

DISORDERED EATING AMONG YOUNG JEWISH AMERICAN WOMEN:  
EXPLORING RELIGION'S ROLE

A Thesis

by

MARGARITA TARTAKOVSKY

Submitted to the Office of Graduate Studies of  
Texas A&M University  
in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

December 2006

Major Subject: Psychology

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Approved by:

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## ABSTRACT

Disordered Eating Among Young Jewish American Women:

Exploring Religion's Role. (December 2006)

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There has been little scientific work exploring eating pathology among Jewish women in the United States, even though research has suggested that body image and eating behavior may be especially problematic within this group. Research has also demonstrated the importance of religion in eating pathology, such that extrinsic religiousness may represent a vulnerability mechanism, whereas intrinsic religiousness may act as a protective factor against disordered eating. Thus, the current study examines the association between religion and disordered eating among Christian ( $n = 145$ ) and Jewish Caucasian ( $n = 73$ ) women. The role of culture was also explored among Jewish women. All participants completed self-report questionnaires at Time 1 and then six weeks later at Time 2. Jewish and Christian women had comparable levels of disordered eating and body dissatisfaction. Results revealed that neither extrinsic religiousness nor intrinsic religiousness predicted disordered eating among the Jewish group. Hypotheses regarding religious motivation and religious adherence were partially supported among the Christian group. These findings highlight that Allport and Ross's religion framework may not be appropriate for use with Jewish female samples.

Similarly, identifying with Jewish culture did not predict disordered eating. As a whole, these findings emphasize the striking need for more empirical data on what does contribute to a Jewish woman's vulnerability to eating disorder symptoms.

## DEDICATION

To the best people on the planet, mama and papa. Papa, thank you for the cokes on our first day in America, and Mama, thank you for holding me when I hurt my left knee.

And to my grandmother Lilya, for whom my academic accomplishments, large or small, meant the world. You are on my mind and in my heart at all times. For making me smile and laugh, I love you - always.

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## INTRODUCTION

Within the United States, minorities have recently received more attention in the eating disorder literature (Perez, Voelz, Pettit, & Joiner, 2002). Seen previously as a “White upper class” female disease, eating disorders have now been well documented in different minorities (e.g., Crago & Shisslak, 2003; Mastria, 2002; O’Neill, 2003; Perez et al., 2002). The literature, however, has predominantly focused on a select few minority groups like African American, Hispanic, and Asian groups (e.g., Altabe, 1998; Cash & Henry, 1995; Flynn & Fitzgibbon, 1996; Kemper, Sargent, Drane, Valois, & Hussey, 1994; Neff, Sargent, McKeown, Jackson, & Valois, 1997; O’Neill, 2003; Perez et al., 2002; Schrieber et al., 1996; Smith, Marcus, Lewis, Fitzgibbon, & Schriener, 1998; Winkelby, Gardner, & Taylor, 1996). There has been a paucity of research investigating eating disorders among Jewish samples, even though Jewish individuals represent a minority both due to their religious beliefs and ethnic identity (Dubow, Pargament, Boxer, & Tarakeshwar, 2000).

The exclusion of Jewish groups from multiculturalism has been conjectured to arise from the perception of this population as an assimilated non-minority, economically privileged, and part of the White majority (Langman, 1999). Consequently, there are only a handful of empirical studies on eating pathology in Jewish groups in the U.S. and they have focused primarily on Jewish individuals as culturally different from the majority (e.g., Sykes, Gross, & Subishin, 1986; Sykes, Leuser, Melia, & Gross, 1988). These studies have neglected to examine the extent to

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This thesis follows the style of the International Journal of Eating Disorders.

which their samples adhere to traditions and beliefs prescribed by Judaism and the importance of the religion for these women. Only one study (Gluck & Geliebter, 2002) has looked at religiosity among Jewish women. These authors explored the strength of religiosity with the Religious Identification Questionnaire (Rosenberg, 1970) and four items assessing Orthodox traditions. Gluck and Geliebter's work highlights the value of exploring religiosity. Their findings suggest that Orthodox women may be particularly protected against eating pathology, while other denominations of Judaism may be more vulnerable.

The research exploring the relationship between religiosity and disordered eating has produced mixed findings (Dancyger et al., 2002; Gluck & Geliebter, 2002; Sykes et al., 1986; Sykes et al., 1988). As mentioned above, Gluck et al.'s (2002) study comparing secular and Orthodox Jewish women found that secular women endorsed more body dissatisfaction and eating pathology than Orthodox women. These authors speculated that Orthodox Jewish women may be protected against disordered eating, because Orthodox Judaism places less emphasis on physical attractiveness and success among women. Because less value is placed on physical appearance, Orthodox women may not perceive a slender body image as unduly important as women from other Jewish sects do. The higher levels of body dissatisfaction among other Jewish women suggest that Judaism may not have protective benefits for all women. Also, there has been some research to suggest that the prevalence of eating disorders is especially high in Jewish women when compared with other religious groups like Protestant women (Sykes et al., 1986; Sykes et al., 1988). For example, Sykes et al. (1988) investigated demographic

characteristics among a sample of 160 eating disorder patients from the Cleveland Clinic Foundation Eating Disorders Program. These authors hypothesized that the prevalence of eating disorders would be higher in patients with Jewish religious backgrounds, because of the importance placed on food in this group. Congruent with their hypotheses, the proportion of Jewish patients with eating disorders was higher than the proportion of Jewish individuals in the general population, indicating that the rate of eating disorders may be higher in this group. Interestingly, Dancyger et al. (2002) did not find any significant differences in the presentation and course of eating disorders among their Orthodox Jewish patients when compared with other patients. It is important to note that Sykes and colleagues (1986; 1988) and Dancyger et al. (2002) did not administer any religiosity measures to their Jewish sample to examine the extent of involvement in Judaism.

Thus, the relation between religiosity and disordered eating is quite ambiguous among Jewish women. More studies are needed to assess religiosity in an objective fashion. Latzer (2003) highlighted the need for future research to investigate whether level of religiosity serves as protection against eating disorders. He contended that no research has looked at the relationship between religiosity and disordered eating among religious Jewish groups in Israel. But assessing religiosity alone ignores the cultural aspects related to Jewish identity. In fact, “Jewish ethnicity does not imply religious orthodoxy” (Friedman, Friedlander, & Blustein, 2005, p. 77). A significant number of Jewish individuals preserve a strong sense of their Jewish identity, even though they are not affiliated with any sect of Judaism (Rosen & Weltman, 1996). One study attempted

to tease apart ethnic identity with religiosity and found that religious Jewish identity was a significant and unique predictor of good psychological functioning among Jewish women, whereas altogether ethnic/cultural and religious facets of identity only held a small effect (Goldberg & O'Brien, 2005). This literature emphasizes the importance of looking at all facets of Jewish identity, through both a religious and cultural lens. As such, the current project aimed to assess cultural/ethnic identity and religious identity, as they related to disordered eating.

Exploring disordered eating among Jewish women is also especially important, because empirical research conducted in Israel has suggested significant levels of eating pathology among Jewish women (Latzer, 2003; Latzer & Shatz, 2001; Mitrany, Lubin, Chetrit, & Modan, 1995; Neumark-Sztainer, Palti, & Butler, 1995; Sasson, Lewin, and Roth, 1995; Stein et al., 1999; Stein et al., 1997). One study investigated adolescent females living in kibbutz communities (a collective egalitarian community of about 200 to 700 members, all contributing their earnings to the kibbutz) and found that 85% of adolescent girls reported dissatisfaction with their bodies, 63% were considering a diet, and 60% were afraid of losing control over their weight (Latzer, 2003; Latzer & Shatz, 2001). In addition, 32.5% of the sample scored high on the Eating Disorder Inventory, placing them in "the group at risk". Sasson et al. (1995) found that among children and adolescents who attended Jewish secular schools in Israel, 54% reported a desire to lose weight, and 41.6% exhibited behaviors intended toward losing weight. Neumark-Sztainer and colleagues (1995) have found weight concerns and problematic eating attitudes in adolescent girls to be on the rise. A study investigating the nationwide

incidence of eating disorders among Jewish female adolescents over a five year period from 1989 to 1994 found the mean annual incidence to be 48.8 per 100, 000 (Mitrany et al., 1995). Furthermore, Stein et al. (1997) found that among 534 11<sup>th</sup> and 12<sup>th</sup> grade female students in three Israeli high schools, 18% had a pathological EAT score (greater than 22), 20.8% were categorized as suffering from partial anorexia and 11.3% from partial bulimia. Similar rates were demonstrated in a sample of young Israeli females drafted to the army, where 12.1% were classified as having partial anorexia and 8.3% with partial bulimia (Stein et al., 1999). Taken together, these studies suggest that disordered eating is prevalent and escalating among Jewish women in Israel. But again, similar to the research conducted in the U.S., these studies did not assess the degree to which the participants adhered to Judaism and the extent of its importance in their lives, if at all.

Some theoretical work has explored the reasons for the increase in body image issues and eating pathology in Jewish women. Several psychotherapists have written about the problematic nature of conflicting messages given to Jewish women. For instance, traditionally, the *zaftig* (“full-figured”) woman has been highly regarded in Jewish culture as a representation of positive sexuality, life, and being well-nourished (Siegel, 1995; Smith, 1999), yet Jewish women are also praised for dieting and achieving the image of the “thin, Gentile, female body” (Schwartz, 1995; Siegel, 1995). Within the United States, Jewish women may internalize the image of perfection as a long and lean body and thus dislike their own bodies (Schwartz, 1995). Other minority groups, when attempting to assimilate into American society often adopt the thin body

image ideal, leaving them vulnerable to eating pathology (Joiner & Kashubeck, 1996; Mastria, 2002). Jewish women may be no different, and this thin body image ideal may conflict with the emphasis placed on food within the Jewish culture (Seid, 1994). Food is viewed in the Jewish culture as a way of communicating nurture and love to children, thereby closely associated with motherhood (Latzer, 2003). Essentially, the Jewish culture may simultaneously promote food and eating and attaining a rigid emaciated standard of beauty.

Much research has connected certain cultures with having greater vulnerabilities to eating pathology. Consistently, White U.S. culture has been implicated in increasing risk for problematic eating attitudes and behavior. The stringent standard of beauty among White U.S. culture (i.e., the slender ideal) creates an environment fit for body dissatisfaction, one of the most consistent and robust risk and maintenance factors for disordered eating (e.g., Stice, 2002). Like many minority cultures, Jewish women must balance their own culture's values (i.e., nurturing and celebratory nature of food) with the thinning values of the majority culture. The question arises: Is there something specifically inherent in the Jewish culture that may either serve as a vulnerability or protective factor against disordered eating? According to the theoretical literature, Jewish women may be vulnerable to disordered because of the presence of mixed messages. These conflicting messages simultaneously encourage Jewish women to eat (i.e., food is equated with nurturance) and to obtain or maintain a thin physical appearance. On the one hand, it appears that culture may predispose Jewish women to increased levels of eating pathology. However, given that there have been no empirical

studies investigating the role of culture in disordered eating, it is difficult to formulate specific hypotheses about this relationship.

In addition to theoretical writings, the prevalence of eating pathology has been a concern and focus in mainstream Jewish publications. Articles have surfaced in Jewish female magazines documenting clinician's observations of the high proportion of Jewish women seeking treatment for eating disorders (Baruchin, 1998a; Baruchin, 1998b). During 1994-1996, 13% of eating disordered patients drawn from across the country at the Renfrew Center in Philadelphia were Jewish (Baruchin, 1998b), even though Jewish individuals make up only 3% of the US population. One study found that one out of nineteen girls living in the Orthodox and Syrian Jewish communities in Brooklyn was suffering from an eating disorder, a rate that is fifty percent higher than in the general population (conducted by Dr. Ira Sacker in 1996; cited in Baruchin, 1998a). These articles suggest that eating disorders are problematic among samples of U.S. Jewish women. As a result, several programs have been created in an attempt to prevent and treat eating disorders among Jewish communities within the United States. Curriculums and manuals have been developed for use by professionals (e.g., for staff in Chicago Jewish community centers), in addition to the creation of treatment programs (e.g., on Long Island specifically for Jewish individuals suffering from eating disorders) and organizations such as Helping to End Eating Disorders (HEED) in Brooklyn (Smith, 1999).

Collectively, the above discussion points to a need to further explore the role of religious and cultural/ethnic identity among Jewish women. Research conducted in the

U.S. and Israel illustrates that disordered eating is becoming increasingly problematic among this group. It is also plausible that assessing cultural identification with being Jewish and religious identification with Judaism may influence the prevalence rates of eating disorders and illuminate whether cultural or religious identification (or perhaps both) are associated with protective benefits or increased risk to disordered eating.

In general, a very small empirical literature exists on the relation between religion and eating disorders, but this research does support religion as an important and multifaceted variable that may influence eating disorder symptoms (e.g., Richards, et al., 1997). Smith, Hardman, Richards, and Fischer (2003) found that among eating disordered women, spiritual growth during treatment was associated with healthier eating attitudes, improvement of body image, a decrease in psychological symptoms, and less interpersonal conflict. Similarly, Joughin, Crisp, Halek, and Humphrey (1992) found that the more bulimic symptomatology their participants endorsed, the less importance was placed on this sample's religious beliefs.

To elucidate this relationship between religion and eating pathology, the literature has turned to Allport and Ross's (1967) delineations of extrinsic and intrinsic motivation, where extrinsically motivated individuals use their religion to obtain status, security, self-justification, and sociability, and intrinsically motivated individuals internalize their beliefs, and do not use religion for personal gain (Bergin, Masters, & Richards, 1987). For instance, a recent study among women with bulimia nervosa and subclinical bulimic symptoms found that those women who were extrinsically religious tended toward more eating disorder symptoms, whereas intrinsic women tended toward

fewer symptoms (Smith, Richards, & Maglio, 2004). Forthun, Pidcock, and Fischer (2003) suggested this same pattern where intrinsic religiousness serves as a buffer against eating pathology while extrinsic religiousness acts as a predictor of disordered eating. In their study, high levels of extrinsic religiousness moderated the relation between family risk and disordered eating; however, in the presence of high intrinsic religiousness, this relation was nonsignificant. It is important to note that one study did not find a significant association between intrinsic religiousness and improvement in eating disorder symptoms and psychological health (Smith et al., 2003); however, the authors explained that this finding may be due to the nature of their treatment facility. The staff at this facility attempts to meet each woman at the place of her personal religion and spirituality, whether she is extrinsically religious or non-religious. Thus, Smith and colleagues (2003) surmised that these extrinsically religious and non-religious women may be just as likely to benefit from the treatment program as intrinsically religious women.

Furthermore, qualitative literature has also suggested a significant relationship between religion and eating pathology. Research on recovery from eating disorders has demonstrated that religiousness and/or spirituality are important for many women in their recovery process (Garrett, 1998; Hall & Cohn, 1992; Mitchell, Erlander, Pyle, & Fletcher, 1990; Morgan, Marsden, & Lacey, 2000; Rorty, Yager, & Rossotto, 1993). Other work has found an association between having an eating disorder and experiencing alterations in one's religious practices (Graham, Spencer, and Andersen, 1991). In this study, patients reported feelings of guilt and self-blame due to the

disruptions in their religious practices (e.g., refusing Holy Communion; vomiting after receiving Holy Communion). As a whole, these studies point to a potential critical interaction between religion and eating disorders.

This relationship between religion and eating pathology has yet to be explored among samples of Jewish women. The literature has focused predominantly on other religions such as Christianity, theorizing that asceticism may inspire women's food refusal, thereby creating a vulnerability to eating disorders (Bell, 1985; Bynum, 1987; Rampling, 1985). When studies have included Jewish participants, the numbers have been small limiting both the analyses and generalizability (Smith et al., 2003; Smith et al., 2004). For instance, Smith et al.'s (2003) sample only included three Jewish women, whereas the majority of this sample was comprised of Latter-Day Saints. Similarly, in another study, Jewish women accounted for a small percentage of the sample. There was only one Jewish participant in the undergraduate college sample and three Jewish women among the eating disordered patients (Smith et al., 2004). Evidently, these Jewish women were lumped in with other religious affiliations that included "Catholic, Protestant, and Other." Other studies have neglected to report information on their sample's religious affiliations. For instance, Forthun et al. (2003) simply noted that 97.3% of their participants identified affiliation "with some religion." Undoubtedly, this also prevents further investigation specifically looking at the influence of religion on eating pathology among Jewish women. Smith et al. (2003) tested the potential association between religious affiliation and treatment outcome. Although this relation was not significant, performance of such analyses would still not provide much insight

on Judaism as the sample of Jewish participants was so small. Overall, many of these studies either have excluded Jewish samples altogether or combined Jewish participants with other religions, highlighting the need for further research.

Thus, the main objective of this study was to explore religion (i.e., religious motivation and religious adherence) and eating disorder symptoms among a sample of Jewish women living in the United States. The data on eating pathology among Jewish women have been scarce, making it difficult to rely on the research to guide hypotheses. However, the few studies that do exist among other faiths highlight the importance of intrinsic religiosity as a protective factor against eating pathology and extrinsic religiosity as a risk factor. Further, because this work also attempted to tease apart the various facets of Jewish identity (i.e., religious and cultural/ethnic identity), it was important to observe the influence of Jewish culture on disordered eating in addition to the impact of religion. Considering that no published work has investigated cultural/ethnic identity and disordered eating among Jewish women, the primary objective was to conduct an exploratory analysis exploring culture's role in eating pathology. Given that the US body image ideal and Judaism send contradicting messages to Jewish women, it is possible that the interaction between religious motivation and body dissatisfaction predicts disordered eating. This study explored the plausibility of that hypothesis. Another objective was to compare Jewish women with Christian women on various disordered eating assessments. To our knowledge, there have been no published studies comparing eating disorder symptomatology between Jewish and

Christian women. We hope to illuminate the differences and similarities that exist among these women.

### *Hypotheses*

In sum, the following hypotheses were explored in the current project: 1. Based on the totality of the data, it was hypothesized that both Jewish and Christian Caucasian women would have comparable levels of eating disorder symptoms. 2. It was hypothesized that among both groups, extrinsic religiousness would predict eating disorder symptoms, body dissatisfaction, bulimia, and drive for thinness at baseline, whereas there would be a negative relationship between intrinsic religiousness and these disordered eating symptoms. Also, this same pattern of results was hypothesized for body dissatisfaction, bulimia, and drive for thinness at follow-up. 3. In addition, among both groups, extrinsic religiousness would predict increases in bulimic symptoms from Time 1 to Time 2, and intrinsic religiousness would not. 4. The interaction between extrinsic religiousness and body dissatisfaction would predict disordered eating (i.e., bulimia and drive for thinness) among Jewish and Christian women. 5. High levels of religious adherence would predict lower levels of disordered eating among Jewish and Christian women. 6. An exploratory analysis was conducted to examine whether having a strong sense of cultural/ethnic identity related to disordered eating among Jewish women. 7. An additional exploratory analysis was performed to explore whether culture or religious adherence was a better predictor of disordered eating at baseline and follow-up.

## METHOD

### *Participants*

The current sample consisted of 218 non-clinical college-aged women. Race was controlled for by only sampling Caucasian women. There were 73 Jewish women and 145 Christian women. The mean age for Christian women was 18.4, while the mean age for Jewish women was 21.4 years old. Regarding college year, among the Jewish sample, there were 15 freshmen, 7 sophomores, 12 juniors, 12 seniors, 23 graduate students, and 2 other. Christian women consisted of 124 freshmen, 17 sophomores, 2 juniors, and 2 seniors. The majority of the Jewish sample was Ashkenazi ( $n = 63$ ), while 3 were Sephardic, 1 was Mizrahi, and 1 Other. Two participants reported they did not know their Jewish ancestry, and two individuals left the question unanswered. Regarding Judaism sect, there were 13 Orthodox, 32 Reform, 22 Conservative, 1 Unaffiliated, 3 Other, and 2 did not specify. Christian women were defined as women who belong to any Christian denomination. Religious affiliation among the Christian group was as follows: 30 Catholic, 33 Baptist, 17 Methodist, 12 Lutheran, and 53 Christian/Protestant.

Fifty-eight of the Jewish women completed both parts of the study, an 80% return rate. From the sample of Christian women, 140 completed both Time 1 and Time 2, a return rate of 96.6%. Christian women were recruited from undergraduate psychology classes. These female participants were compensated by receiving research credit for their psychology class. Jewish women were recruited from the Texas A&M University Hillel as well as the Houston Hillel on a volunteer basis. In addition, women

belonging to Jewish organizations throughout the US were also recruited to participate. For these women, packets were mailed to them. Fifty-four of the Jewish women participated in this study via mail. Jewish women were compensated with \$10 for their participation in both parts of the study.

### *Procedure*

Participants were assessed at two times: Time 1 and then six weeks later at Time 2. A longitudinal design was used to be able to accurately predict disordered eating. The six week time period was specifically chosen because increases in bulimic symptoms have been detected in as little as five weeks with certain vulnerability models (Vohs et al., 2001). Also, this time period allowed for efficiency of data collection. A longitudinal design also allows for prospective predictions in addition to cross-sectional analyses. At Time 1, participants were given an informed consent form describing the study procedures, and confidentiality. Questionnaire packets were administered in groups to those participants who consented to the study. For those participants outside of Texas A&M University, packets were sent via priority mail. Participants completed a series of questionnaires for approximately 60 minutes. At Time 2, participants completed a second packet of questionnaires. The order of these measures was varied to prevent practice effects. Once participants finished the questionnaire packet, they received a debriefing form, explaining in greater detail the study objectives. Psychology students were given research credit at Time 2 for their participation in both study sessions (i.e., Time 1 and Time 2). Jewish participants received a compensation of \$5 at Time 1 and then \$5 at Time 2.

### *Measures*

*Demographics.* A demographics questionnaire [adapted from Goldberg & O'Brien (2000)] was used to obtain such information as year in college and religious affiliation of the participant . There is much heterogeneity within the Jewish population; therefore, Jewish ancestry (i.e., Sephardic, Ashkenazi, Mizrahi) was also assessed.

*Eating Disorder Inventory-3.* The EDI-3 (Garner, 2004) is a self-report measure of eating behavior and thought patterns, consisting of 91 items. It contains twelve scales: Drive for Thinness, Bulimia, Body Dissatisfaction, Low Self-Esteem, Personal Alienation, Interpersonal Alienation, Interpersonal Insecurity, Interoceptive Deficits, Emotional Dysregulation, Perfectionism, Asceticism and Maturity Fears. Participants answer whether each item is characteristic of them either *Always, Usually, Often, Sometimes, Rarely, or Never*. The focus of the current study was on the Body Dissatisfaction, Drive for Thinness (i.e., used as a measure of anorexic symptoms like dieting and desire to be thinner), and Bulimia subscales. Studies have shown the subscales to have adequate reliability (Garner, Olmstead, & Polivy, 1983; Perez et al., 2002). In the current study, Cronbach's alpha was .85 for Bulimia, .91 for Drive for Thinness, and .91 for Body Dissatisfaction among the Christian sample. Reliability coefficients for the Jewish participants consisted of .85, .88, and .87 for Bulimia, Drive for Thinness, and Body Dissatisfaction respectively.

*Body Image (BI) Scales.* Participants were presented with seven female adult figure drawings ranging from very thin to obese, obtained from the Stunkard Body Figure Scale (Stunkard, Sorenson, & Schlusinger, 1983). Participants were asked to

designate the place on the scale they believe their own body resembles in addition to indicating the ideal body image of women in the United States and the ideal image for their ethnicity. Reliability for these scales was shown to be .74 (Sorenson et al., 1983; Stunkard et al., 1983).

*Religious Orientation Scale.* The ROS (Allport & Ross, 1967) consists of 20 items that measure extrinsic and intrinsic religiosity. Extrinsic individuals seek religion for external benefits like security, solace, sociability, status, etc. Intrinsic individuals, however, internalize their religious beliefs. According to Allport and Ross (1967), this type of an individual, “lives his religion” (p. 434). Among the Christian sample in the current study, Cronbach’s alpha was .71 for the Extrinsic subscale and .89 for the Intrinsic subscale. Reliability for the Intrinsic subscale among the Jewish women was .91. The Extrinsic subscale was not internally consistent among the Jewish sample at a value of .53. Item analysis revealed that it was necessary to reverse code three items in order for the subscale to have adequate internal consistency. After these items were recoded, the internal consistency was at best a value of .65.

*The Multigroup Ethnic Identity Measure.* The MEIM (Phinney, 1992) was designed to assess ethnic social identity, ethnic identity search, and commitment. Consisting of 14 items, this scale measures three aspects of ethnic identity: affirmation and belonging, ethnic identity achievement, and ethnic behaviors and practices. Participants answer each item based on a 4-point Likert scale (1 = *strongly disagree* through 4 = *strongly agree*). In order to modify the items for Jewish participants, additional instructions were added: “If you are Jewish, the terms ethnic group/ethnicity

below, refer to you being Jewish.” Among a sample of 136 ethnically diverse college students, the reliability coefficient for the 14-item scale was reported as .90 (Phinney, 1992). The MEIM has been used with Jewish adult samples. One study found Cronbach’s alpha for the 14-item scale to be .77 among Jewish female adults (Bowen, Singal, Eng, Crystal, & Burke, 2003). In the current study, Cronbach’s alpha for the Jewish sample was .91. For the Christian women, the alpha value was .87.

*Internal External Locus of Control Scale.* This scale (Rotter, 1966), consisting of 23 actual items and 6 filler items, explores whether individuals interpret an event as either contingent upon their own behavior and characteristics (internal locus of control) or contingent upon fate, luck, powerful others, or is unpredictable (external locus of control). Participants choose from two items for each question. Each choice item represents either an internal locus of control or an external locus of control. Internal consistency was reported as .73 for a sample of college students (Rotter, 1966). Among the Jewish women in the current study, Cronbach’s alpha was .75, whereas for the Christian women it was .62.

*Religious Adherence Scale.* This instrument consists of seven items taken from the Religious Orientation Scale (Allport & Ross, 1967). Items that were behavior-oriented were chosen specifically in order to accurately isolate religious traditions (e.g., prayer, church/synagogue attendance). It was important to incorporate items that measured the adherence to religious practice. Items were excluded if the question was entirely focused on looking at motivation for religion (already assessed by the Religious Orientation Scale). The following items make up the scale, “If not prevented by

unavoidable circumstances, I attend church,” “I try hard to carry my religion over into all my other dealings in life,” “The prayers I say when I am alone carry as much meaning and personal emotion as those said by me during services,” “Quite often I have been keenly aware of the presence of God or the Divine Being,” “I read literature about my faith,” “My religious beliefs are what really lie behind my whole approach to life,” “Religion is especially important to me because it answers many questions about the meaning of life.” This scale was used with the Christian sample. Among this sample, the reliability coefficient was .90. Higher scores indicate greater levels of religious adherence (i.e., religiosity).

*Judaism.* This scale [adapted from Amyot & Sigelman (1996)] was created to assess specific religious traditions among Jewish participants. Sample items included, “Do members of your household purchase kosher meat?” “Do you fast on Yom Kippur?” and “How frequently do you attend religious Jewish services?” Higher scores signify greater religiosity. In the current study, the reliability coefficient was .88.

## RESULTS

### *Descriptive Analyses*

Means and standard deviations for all variables are presented in Table 1. All assumptions for normality, heteroscedasticity, outliers, skewness, and kurtosis were assessed on all variables. The bulimia subscales at Time 1 and Time 2 for both Jewish and Christian groups were skewed (levels > 2). Thus, a square root transformation was performed on all bulimia totals for both groups.

T-tests were performed to investigate whether Jewish women who participated in the study in person differed from those women who participated via mail. Group (1 = participated in person; 2 = participated via mail) was entered as the independent variable, while all measures of disordered eating (Stunkard Body Image Scales; EDI-Drive for thinness at Time 1 and Time 2; EDI-Bulimia at Time 1 and Time 2; and EDI-Body dissatisfaction at Time 1 and Time 2) were entered as the dependent variables. There were no significant difference between these two groups on any disordered eating measure at both Time 1 and Time 2.

A variety of descriptive analyses were conducted in order to better understand eating disorders among Jewish women. An independent t-test was performed on age to assess differences among the two groups. There were significant differences in age among the Jewish and Christian women [ $t(78.39) = 9.96; p < .01; M$  difference is + 3.06]. Because of the significant difference in age, this variable was controlled for in subsequent analyses comparing the two groups. Analyses were performed to assess differences among the Jewish and Christian women on disordered eating measures

administered at Time 1 and Time 2. A multivariate analysis of variance (MANOVA) was conducted on body image (i.e., Stunkard Body Image Scales), body dissatisfaction, drive for thinness, and bulimic symptoms (i.e., subscales from the Eating Disorder Inventory-3 at Time 1 and Time 2), while controlling for age. Group identification was entered as the independent variable with two groups (1= Jewish and 2= Christian), and the various measures of body image and disordered eating were entered as dependent variables. The overall MANOVA was nonsignificant [ $F(1, 177) = 1.50, p > .05$ ], indicating that there were no significant differences between the Jewish and Christian women on any of the disordered eating measures at both Time 1 and Time 2.

Next, we examined significant differences within each religious affiliation (i.e., including Christian and Jewish sects) on body dissatisfaction, drive for thinness, and bulimic symptoms at baseline and follow-up. Because of the small sample size in each religious affiliation, chi-square analyses were performed. Each measure of disordered eating was split into low, medium, and high scores. Chi-square analyses revealed there were no significant differences on any disordered eating measure between each religious affiliation.

In order to gain more detailed information about each sample's disordered eating scores, we looked at the total scores for each participant on the Bulimia, Body dissatisfaction, and Drive for thinness subscales among the Jewish and Christian groups. Then a percentage was obtained to see the number of women who fell into the following categories: elevated clinical range, typical clinical range, and low clinical range. These categories were ascertained from the Eating Disorder Inventory-3 manual (Garner,

2004). Among the Jewish women, 58.9% were in the low category, 38.4% in the typical clinical range, and 2.7% in the elevated clinical range for the Bulimia subscale. Similar percentages were obtained for the Christian group, where 62.5% were categorized as low, 35.4% as typical, and 2.1% as elevated for the Bulimia subscale. The majority of Jewish women fell in the low category (78.1%) for Drive for Thinness subscale, with 17.8% in the typical clinical range, and 4.1% in the elevated range. The Christian group had a higher percentage of women in the elevated clinical range (6.3%) for Drive for Thinness than the Jewish group, but had similar percentages in the low and typical categories (75% low; 18% typical). There were 65.8% Jewish women categorized in the low range group for the Body Dissatisfaction subscale, with 31.5% as typical, and 2.7% as elevated. The Christian group was similar to the Jewish women in the low (64.6%) and typical category (29.1%); however, they differed in the elevated category. Christian women had a higher percentage of participants scoring in the elevated range with a percentage of 6.3.

Elevated clinical levels of disordered eating were also examined among each religious affiliation within both groups. Among the Christian women, the Methodist group did not endorse elevated levels of any disordered eating. Five percent of the Catholic women endorsed elevated levels of drive for thinness and body dissatisfaction. Similarly, 5% of Baptists had clinical levels of drive for thinness and bulimic symptoms, and 7.7% body dissatisfaction. Fifteen percent of Lutherans had clinically elevated levels of drive for thinness and 7.7% of bulimic symptoms and body dissatisfaction.

Among the Christian/Protestant women, 1.7% had clinical levels of bulimic symptoms, 6.9% drive for thinness, and 5% body dissatisfaction.

Among the Jewish women, the Conservative group did not endorse any clinically elevated levels of disordered eating. Women in the ‘unaffiliated’ and the ‘other’ groups, also did not endorse any elevated levels; however, their sample size was very small (ranging from only 1 to 3 women). With a percentage of 7.7, Orthodox women endorsed clinically high levels of bulimic symptoms, drive for thinness, and body dissatisfaction. Three percent of Reform women had clinical levels of bulimic symptoms, drive for thinness, and body dissatisfaction.

A one-way ANOVA was also conducted to look at the presence of significant differences between the various Jewish sects. There were thirteen Orthodox, thirty-two Reform, twenty-two Conservative, one unaffiliated, and three Other. Because the last two groups had such a small number of participants, they were excluded from the analysis. Judaism sect was entered as the independent variable, while disordered eating subscales at Time 1 and Time 2 were entered as the dependent variables (body dissatisfaction, drive for thinness, and bulimia). There were no significant differences on any of the disordered eating measures among the various groups.

Intercorrelations for all variables were performed separately among each group. Table 2 illustrates the intercorrelations among the Jewish sample. Intercorrelations for the Christian sample are presented in Table 3. Among the Jewish sample at Time 1, body dissatisfaction was positively correlated with bulimic symptoms ( $r = .39, p < .01$ ), drive for thinness ( $r = .62, p < .01$ ), and body image self/ethnic ( $r = .61, p < .01$ ).

Similarly, among the Christian women, there was a positive association between body dissatisfaction and the following measures: bulimia ( $r = .58, p < .01$ ); drive for thinness ( $r = .79, p < .01$ ); and body image self/ethnic ( $r = .65, p < .01$ ). As expected, the Religious Adherence Scale was highly correlated in a positive direction with the Intrinsic subscale among Christian women ( $r = .98, p < .01$ ). Among the Christian sample, a negative correlation was observed between religious adherence and extrinsic religiousness ( $r = -.40, p < .01$ ). Also, there was a small negative correlation between religious adherence and bulimic symptoms, such that the higher a person's religiosity level, the lower her bulimic symptoms ( $r = -.18, p < .05$ ). The Judaism scale, one's adherence to Jewish religious traditions, was positively correlated with intrinsic religiousness ( $r = .61, p < .01$ ). Among the Christian sample, extrinsic religiousness was positively associated with bulimic symptoms ( $r = .23, p < .01$ ). On the other hand, endorsing intrinsic religiousness was associated with lower levels of bulimic symptoms ( $r = -.18, p < .05$ ). Among the Jewish women, ethnic identity was positively correlated with intrinsic religiousness ( $r = .36, p < .01$ ). In addition, having a strong sense of Jewish ethnic identity was positively correlated with adherence to religious traditions ( $r = .45, p < .01$ ).

### *Primary Analyses*

*Extrinsic Religiousness Predicting Disordered Eating.* It was hypothesized that extrinsic religiousness would predict eating disorder symptoms at Time 1, and there would be a negative relationship between intrinsic religiousness and eating disorder symptoms at Time 1. Separate regression analyses were performed for each group,

where intrinsic religiousness and extrinsic religiousness were entered simultaneously as predictors, with each measure of disordered eating at Time 1 (bulimia, drive for thinness, body dissatisfaction) as the dependent variable. Results for the Jewish group are represented in Table 4. Neither extrinsic religiousness nor intrinsic religiousness predicted bulimia among Jewish women [extrinsic:  $pr = -.14$ ;  $t(70) = -1.16$ ;  $p > .05$ ; intrinsic:  $pr = -.02$ ;  $t(70) = -.19$ ;  $p > .05$ ]. Among the Christian women, there was a nonsignificant trend where extrinsic religiousness predicted bulimic symptoms [ $pr = .15$ ;  $t(141) = .1.79$ ;  $p = .08$ ]. Intrinsic religiousness did not predict bulimic symptoms [ $pr = -.06$ ;  $t(141) = -.68$ ;  $p > .05$ ]. Among the Jewish sample, extrinsic religiousness did not predict drive for thinness [ $pr = -.20$ ;  $t(70) = -1.74$ ;  $p > .05$ ]. Intrinsic religiousness also did not predict drive for thinness [ $pr = -.19$ ;  $t(70) = -1.62$ ;  $p > .05$ ]. The same results were observed for the Christian women. Extrinsic and intrinsic motivation did not predict drive for thinness [extrinsic:  $pr = .07$ ;  $t(141) = .87$ ;  $p > .05$ ; intrinsic: [ $pr = -.07$ ;  $t(141) = -.83$ ;  $p > .05$ ]. For the third regression analysis, findings demonstrated that extrinsic religiousness did not predict body dissatisfaction and intrinsic religiousness did not predict body dissatisfaction among both Jewish [extrinsic: [ $pr = -.11$ ;  $t(70) = -.88$ ;  $p > .05$ ; intrinsic:  $pr = .00$ ;  $t(70) = .00$ ;  $p > .05$ ] and Christian women [extrinsic:  $pr = .04$ ;  $t(141) = .49$ ;  $p > .05$ ; intrinsic: [ $pr = -.03$ ;  $t(141) = -.31$ ;  $p > .05$ ].

In addition, it was hypothesized that extrinsic and intrinsic religiosity would predict disordered eating at Time 2. Regression analyses were performed identical to the analyses above, with one exception. Disordered eating at Time 1 was included as an additional predictor to control for these scores in the equation. For example, in testing

whether extrinsic religiousness predicted bulimic symptoms at Time 2, the variable bulimic symptoms at Time 1 was entered simultaneously with extrinsic and intrinsic religiousness. Results from these analyses for the Jewish sample are presented in Table 6. Findings among Christian participants are shown in Table 7.

Among the Jewish women, extrinsic religiousness did not serve as a risk factor for bulimic symptoms [ $pr = -.19$ ;  $t(54) = -1.44$ ;  $p > .05$ ]. Similarly, intrinsic religiousness did not predict bulimic symptoms [ $pr = -.07$ ;  $t(54) = -.55$ ;  $p > .05$ ]. This pattern of results was identical for the Christian sample [extrinsic:  $pr = -.03$ ;  $t(135) = -.40$ ;  $p > .05$ ; intrinsic:  $pr = -.12$ ;  $t(135) = -1.37$ ;  $p > .05$ ]. In addition, among Jewish women, neither extrinsic nor intrinsic religiousness predicted drive for thinness [extrinsic:  $pr = -.15$ ;  $t(54) = -1.08$ ;  $p > .05$ ; intrinsic:  $pr = -.04$ ;  $t(54) = -.30$ ;  $p > .05$ ]. Similarly, extrinsic religiosity did not significantly predict drive for thinness among the Christian women [ $pr = .02$ ;  $t(135) = .21$ ;  $p > .05$ ]. However, intrinsic religiousness did predict drive for thinness [ $pr = -.19$ ;  $t(135) = -2.22$ ;  $p < .05$ ] among Christian women. Essentially, Christian women who were intrinsically motivated for religion endorsed lower levels of drive for thinness. Regarding regression analyses predicting body dissatisfaction at Time 2 among the Jewish sample, findings were again inconsistent with hypotheses. Extrinsic religiousness did not serve as a predictor of body dissatisfaction [ $pr = .04$ ;  $t(54) = .29$ ;  $p > .05$ ]. Similarly, there was no association between intrinsic religiousness and body dissatisfaction [ $pr = .11$ ;  $t(54) = .82$ ;  $p > .05$ ]. Among the Christian women, extrinsic religiousness did not predict body dissatisfaction

[ $pr = .02$ ;  $t(135) = .18$ ;  $p > .05$ ], and intrinsic religiousness did not serve as a buffer against body dissatisfaction [ $pr = -.13$ ;  $t(135) = -1.53$ ;  $p > .05$ ].

In addition, it was hypothesized that extrinsic religiousness at Time 1 would predict increases in bulimic symptoms from Time 1 to Time 2, and intrinsic religiousness would not. Regression analyses were conducted, where extrinsic religiousness and intrinsic religiousness were entered simultaneously as the independent variables. The dependent variable consisted of a disordered eating difference score calculated with the disordered eating endorsed at Time 1 subtracted from the disordered eating endorsed at Time 2. Findings are illustrated in Table 8 for the Jewish group. Among the Jewish group, neither extrinsic nor intrinsic motivation predicted increases in bulimic symptoms [extrinsic:  $pr = -.12$ ;  $t(55) = -.89$ ;  $p > .05$ ; intrinsic:  $pr = -.13$ ;  $t(55) = -.94$ ;  $p > .05$ ]. Results for the Christian group can be found in Table 9. Parallel to findings among the Jewish group, extrinsic religiousness did not predict increases in bulimic symptoms from Time 1 to Time 2 [ $pr = -.01$ ;  $t(136) = -.10$ ;  $p > .05$ ]. Also, there was no relation between intrinsic motivation and increases in bulimic symptoms [ $pr = -.09$ ;  $t(136) = -1.02$ ;  $p > .05$ ].

*The Interaction of Extrinsic Religiousness and Body Dissatisfaction Predicting Disordered Eating among Both Groups.* To test if the interaction of extrinsic religiousness and body dissatisfaction predicted disordered eating, separate regression analyses for each disordered eating measure at Time 1 and Time 2 were performed. In Step 1, extrinsic religiousness and body dissatisfaction were entered simultaneously as predictors. In Step 2, the interaction between extrinsic religiousness and body

dissatisfaction was entered. The dependent variable was disordered eating (at either Time 1 or Time 2). As illustrated in Table 10, among the Jewish women, body dissatisfaction at Time 1 predicted bulimic symptoms at Time 1 [ $pr = .38$ ,  $t(70) = 3.46$ ,  $p < .01$ ]. When the interaction term was entered, the overall regression equation was significant [ $R^2 = .18$ ,  $F(3, 69) = 5.03$ ,  $p < .01$ ]; however, the interaction between extrinsic religiousness and body dissatisfaction did not predict bulimia [ $pr = -.13$ ,  $t(69) = -1.05$ ,  $p > .05$ ]. In testing drive for thinness, body dissatisfaction was a predictor of a participant's desire to be slender [ $pr = .62$ ,  $t(70) = 22.62$ ,  $p < .01$ ]. After the interaction term was entered into the analysis, the overall equation was significant [ $R^2 = .41$ ,  $F(3, 69) = 15.93$ ,  $p < .01$ ]. However, in contrast to hypotheses, the interaction did not predict drive for thinness [ $pr = -.18$ ,  $t(69) = -1.55$ ,  $p > .05$ ].

As can be seen in Table 11, among the Christian group, both body dissatisfaction and extrinsic religiousness predicted bulimic symptoms [Body dissatisfaction:  $pr = .55$ ,  $t(141) = 7.86$ ,  $p < .01$ ; Extrinsic religiousness:  $pr = .19$ ,  $t(141) = 2.25$ ,  $p < .05$ ]. The overall regression equation with the interaction term was significant [ $R^2 = .35$ ,  $F(3, 140) = 24.54$ ,  $p < .01$ ]. The interaction between religious motivation and body dissatisfaction was related to bulimic symptoms [non-significant trend;  $pr = .15$ ,  $t(140) = 1.85$ ,  $p = .07$ ]. That is, the greater the extrinsic religiousness and body dissatisfaction, the more bulimic symptoms were endorsed. Regarding the findings for drive for thinness, only body dissatisfaction significantly predicted a participant's desire to be thin [ $pr = .79$ ,  $t(141) = 15.48$ ,  $p < .01$ ]. When the interaction term was entered, the overall equation was significant [ $R^2 = .64$ ,  $F(3, 140) = 81.42$ ,  $p < .01$ ]. Hypotheses were not supported, such

that the interaction term did not predict drive for thinness [ $pr = .07, t(141) = .77, p > .05$ ].

For Time 2 analyses among both groups, disordered eating at Time 1 was entered simultaneously as an independent variable with all predictors to control for scores at baseline. As presented in Table 12 among the Jewish women, only bulimic symptoms at Time 1 predicted bulimia at Time 2 [ $pr = .14, t(54) = 7.35, p < .01$ ]. When the interaction term was entered, the overall regression analysis was significant [ $R^2 = .60, F(4, 53) = 20.19, p < .01$ ]. In contrast to hypotheses, the interaction term did not predict bulimic symptoms at follow-up [ $pr = -.01, t(53) = -.08, p > .05$ ]. The same pattern of results was observed for drive for thinness. As can be seen in the same table, only drive for thinness at baseline predicted drive for thinness at follow-up [ $pr = .85, t(53) = 11.69, p < .01$ ]. Once the interaction term was input, the overall regression equation was significant [ $R^2 = .81, F(4, 53) = 55.16, p < .01$ ]. The interaction term did not predict drive for thinness at Time 2 among the Jewish sample [ $pr = -.10, t(53) = -.74, p > .05$ ].

Among the Christian women, as presented in Table 13, both body dissatisfaction and bulimia at Time 1 predicted bulimia at Time 2 [Body dissatisfaction:  $pr = .17, t(135) = 2.00, p < .05$ ; Bulimia at Time 1:  $pr = .71, t(135) = 11.68, p < .01$ ]. When the interaction term was included, the overall equation was significant [ $R^2 = .66, F(4, 134) = 64.00, p < .01$ ]. Results revealed that the interaction term was positively associated with bulimic symptoms at follow-up [non-significant trend;  $pr = .17, t(134) = 1.94, p = .06$ ]. Body dissatisfaction and drive for thinness at baseline were both significant predictors of drive for thinness at follow-up [Body dissatisfaction:  $pr = .20, t(135) =$

2.40,  $p = .02$ ; Drive for thinness at Time 1:  $pr = .68$ ,  $t(135) = 10.83$ ,  $p < .01$ ]. After the interaction term was entered, the equation was significant [ $R^2 = .78$ ,  $F(4, 134) = 117.35$ ,  $p < .01$ ]. Contrary to predictions, the interaction between extrinsic religiousness and body dissatisfaction did not predict drive for thinness at Time 2 [ $pr = .09$ ,  $t(134) = 1.07$ ,  $p > .05$ ].

*Religious Adherence Predicting Disordered Eating at Time 1 and Time 2 among Both Groups.* It was hypothesized that high levels of religious adherence would predict low levels of disordered eating at baseline and follow-up among both groups. Regression analyses were performed where religious adherence was inserted as the independent variable, and disordered eating at either Time 1 or Time 2 was the dependent variable. These findings for both groups are presented in Table 14. In the first analysis looking at bulimic symptoms among Jewish women, religiosity did not predict bulimia [ $pr = .03$ ,  $t(70) = .25$ ,  $p > .05$ ]. Similarly, religiosity level did not predict drive for thinness [ $pr = -.07$ ,  $t(70) = -.55$ ,  $p > .05$ ] or body dissatisfaction [ $pr = .07$ ,  $t(70) = .59$ ,  $p > .05$ ].

Among the Christian women, identical results were observed. That is, religious adherence did not predict disordered eating [bulimia:  $pr = -.13$ ,  $t(142) = -1.52$ ,  $p > .05$ ; body dissatisfaction:  $pr = -.05$ ,  $t(142) = -.57$ ,  $p > .05$ ; drive for thinness:  $pr = -.11$ ,  $t(142) = -1.33$ ,  $p > .05$ ].

For analyses at follow-up, an additional predictor, disordered eating at Time 1, was inserted into the equation in order to control for these baseline scores. As can be seen in Table 15, among the Jewish group, separate regression analyses revealed that

religiosity did not predict bulimic symptoms [ $pr = -.10, t(54) = -.70, p > .05$ ], drive for thinness [ $pr = -.02, t(54) = -.12, p > .05$ ], or body dissatisfaction [ $pr = .09, t(54) = .65, p > .05$ ]. Findings for Christian women, on the other hand, were largely consistent with hypotheses, as illustrated by Table 16. Religiosity did predict drive for thinness [ $pr = -.23, t(136) = -2.80, p < .02$ ], such that high levels of religiosity predicted less desire to be thin. Similarly, religiosity was a significant predictor of body dissatisfaction, where greater levels of religiosity predicted decreased levels of body dissatisfaction [ $pr = -.18, t(136) = -2.15, p < .05$ ]. It was only in predicting bulimic symptoms that religious adherence was nonsignificant [ $pr = -.11, t(136) = -1.27, p > .05$ ].

*Culture Predicting Disordered Eating among Jewish Women.* In order to investigate whether cultural/ethnic identity (i.e., the MEIM) predicted disordered eating at both baseline and follow-up, regression analyses were conducted. For all baseline analyses, the MEIM was entered as the independent variable and disordered eating (either bulimia, drive for thinness, or body dissatisfaction) was inserted as the dependent variable. As illustrated in Table 17, culture failed to predict both bulimic symptoms and body dissatisfaction [bulimic symptoms:  $pr = -.03, t(71) = -.21, p > .05$ ; body dissatisfaction:  $pr = -.06, t(71) = -.50, p > .05$ ]. Results looking at drive for thinness indicated a nonsignificant trend, where Jewish participants who reported a close connection to their Jewish culture also endorsed a decreased desire for thinness [ $pr = -.22, t(71) = -1.92, p = .06$ ].

In the first analysis of follow-up data, the MEIM and bulimia at Time 1 were entered simultaneously as the independent variables, and bulimia at Time 2 was entered

as the dependent variable. In the second analysis, the MEIM and drive for thinness at Time 1 were entered as the independent variables, while drive for thinness at Time 2 was the dependent variable. Lastly, in the third equation, the MEIM and body dissatisfaction at Time 1 were inserted simultaneously as the independent variables, and body dissatisfaction at Time 2 was input as the dependent variable.

As seen in Table 18, inconsistent with hypotheses, culture neither predicted bulimic symptoms, drive for thinness, nor body dissatisfaction at Time 2 [bulimic symptoms:  $pr = -.06$ ,  $t(55) = -.42$ ,  $p > .05$ ; drive for thinness:  $pr = .06$ ,  $t(55) = .42$ ,  $p > .05$ ; body dissatisfaction:  $pr = .06$ ,  $t(55) = .41$ ,  $p > .05$ ].

*Is Culture or Religious Adherence a Better Predictor of Disordered Eating among Jewish Women?* To investigate whether culture or religious adherence predicted disordered eating at baseline among Jewish women, a series of regression analyses were constructed. Cultural/ethnic identity (i.e., MEIM) and religious adherence (i.e., Judaism) were entered simultaneously as independent variables, with disordered eating at Time 1 inserted as the dependent variable (i.e., bulimia, drive for thinness, or body dissatisfaction). Table 19 illustrates the results from the following analyses. In the first analysis exploring bulimic symptoms, neither culture nor religious adherence predicted bulimia [MEIM:  $pr = -.07$ ,  $t(69) = -.59$ ,  $p > .05$ ; Judaism:  $pr = .06$ ,  $t(69) = .49$ ,  $p > .05$ ]. Inconsistent with predictions, both culture and religious adherence did not predict drive for thinness [MEIM:  $pr = -.17$ ,  $t(69) = -1.44$ ,  $p > .05$ ; Judaism:  $pr = .02$ ,  $t(69) = .17$ ,  $p > .05$ ] Similarly, these two variables also did not predict body dissatisfaction [MEIM:  $pr = -.07$ ,  $t(69) = -.57$ ,  $p > .05$ ; Judaism:  $pr = .09$ ,  $t(69) = .79$ ,  $p > .05$ ].

Separate regression equations were conducted to test whether culture or religious adherence would predict disordered eating at follow-up. Again, culture and religious adherence were inserted as predictors, and disordered eating at Time 2 was the dependent variable. To control for baseline scores, each disordered eating measure at Time 1 was also entered as a predictor in each equation. These results are displayed in Table 20. Neither culture nor religious adherence predicted bulimic symptoms [MEIM:  $pr = -.07$ ,  $t(53) = -.50$ ,  $p > .05$ ; Judaism:  $pr = -.05$ ,  $t(53) = -.36$ ,  $p > .05$ ], drive for thinness [MEIM:  $pr = .10$ ,  $t(53) = .72$ ,  $p > .05$ ; Judaism:  $pr = -.06$ ,  $t(53) = -.46$ ,  $p > .05$ ], or body dissatisfaction [MEIM:  $pr = .01$ ,  $t(53) = .10$ ,  $p > .05$ ; Judaism:  $pr = .07$ ,  $t(53) = .51$ ,  $p > .05$ ] at Time 2.

*Committee's Suggestions: The Role of Partner Satisfaction in Predicting Disordered Eating.* It was suggested that a partner's satisfaction with the appearance of the participant may influence her body image. Several questions were created to assess the construct of partner's perception of the participant's physical appearance. These included, "I believe my partner is satisfied with my physical appearance," "My partner has mentioned to me that I should lose weight" (reverse scored), "My partner compliments me on my physical appearance," and "I believe my partner likes the way I look." Participants answered each item on a 6 point scale ( $1 = Never$ ;  $6 = Always$ ). The items were summed up and the total score was utilized for analyses. Higher values signify greater partner satisfaction. Reliability coefficients for Jewish women was .71, while for Christian women, it was .58. Thirty-nine Jewish women and sixty-four Christian women completed the items. An ANOVA was performed to test whether there

were significant differences between the Jewish and Christian group. The total score for these items was entered as the dependent variable, and group identification (1 = Jewish; 2 = Christian) was entered as the independent variable. Age was controlled for in the equation. There were no significant differences among the two groups on their partner's satisfaction with physical appearance [ $F(1, 100) = .01; p > .05$ ]. In fact, the means indicate, that overall, both groups reported their partners as being very satisfied with the women's physical appearance [for Jewish women  $M = 21.05$  and for Christian  $M = 21.23$ ].

To test whether partner satisfaction predicted disordered eating, separate regression analyses were performed for body dissatisfaction, bulimic symptoms, and drive for thinness for each group. Partner satisfaction was inserted as the independent variable, while each disordered eating measure was entered as the dependent variable. Among the Jewish group, partner satisfaction with the participant's physical appearance predicted her body dissatisfaction score [ $R^2 = .16; F(1, 37) = 6.96; \beta = -.40; t(37) = -2.64; p < .05$ ]. That is, women who reported their partners were highly satisfied with the women's physical appearance also endorsed less body dissatisfaction. These results also replicated in the Christian women, where partner satisfaction predicted decreased levels of body dissatisfaction [ $R^2 = .10; F(1, 64) = 7.08; \beta = -.32; t(64) = -2.66; p < .05$ ]. Also, partner satisfaction predicted a decreased desire for thinness among this group [ $R^2 = .09; F(1, 64) = 6.45; \beta = -.30; t(64) = -2.54; p < .05$ ].

*Committee's Suggestions: Interaction of Religious Adherence and Locus of Control in Predicting Disordered Eating.* To assess whether religiosity level and locus

of control predicted disordered eating, regression analyses were performed. Separate regression equations were constructed, where the dependent variable was either bulimia, drive for thinness, or body dissatisfaction at Time 1. In Step 1, religious adherence (Judaism scale) and locus of control total score were entered as the independent variables. In Step 2, the interaction term between religious adherence and locus of control was entered. For analyses predicting bulimia, neither religiosity nor locus of control predicted bulimic symptoms [Judaism:  $pr = .03$ ,  $t(69) = .23$ ;  $p > .05$ ; Locus of control:  $pr = -.01$ ,  $t(69) = -.11$ ,  $p > .05$ ]. When the interaction term was entered, the overall equation was not significant [ $R^2 = .12$ ,  $F(3, 68) = .33$ ,  $p > .05$ ]. Thus, the interaction between religious adherence and locus of control did not predict bulimia at baseline [ $pr = .12$ ,  $t(68) = .95$ ,  $p > .05$ ]. Next, results revealed that both religious adherence and locus of control were not significant predictors of body dissatisfaction [Judaism:  $pr = .06$ ,  $t(69) = .52$ ;  $p > .05$ ; Locus of control:  $pr = -.05$ ,  $t(69) = -.45$ ,  $p > .05$ ]. When the interaction term was entered, the overall equation was nonsignificant [ $R^2 = .02$ ,  $F(3, 68) = .36$ ,  $p > .05$ ]. Findings predicting drive for thinness were also nonsignificant, where neither religious adherence nor locus of control were significant predictors for a participant's desire to be thin [Judaism:  $pr = -.08$ ,  $t(69) = -.67$ ;  $p > .05$ ; Locus of control:  $pr = -.11$ ,  $t(69) = -.89$ ;  $p > .05$ ]. When the interaction term was entered, the overall equation was nonsignificant, [ $R^2 = .04$ ,  $F(3, 68) = .87$ ,  $p > .05$ ; interaction term:  $pr = .15$ ,  $t(68) = 1.24$ ;  $p > .05$ ].

In addition, these analyses were repeated for disordered eating at Time 2, controlling for disordered eating at Time 1. Identical with the findings above, the

interaction between religious adherence and locus of control was not significant in predicting any of the disordered eating at follow-up. In the first analysis, bulimia at baseline predicted bulimia at follow-up [ $\beta = .76, t(53) = 8.49; p < .01$ ]. When the interaction term was entered, the equation was significant [ $R^2 = .77; F(3, 52) = 18.96; p < .01$ ]; however, the interaction term did not predict bulimic symptoms at time 2 [ $\beta = .19, t(52) = 1.4; p > .01$ ]. Secondly, body dissatisfaction at Time 1 predicted body dissatisfaction at Time 2 [ $\beta = .82, t(52) = 10.48; p < .01$ ]. When the interaction term was inserted, the overall regression equation was significant [ $R^2 = .69; F(3, 52) = 28.30; p < .01$ ]. Inconsistent with hypotheses, the interaction term did not predict body dissatisfaction at follow-up [ $\beta = .08, t(52) = .61; p > .05$ ]. Finally, the only significant predictor of drive for thinness was drive for thinness at Time 1 [ $\beta = .88, t(53) = 13.75; p < .01$ ]. After the interaction term was entered, the overall equation was significant [ $R^2 = .80; F(3, 52) = 50.45; p < .01$ ]. In contrast, the interaction term did not predict drive for thinness at Time 2 [ $\beta = .16, t(52) = 1.15; p > .05$ ].

## DISCUSSION AND CONCLUSIONS

There is a paucity of research exploring problematic eating attitudes and behaviors among Jewish women, even though both empirical and theoretical work has highlighted disordered eating and body image concerns among this group. The current work examined this phenomenon among college-aged Jewish women. Given that there have been no studies comparing Jewish women with Christian women, this was another objective of this study. It was hypothesized that both Jewish and Christian Caucasian women would have comparable levels of eating disorder symptoms. The literature has demonstrated that disordered eating among Jewish women is reaching comparable levels to that of Caucasian women. Mostly, these studies have been conducted in Israel and have not directly compared Jewish women with Christian women (e.g., Latzer, 2003; Mitrany et al., 1995; Stein et al., 1997; Stein et al., 1999). Thus far, no published work has explored comparisons in disordered eating between Christian and Jewish women. Our findings were consistent with hypotheses as well as with research conducted in Israel. Both groups showed similar scores on all disordered eating measures. It is important to note that Christian women had a higher percentage of women in the 'elevated clinical range' on drive for thinness and body dissatisfaction subscales.

Interestingly, partner's satisfaction with the participant's appearance served as a significant predictor of how that woman felt about her own appearance. Specifically, the more satisfied a partner was with the participant's physical appearance, the less body dissatisfaction the participant endorsed. This was true for both Christian and Jewish women. Additionally, partner satisfaction also predicted drive for thinness in the same

direction among Christian women. Basically, as partner satisfaction increased, less desire for thinness was reported.

Another objective was to explore the association between religion and eating pathology. Research has suggested that intrinsic religiousness may serve as a protective factor against disordered eating, whereas extrinsic religiousness may serve as a risk factor for eating disorder symptoms (Smith et al., 2004; Forthun et al., 2003).

Accordingly, it was hypothesized that extrinsic religiousness would predict eating disorder symptoms at both baseline and follow-up; however, there would be a negative association between intrinsic religiousness and eating disorder symptoms at both time points. Contrary to hypotheses, extrinsic religiousness did not predict bulimic symptoms, body dissatisfaction, or drive for thinness among both groups. Among the Christian group, intrinsic religiousness did significantly predict drive for thinness, such that women who endorsed high levels of intrinsic religiousness had less desire to be thinner. Consequently, these results suggest that intrinsic motivation does serve as a protective factor against certain disordered eating symptoms, but only for Christian women.

It was important to assess whether extrinsic religiousness would predict increases in eating disorder symptoms. Accordingly, it was hypothesized that extrinsic religiousness would predict increases in eating disorder symptoms from Time 1 to Time 2, whereas intrinsic religiousness would not predict this escalation. Results did not support hypotheses. There was no relation between extrinsic religiousness or intrinsic religiousness and increases in bulimic symptoms among both Christian and Jewish women.

Consistently in the eating disorder literature, body dissatisfaction is a significant predictor of disordered eating (e.g. Stice, 2002). For this reason, it was hypothesized that the combination of body dissatisfaction and extrinsic religiousness would predict bulimic symptoms and drive for thinness at both baseline and follow-up. Results among the Jewish group were contrary to hypotheses. The interaction neither predicted bulimic symptoms nor drive for thinness at both Time 1 and Time 2. Oddly, for follow-up data, even body dissatisfaction did not predict bulimia or drive for thinness among Jewish women. But, body dissatisfaction did serve as a predictor for baseline bulimia and drive for thinness scores. Among the Christian women, there was a nonsignificant trend where the interaction between extrinsic religiousness and body dissatisfaction was positively related to bulimic symptoms at baseline and follow-up.

It is puzzling why body dissatisfaction did not predict disordered eating at Time 2 among the Jewish group. Perhaps, body dissatisfaction functions differently in Jewish women. It may be that body dissatisfaction does not lead consistently to disordered eating, when assessed longitudinally. Literature looking at disordered eating in the U.S. and Israel has not specifically assessed whether body dissatisfaction predisposes a Jewish woman to disordered eating. This finding warrants replication in future work with large Jewish samples. If body dissatisfaction does not predict disordered eating longitudinally in future studies, it is highly likely that body dissatisfaction does function differentially among Jewish women.

Overall, these findings bring up an important concern. Though it may be possible that motivation simply does not relate to disordered eating among Jewish women, it

appears more likely that Allport and Ross's Religious Orientation Scale may not be appropriate for use with all religions. For instance, even after recoding items on the extrinsic subscale, the internal consistency was still only .65 at best. Interestingly, the Intrinsic subscale was highly consistent (Cronbach's alpha = .91). One of the reasons for these findings may stem from the actual items. That is, the Extrinsic subscale focuses more on meaning assessed to religion with no behavior-oriented items (e.g., "The purpose of prayer is to secure a happy and peaceful life"), whereas the Intrinsic subscale consists of behavior-oriented items and meaning ("I read literature about my faith," and "Religion is especially important to me because it answers many questions about the meaning of life"). As discussed more extensively below, ritual and tradition (all behavior-oriented) are important for Jewish individuals. Without behavior-oriented items, the Extrinsic scale may have missed the core of Judaism.

Another reason for nonsignificant findings concerns the extrinsic and intrinsic religiosity framework as a whole. A recent work explored this further by looking at normative motivations for Judaism (Cohen, Hall, Koenig, & Meador, 2005). They suggested that the conceptualization of intrinsic motivation as normative and healthy originates from an American Protestant perspective. The value placed on individual prayer and private motivations for religiosity may actually be misplaced. In fact, Cohen et al. cite examples of Judaism where community, social prayer, and ritual practice are regarded and commanded by the Talmud, whereas isolating oneself from the community is specifically forbidden in the Talmud. According to Allport and Ross's proposition, this would be indicative of extrinsic religiousness, which has been represented as

negative, instrumental, external and self centered (Cohen et al., 2005). Yet, these authors postulate that prayer and ritual are inherently collective in Judaism. For instance, there are a number of religious rituals that must be performed in the presence of others. Cohen et al., evidence an example of a mourner's prayer (*kaddish yatom*) that must be recited only in front of a *minyan*, a group of either ten males (for traditional Judaism) or either gender (liberal Judaism). Because social prayer and community are central in Judaism, thereby clearly positive and healthy, this framework may not be appropriate among Jewish individuals. In turn, this may have implications for the results of this study. In fact, Jewish women had significantly higher scores on the Extrinsic subscale, which supports the sense of community and social ties inherent to Judaism. This suggests that the construct validity of the Extrinsic subscale does not hold for Jewish groups. Among the Jewish women, it may simply assess variables that are essential and inherent in Judaism (i.e., community prayer, social ties), whereas in Christian women, extrinsic religiousness accurately taps into instrumental and negative motivation. Thus, comparing Christian and Jewish women on the Religious Orientation Scale may truly be like comparing apples and oranges. Upcoming work should attempt to replicate the current findings (e.g., the relation between religion and eating pathology) using a different model of religion.

Next, religious adherence and disordered eating at Time 1 and Time 2 were explored among both groups. According to the research, religious adherence is important for recovery from eating disorders (e.g, Garrett, 1998; Rorty et al., 1993). It was surmised that religious adherence would buffer against disordered eating. In

contrast, findings revealed that religious adherence did not predict disordered eating for Jewish women. Among Christian women, high levels of religiousness predicted decreased levels of drive for thinness and body dissatisfaction, both at follow-up. Consistent with the literature, these results indicate that greater levels of religious adherence may have protective benefits for these women.

As noted in the measures section, items on the Religious Adherence Scale were taken from the Intrinsic subscale of the ROS. Seven items were selected looking at such variables as church adherence and the salience of religion in the participant's life. Possibly, the Intrinsic subscale is really measuring religious adherence.

In addition, an exploratory analysis was performed to examine cultural/ethnic identity among Jewish women. As mentioned throughout, Jewish individuals are mainly viewed as a religious group; however, Jewish identity also signifies a sense of belonging to Jewish people, indicating that even for those Jewish people who reject Judaism, there is still a sense of Jewish history and cultural/ethnic identity (Beck, Goldberg, & Knefelkamp, 2003). Accordingly, it was essential to assess whether strong identification with the Jewish culture by way of feeling connected to one's culture, learning more about one's culture, or participating in cultural practices was predictive of disordered eating. Theoretical work has pointed to the contradictory messages Jewish women must contend with, like being encouraged for eating, yet applauded for emulating the thin Gentile physique (Schwartz, 1995; Siegel, 1995). Findings revealed that cultural/ethnic identity did not predict disordered eating at either baseline or follow-up. It is important

to note that there was a nonsignificant trend between cultural/ethnic identity and drive for thinness.

Unfortunately, as a whole, these findings do not illuminate the relationship between cultural/ethnic identity in Jewish women. The measure used to assess cultural/ethnic identity has been used with other Jewish samples (e.g., Bowen et al, 2003; Dubow et al., 2000) and adequate internal consistency was obtained in this study. This suggests that our findings are not due to measurement error. Thus, it is plausible that cultural/ethnic identity among Jewish women does not predict eating disorder symptoms.

On the other hand, there may be variables that serve as moderators between culture and disordered eating. More specifically, variables such as familial focus on appearance or familial enmeshment may moderate the relation between Jewish culture (i.e., the extent to which a Jewish woman is connected to her culture) and disordered eating. To reiterate, theoretical literature has hypothesized that the presence of mixed messages can predispose a Jewish woman to disordered eating. Families, who attach great importance to physical attractiveness and internalize the image of perfection as an unattainably thin beautiful young woman, may easily transmit these values on to their children. In fact, when parents create an environment where physical attractiveness and thinness are accentuated and dieting and exercise are encouraged to achieve this ideal, these parents may contribute to their children's disordered eating. So, not only are parents' views influential in shaping their daughter's values, but these views can also lead to problematic eating attitudes and behaviors. For instance, mothers of young girls

with disordered eating reported their daughters as less attractive than mothers of healthy controls (Hill & Franklin, 1998). Among college-aged women, the strongest predictor of bulimic symptoms was critical familial comments about physical appearance and the need for dieting (Crowther, Kichler, Sherwood, Kuhnert, 2002). Also, mothers of eating disordered women reported more weight and shape concerns when compared with healthy controls (Woodside et al., 2002). Negative maternal comments even predicted eating disorder outcome for daughters (Vanfurth et al., 1996). Consequently, Jewish mothers may transmit these conflicting messages onto their daughters, thereby influencing their daughter's perception of body image and values on attractiveness. Future work can test if mothers, who interpret perfection as the Gentile thin image focusing on this image, inspire in their daughters a need to attain this same ideal, leading to body dissatisfaction and other negative consequences.

Family enmeshment may serve as another potential moderator. Family is central in Jewish culture (Herz & Rosen, 1982). In fact, parents are highly involved in their children's lives. Data, however, have shown that families of women with eating disorders tend to be enmeshed (Minuchin, Rosman, & Baker, 1978), suggesting enmeshment is harmful and may be a risk factor for eating disorder symptoms. Accordingly, if family closeness among Jewish families evolves into a negative and entangled environment, this can have detrimental effects on disordered eating.

The last objective was to examine whether culture or religious adherence served as a better predictor of disordered eating among Jewish women. Because neither hypothesis was significant, it was of no surprise, that again neither cultural/ethnic

identity nor religiosity level predicted disordered eating. This highlights a global question: What does predict disordered eating among Jewish women?

The majority of the literature has neglected to explore pathways to disordered eating among Jewish women. Studies are needed to look at what makes Jewish women susceptible to disordered eating. If facets of identity (i.e. cultural/ethnic and religiosity) do not predict disordered eating, then possibly, other avenues of exploration like self-esteem or self-efficacy, specific personality traits (i.e., perfectionism, impulsivity, neuroticism), or coping style may help to illuminate susceptibility channels. Either way, future studies should assess for group identification in their samples. Given that constructs that predispose Christian women to disordered eating may not apply to Jewish women, it will be important to assess group identification to preclude inaccurate or skewed results (i.e., because of Jewish samples) in disordered eating studies.

These findings have implications for university counseling centers. Eighty percent of college students report religion as fundamental to their lives (Media House International, 2003), highlighting the importance of on-campus centers to recognize that religion is a prominent issue among students at college. Illustrated by this study, religion and disordered eating share a significant association. Among Christian women, high religious adherence and intrinsic motivation may serve as buffers against disordered eating. Forthun and colleagues (2003) recommended that disordered eating prevention and intervention work evaluate religious motivation. Richards et al. (1997) suggested that helping extrinsically oriented women progress toward an intrinsic motivation may have positive changes. Intrinsic motivation can be achieved through prayer,

involvement in the religious community, or meditation, etc. All these data together stress the need for counseling centers to approach religion and disordered eating in sensitive and effective ways. Counseling professionals can recommend seeing religious leaders on campus or in the community to discuss religion, if this appears to be significant for the student. On the other hand, some students may initially seek help from religious leaders. As a result, a collaborative relationship between religious leaders and counseling professionals is vital to helping these women. Although articles have discussed the challenges salient in these two groups working together (e.g., McMinn, Chaddock, Edwards, Lim, & Campbell, 1998), Aten (2004) articulated some important ways that collaboration can be facilitated, where counseling professionals examine their own religious values, acknowledge the importance of religious leaders on campus, and work toward establishing a liaison between campus ministries and counseling centers. Recognizing the importance of religion in students' lives may enhance therapy and lead to a broader understanding of the students' problems. Collaboration between counseling centers and religious leaders in the community and on campus can also have these beneficial results.

Notably, this study should be interpreted in light of several other limitations. For instance, there were procedural issues with the current study. First, by mailing packets to participants, this may have resulted in a less controlled environment and in turn, may have affected responses. Participants who completed the study in person were less likely to become distracted. Also, participants who completed the questionnaires over mail may have filled out items over the course of several days or weeks. Though eating

disordered symptoms are stable across time, mood is not. Thus, items that assessed mood may have been compromised for the participants who mailed in their questionnaires. It is important to note that an ANOVA analysis was conducted to test for differences in disordered eating at baseline and at follow-up between those women who participated in person versus women who participated via mail. Results revealed that there were no differences among the two groups on any disordered eating measure. Also, 80% of the Jewish women completed the second part of the study, bringing up a concern that results may have differed if data were complete for the entire sample.

In addition, the current study also attempted to tease apart cultural and religious identity among Jewish women. Invariably, this is quite an ambitious and difficult task. Jewish identity is complicated to conceptualize, because being Jewish cannot be reduced accurately to a nationality, religion, culture, or ethnicity. For a number of Jewish individuals, these facets of identity are intertwined. However, it is not uncommon for Jewish persons to identify themselves exclusively in a cultural way. In fact, as previously mentioned, Jewish identity is not necessarily equated with Judaism. For instance, only 48% of Jewish individuals hold formal membership in synagogues or temples (Cohen & Rosen, 1992). We chose to disentangle Jewish culture from Judaism (i.e., religion) by using specific questionnaires to assess the importance of religion for Jewish individuals (i.e., ROS) and the extent to which they culturally identify with being Jewish (i.e., with Phinney's MEIM). Importantly, this highlights Friedman and colleagues' (2005) assertion that an ethnic Jewish identity is not inevitably associated with religious orthodoxy. The questionnaire method utilized in this study has several

advantages. Standardized questionnaires provide a scientific method of measurement. Objective measures permit the comparison of individuals on identical items, allowing for efficient data synthesis and categorization. On the other hand, there are also disadvantages to this method. For instance, these questionnaires were not normed using Jewish samples. As discussed earlier, the ROS and the extrinsic and intrinsic framework as a whole may not be appropriate for use with this group. By using measures that are not standardized on Jewish samples, it may be that the questions fail to capture the unique dynamics of Jewish identity. Today, religious aspects of Judaism and Jewish ethnic identity are no longer inseparable (Neuberger, 1995). It is certainly possible for an individual to identify herself as culturally Jewish yet have no religious ties to Judaism. Amyot and Sigelman's (1996) work illustrated that a type of Jewish identity can endure exclusive of religiosity and social contact with other Jews. An individual may also be both culturally and religiously Jewish. These categories are undoubtedly complicated, and there may be different idiosyncratic ways in which Jewish individuals interpret their identity culturally, ethnically, and religiously.

Future research can improve upon this limitation by either using an interview method alone or in conjunction with standardized questionnaires to assess whether these measures accurately tap into Jewish identity. Friedman and colleagues (2005) used a semistructured interview method in their study on Jewish identity among a sample of observant and nonobservant Jewish individuals. Their aim was to demonstrate to the counseling field and other practitioners the complexity of Jewish identity and life in the US. These authors raised important issues like exploring the extent to which cultural

identification corresponds with religious observance of Judaism. Little information exists about the interaction of religious and cultural elements in Jewish identity and how these elements may influence experience (Friedman et al., 2005), an issue that has notable implications and has been raised throughout this paper. When asked about religious and cultural aspects in their Jewish identity, participants' responses varied where religious practice did not reflect the solidity of their Jewish identity or religion and culture were clearly indivisible. In other words, some participants clearly had a solid sense of Jewish cultural identity but did not observe rituals prescribed by Judaism, whereas other participants strongly identified themselves as culturally Jewish and viewed participation in religious practice as significant to their Jewish identity. Lazar, Kravetz, and Frederick-Kedem (2002) used similar methods to explore the motivations for Jewish religious behavior and its relation to religious identity among Jewish research participants in Israel. Utilizing a semi-structured interview and an open-ended questionnaire, they found five motivational themes: belief in a divine order, ethnic identity, social activity, family activity, and upbringing.

These studies highlight the importance of exploring Jewish identity in a phenomenological way. Standardized questionnaires may not accurately tap into the differential identities of Jewish women. Speaking with these women via semi-structured measures may illuminate what Jewish identity means to each one and then universal themes can be synthesized, and perhaps replicated in further research.

Furthermore, it will be important for future studies to include larger and heterogeneous samples of Jewish women. Because of the small sample size in this

study, these participants may have been less representative of young Jewish women as a whole. Studying diverse groups of Jewish women makes it possible to conduct separate analyses. For instance, the inclusion of a variety of sects may help to clarify the association between religion and disordered eating. Perhaps, this may be valuable in painting a picture of how different denominations view body image and problematic eating and whether specific vulnerabilities exist. One poignant example is several mainstream articles that discuss the increased presence of eating disorders among the Orthodox community (Baruchin, 1998a; Baruchin, 1998b). Also, it would be interesting to examine whether internalization of the thin ideal works similarly in Jewish women as it does in other minority women, as was speculated earlier in this project.

Finally, the current work contributes in a variety of ways to the literature. Largely, it has explored uncharted territory, by using a minority sample that has been mostly ignored in the eating disorder literature. Also, this study investigated differences in disordered eating among Christian and Jewish women, another exploration neglected in research. By attempting to disentangle cultural/ethnic and religious identity among Jewish women, this project has illustrated the value of looking at all aspects of Jewish identity. By using a longitudinal design, we had the advantage of being able to accurately predict disordered eating symptoms. In addition, this study explored the relation between religious motivation and disordered eating as well as religious adherence and eating pathology among Jewish women, all hypotheses that have yet to be empirically investigated among this group. In essence, this project has attempted to ascertain the vulnerability mechanisms by which Jewish women develop disordered

eating. Although this study failed to find a relation between religiousness (both motivation and religious adherence) and cultural/ethnic identity with eating disorder symptoms, it does highlight the need to explore other pathways among Jewish women. Clarifying what does predict disordered eating among Jewish women is certainly an important avenue of research given the comparable levels of disordered eating among Caucasian Jewish and Christian women, and the rise of disordered eating in Israel. In conclusion, considering these findings are preliminary, it will be important to replicate results in future work.

## REFERENCES

- Allport, G.W, & Ross, J.M. (1967). Personal religious orientation and prejudice. *Journal of Personality and Social Psychology*, 5, 432-443.
- Altabe, M. (1998). Ethnicity and body image: Quantitative and qualitative analysis. *International Journal of Eating Disorders*, 23, 153-160.
- Amyot, P., & Sigelman, L. (1996). Jews without Judaism. *Social Science Quarterly*, 77, 177-189.
- Aten, J.D. (2004). Improving understanding and collaboration between campus ministers and college counseling center personnel. *Journal of College Counseling*, 7, 90-96.
- Baruchin, A. (1998a, Fall). What can Orthodox girls control? *Lilith*, 8.
- Baruchin, A. (1998b, Spring). Why Jewish girls starve themselves? *Lilith*, 5.
- Beck, E.T, Goldberg, J.L., & Knefelkamp, L.L. (2003). Integrating Jewish issues into the teaching of psychology. In P. Bronstein & K. Quina (Eds.), *Teaching a psychology of people: Resources for gender and sociocultural awareness* (2<sup>nd</sup> ed; pp. 237-252). Washington, DC: American Psychological Association.
- Bell, M. (1985). *Holy anorexia*. Chicago: University of Chicago Press.
- Bergin, A.E., Masters, K.S., Richards, P.S. (1987). Religiousness and mental health reconsidered: A study of an intrinsically religious sample. *Journal of Counseling Psychology*, 34, 197-204.
- Bowen, D.J., Singal, R., Eng, E., Crystal, S., & Burke, W. (2003). Jewish identity and intentions to obtain breast cancer screening. *Cultural Diversity and Ethnic*

- Minority Psychology, 9, 79-87.
- Bynum, C.W. (1987). *Holy feast, holy fast*. Berkeley: University of California Press.
- Cash, T.F., & Henry, P.E. (1995). Women's body images: The results of a national survey in the USA. *Sex Roles*, 33, 19-28.
- Cohen, A.B., Hall, D.E., Koenig, H.G., & Meador, K.G. (2005). Social versus individual motivation: Implications for normative definitions of religious orientation. *Personality and Social Psychology Review*, 9, 48-61.
- Cohen, R., & Rosen, S. (1992). *Organizational affiliations of American Jews: A research report*. New York: American Jewish Committee.
- Crago, M., & Shisslak, C.M. (2003). Ethnic differences in dieting, binge eating, and purging behaviors among American females: A review. *Eating Disorders: The Journal of Treatment & Prevention*, 11, 289-304.
- Crowther, J.H., Kichler, J.C., Sherwood, N., & Kuhnert, M.E. (2002). The role of family factors in bulimia nervosa. *Eating Disorders*, 10, 141-151.
- Dancyger, I., Fornari, V., Fisher, M., Schneider, M., Frank, S., Wisotsky, W., Sison, C., & Charitou, M. (2002). Cultural factors in orthodox Jewish adolescents treated in a day program for eating disorders. *International Journal of Adolescent*
- Pargament, K.I., Boxer, P., & Tarakeshwar, N. (2000). Initial investigation of Jewish early adolescents' ethnic identity, stress, and coping. *Journal of Early Adolescence*, 20, 418-441.
- Flynn, K., & Fitzgibbon, M. (1996). Body image ideals of low-income African American mothers and their preadolescent daughters. *Journal of Youth and*

- Adolescence, 25, 615-630.
- Forthun, L.F., Pidcock, B.W., & Fischer, J.L. (2003). Religiousness and disordered eating: Does religiousness modify family risk? *Eating Behaviors*, 4, 7-26.
- Friedman, M.L., Friedlander, M.L., & Blustein, D.L. (2005). Toward an understanding of Jewish identity: A phenomenological study. *Journal of Counseling Psychology*, 52, 77-83.
- Garner, D.M. (2004). *The Eating Disorder Inventory-3*. USA: Psychological Assessment Resources.
- Garner, D. M., Olmstead, M. P., & Polivy, J. (1983). Development and validation of a multidimensional eating disorder inventory for anorexia nervosa and bulimia. *International Journal of Eating Disorders*, 2, 15-34.
- Garrett, C. (1998). *Beyond anorexia: Narrative, spirituality and recovery*. New York: Cambridge University Press.
- Gluck, M. E., & Geliebter, A. (2002). Body image and eating behaviors in Orthodox and secular Jewish women. *The Journal of Gender-Specific Medicine*, 5, 19-24.
- Goldberg, J.L., & O'Brien, K. M. (2000). Jewish women: Attachment, Separation, Jewish identity, and psychological well-being. Poster presentation at the meeting of the American Psychological Association, Washington DC.
- Goldberg, J. L., & O'Brien, K. M. (2005). Jewish women's psychological well-being: The role of attachment, separation, and Jewish identity. *Psychology of Women Quarterly*, 29, 197-206.
- Graham, M.A., Spencer, W., & Andersen, A.E. (1991). Altered religious practice in

- patients with eating disorders. *International Journal of Eating Disorders*, 10, 239-243.
- Hall, L., & Cohn, L. (1992). *Bulimia: A guide to recovery*. Carlsbad, CA: Gurze.
- Herz, F.M., & Rosen, E.J. (1982). Jewish families. In M. McGoldrick, J.F. Pearce, & J. Giordano (Eds.), *Ethnicity and family therapy* (pp. 364-391). New York: The Guilford Press.
- Hill, A. J., & Franklin, J. A. (1998). Mothers, daughters, and dieting: Investigating the transmission of weight control. *British Journal of Clinical Psychology*, 37, 3-13.
- Joiner, G.W., & Kashubeck, S. (1996). Acculturation, body image, self-esteem, and eating disorder symptomatology in adolescent Mexican-American women. *Psychology of Women Quarterly*, 20, 419-435.
- Joughin, N., Crisp, A.H., Halek, C., & Humphrey, H. (1992). Religious belief and anorexia nervosa. *International Journal of Eating Disorders*, 12, 397-406.
- Kemper, K.S., Sargent, R.G., Drane, J.W., Valois, R.F., & Hussey, J.R. (1994). Black and white females' perceptions of ideal body size and social norms. *Obesity Research*, 2, 117-126.
- Langman, P.F. (1999). *Jewish issues in multiculturalism: A handbook for educators and clinicians*. Northvale, NJ: Jason Aronson Inc.
- Latzer, Y. (2003). Disordered eating behaviors and attitudes in diverse groups in Israel. In G. M. Ruggiero (Ed), *Eating disorders in the Mediterranean area: An exploration in transcultural psychology* (pp. 159-181). Hauppauge NY: Nova

Science Publishers.

- Latzer, Y., & Shatz, S. (2001). Disturbed attitudes to weight control in female kibbutz adolescents: A preliminary study with a view to prevention. *Eating Disorders*, 9, 225-237.
- Lazar, A., Kravetz, S., & Frederich-Kedem, P. (2002). The multidimensionality of motivation for Jewish religious behavior: Content, structure, and relationship to religious identity. *Journal for the Scientific Study of Religion*, 41, 509-519.
- Mastria, M.R. (2002). Ethnicity and eating disorders. *Psychoanalysis & Psychotherapy*, 19, 59-77.
- McMinn, M.R., Chaddock, T.P., Edwards, L.C., Lim, B.R., & Campbell, C.D. (1998). Psychologists collaborating with clergy. *Professional Psychology: Research and Practice*, 29, 564-570.
- Media House International. (2003). Gallup poll of American students. Retrieved August 27, 2006, from [http://www.forerunner.com/forerunner/X0362\\_Gallup\\_Poll\\_American.html](http://www.forerunner.com/forerunner/X0362_Gallup_Poll_American.html).
- Minuchin, S., Rosman, B. L., & Baker, L. (1978). *Psychosomatic families: Anorexia nervosa in context*. Cambridge, MA: Harvard University Press.
- Mitchell, J.E., Erlander, M., Pyle, R.L., & Fletcher, L.A. (1990). Eating disorders, religious practices and pastoral counseling. *International Journal of Eating Disorders*, 9, 589-593.
- Mitrany, E, Lubin, F., Chetrit, A., & Modan, B. (1995). Eating disorders among Jewish female adolescents in Israel: A 5-year study. *Journal of Adolescent Health*, 16,

454-457.

- Morgan, J.F., Marsden, P., & Lacey, J.H. (2000). "Spiritual starvation?": A case series concerning Christianity and eating disorders. *International Journal of Eating Disorders*, 28, 476-480.
- Neff, L.J., Sargent, R.G., McKeown, R.E., Jackson, K.L., & Valois, R.F. (1997). Black-white differences in body size perceptions and weight management practices among adolescent females. *Journal of Adolescent Health*, 20, 459-465.
- Neuberger, J. (1995). *On being Jewish*. London: William Heinemann.
- Neumark-Sztainer, D., Palti, H., & Butler, R. (1995). Weight concerns and dieting behaviors among high school girls in Israel. *Journal of Adolescent Health*, 16, 53-59.
- O'Neill, S. K. (2003). African American women and eating disturbances: A meta-analysis. *Journal of Black Psychology*, 29, 3-16.
- Perez, M., Voelz, Z.R., Pettit, J.W., & Joiner, T.E., Jr. (2002). The role of acculturative stress and body dissatisfaction in predicting bulimic symptomatology across ethnic groups. *International Journal of Eating Disorders*, 31, 442-454.
- Phinney, J.S. (1992). The multigroup ethnic identity measure: A new scale for use with diverse groups. *Journal of Adolescent Research*, 7, 156-176.
- Rampling, D. (1985). Ascetic ideals and anorexia nervosa. *Journal of Psychiatric Research*, 19, 89-94.
- Richards, P.S., Hardman, R.K., Frost, H.A., Berrett, M.E., Clark-Sly, J.B., & Anderson, D.K. (1997). Spiritual issues and interventions in the treatment of patients with

- eating disorders. *Eating Disorders: The Journal of Treatment and Prevention*, 5, 261-279.
- Rorty, M., Yager, J., & Rossotto, E. (1993). Why and how do women recover from bulimia nervosa: The subjective appraisals of forty women recovered for a year or more. *International Journal of Eating Disorders*, 14, 249-260.
- Rosen, E. J., & Weltman, S. F. (1996). Jewish families: An overview. In M. McGoldrick, J. Giordano, & J.K. Pearce (Eds.). *Ethnicity and family therapy*. New York: Guilford Press.
- Rosenberg, M. (1970). *Conceiving the Self*. New York: Basic Books.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 80. (Whole No. 609).
- Sasson, A., Lewin, C., & Roth, D. (1995). Dieting behavior and eating attitudes in Israeli children. *International Journal of Eating Disorders*, 17, 67-72.
- Schreiber, G. B., Robins, M., Striegel-Moore, R., Obarzanek, E., Morrison, J. A., & Wright, D. J. (1996). Weight modification efforts reported by black and white preadolescent girls: National Heart, Lung, and Blood Institute growth and health study. *Pediatrics*, 98, 63-69.
- Schwartz, M. (1995). Truth beneath the symptoms: Issues of Jewish women in therapy. In K. Weiner, & A. Moon (Eds.), *Jewish women speak out: Expanding the boundaries of psychology* (pp. 133-143). Seattle, WA: Canopy Press.
- Seid, R.P. (1994). Too "close to the bone": The historical context for women's obsession with slenderness. In P. Fallon, M. Katzman, & S. Wooley (Eds.),

- Feminist perspectives on eating disorders (pp.3-16). New York: Guilford Press.
- Siegel, R.J. (1995). Jewish women's bodies: Sexuality, body image, and self-esteem. In K. Weiner, & A. Moon (Eds.), *Jewish women speak out: Expanding the boundaries of psychology* (pp. 41-54). Seattle, WA: Canopy Press.
- Smith, D. E., Marcus, M. D., Lewis, C. E., Fitzgibbon, M., & Schreiner, P. (1998). Prevalence of binge eating disorder, obesity, and depression in a biracial cohort of young adults. *Annals of Behavioral Medicine*, 20, 227-232.
- Smith, F.T., Hardman, R.K., Richards, P.S., Fischer, L. (2003). Intrinsic religiousness and spiritual well-being as predictors of treatment outcome among women with eating disorders. *Eating Disorders*, 11, 15-26.
- Smith, K. (1999, Fall). Living full Jewish lives in a barbie doll world. *Lilith*, 24.
- Smith, M.H., Richards, P.S., & Maglio, C.J. (2004). Examining the relationship between religious orientation and eating disturbances. *Eating Behaviors*, 5, 2004.
- Sorenson, T. I. A., Stunkard, A. J., Teasdale, T. W., & Higgins, M. (1983). The accuracy of reports of weight: Children's recall of their parent's weight 15 years earlier. *International Journal of Obesity*, 6, 74-84.
- Stein, D., Luria, O., Tarrasch, N., Yoeli, N., Glick, D., Elizur, A., & Weizman, A. (1999). Partial eating disorders in newly drafted female recruits in Israel. *Archives of Women's Mental Health*, 2, 107-115.
- Stein, D., Meged, S., Bar-hanin, T., Blank, S., Elizur, A., & Weizman, A. (1997). Partial eating disorders in a community sample of female adolescents. *Journal of the*

- American Academy of Child and Adolescent Psychiatry, 36, 1116-1123.
- Stice, E. (2002). Risk and maintenance factors for eating pathology: A meta-analytic review. *Psychological Bulletin*, 128, 825-848.
- Stunkard, A.J., Sorenson, T., & Schlusinger, F. (1983). Use of the Danish adoption register for the study of obesity and thinness. In S. Kety, L.P. Rowland, R.L. Sidman & S.W. Matthysse (Eds.), *The genetics of neurological and psychiatric disorders*. New York: Raven Press.
- Sykes, D.K., Gross, M., Subishin, S. (1986). Preliminary findings of demographic variables in patients suffering from anorexia nervosa and bulimia. *International Journal of Psychosomatics*, 33, 27-30.
- Sykes, D.K., Leuser, B., Melia, M. & Gross, M. (1988). A demographic analysis of 252 patients with anorexia nervosa and bulimia. *International Journal of Psychosomatics*, 35, 5-9.
- Vanfurth, E.F., Vanstrien, D.C., Martina, L.M.L., Vanson, M.J.M., Hendrickx, J.J. P., & Engeland, H. (1996). Expressed emotion and the prediction of outcome in adolescent eating disorders. *International Journal of Eating Disorders*, 20, 19-31.
- Vohs, K.D., Voelz, Z.R., Pettit, J.W., Bardone, A.M., Katz, J., Abramson, L.Y., Heatherton, T.F., & Joiner, T.E., Jr. (2001). Perfectionism, body dissatisfaction, and self-esteem: An interactive model of bulimic symptom development. *Journal of Social and Clinical Psychology*, 20, 476-497.
- Winkelby, M.A., Gardner, C.D., & Taylor, B.C. (1996). The influence of gender and

socioeconomic factors of Hispanic/white differences in body mass index.

Preventative Medicine, 25, 203-211.

Woodside, D.B., Bulik, C.M., Halmi, K.A., Fichter, M.M., Kaplan, A., Berrettini, W.H.,

Strober, M., Treasure, J., Lilenfeld, L., Klump, K., & Kaye, W.H. (2002).

Personality, perfectionism, and attitudes toward eating in parents of individuals

with eating disorders. International Journal of Eating Disorders, 31, 290-299.

## APPENDIX A

Table 1. Means and standard deviations for all measures

<i>Measure</i>	<i>N</i>	<i>M</i>	<i>SD</i>
<i>Jewish women</i>			
T1 Bulimia	73	5.16	4.93
T2 Bulimia	58	4.64	5.58
T1Body Dissat	73	17.27	8.95
T2 Body Dissat	58	16.93	18.22
T1 Drive	73	10.82	7.47
T2 Drive	58	10.38	7.75
MEIM	73	49.18	7.13
ROS-Extrinsic	73	53.55	11.28
ROS-Intrinsic	73	45.71	16.49
Judaism	72	23.31	9.02
BI Self-Ethnic	72	.94	1.09
BI Ethnic-US	72	.09	.60
<i>Christian women</i>			
T1 Bulimia	144	4.59	4.80
T2 Bulimia	140	3.99	5.70
T1Body Dissat	144	17.32	10.75
T2 Body Dissat	140	16.60	10.69
T1 Drive	144	4.59	4.80
T2 Drive	140	9.76	7.83
ROS-Extrinsic	145	43.39	11.94
ROS-Intrinsic	145	57.58	15.10
Religiosity	145	45.48	12.55
BI Self-Ethnic	141	.93	.98
BI Ethnic-US	144	-.01	.48

Note: EDI 3= Eating Disorder Inventory 3; T1 Bulimia = Bulimia subscale from EDI-3 at Time 1; Time 2 Bulimia = Bulimia subscale from EDI-3 at Time 2; T1 Body Dissat. = Body Dissatisfaction subscale from EDI-3 at Time 1; T2 Body Dissat = Body Dissatisfaction subscale from EDI-3 at Time 2; T1 Drive = Drive for Thinness subscale from EDI-3 at Time 1; T2 Drive = Drive for Thinness subscale from EDI-3 at Time 2; MEIM = Multigroup Ethnic Identity Measure; ROS-Extrinsic = Extrinsic subscale from Religious Orientation Scale; ROS-Intrinsic = Intrinsic subscale from Religious Orientation Scale; Religiosity = items compiled from ROS; BI Self-Ethnic = difference score between self-perceived body image and ideal body image of ethnic group; BI Ethnic-US = difference score between ideal body image ethnic group and U.S. ideal body image.

Table 2. Intercorrelations for all variables among the Jewish group

<i>Variable</i>	<i>1.</i>	<i>2.</i>	<i>3.</i>	<i>4.</i>	<i>5.</i>	<i>6.</i>	<i>7.</i>	<i>8.</i>	<i>9.</i>	<i>10.</i>	<i>11.</i>	<i>12.</i>
<i>1. T1 Bulimia</i>	<i>1.00</i>											
<i>2. T2 Bulimia.</i>	<i>.75**</i>	<i>1.00</i>										
<i>3. T1 Body Dissat</i>	<i>.39**</i>	<i>.35**</i>	<i>1.00</i>									
<i>4. T2 Body Dissat</i>	<i>.32*</i>	<i>.37**</i>	<i>.83**</i>	<i>1.00</i>								
<i>5. T1 Drive</i>	<i>.61**</i>	<i>.65**</i>	<i>.62**</i>	<i>.56**</i>	<i>1.00</i>							
<i>6. T2 Drive</i>	<i>.51**</i>	<i>.71**</i>	<i>.54**</i>	<i>.59**</i>	<i>.89**</i>	<i>1.00</i>						
<i>7. MEIM</i>	<i>-.12</i>	<i>-.12</i>	<i>-.06</i>	<i>.01</i>	<i>-.22</i>	<i>-.12</i>	<i>1.00</i>					
<i>8. ROS-Extrinsic</i>	<i>-.19</i>	<i>-.23</i>	<i>-.13</i>	<i>-.13</i>	<i>-.11</i>	<i>-.20</i>	<i>-.05</i>	<i>1.00</i>				
<i>9. ROS-Intrinsic</i>	<i>.08</i>	<i>.12</i>	<i>.08</i>	<i>.16</i>	<i>-.08</i>	<i>.07</i>	<i>.36**</i>	<i>-.61**</i>	<i>1.00</i>			
<i>10. BI Self-Ethnic</i>	<i>.33**</i>	<i>.46**</i>	<i>.61**</i>	<i>.52**</i>	<i>.51**</i>	<i>.53**</i>	<i>-.02</i>	<i>-.06</i>	<i>.06</i>	<i>1.00</i>		
<i>11. BI Ethnic-US</i>	<i>-.05</i>	<i>-.20</i>	<i>-.02</i>	<i>-.00</i>	<i>-.21</i>	<i>-.21</i>	<i>.14</i>	<i>.03</i>	<i>-.03</i>	<i>-.39</i>	<i>1.00</i>	
<i>12. Judaism</i>	<i>-.02</i>	<i>-.05</i>	<i>.07</i>	<i>.12</i>	<i>-.07</i>	<i>-.02</i>	<i>.45**</i>	<i>-.31**</i>	<i>.61**</i>	<i>-.04</i>	<i>.11</i>	<i>1.00</i>

Note: EDI-3 = Eating Disorder Inventory-3; T1 Bulimia = Bulimia subscale from EDI-3 at Time 1; Time 2 Bulimia = Bulimia subscale from EDI-3 at Time 2; T1 Body Dissat. = Body Dissatisfaction subscale from EDI- 3 at Time 1; T2 Body Dissat = Body Dissatisfaction subscale from the EDI- 3 at Time 2; T1 Drive = Drive for Thinness subscale from EDI-3 at Time 1; T2 Drive = Drive for Thinness subscale from EDI -3 at Time 2; MEIM = Multigroup Ethnic Identity Measure; ROS-Extrinsic = Extrinsic subscale from Religious Orientation Scale; ROS-Intrinsic = Intrinsic subscale from Religious Orientation Scale; BI Self-Ethnic = difference score between self-perceived body image and ideal body image of participant’s ethnic group; BI Ethnic-US = difference score between ideal body image of ethnic group and U.S. ideal body image

\*  $p < .05$ ; \*\*  $p < .01$

Table 3. Intercorrelations for all variables among the Christian group

<i>Variable</i>	<i>1.</i>	<i>2.</i>	<i>3.</i>	<i>4.</i>	<i>5.</i>	<i>6.</i>	<i>7.</i>	<i>8.</i>	<i>9.</i>	<i>10.</i>	<i>11.</i>
<i>1. T1 Bulimia</i>	<i>1.00</i>										
<i>2. T2 Bulimia.</i>	<i>.84**</i>	<i>1.00</i>									
<i>3. T1 Body Dissat</i>	<i>.58**</i>	<i>.51**</i>	<i>1.00</i>								
<i>4. T2 Body Dissat</i>	<i>.56**</i>	<i>.36**</i>	<i>.90**</i>	<i>1.00</i>							
<i>5. T1 Drive</i>	<i>.66**</i>	<i>.56**</i>	<i>.79**</i>	<i>.75**</i>	<i>1.00</i>						
<i>6. T2 Drive</i>	<i>.68**</i>	<i>.68**</i>	<i>.76**</i>	<i>.84**</i>	<i>.87**</i>	<i>1.00</i>					
<i>7. ROS-Extrinsic</i>	<i>.23**</i>	<i>.22**</i>	<i>.06</i>	<i>.10</i>	<i>.11</i>	<i>.15</i>	<i>1.00</i>				
<i>8. ROS-Intrinsic</i>	<i>-.18*</i>	<i>-.20*</i>	<i>-.05</i>	<i>-.12</i>	<i>-.11</i>	<i>-.21*</i>	<i>-.41</i>	<i>1.00</i>			
<i>9. Religiosity</i>	<i>-.18*</i>	<i>-.20*</i>	<i>-.05</i>	<i>-.14</i>	<i>-.11</i>	<i>-.22**</i>	<i>-.40**</i>	<i>.98**</i>	<i>1.00</i>		
<i>10. BI Self-Ethnic</i>	<i>.39**</i>	<i>.36**</i>	<i>.65**</i>	<i>.59**</i>	<i>.52**</i>	<i>.53**</i>	<i>.11</i>	<i>-.09</i>	<i>-.10</i>	<i>1.00</i>	
<i>11. BI Ethnic-US</i>	<i>.02</i>	<i>.06</i>	<i>.11</i>	<i>.10</i>	<i>.10</i>	<i>.07</i>	<i>-.10</i>	<i>.05</i>	<i>.04</i>	<i>-.15</i>	<i>1.00</i>

Note: EDI-3 = Eating Disorder Inventory-3; T1 Bulimia = Bulimia subscale from EDI-3 at Time 1; Time 2 Bulimia = Bulimia subscale from EDI-3 at Time 2; T1 Body Dissat. = Body Dissatisfaction subscale from EDI- 3 at Time 1; T2 Body Dissat = Body Dissatisfaction subscale from the EDI- 3 at Time 2; T1 Drive = Drive for Thinness subscale from EDI-3 at Time 1; T2 Drive = Drive for Thinness subscale from EDI -3 at Time 2; ROS-Extrinsic = Extrinsic subscale from Religious Orientation Scale; ROS-Intrinsic = Intrinsic subscale from Religious Orientation Scale; Religiosity = Religious Adherence Scale; BI Self-Ethnic = difference score between self-perceived body image and ideal body image of participant’s ethnic group; BI Ethnic-US = difference score between ideal body image of ethnic group and U.S. ideal body image;

\*  $p < .05$ ; \*\*  $p < .01$

Table 4. Extrinsic and intrinsic religiousness predicting disordered eating at Time 1 among Jewish women

Predictors in set	<i>F</i> for set	<i>t</i> for within set predictors	df	$\beta$	Partial Correlation ( <i>pr</i> )	Model $R^2$
<i>DV = Bulimia</i>						
Main Effects	.88		2, 70			.03
Extrinsic		-1.16	70	-.17	-.14	
Intrinsic		-.19	70	-.03	.02	
<i>DV = Drive</i>						
Main Effects	1.76		2, 70			.05
Extrinsic		-1.74	70	-.26	-.20	
Intrinsic		-1.62	70	-.24	-.19	
<i>DV = Body Dissat</i>						
Main Effects	.62		2, 70			.02
Extrinsic		-.88	70	-.13	-.11	
Intrinsic		.00	70	.00	.00	

Note: DV= Dependent variable; Bulimia = Bulimia subscale from the Eating Disorder Inventory-3; Extrinsic = Extrinsic subscale from the Religious Orientation Scale; Intrinsic = Intrinsic subscale from the Religious Orientation Scale; Drive = Drive for Thinness subscale from the Eating Disorder Inventory-3; Body Dissat = Body Dissatisfaction subscale from the Eating Disorder Inventory-3

\*  $p < .05$ ; \*\*  $p < .01$

Table 5. Extrinsic and intrinsic religiousness predicting disordered eating at Time 1 among Christian women

Predictors in set	F for set	t for within set predictors	df	$\beta$	Partial Correlation ( <i>pr</i> )	Model R <sup>2</sup>
<i>DV = Bulimia</i>						
Main Effects	2.78		2, 141			.04
Extrinsic		1.79	141	.16	.15	
Intrinsic		-.68	141	-.06	-.06	
<i>DV = Drive</i>						
Main Effects	1.22		2, 141			.02
Extrinsic		.87	141	.08	.07	
Intrinsic		-.83	141	-.08	-.07	
<i>DV = Body Dissat</i>						
Main Effects	.28		2, 141			.00
Extrinsic		.49	141	.05	.04	
Intrinsic		-.31	141	-.03	-.03	

Note: DV= Dependent variable; Bulimia = Bulimia subscale from the Eating Disorder Inventory-3; Extrinsic = Extrinsic subscale from the Religious Orientation Scale; Intrinsic = Intrinsic subscale from the Religious Orientation Scale; Drive = Drive for Thinness subscale from the Eating Disorder Inventory-3; Body Dissat = Body Dissatisfaction subscale from the Eating Disorder Inventory-3

\*  $p < .05$ ; \*\*  $p < .01$

Table 6. Extrinsic and intrinsic religiousness predicting disordered eating at Time 2 among Jewish women

Predictors in set	F for set	t for within set predictors	df	$\beta$	Partial Correlation ( <i>pr</i> )	Model R <sup>2</sup>
<i>DV = T2 Bulimia</i>						
Main Effects	26.73**		3, 54			.60
Extrinsic		-1.44	54	-.16	-.19	
Intrinsic		-.55	54	-.06	-.07	
T1 Bulimia		8.30**	54	.74	.75	
<i>DV = T2 Drive</i>						
Main Effects	74.13**		3, 54			.81
Extrinsic		-1.08	54	-.08	-.15	
Intrinsic		-.30	54	-.02	-.04	
T1 Drive		14.49**	54	.88	.89	
<i>DV = T2 Body Dissat</i>						
Main Effects	39.25**		3, 54			.69
Extrinsic		.29	54	.03	.04	
Intrinsic		.82	54	.08	.11	
T1 Body Dissat		10.64**	54	.82	.82	

Note: DV= Dependent variable; EDI = Eating Disorder Inventory-3; T2 Bulimia = T2 Bulimia subscale from the EDI-3; Extrinsic = Extrinsic subscale from the Religious Orientation Scale; Intrinsic = Intrinsic subscale from the Religious Orientation Scale; T1 Bulimia = T1 Bulimia subscale; T2 Drive = T2 Drive for Thinness subscale from the EDI-3; T1 Drive = T1 Drive for Thinness subscale; T2 Body Dissat = T2 Body Dissatisfaction subscale from the EDI-3; T1 Body Dissat = T1 Body Dissatisfaction subscale

\*  $p < .05$ ; \*\*  $p < .01$

Table 7. Extrinsic and intrinsic religiousness predicting disordered eating at Time 2 among Christian women

Predictors in set	F for set	t for within set predictors	df	$\beta$	Partial Correlation ( <i>pr</i> )	Model R <sup>2</sup>
<i>DV = T2 Bulimia</i>						
Main Effects	80.44**		3, 135			.64
Extrinsic		-.40	135	-.02	-.03	
Intrinsic		-1.37	135	-.08	-.12	
T1 Bulimia		15.05**	135	.79	.79	
<i>DV = T2 Drive</i>						
Main Effects	154.75**		3, 135			.78
Extrinsic		.21	135	.01	.02	
Intrinsic		-2.22*	135	-.10	-.19	
T1 Drive		20.83**	135	.86	.87	
<i>DV = T2 Body Dissat</i>						
Main Effects	205.99**		3, 135			.82
Extrinsic		.18	135	.01	.02	
Intrinsic		-1.53	135	-.06	-.13	
T1 Body Dissat		24.61**	135	.90	.90	

Note: DV= Dependent variable; EDI = Eating Disorder Inventory-3; T2 Bulimia = T2 Bulimia subscale from the EDI-3; Extrinsic = Extrinsic subscale from the Religious Orientation Scale; Intrinsic = Intrinsic subscale from the Religious Orientation Scale; T1 Bulimia = T1 Bulimia subscale; T2 Drive = T2 Drive for Thinness subscale from the EDI-3; T1 Drive = T1 Drive for Thinness subscale; T2 Body Dissat = T2 Body Dissatisfaction subscale from the EDI-3; T1 Body Dissat = T1 Body Dissatisfaction subscale

\*  $p < .05$ ; \*\*  $p < .01$

Table 8. Extrinsic religiousness predicting increases in bulimic symptoms from Time 1 to Time 2 among Jewish women

Predictors in set	<i>F</i> for set	<i>t</i> for within set predictors	df	$\beta$	Partial Correlation ( <i>pr</i> )	Model $R^2$
Main Effects	.52		2, 55			.02
Extrinsic		-.89	55	-.15	-.12	
Intrinsic		-.94	55	-.16	-.13	

Note: Extrinsic = Extrinsic subscale from the Religious Orientation Scale; Intrinsic = Intrinsic subscale from the Religious Orientation Scale; \*  $p < .05$ ;  
\*\*  $p < .01$

Table 9. Extrinsic religiousness predicting increases in bulimic symptoms from Time 1 to Time 2 among Christian women

Predictors in set	<i>F</i> for set	<i>t</i> for within set predictors	df	$\beta$	Partial Correlation ( <i>pr</i> )	Model $R^2$
Main Effects	.58		2, 136			.01
Extrinsic		-.10	136	-.01	-.01	
Intrinsic		-1.02	136	-.10	-.09	

Note: Extrinsic = Extrinsic subscale from the Religious Orientation Scale; Intrinsic = Intrinsic subscale from the Religious Orientation Scale

\*  $p < .05$ ; \*\*  $p < .01$

Table 10. Interaction between extrinsic religiousness and body dissatisfaction predicting disordered eating at Time 1 among Jewish women

Order of Entry	Predictors in set	F for set	t for within set predictors	df	$\beta$	Partial Correlation ( <i>pr</i> )	Model R <sup>2</sup>
<i>DV = Bulimia</i>							
1.	Main Effects	6.98**		2, 70			.17
	Extrinsic		-.95	70	-.16	-.11	
	Body dissat		3.46*	70	.39	.38	
2.	Interaction	5.03**		3, 69			.18
	Interaction		-1.05	69	-.59	-.13	
<i>DV = Drive</i>							
1.	Main Effects	22.26**		2, 70			.39
	Extrinsic		-.31	70	-.03	-.04	
	Body dissat		6.57**	70	.62	.62	
2.	Interaction	15.93**		3, 69			.41
	Interaction		-1.55	69	-.74	-.18	

Note: DV = Dependent variable; EDI-3 = Eating Disorder Inventory-3; Bulimia = EDI-3 Bulimia subscale; Extrinsic = Extrinsic subscale from ROS; Body dissat = EDI-3 Body dissatisfaction subscale; Interaction = Interaction between extrinsic religiousness and body dissatisfaction

\*  $p < .05$ ; \*\*  $p < .01$

Table 11. Interaction between extrinsic religiousness and body dissatisfaction predicting disordered eating at Time 1 among Christian women

Order of Entry	Predictors in set	F for set	t for within set predictors	df	$\beta$	Partial Correlation ( <i>pr</i> )	Model R <sup>2</sup>
<i>DV = Bulimia</i>							
1.	Main Effects	34.51**		2, 141			.33
	Extrinsic		2.25*	141	.16	.19	
	Body dissat		7.86*	141	.54	.55	
2.	Interaction	24.54**		3, 140			.35
	Interaction		1.85	140	.52	.15	
<i>DV = Drive</i>							
1.	Main Effects	122.18**		2, 141			.63
	Extrinsic		1.29	141	.07	.11	
	Body dissat		15.48**	141	.79	.79	
2.	Interaction	81.42**		3, 140			.64
	Interaction		.77	140	.16	.07	

Note: DV = Dependent variable; EDI-3 = Eating Disorder Inventory-3; Bulimia = EDI-3 Bulimia subscale; Extrinsic = Extrinsic subscale from ROS; Body dissat = EDI-3 Body dissatisfaction subscale; Interaction = Interaction between extrinsic religiousness and body dissatisfaction

\*  $p < .05$ ; \*\*  $p < .01$

Table 12. Interaction between extrinsic religiousness and body dissatisfaction predicting disordered eating at Time 2 among Jewish women

Order of Entry	Predictors in set	F for set	t for within set predictors	df	$\beta$	Partial Correlation ( <i>pr</i> )	Model R <sup>2</sup>
<i>DV = T2 Bulimia</i>							
1.	Main Effects	27.43**		3, 54			.60
	Extrinsic		-1.36	54	-.12	-.18	
	Body dissat		1.07	54	.10	.14	
	T1 Bulimia		7.35**	54	.70	.70	
2.	Interaction	20.19**		4, 53			.60
	Interaction		-.08	53	-.04	-.01	
<i>DV = T2 Drive</i>							
1.	Main Effects	73.98**		3, 54			.80
	Extrinsic		-1.13	54	-.07	-.15	
	Body dissat		.04	54	.00	.01	
	T1 Drive		11.69**	54	.88	.85	
2.	Interaction	55.16**		4, 53			.81
	Interaction		-.74	53	-.24	-.10	

Note: DV = Dependent variable; EDI-3 = Eating Disorder Inventory-3; T2 Bulimia = EDI-3 Bulimia subscale at time 2; T1 Bulimia = T1 Bulimia subscale from EDI-3; T2 Drive = EDI-3 Drive for thinness subscale at time 2; T1 Bulimia = EDI-2 Bulimia subscale at time 1; Extrinsic = Extrinsic subscale from ROS; Body dissat = EDI-3 Body dissatisfaction subscale; Interaction = Interaction between extrinsic religiousness and body dissatisfaction

\*  $p < .05$ ; \*\*  $p < .01$

Table 13. Interaction between extrinsic religiousness and body dissatisfaction predicting disordered eating at Time 2 among Christian women

Order of Entry	Predictors in set	F for set	t for within set predictors	df	β	Partial Correlation (pr)	Model R <sup>2</sup>
<i>DV = T2 Bulimia</i>							
1.	Main Effects	82.39**		3, 135			.65
	Extrinsic		.23	135	.01	.20	
	Body dissat		2.00*	135	.12	.17	
	T1 Bulimia		11.68**	135	.73	.71	
2.	Interaction	64.00**		4, 134			.66
	Interaction		1.94	134	.41	.17	
<i>DV = T2 Drive</i>							
1.	Main Effects	155.92 **		3, 135			.78
	Extrinsic		1.27	135	.05	.11	
	Body dissat		2.40*	135	.16	.20	
	T1 Drive		10.83 **	135	.74	.68	
2.	Interaction	117.35**		4, 134			.78
	Interaction		1.07		.18	.09	

Note: DV = Dependent variable; EDI-3 = Eating Disorder Inventory-3; T2 Bulimia = EDI-3 Bulimia subscale at time 2; T1 Bulimia = T1 Bulimia subscale from EDI-3; T2 Drive = EDI-3 Drive for thinness subscale at time 2; T1 Bulimia = EDI-2 Bulimia subscale at time 1; Extrinsic = Extrinsic subscale from ROS; Body dissat = EDI-3 Body dissatisfaction subscale; Interaction = Interaction between extrinsic religiousness and body dissatisfaction

\*  $p < .05$ ; \*\*  $p < .01$

Table 14. Religiosity predicting disordered eating at Time 1 among both groups

Predictors in set	F for set	t for within set predictors	df	$\beta$	Partial Correlation ( <i>pr</i> )	Model R <sup>2</sup>
<i>Jewish group</i>						
<i>DV = Bulimia</i>						
Main Effects	.06		1, 70			.01
Judaism		.25	70	.03	.03	
<i>DV = Drive</i>						
Main Effects	.30		1, 70			.00
Judaism		-.55	70	-.07	-.07	
<i>DV = Body Dissat</i>						
Main Effects	.35		1, 70			.01
Judaism		.59	70	.07	.07	
<i>Christian group</i>						
<i>DV = Bulimia</i>						
Main Effects	2.31		1, 142			.02
Religiosity		-1.52	142	-.13	-.13	
<i>DV = Drive</i>						
Main Effects	1.76		1, 142			.01
Religiosity		-1.33	142	-.11	-.11	
<i>DV = Body Dissat</i>						
Main Effects	.32		1, 142			.00
Religiosity		-.57	142	-.05	-.05	

Note: DV = Dependent variable; EDI-3 = Eating Disorder Inventory 3; Bulimia = Bulimia subscale from EDI-3; Drive = Drive for thinness subscale from EDI-3; Body Dissat = Body dissatisfaction subscale from EDI-3; Religiosity = Religious Adherence Scale

\*  $p < .05$ ; \*\*  $p < .01$

Table 15. Religiosity predicting disordered eating at Time 2 among Jewish women

Predictors in set	F for set	t for within set predictors	df	$\beta$	Partial Correlation ( <i>pr</i> )	Model R <sup>2</sup>
<i>DV = T2 Bulimia</i>						
Main Effects	36.96**		2, 54			.58
Judaism		-.70	54	-.06	-.10	
T1 Bulimia		8.58**	54	.76	.76	
<i>DV = T2 Drive</i>						
Main Effects	99.77**		2, 54			.79
Judaism		-.12	54	-.01	-.02	
T1 Drive		14.12**	54	.89	.89	
<i>DV = T2 Body Dissat</i>						
Main Effects	57.24**		2, 54			.68
Judaism		.65	54	.05	.09	
T1 Body Dissat		10.59**	54	.82	.82	

Note: DV = Dependent variable; EDI-3 = Eating Disorder Inventory 3; T2 Bulimia = T2 Bulimia subscale from EDI-3; T1 Bulimia = T1 Bulimia subscale from EDI-3; T2 Drive = T2 Drive for thinness subscale from EDI-3; T1 Drive = T1 Drive for thinness subscale from EDI-3; T2 Body Dissat = Body dissatisfaction subscale from EDI-3; T1 Body Dissat = T1 Body dissatisfaction from EDI-3

\*  $p < .05$ ; \*\*  $p < .01$

Table 16. Religiosity predicting disordered eating at Time 2 among Christian women

Predictors in set	F for set	t for within set predictors	df	$\beta$	Partial Correlation ( <i>pr</i> )	Model R <sup>2</sup>
<i>DV = T2 Bulimia</i>						
Main Effects	121.16**		2, 136			.64
Religiosity		-1.27	136	-.07	-.11	
T1 Bulimia		15.23**	136	.79	.79	
<i>DV = T2 Drive</i>						
Main Effects	237.00**		2, 136			.78
Religiosity		-2.80*	136	-.11	-.23	
T1 Drive		21.05**	136	.86	.88	
<i>DV = T2 Body Dissat</i>						
Main Effects	315.34**		2, 136			.82
Religiosity		-2.15*	136	-.08	-.18	
T1 Body Dissat		24.85**	136	-.90	.91	

Note: DV = Dependent variable; Religiosity = Religious Adherence Scale; EDI-3 = Eating Disorder Inventory 3; T2 Bulimia = T2 Bulimia subscale from EDI-3; T1 Bulimia = T1 Bulimia subscale from EDI-3; T2 Drive = T2 Drive for thinness subscale from EDI-3; T1 Drive = T1 Drive for thinness subscale from EDI-3; T2 Body Dissat = Body dissatisfaction subscale from EDI-3; T1 Body Dissat = T1 Body dissatisfaction from EDI-3  
 \*  $p < .05$ ; \*\*  $p < .01$

Table 17. Culture predicting disordered eating at Time 1 among Jewish women

Predictors in set	F for set	t for within set predictors	df	$\beta$	Partial Correlation ( <i>pr</i> )	Model R <sup>2</sup>
<i>DV = Bulimia</i>						
Main Effects	.04		1, 71			.00
MEIM		-.21	71	-.03	-.03	
<i>DV = Drive</i>						
Main Effects	3.68		1, 71			.05
MEIM		-1.92	71	-.22	-.22	
<i>DV = Body Dissat</i>						
Main Effects	.25		1, 71			.00
MEIM		-.50	71	-.06	-.06	

Note: DV = Dependent variable; EDI-3 = Eating Disorder Inventory 3; Bulimia = Bulimia subscale from EDI-3; Drive = Drive for thinness subscale from EDI-3; Body Dissat = Body dissatisfaction subscale from EDI-3; MEIM = Multigroup Ethnic Identity Measure

\*  $p < .05$ ; \*\*  $p < .01$

Table 18. Culture predicting disordered eating at Time 2 among Jewish women

Predictors in set	<i>F</i> for set	<i>t</i> for within set predictors	df	$\beta$	Partial Correlation ( <i>pr</i> )	Model $R^2$
<i>DV = T2 Bulimia</i>						
Main Effects	38.33**		2, 55			.58
MEIM		-.42	55	-.04	-.06	
T1 Bulimia		8.74**	55	.76	.76	
<i>DV = T2 Drive</i>						
Main Effects	110.19**		2, 55			.80
MEIM		.42	55	.03	.06	
T1 Drive		14.71**	55	.90	.89	
<i>DV = T2 Body Dissat</i>						
Main Effects	59.04**		2, 55			.68
MEIM		.41	55	.03	.06	
T1 Body Dissat		10.87**	55	.83	.83	

Note: DV = Dependent variable; EDI-3 = Eating Disorder Inventory 3; T2 Bulimia = T2 Bulimia subscale from EDI-3; T1 Bulimia = T1 Bulimia subscale from EDI-3; T2 Drive = T2 Drive for thinness subscale from EDI-3; T1 Drive = T1 Drive for thinness subscale from EDI-3; T2 Body Dissat = Body dissatisfaction subscale from EDI-3; T1 Body Dissat = T1 Body dissatisfaction from EDI-3; MEIM = Multigroup Ethnic Identity Measure  
 \*  $p < .05$ ; \*\*  $p < .01$

Table 19. Is culture or religiosity a better predictor of disordered eating at Time 1 among Jewish women?

Predictors in set	F for set	t for within set predictors	df	$\beta$	Partial Correlation ( <i>pr</i> )	Model R <sup>2</sup>
<i>DV = Bulimia</i>						
Main Effects	.21		2, 69			.01
MEIM		-.59	69	-.08	-.07	
Judaism		.49	69	.07	.06	
<i>DV = Drive</i>						
Main Effects	1.19		2, 69			.03
MEIM		-1.44	69	-.19	-.17	
Judaism		.17	69	.02	.02	
<i>DV = Body Dissat</i>						
Main Effects	.34		2, 69			.01
MEIM		-.57	69	-.08	-.07	
Judaism		.79	69	.11	.09	

Note: DV = Dependent variable; EDI-3 = Eating Disorder Inventory 3; Bulimia = Bulimia subscale from EDI-3; Drive = Drive for thinness subscale from EDI-3; Body Dissat = Body dissatisfaction from EDI-3; MEIM = Multigroup Ethnic Identity Measure

\*  $p < .05$ ; \*\*  $p < .01$

Table 20. Is culture or religiosity a better predictor of disordered eating at Time 2 among Jewish women?

Predictors in set	F for set	t for within set predictors	df	$\beta$	Partial Correlation ( <i>pr</i> )	Model R <sup>2</sup>
<i>DV = T2 Bulimia</i>						
Main Effects	24.38**		3, 53			.58
MEIM		-.50	53	-.05	-.07	
Judaism		-.36	53	-.04	-.05	
T1 Bulimia		8.46**	53	.76	.76	
<i>DV = T2 Drive</i>						
Main Effects	66.08**		3, 53			.79
MEIM		.72	53	.05	.10	
Judaism		-.46	53	-.03	-.06	
T1 Drive		14.06**	53	.89	.89	
<i>DV = T2 Body Dissat</i>						
Main Effects	37.47 **		3, 53			.68
MEIM		.10	53	.10	.01	
Judaism		.51	53	.05	.07	
T1 Body Dissat		10.49**	53	.82	.82	

Note: DV = Dependent variable; EDI-3 = Eating Disorder Inventory 3; T2 Bulimia = T2 Bulimia subscale from EDI-3; T1 Bulimia = T1 Bulimia subscale from EDI-3; T2 Drive = T2 Drive for thinness subscale from EDI-3; T1 Drive = T1 Drive for thinness subscale from EDI-3; T2 Body Dissat = Body dissatisfaction subscale from EDI-3; T1 Body Dissat = T1 Body dissatisfaction from EDI-3; MEIM = Multigroup Ethnic Identity Measure  
 \*  $p < .05$ ; \*\*  $p < .01$

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