, p = .008$) though not from T1 to T3 ($t = 1.293, ns$). The change in thin-ideal internalization from T1 to T2 ($t = .898, ns$) and from T1 to T3 ($t = .934, ns$) in the waitlist condition was not statistically significant.

A repeated-measures ANOVA model indicated no significantly different change in daughters' body dissatisfaction from T1 to T2 for the two conditions ($F [1/80] = .730$, $p = .395$, 0.9% variance explained) or from T1 to T3 ($F [1/80] = .248$, $p = .620$, 0.3% variance explained). Despite the lack of significant time-by-condition interaction, within-group analyses were conducted to gain a further understanding of these relationships. Paired t tests revealed that there was no significant decrease in body dissatisfaction for participants in the HIP Parents Program from T1 to T2 ($t = -.443$, ns) or from T1 to T3 ($t = .768$, ns). The decrease in body dissatisfaction from T1 to T2 ($t = .830$, ns) and from T1 to T3 ($t = .058$, ns) in the waitlist condition was not statistically significant.

A repeated-measures ANOVA model indicated no significantly different change in daughters' dieting behaviors from T1 to T2 for the two conditions ($F [1/80] = .874$, $p = .353$, 1.1% variance explained) or from T1 to T3 ($F [1/80] = 1.112$, $p = .295$, 1.4% variance explained). Despite the lack of significant time-by-condition interaction, within-group analyses were conducted to gain a further understanding of these relationships. Paired t tests revealed that there was a significant decrease in dieting behaviors for participants in the HIP Parents Program from T1 to T2 ($t = 2.658$, $p = .011$) and from T1 to T3 ($t = 4.077$, $p = .000$). The decrease in dieting behaviors among participants in the waitlist condition was also statistically significant from T1 to T2 ($t = 2.598$, $p = .013$) though not from T1 to T3 ($t = 2.248$, ns).

A repeated-measures ANOVA model indicated no significantly different change in daughters' negative affect from T1 to T2 for the two conditions ($F [1/80] = .613$, $p = .436$, 0.8% variance explained) or from T1 to T3 ($F [1/80] = .010$, $p = .920$, 0% variance

explained). Despite the lack of significant time-by-condition interaction, within-group analyses were conducted to gain a further understanding of these relationships. There were no decreases in negative affect from T1 to T2 for participants in the active intervention ($t = 1.257, ns$) or for those on the waitlist ($t = .062, ns$). There was also no significant within-group change in negative affect from T1 to T3 for participants in the active intervention ($t = 1.666, ns$) or for those on the waitlist ($t = 2.086, ns$).

5.4.4 Effects of Intervention on Bulimic Symptoms

A repeated-measures ANOVA model indicated no significantly different change in parents' bulimic symptoms from T1 to T2 for the two conditions ($F [1/80] = 2.815, p = .097, 3.4\%$ variance explained) or from T1 to T3 ($F [1/80] = 1.722, p = .193, 2.1\%$ variance explained). Despite the lack of significant time-by-condition interaction, within-group analyses were conducted to gain a further understanding of these relationships. Paired t tests revealed that there was a significant decrease in bulimic symptoms for participants in the HIP Parents Program from T1 to T2 ($t = 3.225, p = .003$) though not from T1 to T3 ($t = 2.004, ns$). The decrease in bulimic symptoms among participants in the waitlist condition was not statistically significant from T1 to T2 ($t = 2.123, ns$) or from T1 to T3 ($t = .580, ns$).

A repeated-measures ANOVA model indicated no significantly different change in daughters' bulimic symptoms from T1 to T2 for the two conditions ($F [1/80] = 1.353, p = .248, 1.7\%$ variance explained) or from T1 to T3 ($F [1/80] = 1.011, p = .318, 1.2\%$ variance explained). Despite the lack of significant time-by-condition interaction, within-group analyses were conducted to gain a further understanding of these relationships.

Paired t tests revealed that there was a significant decrease in bulimic symptoms for participants in the HIP Parents Program from T1 to T2 ($t = 3.106, p = .004$) as well as from T1 to T3 ($t = 2.864, p = .007$). The decrease in bulimic symptoms among participants in the waitlist condition was not statistically significant from T1 to T2 ($t = 2.250, ns$) or from T1 to T3 ($t = 1.091, ns$).

5.4.5 Effects of Intervention on Familial Communication

A repeated-measures ANOVA model indicated no significantly different change in family communication as reported by daughters from T1 to T2 for the two conditions ($F [1/80] = .023, p = .880, 0\%$ variance explained) or from T1 to T3 ($F [1/80] = .026, p = .873, 0\%$ variance explained). Despite the lack of significant time-by condition interaction, within-group analyses were conducted to gain a further understanding of these relationships. Paired t tests indicated that there were no significant changes in family communication from T1 to T2 for participants in the HIP Parents Program ($t = 1.855, ns$) or for participants in the waitlist condition ($t = 1.485, ns$). The changes in family communication from T1 to T3 were significant among participants in the active intervention ($t = 2.427, p = .020$) as well as among participants in the waitlist condition ($t = 2.701, p = .010$).

A repeated-measures ANOVA model indicated no significantly different change in family communication as reported by parents from T1 to T2 for the two conditions ($F [1/80] = .000, p = .990, 0\%$ variance explained) or from T1 to T3 ($F [1/80] = .446, p = .506, 0.6\%$ variance explained). Despite the lack of significant time-by condition interaction, within-group analyses were conducted to gain a further understanding of

these relationships. Paired t tests indicated that there was no significant change in family communication for participants in the HIP Parents Program from T1 to T2 ($t = .376, ns$) or from T1 to T3 ($t = .027, ns$). The change in parent-reported family communication among participants in the waitlist condition was not statistically significant from T1 to T2 ($t = .638, ns$) or from T1 to T3 ($t = -1.053, ns$).

5.5 EXPLORATORY EFFECTS

A repeated-measures ANOVA model indicated no significantly different change in BMI as reported by daughters from T1 to T2 for the two conditions ($F [1/80] = .003, p = .959, 0\%$ variance explained) or from T1 to T3 ($F [1/80] = .127, p = .723, 0.2\%$ variance explained). Despite the lack of significant time-by-condition interaction, within-group analyses were conducted to gain a further understanding of these relationships. Paired t tests indicated that there was no significant change in BMI for adolescent participants in the HIP Parents Program from T1 to T2 ($t = .937, ns$) or from T1 to T3 ($t = -.456, ns$). The change in BMI among adolescents assigned to the waitlist condition was not statistically significant from T1 to T2 ($t = .427, ns$) or from T1 to T3 ($t = -.926, ns$).

A repeated-measures ANOVA model indicated that there was no significantly different change in parent BMI as reported from T1 to T2 for the two conditions ($F [1/80] = .885, p = .350, 1.1\%$ variance explained); however, there was significant change in parental BMI from T1 to T3 ($F [1/80] = 8.113, p = .006, 9.2\%$ variance explained). Paired t tests indicated that there was significant change decrease in BMI for parent participants in the HIP Parents Program from T1 to T2 ($t = 2.369, p = .023$), though not from T1 to T3 ($t = .911, ns$). The change in BMI among parents assigned to the waitlist

condition was not statistically significant from T1 to T2 ($t = -.395$, *ns*); however, parent participants in the waitlist condition did report significant weight gain from T1 to T3 ($t = -3.122$, $p = .003$).

CHAPTER 6: DISCUSSION

6.1 MAIN EFFECTS OF EXPERIMENTAL MANIPULATION

The primary aim of the current study was to examine the effect of a parent intervention manipulation on eating disorder risk factors, bulimic symptoms and family communication. Parents who perceived their middle school daughters to have body image concerns were randomly assigned to either the HIP Parents Program active intervention or to a 4-month waitlist control condition in order to experimentally evaluate the impact of the parent workshop and how it relates to parent and daughter food and body related attitudes and behaviors.

6.1.1 Effects of Intervention on Daughter's Perceived Pressure to be Thin and Parental Model of Eating Disturbances

It was predicted that parents in the HIP Parents Program would report reductions in applied pressure to be thin and that parents assigned to the waitlist control condition would not. In conjunction, it was predicted that daughters of participants in the HIP Parents Program condition would report a reduction in perceived pressure to be thin, whereas daughters of participants in the waitlist control condition would not. Results indicate that while parents in the active intervention did report significant decreases in applied pressure to be thin from baseline to program termination (though not statistically significant across condition), their daughters did not report similar perceptions.

It was also predicted that daughters of participants in the HIP Parents Program condition would report a reduction in parental modeling of eating disturbances, whereas daughters of participants in the waitlist control condition would not. Findings supported

this hypothesis in that HIP daughters reported decreased family modeling of eating disturbances from pre to post-intervention and at 3-month follow-up; however these effects in the hypothesized direction did not reach statistical significance across condition.

There are a number of possible interpretations of the differences between parents' reports regarding their applied pressure on their daughters and daughters' perceptions regarding this pressure. First, this may be a result of demand characteristics such that parents' increased awareness of their contributions to "fat talk" and its consequent pressure on their daughters led them to report reductions in their own participation in this pressure regardless of actual behavioral change. It may also be that their actual behavioral shifts were sufficiently minimal that their daughters were unable to perceive the change or that the duration of time during which this change occurred was not long enough to alter daughters' perceptions of how their parents interact with them. In fact, findings suggest that condition accounted for 1.5% (at termination) and 4.5% (at 3-month follow-up) of the explained variance. These modest effect sizes, considered between "small" and "medium" in clinical significance according to Cohen (1988), explain why daughters may not have perceived the change in their parents' behavior. These effect sizes are clinically significant and suggest that a larger sample size may have resulted in statistical significance, as well. Because pressure to be thin is such a pervasive element of female discourse and because the content of the intervention module designed to target this behavior focused primarily on what *not* to say, it is not surprising that the absence of

receiving remarks would be less noticeable to daughters than the absence of making these comments would be to parents.

That daughters of parents in the HIP intervention and daughters assigned to the waitlist condition reported reductions in their parents' modeling of eating disturbances was unexpected. These findings may suggest that parents' motivation to participate in a program of this kind – regardless of their initial assignment to either an active or inactive group – increased their awareness of their own extreme eating and/or compensatory behaviors. Another possibility, especially given the negligible effect sizes, is that it reflects a measurement artifact (i.e., pretest sensitization; Windle, 1955) or simply a regression to the mean.

6.1.2 Effects of Intervention on Parents' Thin-Ideal Internalization, Body Dissatisfaction, Dieting Behaviors and Negative Affect

It was predicted that parent participation in the HIP Parents Program would result in reductions in parents' thin-ideal internalization, body dissatisfaction, dieting behaviors and negative affect as compared to control group parents. As hypothesized, there were significant time-by condition interaction effects for thin-ideal internalization, body dissatisfaction and dieting behaviors from baseline to termination and at 3-month follow-up for thin-ideal internalization and body dissatisfaction. Contrary to hypotheses, there was no such effect for negative affect. Within-group reductions in these first three risk factors indicate that the reductions in thin-ideal internalization and dieting behaviors were maintained at 3-month follow-up. There were no such within-group reductions for those parents assigned to the waitlist condition.

The reduction in thin-ideal internalization among parents participating in the HIP Parents Program suggests that the intervention successfully targeted this risk factor associated with body dissatisfaction and disordered eating. The conversations regarding the definitions and origins of the thin-ideal and costs related to pursuing this ideal initiated within the intervention provided parents with an opportunity to both increase their consciousness about social pressures to be thin and challenge their own previously unconscious acceptance of these ideals. The success of these discussions is measured by parents' consequent reductions in thin-ideal internalization, which is important in that it demonstrates that this prevention module is effective with parents in much the same ways that it has been shown to be effective with adolescents and college women (Stice et al., 2000, 2001, 2003). Because of its primary place in the dual-pathway model (Stice, 1994), the successful manipulation of this risk factor in parents is essential to the ultimate goal of reducing this risk factor in daughters and thus also decreasing disordered eating. The effect sizes for this outcome explain 10.8% (at termination) and 6.7% (at 3-month follow-up) of the variance and represent the most clinically significant findings.

The intervention effects for reductions in body dissatisfaction indicate that the HIP Parents Program improved parents' attitudes about their own bodies. Research indicates that parental body satisfaction is directly related to the importance parents place on their daughters' bodies (McKinley, 1999; Streigel-Moore & Kearney-Cooke, 1994). By successfully decreasing body dissatisfaction among parents, the intervention sought to increase modeling of positive body-related attitudes and disrupt the generational translation of body dissatisfaction. Condition explained 9.3% of the variance at

termination and 4.9% at follow-up, suggesting that this finding is not only statistically significant, but clinically significant as well.

Given the HIP Parents Program's successful manipulation of thin-ideal internalization and body dissatisfaction, it follows that there would also be significant intervention effects for dieting behaviors and negative affect – as proposed by the dual-pathway model. As hypothesized, there was a significant time-by condition effect for dieting behaviors such that parents participating in the intervention reduced their dieting behaviors from baseline to intervention termination with condition explaining 7.7% of the variance. These the interaction effect was no longer statistically significant at 3-month follow-up, condition explained 2.4% of the variance. As with thin-ideal internalization, the workshops questioned the benefits of, and proposed alternatives to, dieting behaviors from the very first session. By working with parents to reevaluate their weight management goals – thinness or health – the workshops successfully reduced those behaviors specifically aimed at weight loss rather than overall health.

The differences between pursuit of the thin-ideal rather than pursuit of the healthy-ideal are captured by the wording of items on the DRES scale (e.g., “If you put on weight, did you eat less than you normally would?” and “Did you deliberately eat less in order not to become heavier?”) such that the items assess motivation for changes in physical appearance rather than endurance, energy or moderate food intake (hallmarks of the pursuit of health). The healthy-ideal module of the HIP Program identified “small change” ways that parents and their daughters could emphasize health by increasing activity (e.g., taking the stairs when possible, finding exercise buddies and making

exercise appointments) and eating consciously (e.g., at the table rather than at the TV) and moderately (e.g., purchasing individual-portion packages of snack food, not characterizing foods as “good” or “bad” and enjoying “treats” on occasion). These moderate alternatives were intended to reduce the dichotomous attitudes and behaviors associated with dieting for weight loss and therefore make the maintenance of such changes easier to integrate into one’s overall lifestyle.

While these effects support the dual-pathway model, contrary to this model and to hypotheses, there were no such interaction effects for negative affect nor were there significant within-group reductions in this risk factor. Unlike prevention programs that have specifically targeted negative affect and depressive symptoms by introducing participants to cognitive-behavioral strategies to reduce negative thought patterns (Bearman et al., 2003), this intervention did not specifically target this risk factor, rather we hypothesized that affect would be affected by shifts in other more specifically-targeted risk factors. Previous dissonance trials (Stice et al., 2000, 2001, 2003) have shown negative affect to be the outcome least affected by the intervention.

6.1.3 Effects of Intervention on Daughters’ Thin-Ideal Internalization, Body Dissatisfaction, Dieting Behaviors and Negative Affect

It was predicted that parent participation in the HIP Parents Program would result in reductions in daughters’ thin-ideal internalization, body dissatisfaction, dieting behaviors and negative affect as compared to control group daughters. Though there were no significant time-by-condition effects for these outcome variables, daughters of parents assigned to the HIP Parents intervention did report reductions in thin-ideal internalization from baseline to intervention termination accounting for 2.5% of the

variance. These daughters also reported reductions in dieting behaviors accounting for 1.1% of the variance at termination and 1.4% at 3-month follow-up. Daughters of parents assigned to the waitlist condition did not report reductions in three of these outcomes, though unexpectedly they did report decreases in dieting behaviors from baseline to termination (though not maintained at follow-up).

Though the change in thin-ideal internalization among daughters of participants in the HIP Parents Program did not reach statistical significance across groups, the effects in the hypothesized direction and the small to medium clinically significant effect size (Cohen, 1988) suggest that the significant decreases in parent thin-ideal internalization was translated to the daughters by way of the interactive homework assignments and additional conversations about course content. This successful manipulation of daughters' internalization of the thin-ideal supports the literature on the important role parents play as mental health educators for their children (Dishion & Kavanaugh, 2000; Hahn, 1993). Despite the modest size of these effects, they are especially noteworthy in that these participants participated only indirectly in this prevention program. Additionally, the young age of these participants and the relative lack of severity of their own risk factors may have contributed to a floor effect in that it was difficult to assess significant change.

As with the parents assigned to the active intervention, daughters of these participants reported decreased dieting behaviors from baseline to intervention termination and maintained at 3-month follow-up, though not reaching statistical significance across groups. Surprisingly, daughters of parents assigned to the waitlist

control condition also reported reductions in dieting behaviors from baseline to intervention termination. These findings again suggest that this may reflect a regression to the mean or a measurement artifact such as pretest sensitization.

Contrary to hypotheses, daughters of parents participating in the HIP Program did not report decreases in body dissatisfaction or negative affect. One possible explanation for the null body satisfaction effects could be that thin-ideal internalization was not associated with body dissatisfaction for these middle school girls. When signing up for the program, many parents suggested that their daughters' body image concerns were related to the development of secondary sex characteristics, or lack thereof. Similarly, many parents spoke of their daughters' concerns about being underweight. It is possible, therefore, that successfully decreasing thin-ideal internalization was unrelated to daughters' feelings of satisfaction with their own bodies. This explanation also supports the null effects for reducing negative affect such that despite changing general attitudes about body ideals, because this program did not shift daughters' feelings about their own bodies it also would not improve their overall affect.

6.1.4 Effects of Intervention on Bulimic Symptoms

Though the reduction in parents' bulimic symptoms did not reach significance for a time-by condition interaction effect, parents participating in the HIP Program did report significant decreases in these symptoms from baseline to intervention termination (not maintained at follow-up). These decreases accounted for 3.4% and 2.1% of the variance at termination and follow-up respectively. It should be noted that the active intervention did not specifically address the issue of eating disorders and thus relied upon the dual-

pathway model's assertion that dieting behaviors are directly related to bulimic symptoms and thus by reducing the former, this prevention program would likely reduce the latter. Because the workshops focused on shifting weight-loss goals to health-pursuit goals and introduced participants to moderate behaviors designed to help them meet these goals, it follows that these parents would reduce their engagement in the more extreme weight-loss behaviors.

The reductions in daughters' bulimic symptoms also did not reach significance for a time-by condition interaction effect; however, daughters of those parents participating in the HIP Program did report significant decreases in these symptoms from baseline to intervention termination and maintained at follow-up accounting for 1.7% and 1.2% of the variance respectively. It is again likely that the workshop's curricular focus on moderate versus extreme weight management strategies best explains these reductions. These findings are also promising in that they suggest that the parent participants successfully used their homework assignments and consequent discussions to elucidate those elements of the course most relevant to their daughters' health. Because the attitudinal items on the measure of bulimic symptoms assess feeling of being fat or fears of becoming fat, this measure more sensitively captures daughters' fat-related body dissatisfaction than does the body dissatisfaction instrument, which does not differentiate between dissatisfaction based on skinniness/fatness/female development.

6.1.5 Effects of Intervention on Familial Communication

Contrary to hypotheses about improving family communication, parents in both conditions reported no significant change, while daughters in both conditions reported

significantly decreased communication from baseline to 3-month follow-up. This finding suggests that there may be a time effect for this outcome given the age of the adolescent participants; perhaps communication between parents and daughters declines as a result of daughters approaching their teen years and high school.

Greenberg et al. (2001) points to improved family communication patterns as an important element of the process of both decreasing risk factors and strengthening protective factors. This particular measure of parent-child communication assesses openness and honesty within discussion, as well as satisfaction with communication. The hypothesis that parents and daughters participating in the intervention would experience improved communication was based on the assumption that the homework assignments and ancillary discussions would promote increased, and perhaps generalized, sharing and understanding. The current study undertook to increase and improve communication about body and food related issues. Due to time constraints, the domain-specific curriculum of the workshop did not focus on general patterns of parent-child communication and problem-solving, perhaps explaining the null effects. Possibly, specific role-playing exercises designed to “practice” the initiation of these assignments and discussions as well as an explicit discussion of the dual goals (information-sharing and intimacy-building) of these assignments may have bolstered communication effects.

6.2 EXPLORATORY EFFECTS

The HIP Parents Program targeted an integrated set of risk factors for the prevention of eating pathology. One of the goals of the program was to reduce parents’ and daughters’ engagement in dieting behaviors, as this is thought to be a proximal

predictor of bulimic pathology. Once it was assessed that the experimental manipulation had, in fact, resulted in significant decreases in parental dieting, exploratory analyses were conducted to determine whether there was significant change in BMI across condition.

While there was no significant change in daughters' BMI across condition, there were significant time-by condition effects for parent BMI from baseline to 3-month follow-up such that HIP participants reported significant weight loss from baseline to termination and waitlist participants reported significant weight gain from baseline to follow-up assessment. Condition explained 9.2% of the variance across condition, representing moderately large clinical significance. These results suggest that by reducing dieting, prevention efforts are not inadvertently encouraging weight gain. In fact, by replacing behaviors such as skipping meals, counting calories and methodically watching one's weight with "small change" healthy weight-management strategies, such as mindful eating and a more active lifestyle, these programs are actually reducing both body dissatisfaction and BMI.

6.3 STRENGTHS AND LIMITATIONS

There are several strengths of the current study that should be noted. First, this study was the first eating disorder prevention program that we know of designed specifically for parents. Because parents' own food and body-related attitudes and behaviors impact those of their daughters, this program's successful manipulation of known risk factors is promising. The clinical significance of these changes is especially noteworthy for thin-ideal internalization, body dissatisfaction and dieting behaviors in

that these effect sizes fell within the medium to large range. Second, the high attendance rate of parents participating in the HIP Parents Program suggests that these workshops were both informative and enjoyable and filled a void expressed by many parents who described enjoying the opportunity to share their parenting experiences and hear the similar concerns of others. Third, the simultaneously structured and interactive nature of the program allowed parents to be exposed to certain specific curriculum modules and related homework while still having the opportunity to feel interpersonally supported and encouraged. Fourth, this may be the first eating disorder prevention program to use multiple reporter data such that it facilitated discerning true effects of the intervention from demand or expectancy characteristics. Fifth, in keeping with recent recommendations regarding prevention research (Stice & Shaw, 2004), this study was theoretically grounded in current etiologic models, employed random assignment, and included an assessment-only control group.

While the results of this study are promising, some limitations should be considered when interpreting these findings. First, while there were effects in the hypothesized direction for some of the daughters' outcomes, the absence of interaction effects for these outcomes implies that, a) the moderate sample size limited the power to detect these differences; b) the age of the daughters and relative lack of severity of their eating pathology and known risk factors may have contributed to a floor effect in that it was difficult to detect significant movement in these outcome variables, and c) a lengthier intervention may have bolstered these effects. Increasing the number of sessions would have provided more time for the specific role-playing exercises and parent-child

communication strategies that could have strengthened the impact of the assigned homework exercises and ancillary discussions. Second, the relative lack of racial/ethnic diversity in the current sample limits our ability to generalize these findings to non-Caucasian parents. The relative racial/ethnic homogeneity of the sample may accurately reflect those parents most likely to sign up for a program of this type; however, it may also be a product of the school districts from which we sampled. In order to determine which of these explanations is most accurate, an important consideration in terms of the future marketing of similar programs, efforts should be made to recruit a more racially/ethnically representative sample of parents. Fourth, a longer follow-up period would have provided information on the durability of the improvements that were made by both daughters and parents with respect to thin-ideal internalization, dieting behaviors and bulimic symptoms. Fifth, the current study did not include a placebo control condition. The addition of such a group (eg. bibliotherapy, unstructured discussion group) would allow us to rule out the possibility that observed effects were a result of demand or expectancy characteristics. Sixth, it would have been optimal to include a diagnostic interview of both parents and daughters that would have provided a more accurate assessment of eating disorder symptoms than self-report scales (Black & Wilson, 1996). Seventh, the inclusion of body satisfaction measures more sensitive to specific elements of dissatisfaction (e.g. skinniness, puberty) would have more clearly highlighted potential shifts in daughters' body ratings. Finally, consistent with past research, we found it quite difficult to recruit parents to participate in the prevention of this internalizing disorder. As the low recruitment rates indicate, it was essential to have

access to a large group of parents in order to successfully implement these workshops. Numerous school districts, independent schools and community organizations were contacted in order to secure a recruitment pool, with very few of them willing to release parent contact information. Without the pre-established relationships with two specific school districts, the recruitment would have been even more challenging, suggesting a possible threat to the generalizability of these findings. The difficulties we experienced in securing a parent sample contributed to the time lag in data collection such that the Texas and California data sets were collected two years apart. This lack of continuity in data collection may have impacted the relative effectiveness of the group facilitator in that the facilitator likely had increased clinical skills at the time of the second wave of data collection.

6.4 CLINICAL IMPLICATIONS AND FUTURE DIRECTIONS

The current study represents a much-needed first step in the direction of providing wrap-around programs for the prevention of eating disorders in adolescent females. There are three specific ways in which the current HIP Parents Program could be adapted for increased effectiveness. First, studies seeking to build on these findings should offer a lengthier intervention that can provide more ample coverage to the topics broached in this program. In order not to jeopardize recruitment and/or retention, these studies may wish to implement a phased approach, such that they advertise a three-session workshop during which the critical components are addressed; participants could then be invited to continue attending subsequent sessions wherein these topics are covered with greater elaboration. Second, despite utilizing a recruitment letter that invited “parents,” only one

father signed up to participate. A number of mothers who signed up asked that their husbands be able to join them at the meetings; however, the nature of the research design precluded the participation of two parents. Future programs may want to either directly recruit fathers or be open to the participation of couples. Third, the current study's success at reducing risk factors among daughters of participants without ever directly working with these daughters suggests that workshops held for daughters and parents separately and concurrently would provide a more potent and lasting manipulation. While the potential clinical implications of such a program are more robust, much consideration should be given to this approach in light of specific recruitment concerns. Given that the current study enrolled 5% of all targeted parents, and that recent adolescent programs have had similar (5-8%) recruitment rates, it is questionable whether these two populations would overlap such that adolescents and parents from the same family would be similarly interested in the concurrent program. Future trials could assess feasibility by recruiting parents first and then inviting those daughters to participate in a separate module. Additionally, perhaps recruitment rates would be improved with a different marketing strategy such as a "healthy bodies" theme rather than a "body image" focus. Finally, while parents factor prominently in their daughters' lives as direct and indirect instructors of health-related behaviors and attitudes, targeting school faculty and administrators would augment the ecological approach started by this program.

6.5 CONCLUSION

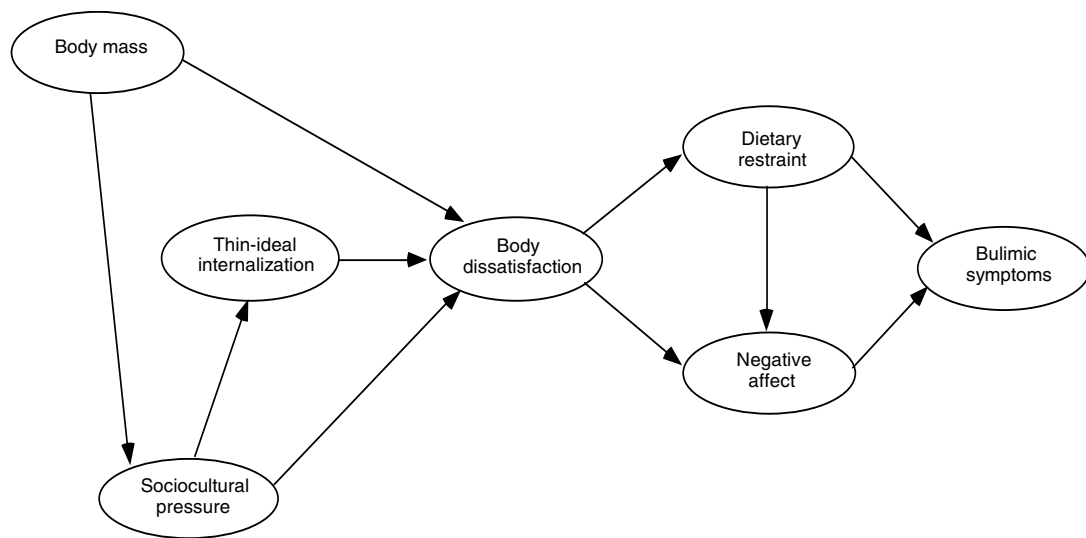
The present study was a controlled, secondary prevention trial designed for parents of middle school females with body image concerns. The intervention designed

for this study produced reductions in parents' thin-ideal internalization, body dissatisfaction and dieting behaviors as compared to the waitlist control group. The intervention also reduced daughters' thin-ideal internalization and reports of family modeling of disturbed eating from pre- to post-intervention. Additionally, daughters' reported reductions in dieting behaviors and bulimic symptoms that persisted at 3-month follow-up. These significant yet modest results of a three-session workshop demonstrate the potential benefits of implementing prevention programs designed to alter children's social environment in order to promote positive changes in those domains that most influence them, such as home and school.

APPENDICES

Appendix A

Dual-Pathway Model



Stice's (1994) Dual-Pathway Model. The proposed relationship among a set of six integrated risk factors for the development of bulimic pathology.

Appendix B

Recruitment Letter



COLLEGE OF LIBERAL ARTS • DEPARTMENT OF PSYCHOLOGY
THE UNIVERSITY OF TEXAS AT AUSTIN

Laboratory for Adaptive Development

Satellite Office • 743 Walker Avenue Oakland, CA • (510) 517-2770

September 9, 2004

Dear Napa Parent,

You are invited to participate in a program designed to help parents help their adolescent daughters feel better about their bodies and reduce the risks of low self-esteem, poor academic performance, and unhealthy weight management strategies.

Interested parents will attend **three 90-minute group meetings**, which will focus on how parents can create and maintain supportive communication about body image. **Meetings will be held this Fall at Harvest Middle School and will accommodate each parent's schedule.**

Parent participants will also be asked to complete three questionnaires as well as interactive homework assignments with their daughters. After completing all surveys, parents will be entered into a raffle for gift certificates to local stores and restaurants. Though daughters will not attend group meetings, they will be asked to complete questionnaires and to participate in these parent-daughter homework activities. They will be paid \$10 for completing each survey, totaling \$30 by the end of the program.

If you are interested in receiving more information about this Healthy Image Partnership (HIP) Parents Program, please call (510) 517-2770 or email HIP_Parents@yahoo.com.

I look forward to hearing from you soon!

Sincerely,

Ariel Trost, MA
Project Coordinator
HIP Parents Program

Appendix C

Recruitment Phone Screen

HIP Phone Script

Thank you for your interest in this study. Before we sign anyone up to participate, we want to be sure you have all the information you need in order to make an informed decision.

If you decide to participate in this program, you will be randomly assigned to either the Healthy Image Partnership Parents Program or to a waiting list. The parents groups will meet ONCE A WEEK FOR THREE CONSECUTIVE WEEKS at HARVEST MIDDLE SCHOOL. Each group session will last for 90 minutes. If you are assigned to the waiting list, you will have the opportunity to participate in the group meetings at the end of four months.

Regardless of which group you are assigned to, YOU WILL BE ENTERED INTO A RAFFLE FOR THE CHANCE OF WINNING ONE OF SIX \$50 GIFT CERTIFICATES to local shops or restaurants. Your daughter will be paid \$30 over the course of the study for her completion of 3 brief questionnaires.

*Are you still interested in participating?
Great, now let me get some information from you.*

Participant (parent) name: _____ **Male/Female?:** _____
Daughter's name: _____ **Daughter's age:** _____

Current Address: _____

Phone numbers: _____

Email address: _____

**What days/times would you be able to attend group meetings?
(any upcoming vacations?)**

Thanks again for your interest; you can expect to hear from the project coordinator within the next two days.

Appendix D

Parent Consent Form

PARENTAL CONSENT FORM
Healthy Image Partnership (HIP) Parents Program

We are evaluating a class designed to help parents improve their daughters' body satisfaction, and would like to invite you and your daughter to participate. My name is Eric Stice and I am a professor at the University of Texas at Austin Psychology Department. Many adolescent females are dissatisfied with their bodies, and body dissatisfaction is a risk factor for eating disorders. Research has also shown that parents can influence many of their daughters' behaviors and attitudes about food and their bodies. We have developed a number of successful body acceptance programs that effectively reduce body dissatisfaction and associated eating problems among high school students, and would like now to involve parents in our efforts. You and your daughter were selected as possible participants in this study because she is in early adolescence. You and your daughter would be one of 80 parent-daughter pairs to participate.

If you consent to your and your daughter's participation, you will either be placed on a waiting list or you will be assigned to take part in three 1 ½ -hour classes aimed at increasing positive parent-daughter communication about body and food related issues and therefore improving your daughter's feelings about her shape and weight. This class will involve a series of written and verbal exercises intended to help parents think critically about the ultra-slender ideal and discuss some of the pitfalls associated with pursuit of this ideal. The group sessions will also include discussions about healthy alternatives to this beauty ideal, and specific activities and homework exercises for you to do with your daughter. If you are assigned to the waiting list, you will have the opportunity to participate in these classes in four months. Regardless of the condition to which you are assigned, you and your daughter will be asked to complete a 15 minute survey about your attitudes and behaviors (e.g., about body satisfaction and dieting behaviors) immediately before the intervention, at the end of the final session, and at 3 months following the final group session. Completion of the surveys will not interfere with your daughter's academic schedule. She will be paid \$10 for each survey, totaling \$30 by the end of her participation. All parents who attend all three sessions and complete the three surveys will be entered into a raffle for six \$50 gift certificates to local stores and restaurants.

Your and your daughter's responses to the surveys will be completely confidential and will not be disclosed.

The only foreseeable risk is that you and/or your daughter may be embarrassed by some of the survey questions. However, you both have the right to decline to participate in the study or to refuse to answer any specific question. The benefits of study participation may include improved body satisfaction and parent-daughter communication as well as reduced eating problems for your daughter.

Your decision to participate and allow your child to participate in this study will not affect your or your daughter's future relations with The University of Texas or your child's current school. If you agree to participate and allow your daughter to participate, you may discontinue your and her participation at any time.

If you have any questions please call me at 510-517-2770. More generally, if you have any questions or concerns at any time about your or your daughter's treatment as a participant in this study call Professor Clarke Burnham, Chair of the University of Texas Institutional Review Board for the Protection of Human Research Participants at 512-232-4383.

Your signature below indicates that you have read the material above and have agreed to participate and allow your child to participate in this study.

I **DO** WANT TO PARTICIPATE IN THIS STUDY WITH MY DAUGHTER (_____).
write in name

Signature of Parent or Legal Guardian

Date

Signature of Investigator

Date

Appendix E

Adolescent Assent Form

DAUGHTER ASSENT FORM
Healthy Image Partnership (HIP) Parents Program

I have read the description of the Healthy Image Partnership (HIP) Parents Program described on the previous page, and I understand what the procedures are and what will happen to me in the study. I have received permission from my parent(s) to participate in the study, and I agree to participate in it. I know that I can quit the study at any time.

I ASSENT TO PARTICIPATE IN THE STUDY DESCRIBED ABOVE.

Signature of Participant

Date

Appendix F

HIP Parents Program Protocol

Protocol

Healthy Image Partnership (HIP) Parents Program

Developed by:

Ariel Trost
Department of Educational Psychology
University of Texas at Austin
2002

This program is based on the works of Stice, Mazotti, Weibel & Agras, 2000,
Stice, Chase, Stormer & Appel, 2001 and Stice, Trost & Chase, 2003.

TABLE OF CONTENTS

- I. Session One:
 - Introduction
 - Exploration of the Thin-Ideal: Definition, Origin and Costs
 - Discerning Healthy vs. Unhealthy Weight Attitudes and Management
 - Homework Assignments

- II. Session Two:
 - Review
 - “Fat Talk:” Modeling and Reinforcing the Thin-Ideal
 - Homework Assignments

- III. Session Three:
 - Review
 - Developing and Practicing Alternatives to “Fat Talk”
 - Homework Assignments

- IV. Appendices
 - Healthy weight management worksheet
 - Top 10 worksheet
 - Fat talk worksheet

All italic text indicates suggested wording for the group leader(s). Bracketed text includes necessary materials and instructions for the specified activity.

Session One

Materials:

- Attendance Record
- Cosmo-girl and 17 magazines
- Large easel
- Informational Folders
- Handouts:
 - Facilitator's contact information
 - Healthy Weight Strategies
 - Homework assignments

Topic Areas:

- Introduction
- Exploration of the Thin-Ideal: Definition, Origin and Costs
- Discerning Healthy vs. Unhealthy Weight Attitudes and Management
- Homework Assignments

[Have group members sign attendance record before beginning session. While participants are waiting for everyone to arrive, have them flip through teen magazines.]

Introduction

Leader and co-leader introduce themselves

Hello, my name is _____. I am a graduate student in psychology and I will be your group leader for the next few weeks. Have co-facilitator introduce herself. At the end of tonight's session, I will hand out my contact information. Feel free to call or email me if you have any questions between sessions. You are always welcome to ask questions during the session as well.

Brief overview of background of this project and related research

All of you decided to participate in these groups because of your concern for your daughter's feelings about her size or shape. This program was developed to serve as a complement to the research we are doing at the University of Texas on adolescent body dissatisfaction and eating disorders. We have been developing and facilitating groups for adolescent girls with body dissatisfaction and have had very promising results. What we have found is that understanding the cultural ideal of thinness – what we'll be referring to as the thin-ideal- and learning the difference between healthy and unhealthy weight management helps adolescents resist many of the social pressures to be thin and instead encourages a healthy lifestyle. Because parents spend far more time with their daughters than we can, we developed this program to help parents to help their daughters accept their bodies and therefore reduce their risks of eating disorders.

I would first like to applaud all of you for choosing to participate in this project. Your commitment to your daughters' health will go a long way in helping your daughters.

Overview of commitment

We will all meet for three group sessions, each of which will be 60-90 minutes. Three months after the program has ended, we'll mail you a final survey that you will send back to us. Because these groups are interactive, the success of the program depends upon you each attending each session and completing the weekly assignments. Because our goal is to help you help your daughters with their body image concerns, we will also be mailing surveys to your daughters that they can mail back to us.

Review of objectives

While you were waiting for tonight's session to begin, you flipped through some examples of the magazines aimed at girls your daughters' ages. What do you think are the messages being given about women's bodies? allow very brief discussion.

The idea behind this program is that girls are bombarded with the message that they must be thin. These messages range from obvious to subtle. By helping you to see both the source and impact of these messages, we hope that you can help your daughters fight the body-related attitudes and behaviors that are causing concern. Are you willing to give this a try? Get commitment from each participant. Another important issue for us to consider is that, as adults, we too have been affected by the media's portrayal of what constitutes beauty. Because of this, many of us have our own body-related issues. As we talk about your daughters, some of your own issues may surface and we should pay attention to this. We'll make sure that there is time to address this as appropriate.

During our three meetings we will:

- 1. Explore the thin-ideal and its origins and examine the costs of pursuing it*
- 2. Differentiate between this ideal and the healthy ideal*
- 3. Discuss the importance of parents in influencing their daughters' body image.*
- 4. Explore ways that parents can help combat the thin ideal and improve their daughters' feelings about their bodies.*

Though we strongly encourage you to talk about the content of these meetings with your daughters and will give you specific exercises to do that will include sharing information with them, it is important that the personal content of what is said in this room remains confidential. Get commitment from each participant.

Getting to know each other

Let's get to know each other better. Can each of you tell us your name, how old your daughter is, and what you are hoping to get out of this program? Leader writes down parents' goals for the program on a large easel and responds to each.

Definition, origins and costs of the thin-ideal

Definition of the thin-ideal

First, let's get a better understanding of the thin-ideal. Pose questions to group and promote participation and collaboration on their responses. Participants should talk, not facilitators.

What are we told that the "perfect woman" looks like?
(e.g. thin and attractive, perfect body, look like a super-model)

We call this look – this thin, toned, busty woman – the "thin-ideal." Chances are that both you and your daughter would agree that this is the ideal of feminine beauty.

Origins of the thin ideal

Has this thin-ideal always been the gold standard for feminine attractiveness?
(no, differs over time)

Where does this ideal come from? What are its origins?
(e.g. media, fashion industry, diet/weight loss industry)

How is the thin-ideal perpetuated?
(e.g. media, television shows, magazines, distortion of images)

How have messages from peers impacted you?

Messages from your own parents?

Messages from spouses?

Discuss participants' personal experiences and emphasize that some of these messages are obvious, while others may be more subtle.

Where do your daughters get these messages?

At least one participant should mention the role parents play. This will be a good opportunity to briefly mention how parents might subtly reinforce the thin-ideal by modeling body dissatisfaction, dieting behaviors and their own beliefs that the thin-ideal should be pursued.

What does society tell us will happen if we look like the thin-ideal?
(e.g. we will be accepted, loved, happy, successful, wealthy)

Are these expected benefits of achieving the thin-ideal realistic?
(e.g. no, will likely have little impact)

Moreover, can most of us really even achieve this ideal?
(no...leading to frustration, feeling like a failure)

Then who benefits from the thin-ideal?
(e.g. diet industry, media, fashion industry)

Costs of pursuing the thin-ideal

We've discussed the thin-ideal and where it comes from. Now, let's talk about the costs involved with this ideal.

What are the costs of pursuing the thin-ideal?
(e.g. decreased sense of self-worth, expensive, physically/mentally exhausting, low self-esteem, feeling bad about body and self, promotes unrealistic and unhealthy attitudes, encourages unhealthy weight loss management strategies, eating disorders)

Who benefits from our pursuit of the thin-ideal?
(e.g. media, fashion industry, diet industry)

Given these costs, does it make sense to pursue the thin-ideal?(no)

Healthy vs. unhealthy weight management

As you mentioned, one of the costs associated with pursuit of the thin-ideal is the use of unhealthy and sometimes dangerous weight management techniques. People often adopt these techniques because of incomplete knowledge about exercise and nutrition.

Dieting vs. lifestyle changes

Let's start by discussing diets. I'd like you to all think about diets you've either heard about, tried, or that your daughters may have tried. Can anyone name a diet that has been popular either recently or in the past? As participants name diets, ask them to describe what each diet suggests.

What do all of these diets have in common?
(e.g. emphasis on extreme dietary changes, "get thin quick" mentality, dichotomizing foods into good/bad categories)

What is the difference between these diets and a healthy lifestyle?
(e.g. one can be maintained, one cannot; diets are meant to last for only a specific amount of time while a healthy lifestyle can last forever)

*Also, the goals are different. What is the main goal of a diet?
(e.g. losing weight)*

*What is the main goal of a healthy lifestyle?
(e.g. to become stronger and healthier)*

Healthy Weight Management – Alternatives to dieting: Handout

Unlike all of the diets we mentioned, however, a healthy lifestyle focuses on moderation and emphasizes the importance of exercise as a source of strength, fitness and health – not weight loss. Generally you can tell which ideal someone is pursuing – the healthy ideal or the thin-ideal– by what their goals are. We have included a list of healthy weight management techniques in your folder. Let's take a few minutes to go over some of the items on this list. Briefly go over list.

In terms of thinking about how you can help your daughters, why is the distinction between the thin-ideal and the healthy-ideal important?

How might our daughters know which ideal we are pursuing? (first very brief mention of modeling)

What are the messages we communicate to our daughters through our choice of pursuing either the thin-ideal or the healthy-ideal? (importance of appearance over health, etc)

Homework

Each week you will have some brief exercises to complete – some alone, others with your daughter.

You will find three homework sheets in your folder. The first one asks you to initiate a conversation with your daughter in which you discuss the differences between pursuing the healthy-ideal and the thin-ideal (and their associated behaviors and consequences). On the sheet provided, write down the things you will both change in order to emphasize health over thinness.

The second assignment asks that you and your daughter write separate lists of where you each receive messages reinforcing the thin-ideal. Once these are completed, take a few minutes to share these lists and discuss your responses. We will be emailing you in three days to find out how these first two assignments went.

The last assignment is a “Body Enhancement Exercise.” Because we often focus on the things we don't like about our bodies, this exercise will help us think about the positives. This exercise sheet lists activities that encourage us to appreciate the wonderful things our body does for us by rewarding our body with baths, pedicures, massages, dancing,

etc. Pick one or more of these activities this week to see how it feels. Then, maybe next week, you can pick an activity to do with your daughter.

Concluding remarks

I want to reiterate how impressed I am with your commitment to your daughters. I know that many of the topics we talked about today are personal and might be difficult to discuss. This is especially true when we talk about the ways we, as parents, may reinforce the thin-ideal. Let's remember that even adults are impacted by the media and the social pressures we talked about. It's also important though to remember that you all joined this program because you care about helping your daughters. In the next couple of weeks we'll continue to discuss the ways you can do that.

Before we leave tonight, I'd like to hear how you're feeling about the topics we covered today and about your commitment to this program.

If you have any questions, comments or concerns, please email or call me. Otherwise, I look forward to emailing you in a couple of days to hear how things are progressing and to seeing you all next week.

Session Two

Materials:

- Attendance Record
- Scrap Paper
- Easel w/ top ten ways parents may promote thin-ideal
- Scenario Cards
- Handouts:
 - Homework assignments
 - Fat Talk

Topic Areas:

- Review of previous session
- Review of homework
- “Fat Talk:” Modeling and Reinforcing the Thin-Ideal
- Homework Assignments

[Have group members sign attendance record before beginning session]

Review

I'm glad to see everyone again this week. Last week we discussed the thin-ideal. Together, we defined what it is, explored its origins, and talked about the costs associated with pursuing this ideal. We then talked about some of the unhealthy ways that people go about trying to achieve this ideal and brainstormed some healthier options. As homework, you were all asked to share these discussions with your daughters. I'd like to begin by hearing how those conversations went.

You were asked to work with your daughter to write a list of changes you were each going to make in order to pursue the healthy-ideal over the thin-ideal. Would people be willing to share the lists they generated? As you hear people's good ideas, feel free to add those to your lists. Go in circle and have all participants share lists. Facilitator should comment on people's ideas and give positive and useful feedback.

How did it feel to do this exercise?

Was it challenging?

How was it to work with your daughters on this task?

You and your daughter were also asked to write down separate lists of where you receive messages about the thin-ideal and then compare your lists.

How did you feel doing this exercise?

Were your lists similar?

Were there any surprises on either your or your daughter's lists?

Are people willing to share these lists? Have participants share lists with group.

What about the "Body Enhancement Exercise?" How did you find that?

Modeling, Social Reinforcement and Thin-Ideal Messages

Definitions of social learning

Many of your lists mentioned that you and your daughter have received thin -ideal messages from the media, from peers and from family members. These messages can take many forms. For example, watching a TV show is different from having a conversation with a friend or being teased by a sibling.

Sometimes we learn through observation. Give example. We also learn from reinforcement – by being either praised or punished for something we did. Give positive and negative example. Can anyone think of some more examples? Of times when you learned through observation? Or, of times when you learned through more explicit rewards or consequences? Have participants share a few examples.

Last week we talked about the messages we get from the media, and now we're going to start thinking about real-life interactions. Let's take a few minutes and think about the messages that we as parents might be giving to our daughters. Remember these might be really subtle and are usually said out of concern for your daughters. For the next two minutes, I'd like you to think about how you might be directly or indirectly promoting the thin-ideal in a way that might influence your daughters. You won't have to share these lists. Hand out scraps of paper and have participants take two minutes to record their thoughts. After participants are done writing, turn to page on big easel with Top Ten Ways Adults/Parents Promote Thin-Ideal. Let's take a moment to look at this list and compare it to the lists you made. Would anyone like to volunteer her/his thoughts on how your list is similar or different? Engage participants in optional discussion of lists.

Exercise: Scenario Cards

Now that we're all thinking about the role parents may play in their daughters' feelings about their bodies, I have an exercise for us. I am holding ten cards. A parent-child interaction is written on one side of each card. On the other side are a couple of discussion questions. We're going to do a couple of these as a group and then we'll break into smaller groups and you can do the exercise with each other.

Each card describes a scenario that has really happened – maybe even in your home, either when you were a child or now that you are a parent. Some of these may seem familiar to you while others might seem more far-fetched. The point of this exercise is to see many examples of ways that parents might be teaching their daughters about the thin-

ideal without even realizing it. After reading through a scenario, we'll turn the card over and discuss our answers to the questions on the back.

Let's try this one as an example:

Scenario

(Parent to Daughter while watching a video together) "Wow, look at how heavy Renee Zellweger is in Bridget Jones' Diary. She looks so much better without all that weight."

Now let's turn it over and see what the questions are.

Questions

What message is this parent giving her/his daughter?

(e.g. a "normal weight" actress is heavy, you can only look good if you're thin, someone's weight is other people's business, an actress's weight is a more important topic of conversation than her acting skills)

List two reasons you think the parent may have said this.

(e.g. surprised by how much weight actress has lost and automatically assumes it is an improvement or that she was heavy before, super-thin models/actresses are so common on TV that we forget how uncommon/unattainable it is for most)

What are other ways the parent could have handled this situation?

(e.g. not said anything, commented on how much more normal the actress looks now, asked whether there might be a health/psychological problem contributing to weight loss)

What different messages would these have communicated to her/his daughter?

Great job. Before we try this on our own in smaller groups, let's do one more together.

Scenario

Mom is standing in front of full-length mirror in her room pinching her stomach and saying to daughter: "You better enjoy being young. The older I get the bigger my stomach becomes. I can't even tuck in my shirts anymore."

Questions

What is this mother communicating to her daughter?

(e.g. body changes are to be feared, aging women are less attractive, daughter will grow to dislike her body too)

What alternative ways could mother have dealt with her feelings?

(e.g. focused on the things she appreciates about getting older, thought of the parts of her body that she still likes, talked with a friend)

What different messages would these have communicated to her daughter?

Again, you all did a wonderful job. Remember, some of the scenarios will be pretty obvious and others will be more subtle. If you get stuck on your card, ask group members for help. We'll be walking around to see how you're doing.

Debriefing: Bring groups back together and discuss exercise.

What were people's experiences in the small groups?

Were the scenarios familiar?

What patterns did you notice while answering the questions?

Were they challenging?

Are these things you had thought about before in this way?

Today we discussed the role that parents may play in influencing their daughters' body image. Even as adults we are bombarded by messages proclaiming the merits of the thin-ideal so it is no wonder we may sometimes unwittingly transmit these messages to our children. Fortunately, in participating in these conversations and learning to resist these messages, you are all working towards helping your daughters to do the same thing.

Your homework exercises this week and our final session next week will give you lots of opportunity to practice the things we've discussed today.

Homework

I'm passing out three more homework sheets for you to put in your folders. The first assignment is the follow up to last week's "Body Enhancement Exercise." This week, initiate one of these activities with your daughter – something you would both enjoy.

The second assignment invites you to engage your daughter in some of the alternative conversations we discussed today (thinness not automatically related to attractiveness, fatness not automatically related to laziness, etc.). Find at least two opportunities this week, while watching TV, reading a magazine, renting a video, passing billboards, or as you are shopping and see advertisements. Be creative – you can engage her in a critique of a show or advertisement, ask her about what is realistic/unrealistic about it, etc. Record your thoughts and feelings on the worksheet after each interaction.

The next exercise requires you to keep a log this week. In this log, you will record the indirect and direct messages you give your daughter related to body (hers and yours) and eating (hers and yours). Each time you record an interaction, mark whether it was beneficial to her feelings about herself and her body. Each time you note one that is not, try to find another opportunity to model or reinforce a healthy perspective and record these as well. I've included a "Fat Talk" sheet that lists some of the common subtle and not-so-subtle ways we often talk about our bodies and eating. You can use this as a guide

so that when you find yourself saying something similar to something on the list, you can also look for a way to reframe it or better communicate your point.

As with last week, we will be emailing you in two or three days to find out how you are progressing. Please write us back to let us know what you have tried or noticed since tonight.

Session Three

Materials:

- Attendance Record
- Goal cards
- Handouts:
 - Homework assignments

Topic Areas:

- Review of previous session
- Review of homework
- Finding and Practicing Alternatives to “Fat Talk”
- Homework Assignments

[Have group members sign attendance record before beginning session]

Review

I'm glad to see everyone again this week for our final discussion. Over the past couple of weeks, we've been talking about issues that affect adolescent – and adult – body image. We've talked about the thin-ideal and how the media's portrayal of this body type as normal has an impact on girls' satisfaction with their own bodies. We've also talked about healthy alternatives to dieting and how to build a lifestyle that emphasizes moderation and fitness. Last week we began to explore the ways that adults often unknowingly reinforce the thin-ideal in both obvious and subtle ways. During the scenario exercise, we also began talking about alternatives to this “fat talk.” Because the goal of this program is to help you to help your daughters with their body image concerns, we have been giving you homework assignments that guide you in sharing information with your daughter and experimenting with different ways that you can use your relationship with her to make a difference in her sense of herself. This week, you were all asked to use our conversation from last week as a catalyst to engage in some alternative interactions with your daughters. I'd like to begin by hearing how those interactions went.

You were asked to join your daughter in a couple of her usual activities – watching TV, reading magazines, etc. – and to take these opportunities to find out what she thinks about the images she sees and use your knowledge of the thin-ideal to challenge her unrealistic beliefs and/or encourage her more realistic understandings. Would people be willing to share how these interactions went? Get agreement. Go in circle and have all participants share their encounters. Facilitator should give positive and useful feedback.

*How did it feel to do this exercise?
Was it challenging?*

How did your daughters seem to feel about you joining them in their activities?

You were also asked to keep a log of the body and eating-related messages you give your daughters.

How did you feel doing this exercise?

Did you notice anything surprising?

How many of you caught yourself in “fat talk?”

Were you able to find opportunities to engage your daughters in alternative conversations as well?

Which came more naturally?

Why do you think this is?

Are people willing to share the highlights or lowlights from their logs? Have participants share specific incidents with group.

Role-playing alternatives to “fat talk”

Now that we’ve talked about how to recognize the “fat talk” most of us participate in, what can we do about it? Tonight we are going to practice challenging our daughters’ and our own fat talk.

I will give you a situation to role play. Your job will be to avoid “fat talk” and to find a way of communicating that challenges the emphasis that we put on female beauty and thinness.

Sample role plays:

- ❑ You’re standing with your daughter and a friend of yours says “Wow, you’re daughter is so beautiful.” What do you say?
- ❑ Your daughter comes home from school and says, “I feel so fat today...” How do you respond?
- ❑ A friend of yours who has a daughter the same age as yours says, “My daughter and I are going on a pre-summer diet together. You all should do it too.”
- ❑ You have dinner guests over and one of them says, “I’m trying to be good so I’ll pass on dessert tonight.” What could you say?
- ❑ Your husband/boyfriend/partner mentions at dinner that someone he works with has “Really packed on some weight recently.” What’s your reply?
- ❑ You’re shopping with your daughter and she asks, “Do I look fat in this outfit?”
- ❑ You and your daughter are visiting with your parents. Your mother turns to you and says, “You look great. Have you lost weight?” What’s your response?

- ❑ Your daughter tells you, “I was so bad today. I had pizza for lunch.” What do you say?

Wrap up

Discussion of what everyone learned

As we come to the end of this program, I'd love to hear what has stood out most for you over the past couple of weeks. What specific things will you take away from this experience? Allow each participant the opportunity to point out what s/he learned.

Review of main goals

It sounds like most of you will be taking away similar messages. As we discussed at the beginning of this program, our goal is to help teach parents how they can combat the media's body-related messages so that their daughters will have healthier and more realistic goals. As we've seen, sometimes this means questioning the messages we ourselves receive from the media and our peers and deciding how we want or don't want to communicate those to our children. Hopefully some of the homework exercises gave you ideas about how you can do this.

Brainstorm strategies for continuing change

After three weeks of talking about these issues, hopefully you all have some ideas about how you can work with your daughters to continue to improve their – and even your own – body images. You all took such a big step in recognizing that there was a problem and participating in this group to try to fix the problem. By looking at how you might influence your daughters' body image, you've done the hardest work already – you're two steps ahead. Let's take a few minutes to brainstorm how each of you can maintain these changes. Elicit ideas and write them on easel.

Before we leave tonight, I'd like to ask each of you to take one of these cards and write down a goal that you have for yourself over the next month. These goals should reflect how you'd either like to continue interacting with your daughters in a food or body-related way or how you'd like to work on changing these interactions. Give or elicit examples. When you're done writing your goal, please put it in an envelope, seal it, and write your name and address on the front. We'll mail these to you in a month so you can see how you're doing.

Exit exercises

Sometime this week, take five minutes with your daughter where you are both looking in the mirror and writing down things you like about yourselves (separate lists). You may write down personality traits, physical qualities, skills, etc. The only rule is that you may not include any qualifiers (ex. I like my hair WHEN...or, I WOULD like my eyes IF...). Once you have completed your lists, take five minutes to share them with each other. We'll be emailing you in one week to find out how this exercise went.

Oftentimes, parents think that their children know how proud they are of them and how much they value them as people. Chances are that many of your daughters do know this, and it can never hurt to remind them often. This exercise asks that you write a list of ten things you admire about your daughter (confidence, intelligence, thoughtfulness, etc.). Over the next two weeks, plan on complimenting your daughters about each of these things.

HEALTHY WEIGHT MANAGEMENT STRATEGIES

- ❑ **DINE AT THE DINNER TABLE ONLY**
Avoid eating in front of the television or “on the go.” This will help you to eat consciously and will allow you to recognize when you’re full.
- ❑ **EAT MINI-MEALS**
Eating smaller but more frequent meals will reduce the likelihood of getting so hungry that bingeing is inevitable.
- ❑ **DRINK UP!**
Drinking 8-10 8 oz. glasses of water per day will help you stay hydrated and will reduce feelings of being bloated.
- ❑ **TAKE THE STAIRS**
- ❑ **CUSTOMIZE YOUR APPROACH** (do what works for you, not for your friend or sister)
The more you enjoy your exercise, the more likely you will be to maintain your routine.
- ❑ **PLAN AHEAD**
An empty fridge after a long day means more eating out.
- ❑ **SCHEDULE YOUR EXERCISE TIME**
Make it a priority by putting it in your dayplanner and treating it as if it were a meeting you cannot miss.
- ❑ **BE PICKY**
When eating out, remember that most restaurants are happy to grill or bake the fish/chicken. It tastes good even when it’s not fried!
- ❑ **FIND AN EXERCISE BUDDY**
For some people, exercise is more enjoyable when you have company. It will also be harder to back out on your plans if you know someone else is relying on you.
- ❑ **MAKE CHANGES YOU CAN LIVE WITH**
At all costs, avoid feelings of deprivation.
- ❑ **WALK**
To the video store, to your friend’s house, after dinner...
- ❑ **LIMIT INITIAL PORTION SIZE**
If you are still hungry a couple minutes after finishing, you can always go back for more.
- ❑ **BUY INDIVIDUALLY PACKAGED SNACKS**
This will prevent you from eating a big bag of chips or cookies at one sitting.
- ❑ **VARY YOUR EXERCISE ROUTINE**
The more interesting and diversified your routine, the less likely you are to become injured or bored.
- ❑ **LEARN FROM THE PAST**
Why go back to the diet plan that didn’t work before? Because diet companies depend upon repeat business, chances are that the plan was not designed to foster maintained health!
- ❑ **MODERATION IS KEY**
There are no bad foods! Everything is okay once in a while.
- ❑ **WHEN YOU INDULGE, ENJOY!**
- ❑ **AVOID GUILT**
No “I should’ve” or “I shouldn’t’ve”...Tomorrow is a new day

MAKE CHANGES SLOWLY...YOU’LL BE MORE LIKELY TO MAINTAIN THEM.

Top Ten Ways Adults Promote the Thin Ideal

1. Praising children, adolescents and adults for being slender
2. Basing their feelings about themselves on their appearances
3. Emphasizing the importance of exercise for changing the way they and others look
4. Only commenting on thin women's attractiveness – not valuing diverse beauty ideals
5. Focusing on numbers – grams of fat, calories, weight, clothing size
6. Equating fatness with character flaws – participating in fat discrimination
7. Believing that thinness will bring happiness, success and popularity
8. Only focusing on health once weight becomes an issue
9. Emphasizing the importance of girls'/womens' attractiveness more than their intelligence/talents/skills/etc.
10. Devaluing their own changing bodies

Fat Talk



“I’m having such a fat day today!”

“I was so good; I didn’t have dessert last night.”

“Wow, look at your flat stomach; I wish I were 15 again.”

“You better take advantage of all the good food now; you won’t be able to eat like that for very much longer.”

“I hate my thighs.”

“I really shouldn’t eat that because I haven’t exercised today.”

“My friend looks so great. She just had her baby and you can’t even tell she was pregnant.”

“I better not have lunch so that we can go out for dinner tonight.”

“You look so great. Have you lost weight?”

“I need to lose some weight before we go to the beach this summer.”

“She definitely does not have the body to be wearing that!”

“I’d feel so much better if I just lost 10 pounds.”

“Are you sure you want dessert?”

“Do I look fat in this?”

“So and so gained so much weight since I last saw her.”

“Wouldn’t you rather have a diet coke?”

“She’d be so pretty if she just lost a few pounds.”

“Do these jeans make me look big?”

“I hate bathing suit shopping!”

“Isn’t this snack good? It only has 10 calories and NO grams of fat

Appendix G

Adolescent Survey

H.I.P. Parents Program:

Adolescent Survey

PLEASE ANSWER THESE QUESTIONS ABOUT YOUR THOUGHTS AND BEHAVIORS OVER THE LAST WEEK.

PLEASE ANSWER ALL QUESTIONS.

Age_____	Ethnicity	Father/father figure's education	Mother/mother figure's education
	Asian_____	Grade School Graduate_____	Grade School Graduate_____
Height_____	Black_____	Some High School_____	Some High School_____
	Hispanic_____	High School Graduate_____	High School Graduate_____
Weight_____	Native American_____	Some College_____	Some College_____
	White_____	College Graduate_____	College Graduate_____
Grade _____	other_____	Advanced Degree_____	Advanced Degree_____

Please circle the response that best captures your own experience:

	none	some	a lot
1. I've felt pressure from my friends to lose weight.	1	2 3	4 5
2. I've noticed a strong message from my friends to have a thin body.	1	2 3	4 5
3. I've felt pressure from my family to lose weight.	1	2 3	4 5
4. I've noticed a strong message from my family to have a thin body.	1	2 3	4 5
5. I've felt pressure from people I've dated to lose weight.	1	2 3	4 5
6. I've noticed a strong message from people I've dated to have a thin body. .	1	2 3	4 5
7. I've felt pressure from the media (e.g., TV, magazines) to lose weight . . .	1	2 3	4 5
8. I've noticed a strong message from the media to have a thin body.	1	2 3	4 5
9. Family members tease me about my weight or body shape.	1	2 3	4 5
10. Kids at school tease me about my weight or body shape.	1	2 3	4 5

Please circle the response that best reflects your parent's behavior over the past week.

Answer these questions only as they relate to the parent who is participating in this study.

	Agree	Slightly Agree	Slightly Disagree	Disagree
1. My mom/dad encourages me to watch my weight.....	1	2	3	4
2. My mom/dad sends a strong message to me that I should have a thin body.....	1	2	3	4
3. My mom/dad comments that I am overweight.....	1	2	3	4
4. My mom/dad encourages me to stay slim...	1	2	3	4
5. My mom/dad praises me for maintaining a slender figure.....	1	2	3	4
6. My mom/dad discourages me from eating second helpings at mealtimes.....	1	2	3	4
7. My mom/dad teases me about my weight or body shape.	1	2	3	4

8. My mom/dad closely monitors what I eat...	1	2	3	4
9. My mom/dad compliments me for having a slender figure.....	1	2	3	4

Please indicate the frequency of each of the following occurrences:

Please indicate the frequency of each of the following occurrences:		never	sometimes		often	
1. One or more of my family members has dieted to lose weight		1	2	3	4	5
2. One or more of my family members has felt bad about themselves because of their weight		1	2	3	4	5
3. One or more of my family members has fasted, exercised excessively, vomited, or used laxatives or diuretics to lose weight.		1	2	3	4	5
4. One or more of my family members has gone on out-of-control eating binges (eaten huge amounts of food in a short period).		1	2	3	4	5

Please circle the response that reflects your agreement with these statements:

	strongly disagree	disagree	neutral	agree	strongly agree
1. Slim women are more attractive	1	2	3	4	5
2. Tall women are more attractive.	1	2	3	4	5
3. Women with toned bodies are more attractive	1	2	3	4	5
4. Women who are in shape are more attractive.	1	2	3	4	5
5. Slender women are more attractive.	1	2	3	4	5
6. Women with long legs are more attractive	1	2	3	4	5
7. Curvy women are more attractive.	1	2	3	4	5
8. Shapely women are more attractive	1	2	3	4	5

Over the past week, how satisfied were you with your:

	extremely dissatisfied	moderately dissatisfied	neutral	moderately satisfied	extremely satisfied
1. Weight	1	2	3	4	5
2. Figure.	1	2	3	4	5
3. Appearance of stomach.	1	2	3	4	5
4. Body build.	1	2	3	4	5
5. Waist	1	2	3	4	5
6. Thighs	1	2	3	4	5
7. Buttocks.	1	2	3	4	5
8. Hips.	1	2	3	4	5
9. Legs.	1	2	3	4	5

Circle the best response to describe your behavior over the last week:

	Never	Seldom	Some-Times	Often	Alwa
1. If you put on weight, did you eat less than you normally would?	1	2	3	4	5
2. Did you try to eat less at mealtimes than you would like to eat?	1	2	3	4	5
3. How often did you refuse food or drink because you were concerned about your weight.	1	2	3	4	5
4. Did you watch exactly what you ate?	1	2	3	4	5
5. Did you deliberately eat foods that were slimming?	1	2	3	4	5

6. When you ate too much, did you eat less than usual the next day?	1	2	3	4	5
7. Did you deliberately eat less in order not to become heavier?	1	2	3	4	5
8. How often did you try not to eat between meals because you were watching your weight?	1	2	3	4	5
9. How often in the evenings did you try not to eat because you were watching your weight?	1	2	3	4	5
10. Did you take into account your weight in deciding what to eat?	1	2	3	4	5

Please circle the response that indicates how you have felt during the past week.

	not at all	a little	moderately	a lot	extremely
1. Sad.	1	2	3	4	5
2. Afraid	1	2	3	4	5
3. Alone.	1	2	3	4	5
4. Blue.	1	2	3	4	5
5. Guilty	1	2	3	4	5
6. Nervous.	1	2	3	4	5
7. Lonely.	1	2	3	4	5
8. Ashamed	1	2	3	4	5
9. Scared	1	2	3	4	5
10. Angry at self	1	2	3	4	5
11. Downhearted.	1	2	3	4	5
12. Blameworthy.	1	2	3	4	5
13. Dissatisfied with self.	1	2	3	4	5
14. Depressed	1	2	3	4	5
15. Worried	1	2	3	4	5

Please circle the response that best describes your relationship with the parent participating in this study.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I can discuss my beliefs with my mom/dad without feeling restrained or embarrassed.	1	2	3	4	5
2. Sometimes I have trouble believing everything my mom/dad tells me.	1	2	3	4	5
3. My mom/dad is always a good listener.	1	2	3	4	5
4. I am sometimes afraid to ask my mom/dad for what I want.	1	2	3	4	5
5. My mom/dad has a tendency to say things to me that would be better left unsaid.	1	2	3	4	5
6. My mom/dad can tell how I'm feeling without asking.	1	2	3	4	5
7. I am very satisfied with how my mom/dad and I talk together.	1	2	3	4	5
8. If I were in trouble, I could tell my mom/dad	1	2	3	4	5
9. I openly show affection to my mom/dad.	1	2	3	4	5
10. When we are having a problem, I often give my mom/dad					

the silent treatment.....	1	2	3	4	5
11. I am careful about what I say to my mom/dad	1	2	3	4	5
12. When talking with my mom/dad, I have the tendency to say things that would be better left unsaid.....	1	2	3	4	5
13. When I ask questions, I get honest answers from my mom/dad.....	1	2	3	4	5
14. My mom/dad tries to understand my point of view.....	1	2	3	4	5
15. There are topics I avoid discussing with my mom/dad	1	2	3	4	5
16. I find it easy to discuss problems with my mom/dad	1	2	3	4	5
17. It is very easy for me to express all my true feelings to my mom/dad	1	2	3	4	5
18. My mom/dad nags/bothers me.....	1	2	3	4	5
19. My mom/dad insults me when s/he is angry with me.....	1	2	3	4	5
20. I don't think I can tell my mom/dad how I really feel about some things.....	1	2	3	4	5

EATING SCREEN

Please carefully complete all questions.

Over the <u>past 3 months</u> ...	Not at all		Slightly		Moderately		Extremely
1. Have you felt fat?	0	1	2	3	4	5	6
2. Have you had a definite fear that you might gain weight or become fat?	0	1	2	3	4	5	6
3. Has your weight influenced how you think about (judge) yourself as a person?	0	1	2	3	4	5	6
4. Has your shape influenced how you think about (judge) yourself as a person?	0	1	2	3	4	5	6

5. During the past 3 months have there been times when you felt you have eaten what other people would regard as an unusually large amount of food (e.g., a quart of ice cream) given the circumstances? YES NO

6. During the times when you ate an unusually large amount of food, did you experience a loss of control (feel you couldn't stop eating or control what or how much you were eating)? YES NO

7. How many DAYS per week on average over the past 3 MONTHS have you eaten an unusually large amount of food and experienced a loss of control? 0 1 2 3 4 5 6 7

8. How many TIMES per week on average over the past 3 MONTHS have you eaten an unusually large amount of food and experienced a loss of control? 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14

During these episodes of overeating and loss of control did you...

9. Eat much more rapidly than normal?	YES	NO
10. Eat until you felt uncomfortably full?	YES	NO
11. Eat large amounts of food when you didn't feel physically hungry?	YES	NO
12. Eat alone because you were embarrassed by how much you were eating?	YES	NO
13. Feel disgusted with yourself, depressed, or very guilty after overeating?	YES	NO
14. Feel very upset about your uncontrollable overeating or resulting weight gain?	YES	NO

15. How many times per week on average over the past 3 months have you made yourself vomit to prevent weight gain or counteract the effects of eating? 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14

16. How many times per week on average over the past 3 months have you used laxatives or diuretics to prevent weight gain or counteract the effects of eating? 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14

17. How many times per week on average over the past 3 months have you fasted (skipped at least 2 meals in a row) to prevent weight gain or counteract the effects of eating? 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14

18. How many times per week on average over the past 3 months have you engaged in excessive exercise specifically to counteract the effects of overeating episodes? 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14

19. How much do you weigh? If uncertain, please give your best estimate. _____lbs.

20. How tall are you? Please specify in inches (5 ft.= 60 in.) _____in.

21. Over the past 3 months, how many menstrual periods have you missed? 0 1 2 3 n/a

22. Have you been taking birth control pills during the past 3 months?YES NO

THANK YOU VERY MUCH FOR COMPLETING THIS SURVEY

Appendix H

Parent Survey

H.I.P. Parents Program: Parent Survey

PLEASE ANSWER THESE QUESTIONS ABOUT YOUR THOUGHTS AND BEHAVIORS OVER
THE LAST WEEK.

PLEASE ANSWER ALL QUESTIONS.

Age_____	Ethnicity	Sex: F____ M____	Marital/Relationship Status
	Asian_____		Married_____
Height_____	Black_____	Number of children_____	Living with_____
	Hispanic_____		Committed_____
Weight_____	Native American_____	Occupation_____	Separated_____
	White_____		Divorced_____
Grade _____	other_____		(Please check all that apply)

Please circle the response that reflects your agreement with these statements:

	strongly disagree	disagree	neutral	agree	strongly agree
1. Slim women are more attractive	1	2	3	4	5
2. Tall women are more attractive.	1	2	3	4	5
3. Women with toned bodies are more attractive	1	2	3	4	5
4. Women who are in shape are more attractive.	1	2	3	4	5
5. Slender women are more attractive.	1	2	3	4	5
6. Women with long legs are more attractive	1	2	3	4	5
7. Curvy women are more attractive.	1	2	3	4	5
8. Shapely women are more attractive	1	2	3	4	5

Over the past week, how satisfied were you with your:

	extremely dissatisfied	moderately dissatisfied	neutral	moderately satisfied	extremely satisfied
1. Weight	1	2	3	4	5
2. Figure.	1	2	3	4	5
3. Appearance of stomach.	1	2	3	4	5
4. Body build.	1	2	3	4	5
5. Waist	1	2	3	4	5
6. Thighs	1	2	3	4	5
7. Buttocks.	1	2	3	4	5
8. Hips.	1	2	3	4	5
9. Legs.	1	2	3	4	5

Circle the best response to describe your behavior over the last week:

	Never	Seldom	Some-Times	Often	Always
1. If you put on weight, did you eat less than you normally would?	1	2	3	4	5
2. Did you try to eat less at mealtimes than you would like to eat?.	1	2	3	4	5
3. How often did you refuse food or drink because you were concerned about your weight.	1	2	3	4	5
4. Did you watch exactly what you ate?.	1	2	3	4	5
5. Did you deliberately eat foods that were slimming?.	1	2	3	4	5
6. When you ate too much, did you eat less than usual the next day?	1	2	3	4	5
7. Did you deliberately eat less in order not to become heavier?.	1	2	3	4	5
8. How often did you try not to eat between meals because you were watching your weight?.	1	2	3	4	5
9. How often in the evenings did you try not to eat because you were watching your weight?	1	2	3	4	5
10. Did you take into account your weight in deciding what to eat?	1	2	3	4	5

Please circle the response that indicates how you have felt during the past week.

	not at all	a little	moderately	a lot	extremely
1. Sad.	1	2	3	4	5
2. Afraid	1	2	3	4	5
3. Alone.	1	2	3	4	5
4. Blue.	1	2	3	4	5
5. Guilty	1	2	3	4	5
6. Nervous.	1	2	3	4	5
7. Lonely.	1	2	3	4	5
8. Ashamed	1	2	3	4	5
9. Scared	1	2	3	4	5
10. Angry at self	1	2	3	4	5
11. Downhearted.	1	2	3	4	5
12. Blameworthy.	1	2	3	4	5
13. Dissatisfied with self.	1	2	3	4	5
14. Depressed	1	2	3	4	5
15. Worried	1	2	3	4	5

Please circle the response that best describes your relationship with the daughter participating with you in this study.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I can discuss my beliefs with my child without feeling restrained or embarrassed.	1	2	3	4	5

2. Sometimes I have trouble believing everything my child tells me.....	1	2	3	4	5
3. My child is always a good listener.....	1	2	3	4	5
4. I am sometimes afraid to ask my child for what I want.....	1	2	3	4	5
5. My child has a tendency to say things to me that would be better left unsaid.....	1	2	3	4	5
6. My child can tell how I'm feeling without asking.....	1	2	3	4	5
7. I am very satisfied with how my child and I talk together.....	1	2	3	4	5
8. If I were in trouble, I could tell my child.....	1	2	3	4	5
9. I openly show affection to my child.....	1	2	3	4	5
10. When we are having a problem, I often give my child the silent treatment.....	1	2	3	4	5
11. I am careful about what I say to my child.....	1	2	3	4	5
12. When talking with my child, I have the tendency to say things that would be better left unsaid.....	1	2	3	4	5
13. When I ask questions, I get honest answers from my child..	1	2	3	4	5
14. My child tries to understand my point of view.....	1	2	3	4	5
15. There are topics I avoid discussing with my child.....	1	2	3	4	5
16. I find it easy to discuss problems with my child.....	1	2	3	4	5
17. It is very easy for me to express all my true feelings to my child.....	1	2	3	4	5
18. My child nags/bothers me.	1	2	3	4	5
19. My child insults me when she is angry with me.....	1	2	3	4	5
20. I don't think I can tell my child how I really feel about some things.....	1	2	3	4	5

Please circle the response that best reflects your behavior over the past week.

	Agree	Slightly Agree	Slightly Disagree	Disagree
10. I encourage my daughter to watch her weight.....	1	2	3	4
11. I send a strong message to my daughter that she should have a thin body.....	1	2	3	4
12. I make comments to my daughter about her being overweight.....	1	2	3	4
13. I encourage my daughter to stay slim...	1	2	3	4
14. I praise my daughter for maintaining a slender figure.....	1	2	3	4
15. I discourage my daughter from eating second helpings at mealtimes.....	1	2	3	4
16. I tease my daughter about her weight or body shape.	1	2	3	4
17. I closely monitor my daughter's diet....	1	2	3	4
18. I compliment my daughter for having a slender figure.....	1	2	3	4

EATING SCREEN

Please carefully complete all questions.

Over the <u>past 3 months</u> ...	Not at all		Slightly		Moderately		Extremely
1. Have you felt fat?	0	1	2	3	4	5	6
2. Have you had a definite fear that you might gain weight or become fat?	0	1	2	3	4	5	6
3. Has your weight influenced how you think about (judge) yourself as a person?	0	1	2	3	4	5	6
4. Has your shape influenced how you think about (judge) yourself as a person?	0	1	2	3	4	5	6

5. During the past 3 months have there been times when you felt you have eaten what other people would regard as an unusually large amount of food (e.g., a quart of ice cream) given the circumstances? YES NO

6. During the times when you ate an unusually large amount of food, did you experience a loss of control (feel you couldn't stop eating or control what or how much you were eating)? . YES NO

7. How many DAYS per week on average over the past 3 MONTHS have you eaten an unusually large amount of food and experienced a loss of control? 0 1 2 3 4 5 6 7

8. How many TIMES per week on average over the past 3 MONTHS have you eaten an unusually large amount of food and experienced a loss of control? 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14

During these episodes of overeating and loss of control did you...

- | | | |
|--|-----|----|
| 9. Eat much more rapidly than normal? | YES | NO |
| 10. Eat until you felt uncomfortably full? | YES | NO |
| 11. Eat large amounts of food when you didn't feel physically hungry? | YES | NO |
| 12. Eat alone because you were embarrassed by how much you were eating? | YES | NO |
| 13. Feel disgusted with yourself, depressed, or very guilty after overeating? | YES | NO |
| 14. Feel very upset about your uncontrollable overeating or resulting weight gain? | YES | NO |

15. How many times per week on average over the past 3 months have you made yourself vomit to prevent weight gain or counteract the effects of eating? 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14

16. How many times per week on average over the past 3 months have you used laxatives or diuretics to prevent weight gain or counteract the effects of eating? 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14

17. How many times per week on average over the past 3 months have you fasted (skipped at least 2 meals in a row) to prevent weight gain or counteract the effects of eating? 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14

18. How many times per week on average over the past 3 months have you engaged in excessive exercise specifically to counteract the effects of overeating episodes? 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14

19. How much do you weigh? If uncertain, please give your best estimate. _____ lbs.

20. How tall are you? _Please specify in inches (5 ft.= 60 in.)_____in.

21. Over the past 3 months, how many menstrual periods have you missed? 0 1 2 3 n/a

22. Have you been taking birth control pills during the past 3 months? YES NO

THANK YOU VERY MUCH FOR COMPLETING THIS SURVEY

REFERENCES

- Agras, W.S., Walsh, B.T., Fairburn, C.G., Wilson, G.T., & Kraemer, H.C. (2000). A multicenter comparison of cognitive-behavioral therapy and interpersonal psychotherapy for bulimia nervosa. Archives of General Psychiatry, 57, 459-466.
- Albee, G.W. (1969). Emerging concepts of mental illness and models of treatment: The psychological point of view. American Journal of Psychiatry, 125, 870-876.
- American Psychiatric Association. (1994). Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition. Washington D.C.: American Psychiatric Association.
- Apple, R.F. (1999). Interpersonal therapy for bulimia. Journal of Clinical Psychology, 55(6), 699-713.
- Ary, D.V., James, L., & Biglan, A. (1999). Parent-daughter discussions to discourage tobacco use: Feasibility and content. Adolescence, 34(134), 275-281.
- Bandura, A. (1963). Social Learning and Personality Development. New York: International Thomson Publishing.
- Bandura, A. (1969). Social-learning theory of identificatory processes. In D.A. Goslin (Ed.), Handbook of Socialization Theory and Research (pp.213-262). Chicago: Rand McNally.
- Bearman, S. K., Stice, E., & Chase, A. (2003). Evaluation of an intervention targeting both depressive and bulimic pathology: A randomized prevention trial. Behavior Therapy, 34(3), 277-293.
- Beck, J.S. (1995). Cognitive Therapy: Basics and Beyond. New York: The Guilford Press.
- Bell, R. (1985). Holy Anorexia. Illinois: University of Chicago Press.
- Benedikt, R., Wertheim, E.H., & Love, A. (1998). Eating attitudes and weight-loss attempts in female adolescents and their mothers. Journal of Youth and Adolescence, 27(1), 43-57.
- Benjamin, J. (1988). The Bonds of Love: Psychoanalysis, Feminism, and the Problem of Domination. New York: Pantheon Books.
- Birch, L.L. (1990). Development of food acceptance patterns. Developmental Psychology, 26, 515-519.

- Black, C. M., & Wilson, G. T. (1996). Assessment of eating disorders: Interview versus questionnaire. International Journal of Eating Disorders, 20, 43-50.
- Bordo, S. (1993). Unbearable Weight: Feminism, Western Culture, and the Body. Berkeley: University of California Press.
- Brooks-Gunn, J., & Warren, M.P. (1985). Measuring physical status and timing in early adolescence: A developmental perspective. Journal of Youth & Adolescence, 14(3), 163-189.
- Brown, J.B., Winzelberg, A.J., Abascal, L.B., & Taylor, B. (2004). An evaluation of an Internet-delivered eating disorder prevention program for adolescents and their parents. Journal of Adolescent Health, 35(4), 290-296.
- Brownmiller, S. (1984). Femininity. New York: Ballantine Books.
- Bruch, H. (1978). The Golden Cage: The Enigma of Anorexia Nervosa. New York: Vintage Books.
- Bruch, H. (1988). Conversations with Anorexics. New York: Basic Books, Inc.
- Brumberg, J.J. (1988). Fasting Girls: The History of Anorexia Nervosa. Massachusetts: Harvard University Press.
- Butler, J. (1990). Gender Trouble : Feminism and the Subversion of Identity (Thinking Gender). New York: Routledge.
- Chase, A.K. (2001). Eating disorder prevention: An intervention for at-risk college women. Dissertation Abstracts International, 62(3), 1568B.
- Chernin, K. (1981). The Obsession: Reflections on the Tyranny of Slenderness. New York: Harper & Row, Publishers, Inc.
- Chernin, K. (1983). In My Mother's House: A Daughter's Story. Boston: Houghton Mifflin Co.
- Chernin, K. (1985). The Hungry Self: Women, Eating and Identity. New York: Harper & Row, Publishers, Inc.
- Chodorow, N. (1989). Feminism and Psychoanalytic Theory. Connecticut: Yale University Press.
- Cohen, J. (1988). Statistical Power Analysis for the Behavioral Sciences, 2nd edition. Hillsdale, NJ: Erlbaum.

- Comstock, G., & Paik, H. (1991). Television and the American Child. San Diego: Academic Press.
- Costanzo, P.R., & Woody, E.Z. (1985). Domain-specific parenting styles and their impact on the child's development of particular deviance: The example of obesity proneness. Journal of Social and Clinical Psychology, 3(4), 425-445.
- Crago, M., Shisslak, C.M., & Estes, L.S. (1996). Eating disturbances among American minority groups: A review. International Journal of Eating Disorders, 19(3), 239-248.
- Crawford, M. (2001). Gender and language. In R.K. Unger (Ed.), Handbook of the Psychology of Women and Gender (pp. 228-244). New York: John Wiley & Sons, Inc.
- Dalle Grave, R.D., De Luca, L., & Campello, G. (2001). Middle school primary prevention program for eating disorders: A controlled study with a twelve-month follow-up. Eating Disorders, 9, 327-337.
- DeBeauvoir, S. (1952). The Second Sex. New York: Knopf.
- Dishion, T.J., Kavanagh, K. (2000) A multilevel approach to family-centered prevention in schools: Process and outcome. Addictive Behaviors, 25(6), 899-911.
- Drewnowski, A., Kurth, C.L., & Krahn, D.D. (1994). Body weight and dieting in adolescence: Impact of socioeconomic status. International Journal of Eating Disorders, 16(1), 61-65.
- Drewnowski, A., Yee, D.K., Kurth, C.L., & Krahn, D.D. (1994). Eating pathology and DSM-III-R bulimia nervosa: A continuum of behavior. American Journal of Psychiatry, 151(8), 1217-1219.
- Fairburn, C.G. (1998) Interpersonal psychotherapy for bulimia nervosa. In J.C. Markowitz (Ed.), Interpersonal Psychotherapy. Review of Psychiatry Series, (pp. 99-128). Washington, DC: American Psychiatric Press, Inc.
- Fairburn, C.G., & Beglin, S.J. (1994). Assessment of eating disorders: Interview or self-report questionnaire? International Journal of Eating Disorders, 16(4), 363-370.
- Fairburn, C.G., & Cooper, Z. (1993). The Eating Disorder Examination (12th edition). In C.G. Fairburn & G.T. Wilson (Eds.), Binge Eating: Nature, Assessment, and Treatment (pp. 317-360). New York: The Guilford Press.

- Fairburn, C.G., Cooper, Z., Doll, H.A., Norman, P.A., & O'Connor, M.E. (2000). The natural course of bulimia nervosa and binge eating disorder in young women. Archives of General Psychiatry, 57, 659-665.
- Faith, M.S., Saelens, B.E., Wilfley, D.E., & Allison, D.B. (2001). Behavioral treatment of childhood and adolescent obesity: Current status, challenges, and future directions. In J.K. Thompson & L. Smolak (Eds.), Body Image, Eating Disorders, and Obesity in Youth: Assessment, Prevention, and Treatment (pp. 313-340). Washington, DC: American Psychological Association.
- Feingold, A. (1992). Good looking people are not what we think. Psychological Bulletin, 111, 304-341.
- Festinger, L. (1957). A theory of cognitive dissonance. In S. Schachter & M. Gazzaniga (Eds.), Extending Psychological Frontiers: Selected Works of Leon Festinger (pp. 201-237). New York: Russell Sage Foundation.
- Fisher, M., Golden, N.H., Katzman, D.K., Kreipe, R.E. et al. (1995). Eating disorders in adolescents: A background paper. Journal of Adolescent Health, 16(6), 420-437.
- Franzoi, S.L., & Shields, S.A. (1984). The Body Esteem Scale: Multidimensional structure and sex differences in a college population. Journal of Personality Assessment, 48(2), 173-178.
- Fraser, L. (1997). Losing It: America's Obsession with Weight and the Industry that Feeds It. New York: Penguin Books.
- Freedman, J., & Combs, G. (1996). Narrative Therapy: The Social Construction of Preferred Realities. New York: W.W. Norton & Company.
- Friedrichs, M. (1988). The dependent solution: Anorexia and bulimia as defenses against danger. Women and Therapy, 7(4), 53-73.
- Garfinkel, P.E., Lin, E., Goering, P., Spegg, C., Goldbloom, D.S., Kennedy, S., Kaplan, A.S., & Woodside, D.B. (1995). Bulimia nervosa in a Canadian community sample: Prevalence and comparison of subgroups. American Journal of Psychiatry, 152, 1052-1058.
- Garner, D.M., Garfinkel, P.E., Schwartz, D., & Thompson, M. (1980). Cultural expectations of thinness in women. Psychological Reports, 47, 483-491.
- Gilbert, L.A., & Rader, J. (2001). Current perspectives on women's adult roles: Work, family, and life. In R.K. Unger (Ed.), Handbook of the Psychology of Women and Gender (pp. 156-169). New York: John Wiley & Sons, Inc.

- Gilbert, L.A., & Scher, M. (1999). Gender and Sex in Counseling and Psychotherapy. Massachusetts: Allyn & Bacon.
- Gilbert, L.A., Walker, S.J., McKinney, S., & Snell, J.L. (1999). Challenging discourse themes reproducing gender in heterosexual dating: An analog study. Sex Roles, 41(9-10), 753-774.
- Gilligan, C. (1989). Teaching Shakespeare's sister: Notes from the underground of female adolescence. In C. Gilligan, N.P. Lyons, & T.J. Hanmer (Eds.), Making Connections: The Relational Worlds of Adolescent Girls at Emma Willard School (pp. 6-29). Massachusetts: Harvard University Press.
- Golan, M., Weizman, A., Apter, A., & Fainaru, M. (1998). Parents as the exclusive agents of change in the treatment of childhood obesity. American Journal of Clinical Nutrition, 67, 1130-1135.
- Goodman, W.C. (1995). The Invisible Woman: Confronting Weight Prejudice in America. California: Gurze Books.
- Graber, J.A., & Brooks-Gunn, J. (1996). Prevention of eating problems and disorders: Including parents. Eating Disorders, 4(4), 348-363.
- Greenberg, M.T., Domitrovich, C., & Bumbarger, B. (2001) The prevention of mental disorders in school-aged children: Current state of the field. Prevention & Treatment, 4, np.
- Hahn, E.J. (1993). Parental alcohol and other drug (AOD) use and health beliefs about parent involvement in AOD prevention. Issues in Mental Health Nursing, 14, 237-247.
- Harris, L., Blum, R.W., Resnick, M. (1991). Teen females in Minnesota: A portrait of quiet disturbance. Women & Therapy, 11(3-4), 119-135.
- Herzog, D.B., Greenwood, D.N., Dorer, D.J., Flores, A.T., Ekeblad, E.R., Richards, A., Blais, M.A., & Keller, M.B. (2000). Mortality in eating disorders: A descriptive study. International Journal of Eating Disorders, 28, 20-26.
- Hill, A.J., & Weaver, C. (1990). Dieting concerns of 10-year-old girls and their mothers. British Journal of Clinical Psychology, 29, 346-348.
- Huon, G.F. (1994). Towards the prevention of dieting-induced disorders: Modifying negative food- and body-related attitudes. International Journal of Eating Disorders, 16, 395-399.

- Johnson, J.G., Cohen, P., Kasen, S., & Brook, J.S. (2002). Eating disorders during adolescence and the risk for physical and mental disorders during early adulthood. Archives of General Psychiatry, 59, 545-552.
- Johnson, W.G., Tsoh, J.Y., & Varnado, P.J. (1996). Eating disorders: Efficacy of pharmacological and psychological interventions. Clinical Psychology Review, 16, 457-478.
- Kaminski, P.L., & McNamara, K. (1996). A treatment for college women at risk for bulimia: A controlled evaluation. Journal of Counseling and Development, 74, 288-294.
- Kanakis, D.M., & Thelen, M.H. (1995). Parental variables associated with bulimia nervosa. Addictive Behaviors, 20(4), 491-500.
- Kandel, D.B. (1985). On processes of peer influences in adolescent drug use: A developmental perspective. Advances in Alcohol and Substance Abuse, 139-163.
- Keller, M.B., Herzog, D.B., Lavori, P.W., Bradburn, I.S., & Mahoney, A. (1992). The naturalistic history of bulimia nervosa: Extraordinarily high rates of chronicity, relapse, recurrence, and psychosocial morbidity. International Journal of Eating Disorders, 12(1), 1-9.
- Kilbourne, J. (1994). Still killing us softly: Advertising and the obsession with thinness. In P. Fallon, M.A. Katzman, & S.C. Wooley (Eds.), Feminist Perspectives on Eating Disorders (pp. 395-418). New York: The Guilford Press.
- Killen, J.D.; Hayward, C.; Wilson, D. M.; Haydel, K. F.; et al. (1996). Predicting onset of drinking in a community sample of adolescents: The role of expectancy and temperament. Addictive Behaviors, 21(4), 473-480.
- Killen, J.D., Taylor, C.B., Litt, I., Wilson, D.M., Rich, T., Hayward, C., Simmonds, B., Kraemer, H., & Varady, A. (1993). An attempt to modify unhealthful eating attitudes and weight regulation practices of young adolescent girls. International Journal of Eating Disorders, 13, 369-384.
- Koff, E., & Rierdan, J. (1991). Perceptions of weight and attitudes towards eating in early adolescent girls. Journal of Adolescent Health, 12, 307-312.
- Kuczmarski, R.J., Ogden, C.L., Guo, S.S, Grummer-Strawn, L.M., Flegal, K.M., Mei, Z. et al. (2002). 2000 CDC Growth Charts for the United States: Methods and development. National Center for Health Statistics. *Vital and Health Statistics*, 11 (246).

- LaFrance, M. (2001). Gender and social interaction. In R.K. Unger (Ed.), Handbook of the Psychology of Women and Gender (pp. 245-255). New York: John Wiley & Sons, Inc.
- Leippe, M.R., & Eisenstadt, D. (1994). Generalization of dissonance reduction: Decreasing prejudice through induced compliance. Journal of Personality and Social Psychology, 67(3), 395-413.
- Levine, M.P. (1994). Beauty myth and the beast: What men can do and be to help prevent eating disorders. Eating Disorders, 2(2), 101-113.
- Levine, M.P., & Smolak, L. (1998). The mass media and disordered eating: Implications for primary prevention. In W. Vandereycken & G. Noordenbos (Eds.), The Prevention of Eating Disorders (pp. 23-56). New York: New York University Press.
- Lewinsohn, , P.M., Striegel-Moore, R.H., & Seeley, J.R. (2000). Epidemiology and natural course of eating disorders in young women from adolescence to young adulthood. Journal of the American Academy of Child and Adolescent Psychiatry, 39, 1284-1292.
- Maine, M. (1991). Father Hunger: Fathers, Daughters and Food. California: Gurze Books.
- McKinley, N.M. (1999). Women and objectified body consciousness: Mothers' and daughters' body experience in cultural, developmental, and familial context. Developmental Psychology, 35(3), 760-769.
- McVey, G.L., Lieberman, M., Voorberg, N., Wardrobe, D. & Blackmore, E. (2003). School-based peer support groups: A new approach to the prevention of disordered eating. Eating Disorders: Journal of Treatment and Prevention, 11, 169-186.
- Miller, J.B. (1984). Development of women's sense of self. Stone Center Working Paper Series Number 12. Wellesley, Mass.
- Millstein, S.G., Petersen, A.C., & Nightingale, E.O. (Eds.). (1993). Promotion of Health Behavior in Adolescence. New York: Oxford University Press.
- Moreno, A.B., & Thelen, M.H. (1993) A preliminary prevention program for eating disorders in a junior high school population. Journal of Youth & Adolescence, 22(2), 109-124.

- Moreno, A., & Thelen, M.H. (1993). Parental factors related to bulimia nervosa. Addictive Behaviors, 18, 681-689.
- Moriarty, D., Shore, R., & Maxim, N. (1990). Evaluation of an eating disorder curriculum. Evaluation and Program Planning, 13, 407-413.
- Nasser, M. (1988). Culture and weight consciousness. Journal of Psychosomatic Research, 32, 573-577.
- Nichter, M., Ritenbaugh, C., Nichter, M., Vuckovic, N., & Aickin, M. (1995). Dieting and “watching” behaviors among adolescent females: Report of a multimethod study. Journal of Adolescent Health, 17, 153-162.
- Nichter, M., & Vuckovic, N. (1994). Fat talk: Body image among adolescent girls. In N. Sault (Ed.), Many Mirrors: Body Images and Social Relations (pp. 104-113). New Jersey: Rutgers University Press.
- Norman, E., & Turner, S. (1993). Adolescent substance abuse prevention program: Theories, models, and research in the encouraging 80's. Journal of Primary Prevention, 14(1), 3-20.
- Olson, D., McCubbin, H.I., Barnes, H., Larsen, A., Muxen, M., & Wilson, M. (1982) Family Inventories: Inventories used in a national survey of families across the family life cycle. Minnesota: Family Social Science Press.
- Orbach, S., & Eichenbaum, L. (1982). Outside In, Inside Out. England: Chaucer Press, Ltd.
- Paxton, S.J. (1993). A prevention program for disturbed eating and body dissatisfaction in adolescent girls: A 1 year follow-up. Health Education Research, 8, 43-51.
- Paxton, S.J., Wertheim, E.H., Gibbons, K., Szmukler, G.I., Hillier, L., & Petrovich, J.L. (1991). Body image satisfaction, dieting beliefs and weight loss behaviors in adolescent girls and boys. Journal of Youth & Adolescence, 20(3), 361-379.
- Pike, K.M., & Rodin, J. (1991). Mothers, daughters, and disordered eating. Journal of Abnormal Psychology, 100(2), 198-204.
- Piran, N. (1999). Eating disorders: A trial of prevention in a high risk school setting. The Journal of Primary Prevention, 20, 75-90.

- Piran, N. (2001). Reinhabiting the body from the inside out. In D.L. Tolman & M. Brydon-Miller (Eds.), From Subjects to Subjectivities: A Handbook of Interpretive and Participatory Methods (pp. 219-238). New York: New York University Press.
- Polivy, J., & Herman, C.P. (1985). Dieting and bingeing: A causal analysis. American Psychologist, 40(2), 193-201.
- Rand, C.S.W., & Kulda, J.M. (1992). Epidemiology of bulimia and symptoms in a general population: Sex, age, race, and socioeconomic status. International Journal of Eating Disorders, 11(1), 37-44.
- Rich, A. (1976). *Of Woman Born: Motherhood as Experience and Institution*. New York: W.W. Norton & Co.
- Richins, M.L. (1991). Social comparison and the idealized images of advertising. Journal of Consumer Research, 18, 71-82.
- Rierdan, J., Koff, E., & Stubbs, M. L. (1989). A longitudinal analysis of body image as a predictor of the onset and persistence of adolescent girls' depression. Journal of Early Adolescence, 9(4), 454-466.
- Robinson, T.N., Killen, J.D., Litt, I.F., Hammer, L.D., Wilson, D.M., Haydel, K.F., Hayward, C., & Taylor, C.B. (1996). Ethnicity and body dissatisfaction: Are Hispanic and Asian girls at increased risk for eating disorders? Journal of Adolescent Health, 19, 384-393.
- Rodin, J., Silberstein, L.R., & Striegel-Moore, R.H. (1985). Women and weight: A normative discontent. In T.B. Sonderegger (Ed.), *Nebraska symposium on motivation: Vol. 32. Psychology and Gender* (pp. 267-307). Lincoln: University of Nebraska.
- Rosen, D.S., & Neumark-Sztainer, D. (1998). Review of options for primary prevention of eating disturbances among adolescents. Journal of Adolescent Health, 23(6), 354-363.
- Rothblum, E.D. (1994). "I'll die for the revolution but don't ask me not to diet": Feminism and the continuing stigmatization of obesity. In P. Fallon, M.A. Katzman, & S.C. Wooley (Eds.), Feminist Perspectives on Eating Disorders (pp. 53-76). New York: The Guilford Press.
- Safer, D.L., Telch, C.F., & Agras, W.S. (2001). Dialectical behavior therapy for bulimia nervosa. American Journal of Psychiatry, 158(4), 632-634.

- Schafer, J. L., & Graham, J. W. (2002). Missing data: Our view of the state of the art. Psychological Methods, 7, 147-177.
- Schneir, M. (1994). Feminism in Our Time: The Essential Writings, World War II to the Present. New York: Vintage Books.
- Shisslak, C.M., Crago, M., & Neal, M.E. (1990). Prevention of eating disorders among adolescents. American Journal of Health Promotion, 5, 100-105.
- Shisslak, C.M., Crago, M., Renger, R., & Clark-Wagner, A. (1998). Self-esteem and the prevention of eating disorders. Eating Disorders: the Journal of Treatment & Prevention, 6(2), 105-118.
- Shochet, I.M., Dadds, M.R., Holland, D., Whitefield, K., Harnett, P.H., & Osgarby, S.M. (2001). The efficacy of a universal school-based program to prevent adolescent depression. Journal of Clinical Child Psychology, 30(3), 303-315.
- Smetana, J.G. (1988). Adolescents' and parents' conceptions of parental authority. Child Development, 59(2), 321-335.
- Smolak, L., & Levine, M.P. (1994). Toward an empirical basis for primary prevention of eating problems with elementary school children. Eating Disorders: the Journal of Treatment & Prevention, 2(4), 293-307.
- Smolak, L., & Levine, M.P. (1996). Adolescent transitions and the development of eating problems. In Smolak, L., & Levine, M.P. (Eds.), The Developmental Psychopathology of Eating Disorders: Implications for Research, Prevention, and Treatment (pp. 207-233). New Jersey: Lawrence Erlbaum Associates, Inc.
- Snedecor, G.W., & Cochran, W.G. (1989). Statistical Methods (8th ed.). Ames, IA: Iowa State University Press.
- Spangler, D.L. (1999). Cognitive-behavioral therapy for bulimia nervosa: An illustration. Journal of Clinical Psychology, 55(6), 699-713.
- Steiner-Adair, C. (1990). The body politic: Normal female adolescent development and the development of eating disorders. In C. Gilligan, N.P. Lyons, & T.J. Hanmer (Eds.), Making Connections: The Relational Worlds of Adolescent Girls at Emma Willard School (pp.163-182). Cambridge: Harvard University Press.
- Stice, E. (1994). Review of the evidence for a sociocultural model of bulimia nervosa and an exploration of the mechanisms of action. Clinical Psychology Review, 14(7), 633-661.

- Stice, E. (1998). Modeling of eating pathology and social reinforcement of the thin-ideal predict onset of bulimic symptoms. Behaviour Research and Therapy, 36, 931-944.
- Stice, E. (1998). Relations of restraint and negative affect to bulimic pathology: A longitudinal test of three competing models. International Journal of Eating Disorders, 23, 243-260.
- Stice, E., & Agras, W.S. (1998). Predicting onset and cessation of bulimic behaviors during adolescence: A longitudinal grouping analyses. Behavior Therapy, 29, 257-276.
- Stice, E., & Bearman, S. K. (2001). Body image and eating disturbances prospectively predict increases in depressive symptoms in adolescent girls: A growth curve analysis. Developmental Psychology, 37, 597-607.
- Stice, E., Chase, A., Stormer, S., & Appel, A. (2001). A randomized trial of a dissonance-based eating disorder prevention program. International Journal of Eating Disorders, 29(3), 247-262.
- Stice, E., Killen, J., Hayward, C., & Taylor, C.B. (1998). Age of onset of binge eating and purging during late adolescence: A 4-year survival analysis. Journal of Abnormal Psychology, 107, 671-675.
- Stice, E., Mazotti, L., Weibel, D., & Agras, W.S. (2000). Dissonance prevention program decreases thin-ideal internalization, body dissatisfaction, dieting, negative affect, and bulimic symptoms: A preliminary experiment. International Journal of Eating Disorders, 27(2), 218-229.
- Stice, E., Nemeroff, C., & Shaw, H.E. (1996). Test of the dual pathway model of bulimia nervosa: Evidence for dietary restraint and affect regulation mechanisms. Journal of Social & Clinical Psychology, 15(3), 340-363.
- Stice, E., & Shaw, H.E. (1994). Adverse effects of the media portrayed thin-ideal on women and linkages to bulimic symptomatology. Journal of Social & Clinical Psychology, 13(3), 288-308.
- Stice, E., & Shaw, H.E. (2004). Eating disorder prevention programs: A meta-analytic review. Psychological Bulletin, 130(2), 206-227.
- Stice, E., Shaw, H., Burton, E., & Wade, E. (under review). Dissonance and healthy weight eating disorder prevention programs: A randomized efficacy trial.

- Stice, E., Telch, C., & Rizvi, S.L. (2000). Development and validation of the Eating Disorder Diagnostic Scale: A brief self-report measure of anorexia, bulimia, and binge-eating disorder. Psychological Assessment, 12(2), 123-131.
- Stice, E., Trost, A., & Chase, A. (2003) Healthy weight control and dissonance-based eating disorder prevention programs: Results from a controlled trial. International Journal of Eating Disorders.
- Stice, E., Ziemba, C., Margolis, J., & Flick, P. (1996). The dual pathway model differentiates bulimics, subclinical bulimics, and controls: Testing the continuity hypothesis. Behavior Therapy, 27, 531-549.
- Stolley, M.R., & Fitzgibbon, M.L. (1997). Effects of an obesity prevention program on the eating behavior of African-American mothers and daughters. Health Education & Behavior, 24(2), 152-164.
- Striegel-Moore, R.H., & Kearney-Cooke, A. (1994). Exploring parents' attitudes and behaviors about their children's physical appearance. International Journal of Eating Disorders, 15(4), 377-385.
- Striegel-Moore, R.H., Schreiber, G.B., Pike, K.M., Wilfley, D.E., & Rodin, J. (1995). Drive for thinness in black and white preadolescent girls. International Journal of Eating Disorders, 18(1), 59-69.
- Striegel-Moore, R.H., Silberstein, L.R., & Rodin, J. (1986). Toward an understanding of risk factors for bulimia. American Psychologist, 41, 246-263.
- Striegel-Moore, R.H., & Steiner-Adair, C. (1998). Primary prevention of eating disorders: Further considerations from a feminist perspective. In W. Vandereyken & G. Nordenbos (Eds.), The Prevention of Eating Disorders (pp. 1-22). London: Athlone.
- Strober, M., Lampert, C., Morrell, W., Burroughs, J. et al. (1990). A controlled family study of anorexia nervosa: Evidence of familial aggregation and lack of shared transmission with affective disorders. International Journal of Eating Disorders, 9(3), 239-253.
- Swarr, A.E., & Richards, M.E. (1996). Longitudinal effects of adolescent girls' pubertal development, perceptions of pubertal timing, and parental relations on eating problems. Developmental Psychology, 32(4), 636-646.
- Telch, C.F., Agras, W.S., & Linehan, M.M. (2001). Dialectical behavior therapy for binge eating disorder. Journal of Consulting and Clinical Psychology, 69, 1061-1065.

- Theander, S. (1992). Chronicity in anorexia nervosa: Results from the Swedish long-term study. In W. Herzog, H. Deter, & W. Vandereyken (Eds.), The Course of Eating Disorders (pp. 214-227). New York: Springer-Verlag.
- Thelen, M.H., & Cormier, J.F. (1995). Desire to be thinner and weight control among children and their parents. Behavior Therapy, 26, 85-99.
- Thompson, B.W. (1994). A Hunger So Wide and So Deep: American Women Speak Out on Eating Problems. Minneapolis: University of Minnesota Press.
- Tolman, D.L., & Brown, L. M. (2001). Adolescent girls' voices: Resonating resistance in body and soul. R.K. Unger (Ed.), Handbook of the Psychology of Women and Gender (pp. 133-155). New York: John Wiley & Sons, Inc.
- Usmiani, S., & Daniluk, J. (1997). Mothers and their adolescent daughters: Relationships between self-esteem, gender role identity and body image. Journal of Youth and Adolescence, 26(1), 45-61.
- van Strien, T., Frijters, J.E., van Staveren, W.A., Defares, P.B., & Deurenberg, P. (1986). The predictive validity of the Dutch Restrained Eating Scale. International Journal of Eating Disorders, 5, 747-755.
- Wadden, T.A., Stunkard, A.J., Rich, L., Rubin, C.J., Sweidel, G., & McKinney, S. (1990). Obesity in black adolescent girls: A controlled clinical trial of treatment by diet, behavior modification, and parental support. Pediatrics, 85(3), 345-352.
- Wardle, J., & Marsland, L. (1990). Adolescent concerns about weight and eating: A social developmental perspective. Journal of Psychosomatic Research, 34, 377-391.
- Watson, D., & Clark, L.A. (1992). Affects separable and inseparable: On the hierarchical arrangement of the negative affects. Journal of Personality and Social Psychology, 62, 489-505.
- Whitaker, A., Johnson, J., Shaffer, D., Rapoport, J.L., Kalikow, K., & Walsh, B.T. (1990). Uncommon troubles in young people: Prevalence estimates of selected psychiatric disorders in a nonreferred adolescent population. Archives of General Psychiatry, 47, 487-496.
- Wilson, G.T., Becker, C.B., & Heffernan, K. (2003). Eating Disorders. In E.J. Mash, & R.A. Barkley (Eds.), Child Psychopathology – 2nd ed. New York: Guilford Press.

- Wilson, G.T., Heffernan, K., & Black, C.M. (1996). Eating Disorders. In E.J. Mash & R.A. Barkley (Eds.), Child Psychopathology (pp. 541-571). New York: The Guilford Press.
- Windle, C. (1955). Further studies of test-retest effect on personality. Educational and Psychological Measurement, 15, 246-253.
- Wiser, S., & Telch, C.F. (1999). Dialectical behavior therapy for binge-eating disorder. Journal of Clinical Psychology, 55(6), 699-713.
- Wodarski, J.S., & Feit, M.D. (1997). Adolescent preventive health: A social and life group skills paradigm. Family Therapy, 24(3), 191-208.
- Wolf, N. (1991). The Beauty Myth: How Images of Beauty are Used Against Women. New York: Doubleday.
- Worell, J.; Remer, P. (1992). Feminist Perspectives in Therapy: An Empowerment Model for Women. New York: John Wiley & Sons.
- World Health Organization. Obesity: Preventing and managing the global epidemic. Report of a WHO Consultation on Obesity, Geneva, 3-5 June, 1997. World Health Organization. Geneva: 1998.

VITA

Ariel Sarah Trost was born in Oakland, California on April 24, 1975, the daughter of Edward Trost and Lisa London. After completing her work at the College Preparatory School, Oakland, California, 1993, she entered the University of California at Berkeley. She received the degree of Bachelor of Arts with honors in Women's Studies from UC Berkeley in May 1998. During the fall of 1999, she entered the Graduate School of The University of Texas at Austin. She was awarded her Masters of Arts in Counseling Psychology in May 2002. She has published articles on eating disorder research in the International Journal of Eating Disorders and Psychology of Addictive Behaviors.

Permanent Address: 621 Boulevard Way, Oakland, California 94610

This dissertation was typed by the author.