

**A COMPARISON OF PSYCHOMETRIC  
PROFILES AND ADMISSION DATA OF WHITE  
AND BLACK FEMALE EATING DISORDER**

**PATIENTS**

by

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*Eating disorders in women*

**DECLARATION**

I, Ilze Delport declare that "A Comparison of Psychometric Profiles and Admission Data of White and Black Female Eating Disorder Patients" is my own work. It has not been submitted before for any degree of examination at this or any other University.

Ilze Delport

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Nov 2004

**Date**

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## **SUMMARY**

### **A COMPARISON OF PSYCHOMETRIC PROFILES AND ADMISSION DATA OF WHITE AND BLACK FEMALE EATING DISORDER PATIENTS**

**Candidate:** Ilze Delport  
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**Degree:** M.Soc.Science – Clinical Psychology

The aim of this study was to compare the psychometric profiles and admission data of black South African females with white South African females on admission to the Eating Disorder Unit at Tara the H. Moross Centre.

This study was a questionnaire-based cross-sectional survey among patients admitted to the Tara Eating Disorder Unit with a post-test only feature. The participants in this study comprised of 20 (n=20) eating disorder patients between the age range of 13 and 29 years admitted to the Tara Eating Disorder Unit between the periods 1998-2004. Participants for the study were selected by using convenience sampling. Of the 13 black patients admitted to the unit from 1998-2004, 7 patients were diagnosed with Anorexia Nervosa and 6 with Bulimia Nervosa. Only 10 of the black patients had adequate admission data that could be included in the study. Of the 10 black patients, 5 patients were diagnosed with Anorexia Nervosa and 5 with Bulimia Nervosa according to the DSMIV criteria. A white comparison group was identified through using the period of admission, age, race and DSM diagnosis of the black patients

In order to identify the psychometric profile of each patient, data was collected by using three questionnaires that were distributed to patients on admission; firstly the Eating Disorder Inventory, secondly the Bulimic Investigatory Test, Edinburgh and thirdly the BECK Depression Inventory.

The following parameters were identified in the data information sheet to establish admission data of each patient: age, race, sex, occupation (employed/unemployed/scholar), home language, province of residence, diagnosis, period of onset, year of admission, admission weight, goal weight, height, body mass index, own ideal weight, highest past weight, lowest past weight, amenorrhea (duration).

No statistically significant differences were found between the psychometric data of both culture groups for anorexia nervosa and bulimia nervosa. Anorexic black patients had significantly lower past weight scores than the white patients and white bulimics were taller than black bulimics.

Findings from this study and previous studies clearly indicate a need for more research in this area to equip clinicians to treat eating disorder patients more effectively, and to understand the factors playing a role in the development of their eating disorder.

## OPSOMMING

### **‘N VERGELYKING VAN PSIGOMETRIESE PROFIELE EN ADMISSIE DATA VAN WIT EN SWART VROULIKE EETVERSTEURINGS PASIËNTE.**

|                      |  |
|----------------------|--|
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Die doel van hierdie studie was om ‘n navorsings artikel te skryf waarin die psigometriese profiele en admisssie data van swart Suid-Afrikaanse vroue met wit Suid- Afrikaanse vroue vergelyk word met toelating tot die Eetversteurings eenheid by Tara die H. Moross Sentrum.

Die studie was ‘n vraelys-gebaseerde kruis-seksionele opname tussen pasiënte wat toegelaat is tot die Tara Eetversteurings Eenheid met ‘n post-toets kenmerk. Die deelnemers aan hierdie studie het bestaan uit 20 ( $n = 20$ ) eetversteurings pasiënte tussen die ouderdomme 13 jaar tot 29 jaar wat toegelaat is tot die Tara Eetversteurings eenheid gedurende die tydperk 1998-2004. Deelnemers vir die studie is geselekteer deur gebruik te maak van ‘n gemaks-steekproef.

Van die 13 swart pasiënte wat toegelaat is tot die eenheid vanaf 1998-2004, was 7 pasiënte gediagnoseer met Anorexia Nervosa en 6 met Bulimia Nervosa. Slegs 10 van die swart pasiënte het voldoende toelatingsdata gehad wat ingesluit kon word in hierdie studie. Van die 10 swart pasiënte, was 5 gediagnoseer met Anorexia Nervosa

en 5 met Bulimia Nervosa volgens die DSM-IV kriteria. 'n Blanke vergelykende groep is geïdentifiseer deur gebruik te maak van die volgende inligting van die swart pasiënte; tydperk van toelating, ouderdom, ras en DSM-IV diagnose.

Om die psigometeriese profiel van elke pasiënt te identifiseer, is data ingewin d.m.v drie vraelyste wat aan pasiënte gegee is tydens toelating: eerstens die Eating Disorder Inventory, tweedens die Bulimic Investigatory Test, Edinburgh en laastens die Beck Depression Inventory.

Op die data inligtings bladsy is die volgende parameters geïdentifiseer om die admissee data van elke pasiënt vas te stel, nl, ouderdom, ras, geslag, beroep (werksaam/werkloos/skolier), huistaal, provinsie waarin woonagtig, diagnose, periode van aanvang, jaar van toelating, toelatingsgewig, doelgewig, lengte, liggaamsmassa-indeks, eie ideale gewig, hoogste gewig in die verlede, laagste gewig in die verlede, amenorrhea (duur).

Statisties gesproke is geen noemenswaardige verskille gevind tussen die psigometriese data van beide kultuurgroepe vir anorexia nervosa en bulimia nervosa nie. Swart anorexia pasiënte het 'n beduidende laer gewigsyfer as wit pasiënte in die verlede gehad, terwyl wit bulimia pasiënte langer is as swart bulimia pasiënte.

Die resultate van hierdie studie asook vorige studies toon 'n behoefte vir vedere ondersoek in hierdie area om medici meer effektief te te rus om die faktore wat 'n rol speel in die ontwikkeling van eetversteurings te verstaan asook om pasiënte meer effektief te kan behandel

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# **A Comparison of Psychometric Profiles and Admission Data of White and Black Female Eating Disorder Patients**

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## **Abstract**

The purpose of this study was to compare the psychometric profiles and admission data of black South African females with white South African females on admission to the Eating Disorder Unit at Tara the H. Moross Centre. A total of 20 eating disorder patients between the age range of 13 and 29 years admitted to the Tara between the periods 1998-2004 were studied. Of the 20 patients, 5 black and 5 white patients with a DSMIV diagnosis of Anorexia Nervosa were used; and 5 black and 5 white patients with a DSMIV diagnosis of Bulimia Nervosa. Psychometric profiles of each patient were established through the use of the EDI (Eating Disorder Inventory) the BITE (Bulimic Investigatory Test, Edinburgh) and the BECK Depression Inventory. Admission data consisted of age, race, sex, occupation, home language, province of residence, diagnosis, period of onset, year of admission, admission weight, goal weight, height, body mass index, own ideal weight, highest past weight, lowest past weight, amenorrhea (duration). All admission and psychometric measurements indicated no significant difference between culture groups for anorexia nervosa and bulimia nervosa. Hence, it is seems as if the psychometric profiles of hospitalised eating disorder patients are similar despite racial/ethnic differences and that black South African females also have similar admission data as white females.

**Keywords:** Admission Data; Psychometric Profile; Anorexia Nervosa; Bulimia Nervosa; Culture.

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## **1. Introduction**

Eating disorders have long been known to be widespread among women all over the world. In South Africa, literature published concerning white female eating disorder patients was evident since the 1970's. However, the first cases noted of black eating disorder patients in South Africa only emerged and was published in 1995 (Szabo, Berk, Tlou & Allwood, 1995). Studies in other African countries such as Egypt, Zimbabwe and Nigeria during the 1980's and 1990's of non-clinical samples already provided evidence that the development of eating disorders in different racial entities are possible and that the emergence of eating disorders on the African continent cannot be ruled out despite international evidence that it was predominantly stereotyped as a Caucasian female disorder (Hooper & Garner, 1986; Caradas, Lambert & Charlton, 2001; Nasser, 1994).

Much of the research and speculation on the etiology of eating disorders has arisen from socio-cultural and psychological perspectives (Powell & Kahn, 1995). Most researchers recognize the contribution of the culturally enforced ideal of thinness and associated food restriction to the increased prevalence of anorexia and bulimia over the past few decades, especially for women (Hsu, 1987). It is generally accepted that food preferences and attitudes are culturally learned. Culture has a major influence on the "ideal" appearance and body figure preference for woman, which in westernised countries, has become increasingly thin (Striegel-Moore & Smolak, 2000). The cultural pressure to be thin has been related to a greater incidence of eating disorders and attempts at weight control (French, Story, Neumark-Sztainer, Downes, Resnick & Blum, 1997).

Eating disorders are widely associated with westernised white populations and have been conceptualised as culture-bound syndromes (Swartz, 1985). Eating disorders were mainly seen as a white, middle- upper class heterosexual problem. This myth that eating disorders are confined to white females has recently been exposed as false, indicating that females of different races/ethnicity are also succumbing to the illness (Striegel-Moore & Smolak, 1996). Since the 1980's studies have reported a rising incidence of disordered eating patterns in Africa, the Indian sub-continent and also amongst ethnic minorities in the United States. The prevalence of eating disorders in different races around the world where the disorder was once considered rare is increasingly reported (Thompson, Sargent, Rogan & Corwin, 1997).

Some international studies suggested that a relationship exists between race/ethnicity and eating disorders. Studies in the United States demonstrated that young Hispanic, white and Native American women are more likely to be body dissatisfied and at risk to develop an eating disorder than blacks and Asians (Davis & Yager, 1992). Eating disorders were therefore seen as presenting more commonly in young white women, and less in black women and other races (Abrams, Allen, Gray, 1993).

However, according to Le Grange, Stone & Brownell (1998) the overall clinical presentation of eating disorders are similar amongst cultures, but there is considerable variation in presenting complaint, prevalence and cultural context (Steinhausen, Boyadjieva & Grigoriu-Serbanescu, 2000). French et al., (1997) further supported that a larger perceived current size and body dissatisfaction are related to overall eating pathology regardless of ethnicity. Szabo et al (1995) confirmed that the presentation of black African eating disorder patients do not differ from those of

white patients. Further research indicated that no unique feature is evident in black eating disorder patients that distinguish them from other racial entities (Szabo, 1999).

Studies conducted amongst secondary-school girls in South Africa showed that abnormal eating attitudes were more prominent in black females. Black pupils were more pre-occupied with their body weight than their white counterparts, and the study revealed that 37,6% of black pupils have abnormal eating attitudes versus 20,67% of white pupils (Szabo & Hollands, 1997). It was therefore necessary to consider the possibility that eating disorders are not a culturally bound illness.

This study was motivated because of the limited data within the South African context documenting cases of eating disorders in black South Africans. Up to now eating disorders have been seen to be culture bound in South Africa due to the fact that there is little published literature reporting it otherwise except for the research by Szabo et al (1995). The absence of clinical samples diagnosed in accordance with the DSM criteria makes it difficult to establish whether a difference exists in admission data and psychometric profiles of hospitalised white and black eating disorder patients.

This study aimed to draw a comparison between white and black South African females, diagnosed with having an eating disorder and demonstrate that race/ethnicity does not play a role in the development of an eating disorder. Especially in South Africa it is important to dispel the idea that only white, middle- upper class females develop eating disorders. It is important to note and be aware if eating disorders are indeed not racially restricted.

## **2. Method**

### ***Research Design***

This study was a questionnaire based, cross-sectional survey among patients admitted to the Tara Eating Disorder Unit with a post-test only feature.

### ***Participants***

The participants in this study comprised of 20 (n=20) eating disorder patients between the age range of 13 and 29 years admitted to the Tara Eating Disorder Unit between the periods 1998-2004. Participants for the study were selected by using convenience sampling. Participants signed a consent form on admission to the eating disorder unit, indicating that their information may be used for research purposes. In addition, ethical clearance for the study was obtained from Tara the H. Moross Centre and from the North West University.

Of the 13 black patients admitted to the unit from 1998-2004, 7 patients were diagnosed with Anorexia Nervosa and 6 with Bulimia Nervosa. Only 10 of the black patients had adequate admission data that could be included in the study. Of the 10 black patients, 5 patients were diagnosed with Anorexia Nervosa and 5 with Bulimia Nervosa according to the DSMIV criteria. A white comparison group was identified through using the period of admission, age, race and DSM diagnosis of the black patients. The study therefore consisted of 20 patients: 10 black and 10 white patients. Of the 20 patients, 5 black and 5 white patients with a diagnosis of Anorexia Nervosa were used; and 5 black and 5 white patients with a diagnosis of Bulimia Nervosa.

In the following table, the demographical information of the participants is displayed. The majority of patients were scholars (60%), both in the black and white groups. In both groups the minimum age was 13 and the maximum age 29. The mean should be the same due to age matching being used. The majority of white patients (80%) were English speaking, while a third of the black patients (30%) were Sotho speaking. The majority of both black and white patients resided in Gauteng.

| Variable                     | Race              | Categories      | Frequency | Percentage |
|------------------------------|-------------------|-----------------|-----------|------------|
| <b>Occupation</b>            | White             | Scholar         | 6         | 60.0       |
|                              |                   | Employed        | 1         | 10.0       |
|                              |                   | Unemployed      | 3         | 30.0       |
|                              |                   | Total           | 10        | 100.0      |
|                              | Black             | Scholar         | 6         | 60.0       |
|                              |                   | Employed        | 2         | 20.0       |
| Unemployed                   |                   | 2               | 20.0      |            |
|                              | Total             | 10              | 100.0     |            |
| <b>Age</b>                   | White             | 13-19           | 6         | 60.0       |
|                              |                   | 20-29           | 4         | 40.0       |
|                              |                   | Total           | 10        | 100.0      |
|                              | Black             | 13-19           | 6         | 60.0       |
|                              |                   | 20-29           | 4         | 40.0       |
|                              |                   | Total           | 10        | 100.0      |
| <b>Home Language</b>         | White             | English         | 8         | 80.0       |
|                              |                   | Afrikaans       | 1         | 10.0       |
|                              |                   | Italian/English | 1         | 10.0       |
|                              |                   | Total           | 10        | 100.0      |
|                              | Black             | English         | 1         | 10.0       |
|                              |                   | Tswana          | 1         | 10.0       |
|                              |                   | Xhosa           | 2         | 20.0       |
|                              |                   | Zulu            | 2         | 20.0       |
|                              |                   | Sotho           | 3         | 30.0       |
|                              |                   | Venda           | 1         | 10.0       |
|                              |                   | Total           | 10        | 100.0      |
| <b>Province of Residence</b> | White             | Kwazulu Natal   | 1         | 10.0       |
|                              |                   | Gauteng         | 9         | 90.0       |
|                              |                   | Total           | 10        | 100.0      |
|                              | Black             | Kwazulu Natal   | 1         | 10.0       |
|                              |                   | Gauteng         | 7         | 70.0       |
|                              |                   | Eastern Cape    | 1         | 10.0       |
|                              | Northern Province | 1               | 10.0      |            |
|                              | Total             | 10              | 100.0     |            |

*Table 1: Demographical Information of Participants*

### ***Data Collection***

In order to identify the psychometric profile of each patient, data was collected by using three questionnaires that were distributed to patients on admission; firstly the Eating Disorder Inventory (Garner, Olmstead & Polivy, 1983), secondly the Bulimic Investigatory Test, Edinburgh (Henderson & Freeman, 1987) and thirdly the BECK Depression Inventory (Beck, Ward, Mendelson, Mock & Erbaugh, 1961).

Scores of these tests as well as other relevant information were used to complete a data information sheet (Appendix C) of each patient. In the data information sheet the following parameters were identified to establish admission data of each patient, namely: age, race, sex, occupation (employed/unemployed/scholar), home language, province of residence, diagnosis, period of onset, year of admission, admission weight, goal weight, height, body mass index, own ideal weight, highest past weight, lowest past weight, amenorrhea (duration). The psychometric profiles and admission data of both groups were entered on the data information sheet. This was used to draw a comparison between both groups.

### ***Instrumentation***

The following instruments were used in this study to collect data; the Eating Disorder Inventory (EDI: Garner, Olmstead & Polivy, 1983), the Bulimic Investigatory Test, Edinburgh (BITE: Henderson & Freeman, 1987) and the BECK Depression Inventory (BDI: Beck, Ward, Mendelson, Mock & Erbaugh, 1961).

The EDI is a psychometric instrument designed to assess a broad range of behavioural and attitudinal characteristics of anorexia nervosa and bulimia nervosa. Consistent

with the multidimensional conception of anorexia nervosa, questions were generated for behavioural and psychological constructs that have been described as relevant to the disorder.

The subscales of the EDI consist of: drive for thinness, bulimia, body dissatisfaction, ineffectiveness, perfectionism, interpersonal distrust, interoceptive awareness, and maturity fears (Garner, Olmstead & Polivy, 1983). An additional sheet requested demographic information about the subject, including the subject's age, height, weight, marital status, current family income, place of birth, and ethnic background. Scores higher than the mean of the subtest were seen as being significant. The table below was adapted from the mean scale scores table for anorexia nervosa and a female comparison group (Garner, Olmstead & Polivy, 1983).

**Table 2: Mean Subscale Scores for Anorexia Nervosa and Female Comparison Groups**

|                         | <b>Anorexia Nervosa</b> | <b>Female Comparison</b> |
|-------------------------|-------------------------|--------------------------|
| <i>Subtest</i>          | <i>Mean</i>             | <i>Mean</i>              |
| Drive for Thinness      | 15.2                    | 5.0                      |
| Bulimia                 | 2.2                     | 1.8                      |
| Body Dissatisfaction    | 13.8                    | 9.8                      |
| Ineffectiveness         | 13.9                    | 2.1                      |
| Perfectionism           | 9.9                     | 5.6                      |
| Interpersonal Distrust  | 7.4                     | 2.3                      |
| Interoceptive Awareness | 12.3                    | 2.3                      |
| Maturity Fears          | 5.9                     | 2.3                      |

The EDI was cross-validated on three independent anorexia nervosa and female comparison groups. The reliabilities were considered acceptable for six of the eight subscales. In the interoceptive awareness and maturity fear subscale no significant mean scale differences within the anorexia nervosa and female comparison group were found across three cross-validation trials. Convergent and discriminant validity was established for all subscales (Garner, Olmstead & Polivy, 1983).

The BITE is a 33-item self-report measure, designed to identify subjects with symptoms of bulimia or binge eating. The BITE consists of two subscales: the Symptom Scale, which measures the degree of symptoms present and the Severity Scale, which provides an index of the severity of bingeing and purging behaviour as defined by their frequency (Henderson & Freeman, 1987). A Symptom Scale score of more than 20 indicates a highly disordered eating pattern and the presence of binge-eating. A score in the medium range (10-19) suggests an unusual eating pattern while a score in the low range (0-10) falls within the normal limits which suggest the absence of compulsive and binge eating. However, on the Severity Scale a score of 5 or more is considered as clinically significant, while a score of 10 or more indicates a high degree of severity (Henderson & Freeman, 1987).

The BITE serves as a useful measure of severity and responses to treatment. The BITE is put forward as a tested, valid and reliable questionnaire due to the high degree of internal consistency in the items of the Severity and Symptom scale.

The BECK Depression Inventory is a 21-item self-report questionnaire designed to measure the level of depression. Interpretation of total scores ranges from an ideal

level (below 5) to an extreme depression (over 40). The BDI is widely used to measure the extent of depression. It consists of 21 items with a Likert type format and is based on Beck's theory of depression (Beck, Ward, Mendelson, Mock & Erbaugh, 1961).

**Table 3: BECK Depression Inventory Scores**

| <b>BDI Score</b> | <b>Range</b>                   |
|------------------|--------------------------------|
| 40+              | Extreme Depression             |
| 31-40            | Severe Depression              |
| 21-30            | Moderate Depression            |
| 17-20            | Borderline Clinical Depression |
| 11-16            | Mild Moody Disturbance         |
| 1-10             | Up and Down (Normal)           |
| 5<               | Ideal                          |

**Data analysis**

The data was captured onto excel and converted to SPSS in order to do the analysis.

The data analysis had the following aims:

- To give a description of the sample that was included in this study.
- To determine whether statistically significant differences existed between the black and white patients on admission data.
- To determine whether statistically significant differences existed between black and white patients on all psychometric measurements.
- To determine whether there were statistically significant relationships between culture group and the measurements taken during psychometric analysis.

- To determine whether there were statistically significant differences between Anorexia and Bulimia Nervosa patients on all measurements taken regardless of culture.

Since the sample was relatively small and consisted of only 10 participants per culture group respectively, use was made of non-parametric statistics to analyse the data. Non-parametric tests, also known as distribution-free tests, is a class of tests that does not rely on a parameter estimation and/or distribution assumptions (Howell, 1992). The major advantage attributed to these tests is that they do not rely on any seriously restrictive assumptions concerning the shape of the sampled populations and thus accommodates small samples as in the case of this study.

The following statistical data analysis procedures were used:

- **Descriptive statistics:** Descriptive statistics are primarily aimed at describing the data. Frequencies were used to give a description of the sample. Means were used to describe the respective groups' performance on admission and psychometric data. Certain disadvantages are associated with the mean. It is influenced by extreme scores, its value may not actually exist in the data, and its interpretation in terms of the underlying variable being measured requires at least some faith in the interval properties of the data (Howell, 1992). The mean, standard deviation, minimum and maximum scores for each measurement per group were determined for reference purposes.

➤ **Inferential statistics:** *These were used to test hypotheses about differences in populations on the basis of measurements made on samples of subjects.* (Tabachnick & Fidell, 1996).

- ***The Mann-Whitney Test:*** The Mann-Whitney test was used for testing differences between means when there were two conditions and different subjects had been used in each condition. This test is a distribution-free alternative to the independent samples t-test and the one way ANOVA. Like the t-test, Mann-Whitney tests the null hypothesis that two independent samples (groups) come from the same population (not just populations with the same mean). Rather than being based on parameters of a normal distribution like mean and variance, Mann-Whitney statistics are based on ranks. The Mann-Whitney statistic is obtained by counting the number of times an observation from the group with the smaller sample size precedes an observation from the larger group. It is especially sensitive to population differences in central tendency (Howell, 1992). The rejection of the null hypothesis is generally interpreted to mean that the two distributions had different central tendencies. This test was used to determine significant differences between black and white patients on both admission and psychometric data.
  
- ***Chi-square:*** This test is used to determine whether variables are independent of one another. The data are cast in what is commonly referred to as a contingency table (Howell, 1992). This technique thus gives an indication of whether there is a statistically significant relationship between two variables. The coefficient does however, not

give an indication of the strength or direction of the relationship. This technique was used to determine whether there were statistically significant relationships among culture groups and all psychometric measurements.

### **3. Results**

The results will be presented in the following order:

- Descriptive statistics for the 2 groups on all measurements.
- Results of the analysis of the comparison of the two culture groups on admission data.
- Results of the analysis of the comparison of the two culture groups on Psychometric data.
- Results of the analysis of the comparison of Anorexia Nervosa and Bulimia Nervosa patients on all measurements regardless of culture group.

#### **Results of the Two Groups on all Measurements**

These results are included simply as frame of reference to see how the two groups performed on all the measurements. The results are presented in Tables 4 to 7.

The table below describes the admission data of the anorexia patients. The minimum period of onset of the disorder in months for white patients is 5 months and the maximum 18 months. The average or mean number of months is 10.6. For black patients the minimum number of months is 5 months with 17 months as the maximum number of months in terms of the period of onset of the disorder. The average number of months that the group of black patients have been identified with this disorder is 8

months. The rest of the information in the table can be interpreted in the same fashion.

It appears as if the black anorexia patients have a lower admission weight than the white anorexia patients as well as a lower own ideal weight and past weight. However it is interesting to note that the period of having Amenorrhea is shorter than that of the white patients. Yet, the body mass index of both white and black patients is basically similar.

**Table 4: Admission Data for Anorexia Patients**

| Race  |                                 | N | Minimum | Maximum | Mean    | Std. Deviation |
|-------|---------------------------------|---|---------|---------|---------|----------------|
| White | Period of Onset in Months       | 5 | 5.00    | 18.00   | 10.6000 | 5.98331        |
|       | Admission Weight                | 5 | 28.4    | 43.4    | 39.610  | 6.3862         |
|       | Goal Weight Anorexia            | 5 | 41.00   | 55.00   | 48.0000 | 5.29150        |
|       | Height                          | 5 | 1.50    | 1.66    | 1.5880  | .06723         |
|       | Body Mass Index                 | 5 | 12.62   | 18.10   | 15.6400 | 2.10151        |
|       | Own Ideal Weight                | 5 | 40.00   | 55.00   | 47.2000 | 5.35724        |
|       | Highest Past Weight             | 5 | 48.00   | 66.00   | 55.8000 | 6.72309        |
|       | Lowest Past Weight              | 5 | 28.40   | 47.00   | 40.7500 | 7.15839        |
|       | Amenorrhea (Duration in months) | 5 | 1.00    | 7.00    | 4.6000  | 2.30217        |
|       | Valid N (listwise)              | 5 |         |         |         |                |
| Black | Period of Onset in Months       | 5 | 5.00    | 17.00   | 8.0000  | 5.09902        |
|       | Admission Weight                | 5 | 27.1    | 44.3    | 36.940  | 7.2033         |
|       | Goal Weight Anorexia            | 4 | 41.00   | 50.00   | 44.0000 | 4.08248        |
|       | Height                          | 5 | 1.51    | 1.62    | 1.5500  | .04359         |
|       | Body Mass Index                 | 5 | 11.72   | 18.20   | 15.3340 | 2.75292        |
|       | Own Ideal Weight                | 5 | 30.00   | 48.00   | 38.6000 | 6.69328        |
|       | Highest Past Weight             | 5 | 45.00   | 70.00   | 53.6000 | 9.60729        |
|       | Lowest Past Weight              | 5 | 25.00   | 39.00   | 32.6600 | 6.71774        |
|       | Amenorrhea (Duration in months) | 5 | .00     | 7.00    | 3.6000  | 2.96648        |
|       | Valid N (listwise)              | 4 |         |         |         |                |

The results in the tables below are interpreted in the same manner as in Table 4. For example, in table 5 the minimum admission weight for black bulimia patients is 46.2 kg with a maximum of 61.3 kg. The average admission weight for black bulimia patients was 52.6 kg. The rest of the results can be interpreted in the same manner.

The mean admission weight of black and white bulimia patients was similar. Yet, the period of onset were shorter for white patients than black patients, indicating that the black bulimia patients lived with their symptoms for a longer period before getting help. Black bulimia patients also established a higher own ideal weight than white patients did.

**Table 5: Admission Data for Bulimia Patients**

| Race  |                                 | N | Minimum | Maximum | Mean    | Std. Deviation |
|-------|---------------------------------|---|---------|---------|---------|----------------|
| White | Period of Onset in Months       | 5 | 4.00    | 84.00   | 35.4000 | 39.16376       |
|       | Admission Weight                | 5 | 37.0    | 58.2    | 50.500  | 7.9524         |
|       | Goal Weight Anorexia            | 0 |         |         |         |                |
|       | Height                          | 5 | 1.60    | 1.70    | 1.6460  | .03912         |
|       | Body Mass Index                 | 5 | 13.92   | 21.90   | 18.6700 | 3.04782        |
|       | Own Ideal Weight                | 5 | 40.00   | 52.00   | 47.4000 | 4.56070        |
|       | Highest Past Weight             | 5 | 52.00   | 74.00   | 64.2000 | 9.95992        |
|       | Lowest Past Weight              | 5 | 37.00   | 51.00   | 45.4000 | 5.68331        |
|       | Amenorrhea (Duration in months) | 5 | .00     | 9.00    | 3.8000  | 4.32435        |
|       | Valid N (listwise)              | 0 |         |         |         |                |
| Black | Period of Onset in Months       | 5 | 6.00    | 156.00  | 48.0000 | 62.80127       |
|       | Admission Weight                | 5 | 46.2    | 61.3    | 52.640  | 6.2083         |
|       | Goal Weight Anorexia            | 0 |         |         |         |                |
|       | Height                          | 5 | 1.53    | 1.62    | 1.5720  | .03701         |
|       | Body Mass Index                 | 5 | 18.50   | 25.84   | 21.3520 | 3.00618        |
|       | Own Ideal Weight                | 5 | 40.00   | 55.00   | 49.0000 | 5.87367        |
|       | Highest Past Weight             | 5 | 50.00   | 70.00   | 57.8000 | 8.31865        |
|       | Lowest Past Weight              | 5 | 39.00   | 61.30   | 48.8600 | 9.38339        |
|       | Amenorrhea (Duration in months) | 5 | .00     | 12.00   | 6.6000  | 4.97996        |
|       | Valid N (listwise)              | 0 |         |         |         |                |

In the table below, the psychometric data of anorexia patients is described. Both the white and black patients had similar scores on the BDI. The black patients had a higher score for drive for thinness and body dissatisfaction than white patients on the EDI. The rest of the psychometric data were similar despite cultural differences.

**Table 6: Psychometric Data for Anorexia Patients**

| Race                        |                             | N                      | Minimum | Maximum | Mean    | Std. Deviation |          |
|-----------------------------|-----------------------------|------------------------|---------|---------|---------|----------------|----------|
| White                       | BDI                         | 5                      | 25.00   | 36.00   | 29.6000 | 4.39318        |          |
|                             | EDI Drive for Thinness      | 5                      | 6.00    | 18.00   | 11.2000 | 5.80517        |          |
|                             | EDI Bulimia                 | 5                      | .00     | 8.00    | 3.0000  | 3.08221        |          |
|                             | EDI Body Dissatisfaction    | 5                      | 4.00    | 17.00   | 9.2000  | 5.06952        |          |
|                             | EDI Ineffectiveness         | 5                      | 6.00    | 18.00   | 10.2000 | 4.60435        |          |
|                             | EDI Perfectionism           | 5                      | .00     | 12.00   | 7.6000  | 4.97996        |          |
|                             | EDI Interpersonal Distrust  | 5                      | 3.00    | 16.00   | 7.2000  | 5.49545        |          |
|                             | EDI Interoceptive Awareness | 5                      | 7.00    | 17.00   | 12.8000 | 4.38178        |          |
|                             | EDI Maturity Fears          | 5                      | 3.00    | 11.00   | 6.6000  | 3.20936        |          |
|                             | BITE Symptom Scale Score    | 5                      | 8.00    | 25.00   | 12.0000 | 7.38241        |          |
|                             | BITE Severity Scale Score   | 5                      | 8.00    | 18.00   | 12.6000 | 4.44972        |          |
|                             | Valid N (listwise)          | 5                      |         |         |         |                |          |
|                             | Black                       | BDI                    | 5       | 14.00   | 48.00   | 30.0000        | 12.74755 |
|                             |                             | EDI Drive for Thinness | 5       | 8.00    | 21.00   | 16.8000        | 6.01664  |
| EDI Bulimia                 |                             | 5                      | 3.00    | 5.00    | 3.6000  | .89443         |          |
| EDI Body Dissatisfaction    |                             | 5                      | 5.00    | 27.00   | 20.4000 | 9.58123        |          |
| EDI Ineffectiveness         |                             | 5                      | 8.00    | 29.00   | 18.0000 | 9.16515        |          |
| EDI Perfectionism           |                             | 5                      | 5.00    | 16.00   | 11.2000 | 4.43847        |          |
| EDI Interpersonal Distrust  |                             | 5                      | 4.00    | 14.00   | 10.8000 | 4.32435        |          |
| EDI Interoceptive Awareness |                             | 5                      | 2.00    | 22.00   | 13.2000 | 9.65401        |          |
| EDI Maturity Fears          |                             | 5                      | 5.00    | 23.00   | 11.8000 | 8.55570        |          |
| BITE Symptom Scale Score    |                             | 5                      | 4.00    | 21.00   | 12.6000 | 6.58027        |          |
| BITE Severity Scale Score   |                             | 5                      | 8.00    | 16.00   | 12.2000 | 3.89872        |          |
| Valid N (listwise)          |                             | 5                      |         |         |         |                |          |

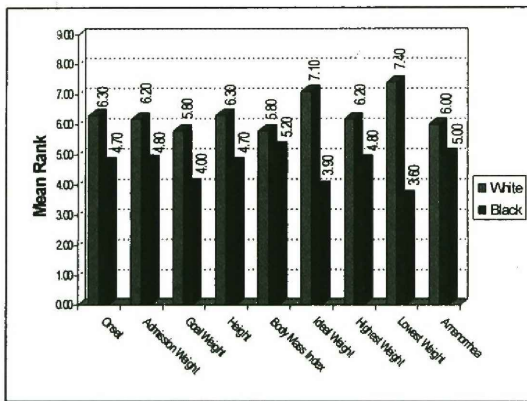
Table 7 describes the psychometric data of bulimia patients. The white bulimic patients had a higher BDI score than the black patients as well as a higher ineffectiveness, and maturity fears score on the EDI. The white patients symptom scale and severity scale score on the BITE was also higher than the score obtained by the black patients.

**Table 7: Admission Data for Bulimia Patients**

| Race  |                             | N | Minimum | Maximum | Mean    | Std. Deviation |
|-------|-----------------------------|---|---------|---------|---------|----------------|
| White | BDI                         | 5 | 17.00   | 39.00   | 29.0000 | 8.15475        |
|       | EDI Drive for Thinness      | 5 | 1.00    | 21.00   | 15.0000 | 8.15475        |
|       | EDI Bulimia                 | 5 | .00     | 17.00   | 9.0000  | 7.00000        |
|       | EDI Body Dissatisfaction    | 5 | 4.00    | 27.00   | 20.8000 | 9.62808        |
|       | EDI Ineffectiveness         | 5 | .00     | 29.00   | 21.4000 | 12.17785       |
|       | EDI Perfectionism           | 5 | 2.00    | 18.00   | 11.6000 | 7.92465        |
|       | EDI Interpersonal Distrust  | 5 | 4.00    | 20.00   | 13.0000 | 5.83095        |
|       | EDI Interoceptive Awareness | 5 | .00     | 29.00   | 19.2000 | 11.47606       |
|       | EDI Maturity Fears          | 5 | .00     | 22.00   | 14.6000 | 8.64870        |
|       | BITE Symptom Scale Score    | 5 | 5.00    | 30.00   | 20.4000 | 9.81326        |
|       | BITE Severity Scale Score   | 5 | .00     | 28.00   | 17.2000 | 10.56882       |
|       | Valid N (listwise)          | 5 |         |         |         |                |
| Black | BDI                         | 5 | 3.00    | 27.00   | 18.0000 | 9.11043        |
|       | EDI Drive for Thinness      | 5 | .00     | 18.00   | 13.6000 | 7.66812        |
|       | EDI Bulimia                 | 5 | .00     | 21.00   | 13.2000 | 9.25743        |
|       | EDI Body Dissatisfaction    | 5 | 5.00    | 24.00   | 18.2000 | 7.82304        |
|       | EDI Ineffectiveness         | 5 | 3.00    | 19.00   | 11.0000 | 5.70088        |
|       | EDI Perfectionism           | 5 | 10.00   | 15.00   | 12.6000 | 1.81659        |
|       | EDI Interpersonal Distrust  | 5 | 3.00    | 12.00   | 8.0000  | 3.87298        |
|       | EDI Interoceptive Awareness | 5 | 2.00    | 22.00   | 12.8000 | 7.91833        |
|       | EDI Maturity Fears          | 5 | 2.00    | 6.00    | 3.4000  | 1.51658        |
|       | BITE Symptom Scale Score    | 5 | 3.00    | 25.00   | 11.0000 | 8.45577        |
|       | BITE Severity Scale Score   | 5 | .00     | 19.00   | 6.6000  | 7.36885        |
|       | Valid N (listwise)          | 5 |         |         |         |                |

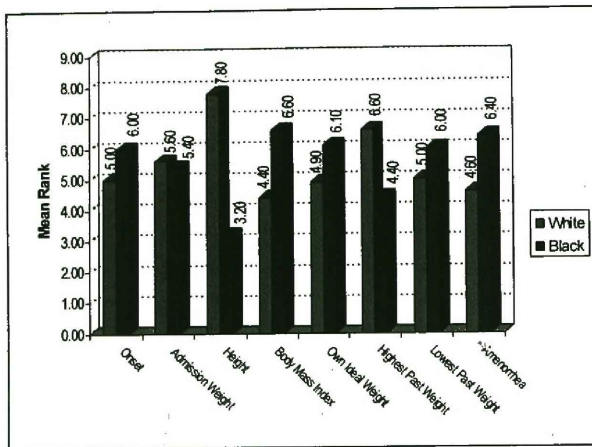
### Comparison of the Two Culture Groups on Admission Data

The Mann-Whitney U-test was used to determine whether statistically significant differences existed between the two cultural groups on all admission and psychometric measurements (see figures 1 to 4). In this study reference will be made to differences on the 5% level of significance. This implies that the researcher can say with 95 % confidence that the results indicate actual differences and are not due to chance.



**Figure 1: Differences between Culture Groups on Admission Data (Anorexia Nervosa)**

The above figure confirms that one statistically significant difference could be found between black and white anorexia patients regarding lowest past weight (Mann-Whitney  $U = 3$ , Wilcoxon  $X = 18.00$ ,  $Z = -1.984$  and  $p = 0.47$ ). Black patients had significantly lower scores than white patients. This difference was significant on the 5% level of significance.

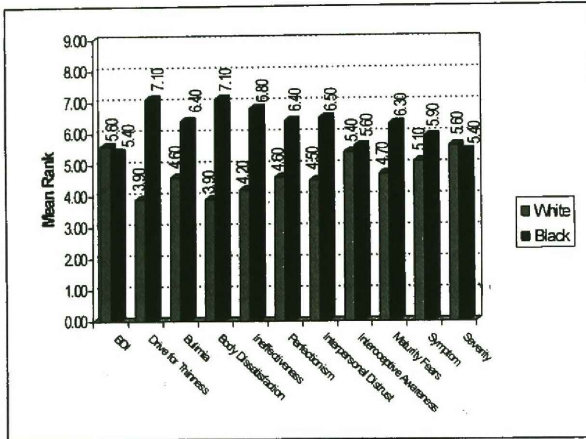


**Figure 2: Differences between Culture Groups on Admission Data (Bulimia Nervosa)**

Only one statistically significant difference was found between black and white bulimia patients (Mann-Whitney  $U = 1$ , Wilcoxon  $X = 16.00$ ,  $Z = -2.410$  and  $p = 0.16$ ). White patients were significantly taller than black patients. This difference was significant on the 5% level of significance.

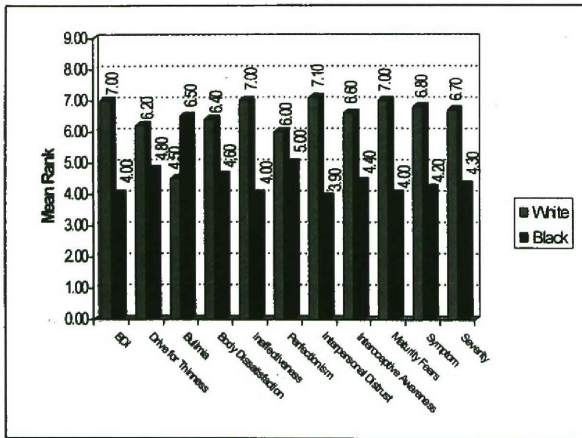
### **Comparison of the Two Culture Groups on Psychometric Data**

The results in the figure below reflect tests for differences between culture groups on psychometric data amongst anorexia nervosa patients. No statistically significant differences were found between the two culture groups on the 5% level of significance.



**Figure 3: Differences between Culture Groups on Psychometric Data (Anorexia Nervosa)**

In the figure below, no significant differences were found on the 5% level between black and white bulimia patients on all psychometric measurements taken.

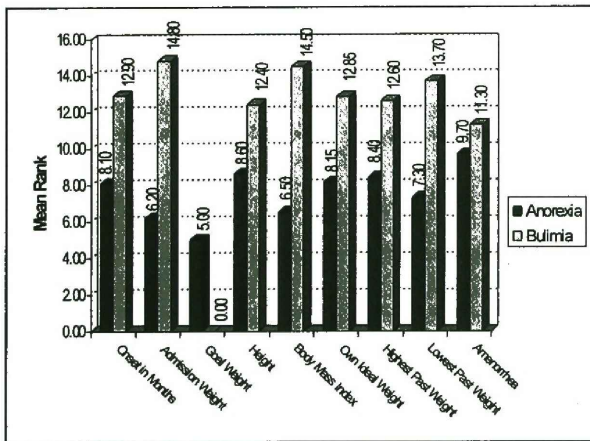


**Figure 4: Differences between Culture Groups on Psychometric Data (Bulimia Nervosa)**

The relationships between culture group and psychometric measurements were also tested by means of Chi-square tests. The results of these tests are presented in Appendix B. No statistically significant relationships were found on the 5% level of significance.

**Comparison of all Anorexia Nervosa and Bulimia Nervosa Patients on all Measurements**

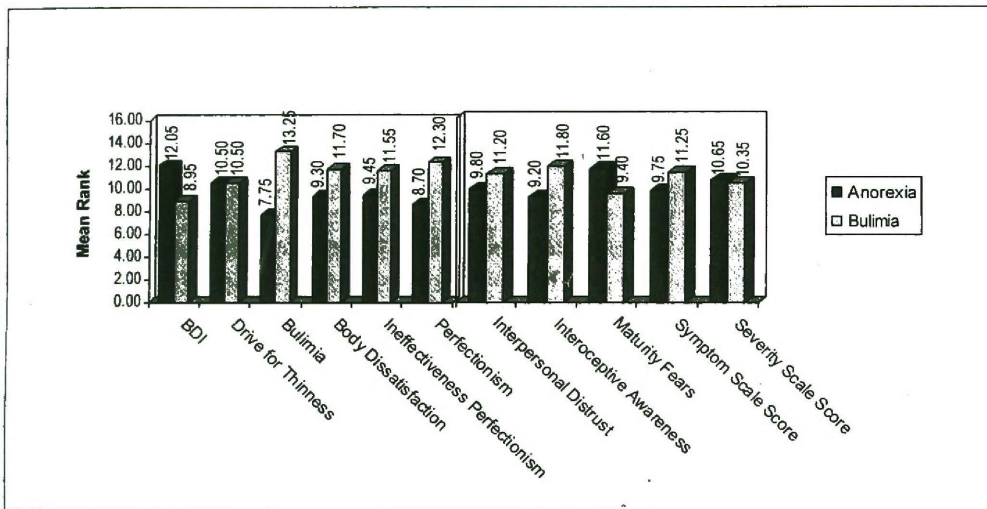
The study further focused on determining whether statistically significant differences existed between Anorexia and Bulimia patients regardless of culture. The results will be presented in figures 5 and 6.



**Figure 5: Comparison of Clinical Diagnosis regardless of Culture on Admission Data**

The results in figure 5 reflect differences between anorexia and bulimia patients on all admission data. Statistically significant differences were found on the 5% level for the following admission data: admission weight (mean rank = 6.20), body mass index

(mean rank = 6.50) and lowest past weight (mean rank = 7.30). As expected, in all cases the anorexia nervosa patients had significantly lower scores.



**Figure 6: Differences between Clinical Diagnosis regardless of Culture on Psychometric Data**

The above figure describes the differences between anorexia and bulimia regardless of culture. Only one statistically significant difference was found on the 5% level of significance. As expected the EDI bulimia score was significantly higher for bulimia patients than anorexia patients. No statistically significant differences were found on any of the other psychometric tests done.

#### **4. Discussion**

Cross cultural studies comparing black and white culture groups, especially in South Africa are of interest due to the belief in the past that black populations in the developed world were usually considered to have a low incidence of anorexia and

bulimia, and to be more prone to being obese. Yet, researchers increasingly report more black individuals being diagnosed with eating disorders internationally (Thompson, Sargent, Rogan & Corwin, 1997) and nationally (Szabo & Hollands, 1997). Dolan (1991) discussed the first “non-white” anorexics as part of a New York case series between 1960 and 1971 of which one of the women was Chinese. Garner and Garfinkel reported that their specialist Canadian treatment centre had not seen any black women prior to 1979, but later on; 4 out of 124 referrals were black and 3 of these women came from upper middle class backgrounds. Increasing numbers of patients with eating disorders from different cultural backgrounds around the world are being reported (Striegel-Moore & Smolak, 1996); making it impossible to ignore the rising incidence and influence of eating disorders on the South African population.

Research done by Le Grange et al.; (1998) suggested that the overall presentation of eating disorders is similar amongst different cultures. In this study, very few significant differences on the 5% level of significance were found between black and white patients on all measurements taken, indicating that eating pathology is not related to ethnicity. In this study, white bulimia patients were significantly taller than black patients. In this study it does not play a major role in the development of an eating disorder, it only influences the calculation of the body mass index and goal weight. Furthermore, no significant differences between black and white patients existed on the 5% level for bulimia nervosa.

Anorexic black patients had significantly lower past weight scores than the white patients. This might be due to the unfamiliarity of eating disorders in black populations and therefore a more timely response from parents to explore it further.

Further, no significant differences were found on the admission data of anorexia patients.

No statistically significant differences were found between the psychometric data of both culture groups for anorexia nervosa and bulimia nervosa. The results of a Chi-square analysis tested the relationships between culture groups. All admission and psychometric measurements indicated no significant difference between culture groups for anorexia nervosa and bulimia nervosa. These results are different from that of Dolan et al., (1991) which indicated that black anorexics are more likely to be bulimic. This finding is not evident in this study.

The international studies of most research are therefore not useful in understanding eating disorders and the role of culture in the South African context. An eating disorder is not a “white mans” illness anymore and is not culture bound as it was believed before. The question that now arises is that if eating disorders are not culture bound; are they bound to the societal influences?

It is difficult to interpret the role of culture in the development of eating disorders in South Africa due to the limited research in this context as well as the lack of data available of black patients in a clinical or hospitalised setting. The data available is based on self-report questionnaires and is mostly obtained in non-clinical settings such as schools. The reliability and validity of these questionnaires are difficult to establish. Furthermore, self report questionnaires measure the dimensions of psychopathology and not the development of an eating disorder as such.

The questionnaires used in this study were not designed to diagnose or differentiate anorexia nervosa from bulimia nervosa. It serves only as a guideline to identify risk factors and symptoms; with the aim to establish the most effective intervention and treatment plan possible. The fact that no differences were evident between culture groups diagnosed with eating disorders in this study, raises the question that maybe specific questionnaires need to be developed that focuses specifically on establishing if cultural differences exists rather than focusing only on pathology.

Results of the analysis of differences between admission data of anorexia and bulimia patients regardless of culture showed that the following aspects differed significantly on the 5% level of significance: admission weight, body mass index and lowest past weight. As expected, in all cases the anorexia nervosa patients had significantly lower scores. Therefore, the diagnosis played a role in differentiating patients and not culture.

The results of the analysis of psychometric data of anorexia and bulimia patients regardless of culture indicated only one difference. The EDI bulimia score of bulimia nervosa patients were significantly higher than the anorexia patients as could be expected. Therefore, the fact that culture was now removed as a variable, made it impossible to know which patients were black and which one's white. The diagnosis of the patient played the major role. No presenting feature is available now which distinguishes the two groups from one another. In other words no presenting feature identifies a patient as being black. It is clear that the instruments used did not detect and differentiate between cultures. It is also clear that the same condition or diagnosis were given to both white and black patients. Should there then be a difference

between black and white patients if the diagnostic criteria are the same for both groups?

## **5. Conclusion**

In conclusion, findings from this study and previous studies clearly indicate a need for more research in this area to equip clinicians to treat eating disorder patients more effectively, and to understand the factors playing a role in the development of their eating disorder. It is important make the community aware that eating disorders are not culturally bound and to dispel the idea that "it will not happen to me". Preventative strategies need to be developed to inform and warn the youth of South Africa of the dangers of dieting excessively, purging, laxative abuse etc. and the long term impact an eating disorder has on your health.

Furthermore, the development of more culturally orientated questionnaires might give a richer explanation of cultural habits concerning eating behaviour and food rituals. The existence of eating disorders in the South African context is not a new phenomenon, but the prevalence of more admissions of different cultures is. It is time to rethink the use of self-report questionnaires with questionable validity and invent new views and new measures.

## 6. References

- Abrams, K.K., Allen, L.R., & Gray, J.J. (1993). Disordered eating attitudes and behaviours, psychological adjustment, and ethnic identity: A comparison of black and white female college students. *International Journal of Eating Disorders, 14*, 49-57.
- Beck, A.T., Ward, C.H., Mendelson, M., Mock, R. & Erbaugh, J. (1961). An inventory for measuring depression. *Archives of General Psychiatry, 4*, 53-63.
- Caradas, A.A., Lambert, E.V., & Charlton, K.E. (2001). An ethnic comparison of eating attitudes and associated body image concerns in adolescent South African school girls. *Journal of Obesity and Related Metabolic Disorders, 21*, 775-782
- Davis, C., & Yager, J. (1992). Transcultural aspects of eating disorders: a critical review of the literature. *Culture, Medicine, and Psychiatry, 16*, 377-394.
- Dolan, B. (1991). Cross-Cultural Aspects of Anorexia Nervosa and Bulimia: A review. *International Journal of Eating Disorders, 10*, 67-78.
- French, S. A., Story, M., Neumark-Sztainer, D., Downes, B., Resnick, M., & Blum, R. (1997). Ethnic differences in psychosocial and health behavior correlates of dieting, purging, and binge eating in a population-based sample of adolescent females. *International Journal of Eating Disorders, 22*, 315-322.
- Garner, D.M. & Garfinkel, P.E. (1979). The Eating Attitudes Test: an index of the symptoms of anorexia nervosa. *Psychological Medicine, 9*, 273-279.

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.

Henderson, M. & Freeman, C.P.L. (1987). A self-rating scale for bulimia – the “BITE”. *British Journal of Psychiatry*, 150, 18-24.

Hooper, M.S.H., & Garner, D.M. (1986). Application of the eating disorders inventory to a sample of black, white and mixed race school girls in Zimbabwe. *International Journal of Eating Disorders*, 5, 161-168.

Howell, D.C. (1992). *Statistical methods for psychology* (3<sup>rd</sup> ed.). Belmont: Duxbury Press.

Hsu, L.K. (1987). Are the eating disorders becoming more common in Blacks? *International journal of Eating Disorders*, 6, 113-124.

Le Grange D., Stone A.A. & Brownell K.D. (1998). Eating disturbances in white and minority female dieters. *International Journal of Eating Disorders*, 24, 395-403.

Nasser, M. (1994). Screening for abnormal eating attitudes in a population of Egyptian secondary school girls. *Social Psychiatry and Psychiatric Epidemiology*, 29, 25-30.

Powell, A.D. & Kahn, A.S. (1995). Racial differences in women's desires to be thin. *International Journal of Eating Disorders*, 17, 191-195

Steinhausen H.C., Boyadjieva S.B. & Grigoriu-Serbanescu M. (2000). Transcultural outcome study of adolescent eating disorders. *Acta Psychiatr Scand*, 101, 60-66.

Striegel-Moore, R. H., & Smolak, L. (1996). *The role of race in the development of eating disorders*. In L. Smolak, M. P., Levine, & R. H. Striegel-Moore (Eds.), *The developmental psychopathology of eating disorders* (259-284). Mahwah, NJ: Erlbaum.

Striegel-Moore, R. H., & Smolak, L. (2000). *The influence of ethnicity on eating disorders in women*. In R. Eisler, & M.Hersen (Eds.), *Handbook of gender, culture, and health* (227-254). Mahwah, NJ: Erlbaum.

Swartz, L. (1985). Anorexia nervosa a cultural bound syndrome. *Social Science and Medicine*, 20, 725-730.

Szabo, C.P. & Hollands, C. (1997). Abnormal eating attitudes in secondary-school girls in South-Africa – a preliminary study. *South African Medical Journal*, 87:4, 524-530.

Szabo, C.P. (1999). Eating attitudes among black South Africans. *American Journal of Psychiatry*, 156:6, 981-982.

Szabo, C.P., Berk, M., Tlou, E. & Allwood, C.W. (1995). Eating Disorders in black South African females, a series of cases. *South African Medical Journal*, 85, 588-590.

Tabachnick, B.G. & Fidell, L.S. (1996). *Using multivariate statistics* (3<sup>rd</sup> ed.) Northridge: Harper Collins College Publishers.

Thompson, S. H., Sargent, R. G., Rogan, T., & Corwin, S. J. (1997). Sociocultural influences on weight concerns among early adolescents. *Journal of Gender, Culture, and Health*, 2, 211–231.

**Appendix A**

**NPar Tests: Results of the Analysis of Differences between Culture Groups and all Admission Data.**

**Descriptive Statistics**

| Diagnosis        | Period of Onset in Months       | N  | Mean    | Std. Deviation | Minimum | Maximum |
|------------------|---------------------------------|----|---------|----------------|---------|---------|
| Anorexia Nervosa | Period of Onset in Months       | 10 | 9.3000  | 5.41705        | 5.00    | 18.00   |
|                  | Admission Weight                | 10 | 38.275  | 6.5702         | 27.1    | 44.3    |
|                  | Goal Weight Anorexia            | 9  | 46.2222 | 4.96935        | 41.00   | 55.00   |
|                  | Height                          | 10 | 1.5690  | .05705         | 1.50    | 1.66    |
|                  | Body Mass Index                 | 10 | 15.4870 | 2.31454        | 11.72   | 18.20   |
|                  | Own Ideal Weight                | 10 | 42.9000 | 7.29459        | 30.00   | 55.00   |
|                  | Highest Past Weight             | 10 | 54.7000 | 7.90288        | 45.00   | 70.00   |
|                  | Lowest Past Weight              | 10 | 36.7050 | 7.81098        | 25.00   | 47.00   |
|                  | Amenorrhea (Duration in months) | 10 | 4.1000  | 2.55821        | .00     | 7.00    |
|                  | Race                            | 10 | 1.5000  | .52705         | 1.00    | 2.00    |
| Bulimia Nervosa  | Period of Onset in Months       | 10 | 41.7000 | 49.78632       | 4.00    | 156.00  |
|                  | Admission Weight                | 10 | 51.570  | 6.8198         | 37.0    | 61.3    |
|                  | Goal Weight Anorexia            | 0  |         |                |         |         |
|                  | Height                          | 10 | 1.6090  | .05301         | 1.53    | 1.70    |
|                  | Body Mass Index                 | 10 | 20.0110 | 3.18483        | 13.92   | 25.84   |
|                  | Own Ideal Weight                | 10 | 48.2000 | 5.02881        | 40.00   | 55.00   |
|                  | Highest Past Weight             | 10 | 61.0000 | 9.28559        | 50.00   | 74.00   |
|                  | Lowest Past Weight              | 10 | 47.1300 | 7.53747        | 37.00   | 61.30   |
|                  | Amenorrhea (Duration in months) | 10 | 5.2000  | 4.63801        | .00     | 12.00   |
|                  | Race                            | 10 | 1.5000  | .52705         | 1.00    | 2.00    |

Mann-Whitney Test

| Diagnosis        |                                 | Race  | N  | Mean Rank | Sum of Ranks |
|------------------|---------------------------------|-------|----|-----------|--------------|
| Anorexia Nervosa | Period of Onset in Months       | White | 5  | 6.30      | 31.50        |
|                  |                                 | Black | 5  | 4.70      | 23.50        |
|                  |                                 | Total | 10 |           |              |
|                  | Admission Weight                | White | 5  | 6.20      | 31.00        |
|                  |                                 | Black | 5  | 4.80      | 24.00        |
|                  |                                 | Total | 10 |           |              |
|                  | Goal Weight Anorexia            | White | 5  | 5.80      | 29.00        |
|                  |                                 | Black | 4  | 4.00      | 16.00        |
|                  |                                 | Total | 9  |           |              |
|                  | Height                          | White | 5  | 6.30      | 31.50        |
|                  |                                 | Black | 5  | 4.70      | 23.50        |
|                  |                                 | Total | 10 |           |              |
|                  | Body Mass Index                 | White | 5  | 5.80      | 29.00        |
|                  |                                 | Black | 5  | 5.20      | 26.00        |
|                  |                                 | Total | 10 |           |              |
|                  | Own Ideal Weight                | White | 5  | 7.10      | 35.50        |
|                  |                                 | Black | 5  | 3.90      | 19.50        |
|                  |                                 | Total | 10 |           |              |
|                  | Highest Past Weight             | White | 5  | 6.20      | 31.00        |
|                  |                                 | Black | 5  | 4.80      | 24.00        |
|                  |                                 | Total | 10 |           |              |
|                  | Lowest Past Weight              | White | 5  | 7.40      | 37.00        |
|                  |                                 | Black | 5  | 3.60      | 18.00        |
|                  |                                 | Total | 10 |           |              |
|                  | Amenorrhea (Duration in months) | White | 5  | 6.00      | 30.00        |
|                  |                                 | Black | 5  | 5.00      | 25.00        |
|                  |                                 | Total | 10 |           |              |

**Mann-Whitney Test**

|                                 |                           |       |    |      |       |
|---------------------------------|---------------------------|-------|----|------|-------|
| Bulimia Nervosa                 | Period of Onset in Months | White | 5  | 5.00 | 25.00 |
|                                 |                           | Black | 5  | 6.00 | 30.00 |
|                                 |                           | Total | 10 |      |       |
| Admission Weight                |                           | White | 5  | 5.60 | 28.00 |
|                                 |                           | Black | 5  | 5.40 | 27.00 |
|                                 |                           | Total | 10 |      |       |
| Height                          |                           | White | 5  | 7.80 | 39.00 |
|                                 |                           | Black | 5  | 3.20 | 16.00 |
|                                 |                           | Total | 10 |      |       |
| Body Mass Index                 |                           | White | 5  | 4.40 | 22.00 |
|                                 |                           | Black | 5  | 6.60 | 33.00 |
|                                 |                           | Total | 10 |      |       |
| Own Ideal Weight                |                           | White | 5  | 4.90 | 24.50 |
|                                 |                           | Black | 5  | 6.10 | 30.50 |
|                                 |                           | Total | 10 |      |       |
| Highest Past Weight             |                           | White | 5  | 6.60 | 33.00 |
|                                 |                           | Black | 5  | 4.40 | 22.00 |
|                                 |                           | Total | 10 |      |       |
| Lowest Past Weight              |                           | White | 5  | 5.00 | 25.00 |
|                                 |                           | Black | 5  | 6.00 | 30.00 |
|                                 |                           | Total | 10 |      |       |
| Amenorrhea (Duration in months) |                           | White | 5  | 4.60 | 23.00 |
|                                 |                           | Black | 5  | 6.40 | 32.00 |
|                                 |                           | Total | 10 |      |       |

Test Statistics

| Diagnosis        |                                | Period of Onset in Months | Admission Weight | Goal Weight Anorexia | Height | Body Mass Index | Own Ideal Weight | Highest Past Weight | Lowest Past Weight | Amenorrhea (Duration in months) |
|------------------|--------------------------------|---------------------------|------------------|----------------------|--------|-----------------|------------------|---------------------|--------------------|---------------------------------|
| Anorexia Nervosa | Mann-Whitney U                 | 8.500                     | 9.000            | 6.000                | 8.500  | 11.000          | 4.500            | 9.000               | 3.000              | 10.000                          |
|                  | Wilcoxon W                     | 23.500                    | 24.000           | 16.000               | 23.500 | 26.000          | 19.500           | 24.000              | 18.000             | 25.000                          |
|                  | Z                              | -.849                     | -.731            | -.988                | -.838  | -.313           | -1.697           | -.733               | -1.984             | -.532                           |
|                  | Asymp. Sig. (2-tailed)         | .396                      | .465             | .323                 | .402   | .754            | .090             | .463                | .047               | .595                            |
|                  | Exact Sig. [2*(1-tailed Sig.)] | .421                      | .548             | .413                 | .421   | .841            | .095             | .548                | .056               | .690                            |
| Bulimia Nervosa  | Mann-Whitney U                 | 10.000                    | 12.000           |                      | 1.000  | 7.000           | 9.500            | 7.000               | 10.000             | 8.000                           |
|                  | Wilcoxon W                     | 25.000                    | 27.000           |                      | 16.000 | 22.000          | 24.500           | 22.000              | 25.000             | 23.000                          |
|                  | Z                              | -.522                     | -.104            |                      | 2.410  | -1.149          | -.632            | -1.167              | -.522              | -.949                           |
|                  | Asymp. Sig. (2-tailed)         | .602                      | .917             |                      | .016   | .251            | .527             | .243                | .602               | .343                            |
|                  | Exact Sig. [2*(1-tailed Sig.)] | .690                      | 1.000            |                      | .016   | .310            | .548             | .310                | .690               | .421                            |

a Not corrected for ties. b Grouping Variable: Race

**NPar Tests: Results of Differences between Culture Groups on all Psychometric Data**

**Descriptive Statistics**

| Diagnosis        |                             | N  | Std. Deviation | Minimum | Maximum |
|------------------|-----------------------------|----|----------------|---------|---------|
| Anorexia Nervosa | BDI                         | 10 | 29.8000        | 14.00   | 48.00   |
|                  | EDI Drive for Thinness      | 10 | 14.0000        | 6.00    | 21.00   |
|                  | EDI Bulimia                 | 10 | 3.3000         | .00     | 8.00    |
|                  | EDI Body Dissatisfaction    | 10 | 14.8000        | 4.00    | 27.00   |
|                  | EDI Ineffectiveness         | 10 | 14.1000        | 6.00    | 29.00   |
|                  | EDI Perfectionism           | 10 | 9.4000         | .00     | 16.00   |
|                  | EDI Interpersonal Distrust  | 10 | 9.0000         | 3.00    | 16.00   |
|                  | EDI Interoceptive Awareness | 10 | 13.0000        | 2.00    | 22.00   |
|                  | EDI Maturity Fears          | 10 | 9.2000         | 3.00    | 23.00   |
|                  | BITE Symptom Scale Score    | 10 | 12.3000        | 4.00    | 25.00   |
|                  | BITE Severity Scale Score   | 10 | 12.4000        | 8.00    | 18.00   |
|                  | Race                        | 10 | 1.5000         | 1.00    | 2.00    |

**Descriptive Statistics**

|                        |                              |    |         |          |      |       |
|------------------------|------------------------------|----|---------|----------|------|-------|
| <b>Bulimia Nervosa</b> | <b>BDI</b>                   | 10 | 23.5000 | 10.00278 | 3.00 | 39.00 |
|                        | ED I Drive for Thinness      | 10 | 14.3000 | 7.49889  | .00  | 21.00 |
|                        | ED I Bulimia                 | 10 | 11.1000 | 8.04777  | .00  | 21.00 |
|                        | ED I Body Dissatisfaction    | 10 | 19.5000 | 8.38318  | 4.00 | 27.00 |
|                        | ED I Ineffectiveness         | 10 | 16.2000 | 10.50714 | .00  | 29.00 |
|                        | ED I Perfectionism           | 10 | 12.1000 | 5.44569  | 2.00 | 18.00 |
|                        | ED I Interpersonal Distrust  | 10 | 10.5000 | 5.35931  | 3.00 | 20.00 |
|                        | ED I Interoceptive Awareness | 10 | 16.0000 | 9.88826  | .00  | 29.00 |
|                        | ED I Maturity Fears          | 10 | 9.0000  | 8.31331  | .00  | 22.00 |
|                        | BITE Symptom Scale Score     | 10 | 15.7000 | 9.95601  | 3.00 | 30.00 |
|                        | BITE Severity Scale Score    | 10 | 11.9000 | 10.24641 | .00  | 28.00 |
|                        | Race                         | 10 | 1.5000  | .52705   | 1.00 | 2.00  |

### Mann-Whitney Test

| Diagnosis                   |                          | Race  | N    | Mean Rank | Sum of Ranks |
|-----------------------------|--------------------------|-------|------|-----------|--------------|
| Anorexia Nervosa            | BDI                      | White | 5    | 5.60      | 28.00        |
|                             |                          | Black | 5    | 5.40      | 27.00        |
|                             |                          | Total | 10   |           |              |
|                             | EDI Drive for Thinness   | White | 5    | 3.90      | 19.50        |
|                             |                          | Black | 5    | 7.10      | 35.50        |
|                             |                          | Total | 10   |           |              |
|                             | EDI Bulimia              | White | 5    | 4.60      | 23.00        |
|                             |                          | Black | 5    | 6.40      | 32.00        |
|                             |                          | Total | 10   |           |              |
|                             | EDI Body Dissatisfaction | White | 5    | 3.90      | 19.50        |
|                             |                          | Black | 5    | 7.10      | 35.50        |
|                             |                          | Total | 10   |           |              |
|                             | EDI Ineffectiveness      | White | 5    | 4.20      | 21.00        |
|                             |                          | Black | 5    | 6.80      | 34.00        |
|                             |                          | Total | 10   |           |              |
| EDI Perfectionism           | White                    | 5     | 4.60 | 23.00     |              |
|                             | Black                    | 5     | 6.40 | 32.00     |              |
|                             | Total                    | 10    |      |           |              |
| EDI Interpersonal Distrust  | White                    | 5     | 4.50 | 22.50     |              |
|                             | Black                    | 5     | 6.50 | 32.50     |              |
|                             | Total                    | 10    |      |           |              |
| EDI Interoceptive Awareness | White                    | 5     | 5.40 | 27.00     |              |
|                             | Black                    | 5     | 5.60 | 28.00     |              |
|                             | Total                    | 10    |      |           |              |
| EDI Maturity Fears          | White                    | 5     | 4.70 | 23.50     |              |
|                             | Black                    | 5     | 6.30 | 31.50     |              |
|                             | Total                    | 10    |      |           |              |
| BITE Symptom Scale Score    | White                    | 5     | 5.10 | 25.50     |              |
|                             | Black                    | 5     | 5.90 | 29.50     |              |
|                             | Total                    | 10    |      |           |              |
| BITE Severity Scale Score   | White                    | 5     | 5.60 | 28.00     |              |
|                             | Black                    | 5     | 5.40 | 27.00     |              |
|                             | Total                    | 10    |      |           |              |
| Bulimia Nervosa             | BDI                      | White | 5    | 7.00      | 35.00        |
|                             |                          | Black | 5    | 4.00      | 20.00        |
|                             |                          | Total | 10   |           |              |
|                             | EDI Drive for Thinness   | White | 5    | 6.20      | 31.00        |
|                             |                          | Black | 5    | 4.80      | 24.00        |
|                             |                          | Total | 10   |           |              |
|                             | EDI Bulimia              | White | 5    | 4.50      | 22.50        |
|                             |                          | Black | 5    | 6.50      | 32.50        |
|                             |                          | Total | 10   |           |              |
|                             | EDI Body Dissatisfaction | White | 5    | 6.40      | 32.00        |
|                             |                          | Black | 5    | 4.60      | 23.00        |
|                             |                          | Total | 10   |           |              |
|                             | EDI Ineffectiveness      | White | 5    | 7.00      | 35.00        |

|  |                             |       |    |      |       |
|--|-----------------------------|-------|----|------|-------|
|  |                             | Black | 5  | 4.00 | 20.00 |
|  |                             | Total | 10 |      |       |
|  | EDI Perfectionism           | White | 5  | 6.00 | 30.00 |
|  |                             | Black | 5  | 5.00 | 25.00 |
|  |                             | Total | 10 |      |       |
|  | EDI Interpersonal Distrust  | White | 5  | 7.10 | 35.50 |
|  |                             | Black | 5  | 3.90 | 19.50 |
|  |                             | Total | 10 |      |       |
|  | EDI Interoceptive Awareness | White | 5  | 6.60 | 33.00 |
|  |                             | Black | 5  | 4.40 | 22.00 |
|  |                             | Total | 10 |      |       |
|  | EDI Maturity Fears          | White | 5  | 7.00 | 35.00 |
|  |                             | Black | 5  | 4.00 | 20.00 |
|  |                             | Total | 10 |      |       |
|  | BITE Symptom Scale Score    | White | 5  | 6.80 | 34.00 |
|  |                             | Black | 5  | 4.20 | 21.00 |
|  |                             | Total | 10 |      |       |
|  | BITE Severity Scale Score   | White | 5  | 6.70 | 33.50 |
|  |                             | Black | 5  | 4.30 | 21.50 |
|  |                             | Total | 10 |      |       |

Test Statistics

| Diagnosis        |                                | BDI    | EDI Drive for Thinness | EDI Bulimia | EDI Body Dissatisfaction | EDI Ineffectiveness | EDI Perfectionism | EDI Interpersonal Distrust | EDI Interceptive Awareness | EDI Maturity Fears | BITE Symptom Scale Score | BITE Severity Scale Score |
|------------------|--------------------------------|--------|------------------------|-------------|--------------------------|---------------------|-------------------|----------------------------|----------------------------|--------------------|--------------------------|---------------------------|
| Anorexia Nervosa | Mann-Whitney U                 | 12.000 | 4.500                  | 8.000       | 4.500                    | 6.000               | 8.000             | 7.500                      | 12.000                     | 8.500              | 10.500                   | 12.000                    |
|                  | Wilcoxon W                     | 27.000 | 19.500                 | 23.000      | 19.500                   | 21.000              | 23.000            | 22.500                     | 27.000                     | 23.500             | 25.500                   | 27.000                    |
|                  | Z                              | -.105  | -1.697                 | -1.003      | -1.681                   | -1.366              | -.946             | -1.054                     | -.105                      | -.841              | -.424                    | -.108                     |
|                  | Asymp. Sig. (2-tailed)         | .916   | .090                   | .316        | .093                     | .172                | .344              | .292                       | .916                       | .401               | .671                     | .914                      |
|                  | Exact Sig. [2*(1-tailed Sig.)] | 1.000  | .095                   | .421        | .095                     | .222                | .421              | .310                       | 1.000                      | .421               | .690                     | 1.000                     |
| Bulimia Nervosa  | Mann-Whitney U                 | 5.000  | 9.000                  | 7.500       | 8.000                    | 5.000               | 10.000            | 4.500                      | 7.000                      | 5.000              | 6.000                    | 6.500                     |
|                  | Wilcoxon W                     | 20.000 | 24.000                 | 22.500      | 23.000                   | 20.000              | 25.000            | 19.500                     | 22.000                     | 20.000             | 21.000                   | 21.500                    |
|                  | Z                              | -1.567 | -.742                  | -1.048      | -.955                    | -1.567              | -.525             | -1.676                     | -1.149                     | -1.586             | -1.358                   | -1.257                    |
|                  | Asymp. Sig. (2-tailed)         | .117   | .458                   | .295        | .340                     | .117                | .599              | .094                       | .251                       | .113               | .175                     | .209                      |
|                  | Exact Sig. [2*(1-tailed Sig.)] | .151   | .548                   | .310        | .421                     | .151                | .690              | .095                       | .310                       | .151               | .222                     | .222                      |

a Not corrected for ties.

b Grouping Variable: Race

**NPar Tests: Results of the Comparison of Clinical Diagnosis regardless of Culture on Admission Data**

**Descriptive Statistics**

|                                 | N  | Mean    | Std. Deviation | Minimum | Maximum |
|---------------------------------|----|---------|----------------|---------|---------|
| Period of Onset in Months       | 20 | 25.5000 | 38.26569       | 4.00    | 156.00  |
| Admission Weight                | 20 | 44.922  | 9.4336         | 27.1    | 61.3    |
| Goal Weight Anorexia            | 9  | 46.2222 | 4.96935        | 41.00   | 55.00   |
| Height                          | 20 | 1.5890  | .05739         | 1.50    | 1.70    |
| Body Mass Index                 | 20 | 17.7490 | 3.56765        | 11.72   | 25.84   |
| Own Ideal Weight                | 20 | 45.5500 | 6.67655        | 30.00   | 55.00   |
| Highest Past Weight             | 20 | 57.8500 | 8.99283        | 45.00   | 74.00   |
| Lowest Past Weight              | 20 | 41.9175 | 9.18760        | 25.00   | 61.30   |
| Amenorrhea (Duration in months) | 20 | 4.6500  | 3.68889        | .00     | 12.00   |
| Diagnosis                       | 20 | 1.5000  | .51299         | 1.00    | 2.00    |

### Mann-Whitney Test

|                                 | Diagnosis        | N  | Mean Rank | Sum of Ranks |
|---------------------------------|------------------|----|-----------|--------------|
| Period of Onset in Months       | Anorexia Nervosa | 10 | 8.10      | 81.00        |
|                                 | Bulimia Nervosa  | 10 | 12.90     | 129.00       |
|                                 | Total            | 20 |           |              |
| Admission Weight                | Anorexia Nervosa | 10 | 6.20      | 62.00        |
|                                 | Bulimia Nervosa  | 10 | 14.80     | 148.00       |
|                                 | Total            | 20 |           |              |
| Goal Weight Anorexia            | Anorexia Nervosa | 9  | 5.00      | 45.00        |
|                                 | Bulimia Nervosa  | 0  | .00       | .00          |
|                                 | Total            | 9  |           |              |
| Height                          | Anorexia Nervosa | 10 | 8.60      | 86.00        |
|                                 | Bulimia Nervosa  | 10 | 12.40     | 124.00       |
|                                 | Total            | 20 |           |              |
| Body Mass Index                 | Anorexia Nervosa | 10 | 6.50      | 65.00        |
|                                 | Bulimia Nervosa  | 10 | 14.50     | 145.00       |
|                                 | Total            | 20 |           |              |
| Own Ideal Weight                | Anorexia Nervosa | 10 | 8.15      | 81.50        |
|                                 | Bulimia Nervosa  | 10 | 12.85     | 128.50       |
|                                 | Total            | 20 |           |              |
| Highest Past Weight             | Anorexia Nervosa | 10 | 8.40      | 84.00        |
|                                 | Bulimia Nervosa  | 10 | 12.60     | 126.00       |
|                                 | Total            | 20 |           |              |
| Lowest Past Weight              | Anorexia Nervosa | 10 | 7.30      | 73.00        |
|                                 | Bulimia Nervosa  | 10 | 13.70     | 137.00       |
|                                 | Total            | 20 |           |              |
| Amenorrhea (Duration in months) | Anorexia Nervosa | 10 | 9.70      | 97.00        |
|                                 | Bulimia Nervosa  | 10 | 11.30     | 113.00       |
|                                 | Total            | 20 |           |              |

a Mann-Whitney Test cannot be performed on empty groups.

Test Statistics

|                                | Period of Onset in Months | Admission Weight | Height | Body Mass Index | Own Ideal Weight | Highest Past Weight | Lowest Past Weight | Amenorrhea (Duration in months) |
|--------------------------------|---------------------------|------------------|--------|-----------------|------------------|---------------------|--------------------|---------------------------------|
| Mann-Whitney U                 | 26.000                    | 7.000            | 31.000 | 10.000          | 26.500           | 29.000              | 18.000             | 42.000                          |
| Wilcoxon W                     | 81.000                    | 62.000           | 86.000 | 65.000          | 81.500           | 84.000              | 73.000             | 97.000                          |
| Z                              | -1.821                    | -3.250           | -1.440 | -3.024          | -1.797           | -1.600              | -2.421             | -.609                           |
| Asymp. Sig. (2-tailed)         | .069                      | .001             | .150   | .002            | .072             | .110                | .015               | .542                            |
| Exact Sig. [2*(1-tailed Sig.)] | .075                      | .000             | .165   | .002            | .075             | .123                | .015               | .579                            |

a Not corrected for ties.

b Grouping Variable: Diagnosis

**NPar Tests Results of the Differences between Clinical Diagnoses regardless of Culture on Psychometric Data.**

**Descriptive Statistics**

|                             | N  | Mean    | Std. Deviation | Minimum | Maximum |
|-----------------------------|----|---------|----------------|---------|---------|
| BDI                         | 20 | 26.6500 | 9.80481        | 3.00    | 48.00   |
| EDI Drive for Thinness      | 20 | 14.1500 | 6.74556        | .00     | 21.00   |
| EDI Bulimia                 | 20 | 7.2000  | 6.99323        | .00     | 21.00   |
| EDI Body Dissatisfaction    | 20 | 17.1500 | 8.96352        | 4.00    | 27.00   |
| EDI Ineffectiveness         | 20 | 15.1500 | 9.14374        | .00     | 29.00   |
| EDI Perfectionism           | 20 | 10.7500 | 5.19995        | .00     | 18.00   |
| EDI Interpersonal Distrust  | 20 | 9.7500  | 5.11834        | 3.00    | 20.00   |
| EDI Interoceptive Awareness | 20 | 14.5000 | 8.50696        | .00     | 29.00   |
| EDI Maturity Fears          | 20 | 9.1000  | 7.34059        | .00     | 23.00   |
| BITE Symptom Scale Score    | 20 | 14.0000 | 8.40426        | 3.00    | 30.00   |
| BITE Severity Scale Score   | 20 | 12.1500 | 7.56220        | .00     | 28.00   |
| Diagnosis                   | 20 | 1.5000  | .51299         | 1.00    | 2.00    |

### Mann-Whitney Test

|                             | Diagnosis        | N  | Mean Rank | Sum of Ranks |
|-----------------------------|------------------|----|-----------|--------------|
| BDI                         | Anorexia Nervosa | 10 | 12.05     | 120.50       |
|                             | Bulimia Nervosa  | 10 | 8.95      | 89.50        |
|                             | Total            | 20 |           |              |
| EDI Drive for Thinness      | Anorexia Nervosa | 10 | 10.50     | 105.00       |
|                             | Bulimia Nervosa  | 10 | 10.50     | 105.00       |
|                             | Total            | 20 |           |              |
| EDI Bulimia                 | Anorexia Nervosa | 10 | 7.75      | 77.50        |
|                             | Bulimia Nervosa  | 10 | 13.25     | 132.50       |
|                             | Total            | 20 |           |              |
| EDI Body Dissatisfaction    | Anorexia Nervosa | 10 | 9.30      | 93.00        |
|                             | Bulimia Nervosa  | 10 | 11.70     | 117.00       |
|                             | Total            | 20 |           |              |
| EDI Ineffectiveness         | Anorexia Nervosa | 10 | 9.45      | 94.50        |
|                             | Bulimia Nervosa  | 10 | 11.55     | 115.50       |
|                             | Total            | 20 |           |              |
| EDI Perfectionism           | Anorexia Nervosa | 10 | 8.70      | 87.00        |
|                             | Bulimia Nervosa  | 10 | 12.30     | 123.00       |
|                             | Total            | 20 |           |              |
| EDI Interpersonal Distrust  | Anorexia Nervosa | 10 | 9.80      | 98.00        |
|                             | Bulimia Nervosa  | 10 | 11.20     | 112.00       |
|                             | Total            | 20 |           |              |
| EDI Interoceptive Awareness | Anorexia Nervosa | 10 | 9.20      | 92.00        |
|                             | Bulimia Nervosa  | 10 | 11.80     | 118.00       |
|                             | Total            | 20 |           |              |
| EDI Maturity Fears          | Anorexia Nervosa | 10 | 11.60     | 116.00       |
|                             | Bulimia Nervosa  | 10 | 9.40      | 94.00        |
|                             | Total            | 20 |           |              |
| BITE Symptom Scale Score    | Anorexia Nervosa | 10 | 9.75      | 97.50        |
|                             | Bulimia Nervosa  | 10 | 11.25     | 112.50       |
|                             | Total            | 20 |           |              |
| BITE Severity Scale Score   | Anorexia Nervosa | 10 | 10.65     | 106.50       |
|                             | Bulimia Nervosa  | 10 | 10.35     | 103.50       |
|                             | Total            | 20 |           |              |

### Test Statistics

|                                | BDI    | EDI Drive for Thinness | EDI Bulimia | EDI Body Dissatisfaction | EDI Ineffectiveness | EDI Perfectionism | EDI Interpersonal Distrust | EDI Interceptive Awareness | EDI Maturity Fears | BITE Symptom Scale Score | BITE Severity Scale Score |
|--------------------------------|--------|------------------------|-------------|--------------------------|---------------------|-------------------|----------------------------|----------------------------|--------------------|--------------------------|---------------------------|
| Mann-Whitney U                 | 34.500 | 50.000                 | 22.500      | 38.000                   | 39.500              | 32.000            | 43.000                     | 37.000                     | 39.000             | 42.500                   | 48.500                    |
| Wilcoxon W                     | 89.500 | 105.000                | 77.500      | 93.000                   | 94.500              | 87.000            | 98.000                     | 92.000                     | 94.000             | 97.500                   | 103.500                   |
| Z                              | -1.174 | .000                   | 2.099       | -.913                    | -.795               | -1.367            | -.532                      | -.985                      | -.836              | -.570                    | -.114                     |
| Asymp. Sig. (2-tailed)         | .240   | 1.000                  | .036        | .361                     | .426                | .172              | .595                       | .324                       | .403               | .569                     | .909                      |
| Exact Sig. [2*(1-tailed Sig.)] | .247   | 1.000                  | .035        | .393                     | .436                | .190              | .631                       | .353                       | .436               | .579                     | .912                      |

a Not corrected for ties.

b Grouping Variable: Diagnosis

## Appendix B

### **Results of the Cross Tabulations and Chi Square Analysis to Test the Relationship Between Culture and all Admission and Psychometric Data**

#### **Crosstab**

|                                 |                                     | Race  |   | Total  |        |        |
|---------------------------------|-------------------------------------|---|---|--------|--------|--------|
|                                 |                                     | White                                       | Black                                       |        |        |        |
| Beck Depression<br>2 Categories | No to Moderate<br>Depression        | Count                                       | 4   | 8      | 12     |        |
|                                 |                                     | % within Beck<br>Depression 2<br>Categories | 33.3%                                       | 66.7%  | 100.0% |        |
|                                 | Severe and<br>Extreme<br>Depression | % within Race<br>Count                      | 40.0%                                       | 80.0%  | 60.0%  |        |
|                                 |                                     | Count                                       | 6   | 2      | 8      |        |
| Total                           |                                     |   | % within Beck<br>Depression 2<br>Categories | 75.0%  | 25.0%  | 100.0% |
|                                 |                                     |   | % within Race<br>Count                      | 60.0%  | 20.0%  | 40.0%  |
|                                 |                                     |   | Count                                       | 10     | 10     | 20     |
|                                 |                                     |   | % within Beck<br>Depression 2<br>Categories | 50.0%  | 50.0%  | 100.0% |
|                                 |                                     | % within Race                               |   | 100.0% | 100.0% | 100.0% |

#### **Chi-Square Tests**

|  | Value | df | Asymp. Sig. (2-<br>sided) | Exact Sig. (2-<br>sided) | Exact Sig. (1-<br>sided) |
|--|-------|----|---------------------------|--------------------------|--------------------------|
| Pearson Chi-Square                         | 3.333 | 1  | .068                      |                          |                          |
| Continuity<br>Correction                   | 1.875 | 1  | .171                      |                          |                          |
| Likelihood Ratio<br>Fisher's Exact<br>Test | 3.452 | 1  | .063                      | .170                     | .085                     |
| Linear-by-Linear<br>Association            | 3.167 | 1  | .075                      |                          |                          |
| N of Valid Cases                           | 20    |    |                           |                          |                          |

a Computed only for a 2x2 table

b 2 cells (50.0%) have expected count less than 5. The minimum expected count is 4.00.

**EDI Drive for Thinness Recoded \* Race**

**Crosstab**

|                                |                          | Count                                   | Race   |        | Total  |
|--------------------------------|--------------------------|---|--------|--------|--------|
|                                |                          |   | White  | Black  |        |
| EDI Drive for Thinness Recoded | Below Mean               |   | 5      | 3      | 8      |
|                                |                          | % within EDI Drive for Thinness Recoded | 62.5%  | 37.5%  | 100.0% |
|                                | Significantly Above Mean | % within Race                           | 50.0%  | 30.0%  | 40.0%  |
|                                |                          | Count                                   | 5      | 7      | 12     |
| Total                          |                          | % within EDI Drive for Thinness Recoded | 41.7%  | 58.3%  | 100.0% |
|                                |                          | % within Race                           | 50.0%  | 70.0%  | 60.0%  |
|                                |                          | Count                                   | 10     | 10     | 20     |
|                                |                          | % within EDI Drive for Thinness Recoded | 50.0%  | 50.0%  | 100.0% |
|                                |                          | % within Race                           | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

|                              | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|------------------------------|-------|----|-----------------------|----------------------|----------------------|
| Pearson Chi-Square           | .833  | 1  | .361                  |                      |                      |
| Continuity Correction        | .208  | 1  | .648                  |                      |                      |
| Likelihood Ratio             | .840  | 1  | .359                  |                      |                      |
| Fisher's Exact Test          |       |    |                       | .650                 | .325                 |
| Linear-by-Linear Association | .792  | 1  | .374                  |                      |                      |
| N of Valid Cases             | 20    |    |                       |                      |                      |

a Computed only for a 2x2 table

b 2 cells (50.0%) have expected count less than 5. The minimum expected count is 4.00.

## EDI Bulimia Recoded \* Race

### Crosstab

|                     |                          |                              | Race   |        | Total  |
|---------------------|--------------------------|------------------------------|--------|--------|--------|
| EDI Bulimia Recoded | Below Mean               | Count                        | White  | Black  |        |
|                     |                          | 3                            | 1      | 4      |        |
|                     |                          | % within EDI Bulimia Recoded | 75.0%  | 25.0%  | 100.0% |
|                     |                          | % within Race                | 30.0%  | 10.0%  | 20.0%  |
| EDI Bulimia Recoded | Significantly Above Mean | Count                        | White  | Black  | Total  |
|                     |                          | 7                            | 9      | 16     |        |
|                     |                          | % within EDI Bulimia Recoded | 43.8%  | 56.3%  | 100.0% |
|                     |                          | % within Race                | 70.0%  | 90.0%  | 80.0%  |
| Total               |                          | Count                        | White  | Black  | Total  |
|                     |                          | 10                           | 10     | 20     |        |
|                     |                          | % within EDI Bulimia Recoded | 50.0%  | 50.0%  | 100.0% |
|                     |                          | % within Race                | 100.0% | 100.0% | 100.0% |

### Chi-Square Tests

|                              | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|------------------------------|-------|----|-----------------------|----------------------|----------------------|
| Pearson Chi-Square           | 1.250 | 1  | .264                  |                      |                      |
| Continuity Correction        | .313  | 1  | .576                  |                      |                      |
| Likelihood Ratio             | 1.297 | 1  | .255                  |                      |                      |
| Fisher's Exact Test          |       |    |                       | .582                 | .291                 |
| Linear-by-Linear Association | 1.188 | 1  | .276                  |                      |                      |
| N of Valid Cases             | 20    |    |                       |                      |                      |

a Computed only for a 2x2 table

b 2 cells (50.0%) have expected count less than 5. The minimum expected count is 2.00.

**EDI Body Dissatisfaction Recorded \* Race**

**Crosstab**

|   |   | Race  |        | Total  |        |
|---|---|---|--------|--------|--------|
|   |   | White   | Black  |        |        |
| EDI Body<br>Dissatisfaction<br>Recorded | Below Mean  | Count   | 5      | 2      | 7      |
|   |   | % within EDI<br>Body<br>Dissatisfaction<br>Recorded | 71.4%  | 28.6%  | 100.0% |
|   | Significantly<br>Above Mean                         | % within Race<br>Count                              | 50.0%  | 20.0%  | 35.0%  |
|   |   |   | 5      | 8      | 13     |
|   | % within EDI<br>Body<br>Dissatisfaction<br>Recorded | 33.5%   | 61.5%  | 100.0% |        |
| Total                                   |   | % within Race<br>Count                              | 50.0%  | 80.0%  | 65.0%  |
|   |   |   | 10     | 10     | 20     |
|   |   | % within EDI<br>Body<br>Dissatisfaction<br>Recorded | 50.0%  | 50.0%  | 100.0% |
|   |   | % within Race                                       | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

|                              | Value | df | Asymp. Sig. (2-<br>sided) | Exact Sig. (2-<br>sided) | Exact Sig. (1-<br>sided) |
|------------------------------|-------|----|---------------------------|--------------------------|--------------------------|
| Pearson Chi-Square           | 1.978 | 1  | .160                      |                          |                          |
| Continuity Correction        | .879  | 1  | .348                      |                          |                          |
| Likelihood Ratio             | 2.027 | 1  | .155                      |                          |                          |
| Fisher's Exact Test          |       |    |                           | .350                     | .175                     |
| Linear-by-Linear Association | 1.879 | 1  | .170                      |                          |                          |
| N of Valid Cases             | 20    |    |                           |                          |                          |

a Computed only for a 2x2 table

b 2 cells (50.0%) have expected count less than 5. The minimum expected count is 3.50.

**EDI Ineffectiveness Recoded \* Race**

**Crosstab**

|                                    |                                      |                                      |       | Race   |        | Total  |
|------------------------------------|--------------------------------------|--------------------------------------|-------|--------|--------|--------|
|                                    |                                      |                                      | Count | White  | Black  |        |
| <b>EDI Ineffectiveness Recoded</b> | Below Mean                           |                                      |       | 5      | 6      | 11     |
|                                    |                                      | % within EDI Ineffectiveness Recoded |       | 45.5%  | 54.5%  | 100.0% |
|                                    | Significantly Above Mean             | % within Race                        |       | 50.0%  | 60.0%  | 55.0%  |
|                                    |                                      | Count                                |       | 5      | 4      | 9      |
|                                    | % within EDI Ineffectiveness Recoded |                                      | 55.6% | 44.4%  | 100.0% |        |
| <b>Total</b>                       |                                      | % within Race                        |       | 50.0%  | 40.0%  | 45.0%  |
|                                    |                                      | Count                                |       | 10     | 10     | 20     |
|                                    |                                      | % within EDI Ineffectiveness Recoded |       | 50.0%  | 50.0%  | 100.0% |
|                                    |                                      | % within Race                        |       | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

|                                     | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|-------------------------------------|-------|----|-----------------------|----------------------|----------------------|
| <b>Pearson Chi-Square</b>           | .202  | 1  | .653                  |                      |                      |
| <b>Continuity Correction</b>        | .000  | 1  | 1.000                 |                      |                      |
| <b>Likelihood Ratio</b>             | .202  | 1  | .653                  |                      |                      |
| <b>Fisher's Exact Test</b>          |       |    |                       | 1.000                | .500                 |
| <b>Linear-by-Linear Association</b> | .192  | 1  | .661                  |                      |                      |
| <b>N of Valid Cases</b>             | 20    |    |                       |                      |                      |

a Computed only for a 2x2 table

b 2 cells (50.0%) have expected count less than 5. The minimum expected count is 4.50.

**EDI Perfectionism Recoded \* Race**

**Crosstab**

|                           |                                    | Count                              | Race   |        | Total  |
|---------------------------|------------------------------------|------------------------------------|--------|--------|--------|
|                           |                                    |                                    | White  | Black  |        |
| EDI Perfectionism Recoded | Below Mean                         |                                    | 5      | 1      | 6      |
|                           |                                    | % within EDI Perfectionism Recoded | 83.3%  | 16.7%  | 100.0% |
|                           | Significantly Above Mean           | % within Race                      | 50.0%  | 10.0%  | 30.0%  |
|                           |                                    | Count                              | 5      | 9      | 14     |
|                           | % within EDI Perfectionism Recoded | 35.7%                              | 64.3%  | 100.0% |        |
| Total                     |                                    | % within Race                      | 50.0%  | 90.0%  | 70.0%  |
|                           |                                    | Count                              | 10     | 10     | 20     |
|                           |                                    | % within EDI Perfectionism Recoded | 50.0%  | 50.0%  | 100.0% |
|                           |                                    | % within Race                      | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

|                              | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|------------------------------|-------|----|-----------------------|----------------------|----------------------|
| Pearson Chi-Square           | 3.810 | 1  | .051                  |                      |                      |
| Continuity Correction        | 2.143 | 1  | .143                  |                      |                      |
| Likelihood Ratio             | 4.070 | 1  | .044                  |                      |                      |
| Fisher's Exact Test          |       |    |                       | .141                 | .070                 |
| Linear-by-Linear Association | 3.619 | 1  | .057                  |                      |                      |
| N of Valid Cases             | 20    |    |                       |                      |                      |

a Computed only for a 2x2 table

b 2 cells (50.0%) have expected count less than 5. The minimum expected count is 3.00.

**EDI Interpersonal Distrust Recoded \* Race**

**Crosstab**

|                                       |   |   |  | Race   |        | Total  |
|---------------------------------------|---|---|--|--------|--------|--------|
|                                       |   |   |  | White  | Black  |        |
| EDI Interpersonal<br>Distrust Recoded | Below Mean  | Count   |  | 4      | 3      | 7      |
|                                       |   | % within EDI<br>Interpersonal<br>Distrust Recoded |  | 57.1%  | 42.9%  | 100.0% |
|                                       |   | % within Race                                     |  | 40.0%  | 30.0%  | 35.0%  |
|                                       | Significantly<br>Above Mean                       | Count   |  | 6      | 7      | 13     |
|                                       |   | % within EDI<br>Interpersonal<br>Distrust Recoded |  | 46.2%  | 53.8%  | 100.0% |
|                                       |   | % within Race                                     |  | 60.0%  | 70.0%  | 65.0%  |
| Total                                 | Count   |   |  | 10     | 10     | 20     |
|                                       | % within EDI<br>Interpersonal<br>Distrust Recoded |   |  | 50.0%  | 50.0%  | 100.0% |
|                                       | % within Race                                     |   |  | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

|                                 | Value | df | Asymp. Sig. (2-<br>sided) | Exact Sig. (2-<br>sided) | Exact Sig. (1-<br>sided) |
|---------------------------------|-------|----|---------------------------|--------------------------|--------------------------|
| Pearson Chi-Square              | .220  | 1  | .639                      |                          |                          |
| Continuity<br>Correction        | .000  | 1  | 1.000                     |                          |                          |
| Likelihood Ratio                | .220  | 1  | .639                      |                          |                          |
| Fisher's Exact<br>Test          |       |    |                           | 1.000                    | .500                     |
| Linear-by-Linear<br>Association | .209  | 1  | .648                      |                          |                          |
| N of Valid Cases                | 20    |    |                           |                          |                          |

a Computed only for a 2x2 table

b 2 cells (50.0%) have expected count less than 5. The minimum expected count is 3.50.

**EDI Interoceptive Awareness Recoded \* Race**

**Crosstab**

|                                     |  | Count  | Race   |        | Total  |
|-------------------------------------|--|--|--------|--------|--------|
|                                     |  |  | White  | Black  |        |
| EDI Interoceptive Awareness Recoded | Below Mean                                   |  | 3      | 5      | 8      |
|                                     |  | % within EDI Interoceptive Awareness Recoded | 37.5%  | 62.5%  | 100.0% |
|                                     | Significantly Above Mean                     | % within Race                                | 30.0%  | 50.0%  | 40.0%  |
|                                     |  | Count  | 7      | 5      | 12     |
|                                     | % within EDI Interoceptive Awareness Recoded | 58.3%  | 41.7%  | 100.0% |        |
| Total                               |  | % within Race                                | 70.0%  | 50.0%  | 60.0%  |
|                                     |  | Count  | 10     | 10     | 20     |
|                                     |  | % within EDI Interoceptive Awareness Recoded | 50.0%  | 50.0%  | 100.0% |
|                                     |  | % within Race                                | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

|                              | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|------------------------------|-------|----|-----------------------|----------------------|----------------------|
| Pearson Chi-Square           | .833  | 1  | .361                  |                      |                      |
| Continuity Correction        | .208  | 1  | .648                  |                      |                      |
| Likelihood Ratio             | .840  | 1  | .359                  |                      |                      |
| Fisher's Exact Test          |       |    |                       | .650                 | .325                 |
| Linear-by-Linear Association | .792  | 1  | .374                  |                      |                      |
| N of Valid Cases             | 20    |    |                       |                      |                      |

a Computed only for a 2x2 table

b 2 cells (50.0%) have expected count less than 5. The minimum expected count is 4.00.

## EDI Maturity Fears Recoded \* Race

### Crosstab

|                            |                                     |                                     | Race   |        | Total  |
|----------------------------|-------------------------------------|-------------------------------------|--------|--------|--------|
|                            |                                     |                                     | White  | Black  |        |
| EDI Maturity Fears Recoded | Below Mean                          | Count                               | 3      | 6      | 9      |
|                            |                                     | % within EDI Maturity Fears Recoded | 33.3%  | 66.7%  | 100.0% |
|                            | Significantly Above Mean            | % within Race                       | 30.0%  | 60.0%  | 45.0%  |
|                            |                                     | Count                               | 7      | 4      | 11     |
|                            |                                     | % within EDI Maturity Fears Recoded | 63.6%  | 36.4%  | 100.0% |
|                            |                                     | % within Race                       | 70.0%  | 40.0%  | 55.0%  |
| Total                      | Count                               | 10                                  | 10     | 20     |        |
|                            | % within EDI Maturity Fears Recoded | 50.0%                               | 50.0%  | 100.0% |        |
|                            | % within Race                       | 100.0%                              | 100.0% | 100.0% |        |

### Chi-Square Tests

|                              | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|------------------------------|-------|----|-----------------------|----------------------|----------------------|
| Pearson Chi-Square           | 1.818 | 1  | .178                  |                      |                      |
| Continuity Correction        | .808  | 1  | .369                  |                      |                      |
| Likelihood Ratio             | 1.848 | 1  | .174                  |                      |                      |
| Fisher's Exact Test          |       |    |                       | .370                 | .185                 |
| Linear-by-Linear Association | 1.727 | 1  | .189                  |                      |                      |
| N of Valid Cases             | 20    |    |                       |                      |                      |

a Computed only for a 2x2 table

b 2 cells (50.0%) have expected count less than 5. The minimum expected count is 4.50.

**BITE Symptom Scale Score Recoded \* Race**

**Crosstab**

|  |                             | Race  |        | Total  |        |
|--|-----------------------------|---|--------|--------|--------|
|  |                             | White   | Black  |        |        |
| BITE Symptom<br>Scale Score<br>Recoded | Below Mean                  | Count   | 6      | 8      | 14     |
|  |                             | % within BITE<br>Symptom Scale<br>Score Recoded | 42.9%  | 57.1%  | 100.0% |
|  |                             | % within Race                                   | 60.0%  | 80.0%  | 70.0%  |
|  | Significantly<br>Above Mean | Count   | 4      | 2      | 6      |
|  |                             | % within BITE<br>Symptom Scale<br>Score Recoded | 66.7%  | 33.3%  | 100.0% |
|  |                             | % within Race                                   | 40.0%  | 20.0%  | 30.0%  |
| Total                                  |                             | Count   | 10     | 10     | 20     |
|  |                             | % within BITE<br>Symptom Scale<br>Score Recoded | 50.0%  | 50.0%  | 100.0% |
|  |                             | % within Race                                   | 100.0% | 100.0% | 100.0% |
|  |                             |   |        |        |        |

**Chi-Square Tests**

|                                 | Value | df | Asymp. Sig. (2-<br>sided) | Exact Sig. (2-<br>sided) | Exact Sig. (1-<br>sided) |
|---------------------------------|-------|----|---------------------------|--------------------------|--------------------------|
| Pearson Chi-Square              | .952  | 1  | .329                      |                          |                          |
| Continuity<br>Correction        | .238  | 1  | .626                      |                          |                          |
| Likelihood Ratio                | .966  | 1  | .326                      |                          |                          |
| Fisher's Exact<br>Test          |       |    |                           | .628                     | .314                     |
| Linear-by-Linear<br>Association | .905  | 1  | .342                      |                          |                          |
| N of Valid Cases                | 20    |    |                           |                          |                          |

a Computed only for a 2x2 table

b 2 cells (50.0%) have expected count less than 5. The minimum expected count is 3.00.

**BITE Severity Scale Score recorded \* Race**

**Crosstab**

|                                    |                          | Race  |        | Total  |        |
|------------------------------------|--------------------------|---|--------|--------|--------|
| BITE Severity Scale Score recorded | Below Mean               | Count                                       | White  | Black  |        |
|                                    |                          |   | 1      | 3      | 4      |
|                                    |                          | % within BITE Severity Scale Score recorded | 25.0%  | 75.0%  | 100.0% |
|                                    |                          | % within Race                               | 10.0%  | 30.0%  | 20.0%  |
|                                    | Significantly Above Mean | Count                                       | 9      | 7      | 16     |
|                                    |                          | % within BITE Severity Scale Score recorded | 56.3%  | 43.8%  | 100.0% |
|                                    |                          | % within Race                               | 90.0%  | 70.0%  | 80.0%  |
| <b>Total</b>                       |                          | Count                                       | 10     | 10     | 20     |
|                                    |                          | % within BITE Severity Scale Score recorded | 50.0%  | 50.0%  | 100.0% |
|                                    |                          | % within Race                               | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

|                                     | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|-------------------------------------|-------|----|-----------------------|----------------------|----------------------|
| <b>Pearson Chi-Square</b>           | 1.250 | 1  | .264                  |                      |                      |
| <b>Continuity Correction</b>        | .313  | 1  | .576                  |                      |                      |
| <b>Likelihood Ratio</b>             | 1.297 | 1  | .255                  |                      |                      |
| <b>Fisher's Exact Test</b>          |       |    |                       | .582                 | .291                 |
| <b>Linear-by-Linear Association</b> | 1.187 | 1  | .276                  |                      |                      |
| <b>N of Valid Cases</b>             | 20    |    |                       |                      |                      |

a Computed only for a 2x2 table

b 2 cells (50.0%) have expected count less than 5. The minimum expected count is 2.00.

### Crosstab

|                                 |   | Race  |        |        | Total  |
|---------------------------------|---|---|--------|--------|--------|
|                                 |   |   | White  | Black  |        |
| Beck Depression<br>2 Categories | No to Moderate<br>Depression                | Count                                       | 4      | 8      | 12     |
|                                 |   | % within Beck<br>Depression 2<br>Categories | 33.3%  | 66.7%  | 100.0% |
|                                 |   | % within Race                               | 40.0%  | 80.0%  | 60.0%  |
|                                 | Severe and<br>Extreme<br>Depression         | Count                                       | 6      | 2      | 8      |
|                                 |   | % within Beck<br>Depression 2<br>Categories | 75.0%  | 25.0%  | 100.0% |
|                                 |   | % within Race                               | 60.0%  | 20.0%  | 40.0%  |
| Total                           | Count                                       | 10  | 10     | 20     |        |
|                                 | % within Beck<br>Depression 2<br>Categories | 50.0%                                       | 50.0%  | 100.0% |        |
|                                 | % within Race                               | 100.0%                                      | 100.0% | 100.0% |        |
|                                 |   |   |        |        |        |

### Chi-Square Tests

|                              | Value | df | Asymp. Sig. (2-<br>sided) | Exact Sig. (2-<br>sided) | Exact Sig. (1-<br>sided) |
|------------------------------|-------|----|---------------------------|--------------------------|--------------------------|
| Pearson Chi-Square           | 3.333 | 1  | .068                      |                          |                          |
| Continuity Correction        | 1.875 | 1  | .171                      |                          |                          |
| Likelihood Ratio             | 3.452 | 1  | .063                      |                          |                          |
| Fisher's Exact Test          |       |    |                           | .170                     | .085                     |
| Linear-by-Linear Association | 3.167 | 1  | .075                      |                          |                          |
| N of Valid Cases             | 20    |    |                           |                          |                          |

a Computed only for a 2x2 table

b 2 cells (50.0%) have expected count less than 5. The minimum expected count is 4.00.

**EDI Drive for Thinness Recoded \* Race**

**Crosstab**

|                                      |  |  |       | Race   |        | Total  |
|--------------------------------------|--|--|-------|--------|--------|--------|
|                                      |  |  |       | White  | Black  |        |
| EDI Drive for<br>Thinness<br>Recoded | Below Mean                                       | Count  |       | 5      | 3      | 8      |
|                                      |  | % within EDI<br>Drive for<br>Thinness<br>Recoded |       | 62.5%  | 37.5%  | 100.0% |
|                                      | Significantly<br>Above Mean                      | % within Race                                    |       | 50.0%  | 30.0%  | 40.0%  |
|                                      |  | Count  |       | 5      | 7      | 12     |
| Total                                |  | % within EDI<br>Drive for<br>Thinness<br>Recoded |       | 41.7%  | 58.3%  | 100.0% |
|                                      |  | % within Race                                    |       | 50.0%  | 70.0%  | 60.0%  |
|                                      | Count  |  | 10    | 10     | 20     |        |
|                                      | % within EDI<br>Drive for<br>Thinness<br>Recoded |  | 50.0% | 50.0%  | 100.0% |        |
|                                      |  | % within Race                                    |       | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

|                              | Value | df | Asymp. Sig. (2-<br>sided) | Exact Sig. (2-<br>sided) | Exact Sig. (1-<br>sided) |
|------------------------------|-------|----|---------------------------|--------------------------|--------------------------|
| Pearson Chi-Square           | .833  | 1  | .361                      |                          |                          |
| Continuity Correction        | .208  | 1  | .648                      |                          |                          |
| Likelihood Ratio             | .840  | 1  | .359                      |                          |                          |
| Fisher's Exact Test          |       |    |                           | .650                     | .325                     |
| Linear-by-Linear Association | .792  | 1  | .374                      |                          |                          |
| N of Valid Cases             | 20    |    |                           |                          |                          |

a Computed only for a 2x2 table

b 2 cells (50.0%) have expected count less than 5. The minimum expected count is 4.00.

**EDI Bulimia Recoded \* Race**

**Crosstab**

|                     |                              |                              | Race   |        | Total  |
|---------------------|------------------------------|------------------------------|--------|--------|--------|
|                     |                              |                              | White  | Black  |        |
| EDI Bulimia Recoded | Below Mean                   | Count                        | 3      | 7      | 10     |
|                     |                              | % within EDI Bulimia Recoded | 30.0%  | 70.0%  | 100.0% |
|                     |                              | % within Race                | 30.0%  | 70.0%  | 50.0%  |
|                     | Significantly Above Mean     | Count                        | 7      | 3      | 10     |
|                     |                              | % within EDI Bulimia Recoded | 70.0%  | 30.0%  | 100.0% |
|                     |                              | % within Race                | 70.0%  | 30.0%  | 50.0%  |
| Total               | Count                        |                              | 10     | 10     | 20     |
|                     | % within EDI Bulimia Recoded |                              | 50.0%  | 50.0%  | 100.0% |
|                     | % within Race                |                              | 100.0% | 100.0% | 100.0% |
|                     |                              |                              |        |        |        |

**Chi-Square Tests**

|                              | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|------------------------------|-------|----|-----------------------|----------------------|----------------------|
| Pearson Chi-Square           | 3.200 | 1  | .074                  |                      |                      |
| Continuity Correction        | 1.800 | 1  | .180                  |                      |                      |
| Likelihood Ratio             | 3.291 | 1  | .070                  |                      |                      |
| Fisher's Exact Test          |       |    |                       | .179                 | .089                 |
| Linear-by-Linear Association | 3.040 | 1  | .081                  |                      |                      |
| N of Valid Cases             | 20    |    |                       |                      |                      |

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.00.

**EDI Body Dissatisfaction Recoded \* Race**

**Crosstab**

|  |                             | Race   |        | Total  |        |
|--|-----------------------------|--|--------|--------|--------|
|  |                             | White  | Black  |        |        |
| EDI Body<br>Dissatisfaction<br>Recoded | Below Mean                  | Count  | 5      | 3      | 8      |
|  |                             | % within EDI<br>Body<br>Dissatisfaction<br>Recoded | 62.5%  | 37.5%  | 100.0% |
|  | Significantly<br>Above Mean | Count  | 5      | 7      | 12     |
|  |                             | % within Race                                      | 50.0%  | 30.0%  | 40.0%  |
| Total                                  |                             | % within EDI<br>Body<br>Dissatisfaction<br>Recoded | 41.7%  | 58.3%  | 100.0% |
|  |                             | % within Race                                      | 50.0%  | 70.0%  | 60.0%  |
|  |                             | Count  | 10     | 10     | 20     |
|  |                             | % within EDI<br>Body<br>Dissatisfaction<br>Recoded | 50.0%  | 50.0%  | 100.0% |
|  |                             | % within Race                                      | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

|                              | Value | df | Asymp. Sig. (2-<br>sided) | Exact Sig. (2-<br>sided) | Exact Sig. (1-<br>sided) |
|------------------------------|-------|----|---------------------------|--------------------------|--------------------------|
| Pearson Chi-Square           | .833  | 1  | .361                      |                          |                          |
| Continuity Correction        | .208  | 1  | .648                      |                          |                          |
| Likelihood Ratio             | .840  | 1  | .359                      |                          |                          |
| Fisher's Exact Test          |       |    |                           | .650                     | .325                     |
| Linear-by-Linear Association | .792  | 1  | .374                      |                          |                          |
| N of Valid Cases             | 20    |    |                           |                          |                          |

a Computed only for a 2x2 table

b 2 cells (50.0%) have expected count less than 5. The minimum expected count is 4.00.

**EDI Ineffectiveness Recoded \* Race**

**Crosstab**

|                             |                          |                                      |        | Race   |        | Total |
|-----------------------------|--------------------------|--------------------------------------|--------|--------|--------|-------|
| EDI Ineffectiveness Recoded | Below Mean               | Count                                | White  | Black  |        |       |
|                             |                          |                                      |        | 5      | 6      | 11    |
|                             |                          | % within EDI Ineffectiveness Recoded | 45.5%  | 54.5%  | 100.0% |       |
|                             | Significantly Above Mean | % within Race                        | 50.0%  | 60.0%  | 55.0%  |       |
|                             |                          | Count                                | 5      | 4      | 9      |       |
|                             |                          | % within EDI Ineffectiveness Recoded | 55.6%  | 44.4%  | 100.0% |       |
| Total                       |                          | % within Race                        | 50.0%  | 40.0%  | 45.0%  |       |
|                             |                          | Count                                | 10     | 10     | 20     |       |
|                             |                          | % within EDI Ineffectiveness Recoded | 50.0%  | 50.0%  | 100.0% |       |
|                             |                          | % within Race                        | 100.0% | 100.0% | 100.0% |       |

**Chi-Square Tests**

|                              | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|------------------------------|-------|----|-----------------------|----------------------|----------------------|
| Pearson Chi-Square           | .202  | 1  | .653                  |                      |                      |
| Continuity Correction        | .000  | 1  | 1.000                 |                      |                      |
| Likelihood Ratio             | .202  | 1  | .653                  |                      |                      |
| Fisher's Exact Test          |       |    |                       | 1.000                | .500                 |
| Linear-by-Linear Association | .192  | 1  | .661                  |                      |                      |
| N of Valid Cases             |       | 20 |                       |                      |                      |

a Computed only for a 2x2 table

b 2 cells (50.0%) have expected count less than 5. The minimum expected count is 4.50.

**EDI Perfectionism Recoded \* Race**

**Crosstab**

|                           |                                    | Race                               |        | Total  |        |
|---------------------------|------------------------------------|------------------------------------|--------|--------|--------|
|                           |                                    | White                              | Black  |        |        |
| EDI Perfectionism Recoded | Below Mean                         | Count                              | 5      | 1      | 6      |
|                           |                                    | % within EDI Perfectionism Recoded | 83.3%  | 16.7%  | 100.0% |
|                           | Significantly Above Mean           | % within Race                      | 50.0%  | 10.0%  | 30.0%  |
|                           |                                    | Count                              | 5      | 9      | 14     |
|                           | % within EDI Perfectionism Recoded | 35.7%                              | 64.3%  | 100.0% |        |
| Total                     |                                    | % within Race                      | 50.0%  | 90.0%  | 70.0%  |
|                           |                                    | Count                              | 10     | 10     | 20     |
|                           |                                    | % within EDI Perfectionism Recoded | 50.0%  | 50.0%  | 100.0% |
|                           |                                    | % within Race                      | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

|                              | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|------------------------------|-------|----|-----------------------|----------------------|----------------------|
| Pearson Chi-Square           | 3.810 | 1  | .051                  |                      |                      |
| Continuity Correction        | 2.143 | 1  | .143                  |                      |                      |
| Likelihood Ratio             | 4.070 | 1  | .044                  |                      |                      |
| Fisher's Exact Test          |       |    |                       | .141                 | .070                 |
| Linear-by-Linear Association | 3.619 | 1  | .057                  |                      |                      |
| N of Valid Cases             | 20    |    |                       |                      |                      |

a Computed only for a 2x2 table

b 2 cells (50.0%) have expected count less than 5. The minimum expected count is 3.00.

**EDI Interpersonal Distrust Recoded \* Race**

**Crosstab**

|                                       |   |   |  | Race   |        | Total  |
|---------------------------------------|---|---|--|--------|--------|--------|
|                                       |   |   |  | White  | Black  |        |
| EDI Interpersonal<br>Distrust Recoded | Below Mean  | Count   |  | 4      | 3      | 7      |
|                                       |   | % within EDI<br>Interpersonal<br>Distrust Recoded |  | 57.1%  | 42.9%  | 100.0% |
|                                       |   | % within Race                                     |  | 40.0%  | 30.0%  | 35.0%  |
|                                       | Significantly<br>Above Mean                       | Count   |  | 6      | 7      | 13     |
|                                       |   | % within EDI<br>Interpersonal<br>Distrust Recoded |  | 46.2%  | 53.8%  | 100.0% |
|                                       |   | % within Race                                     |  | 60.0%  | 70.0%  | 65.0%  |
| Total                                 | Count   |   |  | 10     | 10     | 20     |
|                                       | % within EDI<br>Interpersonal<br>Distrust Recoded |   |  | 50.0%  | 50.0%  | 100.0% |
|                                       | % within Race                                     |   |  | 100.0% | 100.0% | 100.0% |
|                                       |   |   |  |        |        |        |

**Chi-Square Tests**

|  | Value | df | Asymp. Sig. (2-<br>sided) | Exact Sig. (2-<br>sided) | Exact Sig. (1-<br>sided) |
|--|-------|----|---------------------------|--------------------------|--------------------------|
| Pearson Chi-Square                         | .220  | 1  | .639                      |                          |                          |
| Continuity<br>Correction                   | .000  | 1  | 1.000                     |                          |                          |
| Likelihood Ratio<br>Fisher's Exact<br>Test | .220  | 1  | .639                      | 1.000                    | .500                     |
| Linear-by-Linear<br>Association            | .209  | 1  | .648                      |                          |                          |
| N of Valid Cases                           | 20    |    |                           |                          |                          |

a Computed only for a 2x2 table

b 2 cells (50.0%) have expected count less than 5. The minimum expected count is 3.50.

**EDI Interoceptive Awareness Recoded \* Race**

**Crosstab**

|                                     |                          |  |       | Race   |        | Total  |
|-------------------------------------|--------------------------|--|-------|--------|--------|--------|
|                                     |                          |  | Count | White  | Black  |        |
| EDI Interoceptive Awareness Recoded | Below Mean               |  |       | 3      | 5      | 8      |
|                                     |                          | % within EDI Interoceptive Awareness Recoded |       | 37.5%  | 62.5%  | 100.0% |
|                                     | Significantly Above Mean | % within Race                                |       | 30.0%  | 50.0%  | 40.0%  |
|                                     |                          | Count  |       | 7      | 5      | 12     |
| Total                               |                          | % within EDI Interoceptive Awareness Recoded |       | 58.3%  | 41.7%  | 100.0% |
|                                     |                          | % within Race                                |       | 70.0%  | 50.0%  | 60.0%  |
|                                     |                          | Count  |       | 10     | 10     | 20     |
|                                     |                          | % within EDI Interoceptive Awareness Recoded |       | 50.0%  | 50.0%  | 100.0% |
|                                     |                          | % within Race                                |       | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

|                              | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|------------------------------|-------|----|-----------------------|----------------------|----------------------|
| Pearson Chi-Square           | .833  | 1  | .361                  |                      |                      |
| Continuity Correction        | .208  | 1  | .648                  |                      |                      |
| Likelihood Ratio             | .840  | 1  | .359                  |                      |                      |
| Fisher's Exact Test          |       |    |                       | .650                 | .325                 |
| Linear-by-Linear Association | .792  | 1  | .374                  |                      |                      |
| N of Valid Cases             | 20    |    |                       |                      |                      |

a Computed only for a 2x2 table

b 2 cells (50.0%) have expected count less than 5. The minimum expected count is 4.00.

**EDI Maturity Fears Recorded \* Race**

**Crosstab**

|                             |                          |                                      |        | Race   |        | Total |
|-----------------------------|--------------------------|--------------------------------------|--------|--------|--------|-------|
| EDI Maturity Fears Recorded | Below Mean               | Count                                | White  | Black  |        |       |
|                             |                          |                                      | 3      | 6      | 9      |       |
|                             |                          | % within EDI Maturity Fears Recorded | 33.3%  | 66.7%  | 100.0% |       |
|                             | Significantly Above Mean | % within Race Count                  | 30.0%  | 60.0%  | 45.0%  |       |
|                             |                          |                                      | 7      | 4      | 11     |       |
|                             |                          | % within EDI Maturity Fears Recorded | 63.6%  | 36.4%  | 100.0% |       |
|                             |                          | % within Race Count                  | 70.0%  | 40.0%  | 55.0%  |       |
| Total                       |                          |                                      | 10     | 10     | 20     |       |
|                             |                          | % within EDI Maturity Fears Recorded | 50.0%  | 50.0%  | 100.0% |       |
|                             |                          | % within Race                        | 100.0% | 100.0% | 100.0% |       |

**Chi-Square Tests**

|                              | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|------------------------------|-------|----|-----------------------|----------------------|----------------------|
| Pearson Chi-Square           | 1.818 | 1  | .178                  |                      |                      |
| Continuity Correction        | .808  | 1  | .369                  |                      |                      |
| Likelihood Ratio             | 1.848 | 1  | .174                  |                      |                      |
| Fisher's Exact Test          |       |    |                       | .370                 | .185                 |
| Linear-by-Linear Association | 1.727 | 1  | .189                  |                      |                      |
| N of Valid Cases             | 20    |    |                       |                      |                      |

a Computed only for a 2x2 table

b 2 cells (50.0%) have expected count less than 5. The minimum expected count is 4.50.

**BITE Symptom Scale Score Recoded \* Race**

**Crosstab**

|                                  |                          |   |        | Race   |        | Total |
|----------------------------------|--------------------------|---|--------|--------|--------|-------|
| BITE Symptom Scale Score Recoded | Below Mean               | Count                                     | White  | Black  |        |       |
|                                  |                          |   | 6      | 8      | 14     |       |
|                                  |                          | % within BITE Symptom Scale Score Recoded | 42.9%  | 57.1%  | 100.0% |       |
|                                  | Significantly Above Mean | % within Race                             | 60.0%  | 80.0%  | 70.0%  |       |
|                                  |                          | Count                                     | 4      | 2      | 6      |       |
|                                  |                          | % within BITE Symptom Scale Score Recoded | 66.7%  | 33.3%  | 100.0% |       |
|                                  |                          | % within Race                             | 40.0%  | 20.0%  | 30.0%  |       |
| Total                            |                          | Count                                     | 10     | 10     | 20     |       |
|                                  |                          | % within BITE Symptom Scale Score Recoded | 50.0%  | 50.0%  | 100.0% |       |
|                                  |                          | % within Race                             | 100.0% | 100.0% | 100.0% |       |

**Chi-Square Tests**

|                              | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|------------------------------|-------|----|-----------------------|----------------------|----------------------|
| Pearson Chi-Square           | .952  | 1  | .329                  |                      |                      |
| Continuity Correction        | .238  | 1  | .626                  |                      |                      |
| Likelihood Ratio             | .966  | 1  | .326                  |                      |                      |
| Fisher's Exact Test          |       |    |                       | .628                 | .314                 |
| Linear-by-Linear Association | .905  | 1  | .342                  |                      |                      |
| N of Valid Cases             | 20    |    |                       |                      |                      |

a Computed only for a 2x2 table

b 2 cells (50.0%) have expected count less than 5. The minimum expected count is 3.00.

**BITE Severity Scale Score recorded \* Race**

**Crosstab**

|                                    |                          | Race  |        | Total  |        |
|------------------------------------|--------------------------|---|--------|--------|--------|
| BITE Severity Scale Score recorded | Below Mean               | Count                                       | White  | Black  |        |
|                                    |                          |   | 1      | 3      | 4      |
|                                    |                          | % within BITE Severity Scale Score recorded | 25.0%  | 75.0%  | 100.0% |
|                                    |                          | % within Race                               | 10.0%  | 30.0%  | 20.0%  |
|                                    | Significantly Above Mean | Count                                       | 9      | 7      | 16     |
|                                    |                          | % within BITE Severity Scale Score recorded | 56.3%  | 43.8%  | 100.0% |
|                                    |                          | % within Race                               | 90.0%  | 70.0%  | 80.0%  |
| Total                              |                          | Count                                       | 10     | 10     | 20     |
|                                    |                          | % within BITE Severity Scale Score recorded | 50.0%  | 50.0%  | 100.0% |
|                                    |                          | % within Race                               | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

|                              | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|------------------------------|-------|----|-----------------------|----------------------|----------------------|
| Pearson Chi-Square           | 1.250 | 1  | .264                  |                      |                      |
| Continuity Correction        | .313  | 1  | .576                  |                      |                      |
| Likelihood Ratio             | 1.297 | 1  | .255                  |                      |                      |
| Fisher's Exact Test          |       |    |                       | .582                 | .291                 |
| Linear-by-Linear Association | 1.187 | 1  | .276                  |                      |                      |
| N of Valid Cases             | 20    |    |                       |                      |                      |

a Computed only for a 2x2 table

b 2 cells (50.0%) have expected count less than 5. The minimum expected count is 2.00.

**Appendix C**

**DATA INFORMATION SHEET**

- 1. Age: .....
- 2. Race: .....
- 3. Sex: .....
- 4. Occupation (Employed/Unemployed/Scholar): .....
- 5. Home Language: .....
- 6. Province of Residence: .....
- 7. Diagnosis: .....
- 8. Period of Onset: .....
- 9. Year of Admission: .....
- 10. Admission Weight: .....
- 11. Goal Weight: .....
- 12. Height: .....
- 13. Body Mass Index: .....
- 14. Own Ideal Weight: .....
- 15. Highest Past Weight: .....
- 16. Lowest Past Weight: .....
- 17. Amenorrhea (Duration): .....
- 18. Beck's Level of Depression: .....
- 19. EDI (Eating Disorder Inventory) Scores:
  - Drive for Thinness: .....
  - Bulimia: .....
  - Body Dissatisfaction: .....
  - Ineffectiveness: .....
  - Perfectionism: .....
  - Interpersonal Distrust: .....
  - Interoceptive Awareness: .....
  - Maturity Fears: .....
- 20. BITE (Bulimic Investigatory Test, Edinburgh) Scores:
  - Symptom Scale Score: .....
  - Severity Scale Score: .....

## **Appendix D**

### **BECK DEPRESSION INVENTORY**

On this questionnaire are a group of statements. Please read each group of statements carefully, then pick out the statement in each group which best describes the way you have been feeling the PAST WEEK, INCLUDING TODAY! Circle the number beside the statement you picked. If several statements in the group seem to apply equally well, circle each one. Be sure to read all the statements in each group before making your choice.

1.

- 0 I do not feel sad
- 1 I feel sad
- 2 I am sad all the time and I can't snap out of it
- 3 I am so sad or unhappy that I can't stand it

2.

- 0 I am not particularly discouraged about the future
- 1 I feel discouraged about the future
- 2 I feel I have nothing to look forward to
- 3 I feel that the future is hopeless and that the things cannot improve

3.

- 0 I do not feel like a failure
- 1 I feel I have failed more than the average person
- 2 As I look back on my life, all I can see is a lot of failures
- 3 I feel I am a complete failure as a person

4.

- 0 I get as much satisfaction out of things as I used to
- 1 I don't enjoy way the way I used to
- 2 I don't get real satisfaction out of anything anymore
- 3 I am dissatisfied or bored with everything

5.

- 0 I don't feel particularly guilty
- 1 I feel guilty a good part of the day
- 2 I feel quite guilty most of the time
- 3 I feel guilty all of the time

6.

- 0 I don't feel I am being punished
- 1 I feel I may be punished
- 2 I expect to be punished
- 3 I feel I am being punished

7.

- 0 I don't feel disappointed in myself
- 1 I am disappointed in myself
- 2 I am disgusted in myself
- 3 I hate myself

8.

- 0 I don't feel I am worse than anybody else
- 1 I am critical of myself for my weaknesses or mistakes
- 2 I blame myself all the time for my faults
- 3 I blame myself for everything bad that happens

9.

- 0 I don't have any thoughts of killing myself
- 1 I have thoughts of killing myself, but I would not carry them out
- 2 I would like to kill myself
- 3 I would kill myself if I had the chance

10.

- 0 I don't cry any more than usual
- 1 I cry more than I used to
- 2 I cry all the time now
- 3 I used to be able to cry, but now I can't cry even though I want to

11.

- 0 I am no more irritated now than I ever am
- 1 I get annoyed or irritated more easily than I used to
- 2 I feel irritated all the time now
- 3 I don't get irritated at all by the things that used to irritate me

12.

- 0 I have not lost interest in other people
- 1 I am less interested in other people than I used to be
- 2 I have lost most of my interest in other people
- 3 I have lost all my interest in other people

13.

- 0 I make decisions about as well as I ever could
- 1 I put off making decisions more than I used to
- 2 I have greater difficulty in making decisions than before
- 3 I can't make decisions at all anymore

14.

- 0 I don't feel I look any worse than I used to
- 1 I am worried that I am looking old or unattractive
- 2 I feel that there are permanent changes in my appearance that make me look unattractive
- 3 I believe that I look ugly

15.

- 0 I can work about as well as before
- 1 It takes an extra effort to get started at doing something
- 2 I have to push myself very hard to do anything
- 3 I can't do any work at all

16.

- 0 I can sleep as well as usual
- 1 I don't sleep as well as I used to
- 2 I wake up 1 –2 hours earlier than usual and find it hard to get back to sleep
- 3 I wake up several hours earlier than I used to and cannot get back to sleep

17.

- 0 I don't get more tired than usual
- 1 I get tired more easily than I used to
- 2 I get tired from doing almost anything
- 3 I am too tired to do anything

18.

- 0 My appetite is no worse than usual
- 1 My appetite is not as good as it used to be
- 2 My appetite is much worse now
- 3 I have no appetite at all anymore

19.

- 0 I haven't lost much weight, if any, lately
- 1 I have lost more than 10 kilograms
- 2 I have lost more than 20 kilograms
- 3 I have lost more than 30 kilograms

I am purposely trying to lose weight by eating less

Yes \_\_\_\_\_ No \_\_\_\_\_

20.

- 0 I am no more worried about my health than usual
- 1 I am worried about physical problems such as aches and pains, or upset stomach, or constipation
- 2 I am very worried about physical problems and it's hard to think of much else
- 3 I am so worried about my physical problems and it's hard to think of much else

21.

- 0 I have noticed any recent change in my interest in sex
- 1 I am less interested in sex than I used to be
- 2 I am much less interested in sex now
- 3 I have lost interest in sex completely

## EATING DISORDER INVENTORY

Always    Usually    Often    Sometime    Rarely    Never

1. I eat sweets and carbohydrates without feeling nervous
2. I think that my stomach is too big
3. I wish that I could return to the security of my childhood
4. I eat when I am upset
5. I stuff myself with food
6. I wish that I could be younger
7. I think about dieting
8. I get frightened when my feelings are too strong
9. I think my thighs are too large
10. I feel ineffective as a person
11. I feel extremely guilty after overeating
12. I think that my stomach is just the right size
13. Only outstanding performance is good enough in my family
14. The happiest time in my life is when you are a child
15. I am open about my feelings
16. I am terrified of gaining weight
17. I trust others
18. I feel alone in the world
19. I feel satisfied with the shape of my body
20. I feel generally in control of things in my life
21. I get confused about what emotion I am feeling
22. I would rather be an adult than a child
23. I can communicate with others easily

24. I wish I were someone else
25. I exaggerate or magnify the importance of weight
26. I can clearly identify what emotion I am feeling
27. I feel inadequate
28. I have gone on eating binges and felt that I could not stop
29. As a child, I tried very hard to avoid disappointing my parents and teachers
30. I have close relationships
31. I like the shape of my buttocks
32. I am preoccupied with the desire to be thinner
33. I don't know what's going on inside of me
34. I have trouble expressing my emotions to others
35. The demands of adulthood are too great
36. I hate being less than the best of things
37. I feel secure about myself
38. I think about bingeing (overeating)
39. I feel happy that I am not a child anymore
40. I get confused as to whether or not I am hungry
41. I have a low opinion of myself
42. I feel that I can achieve my standards
43. My parents have expected excellence of me
- . I worry that my feelings will get out of control
  - . I think my hips are too big
  - . I eat moderately in front of others and stuff self when they're gone
7. I feel bloated after eating a normal meal
- I feel that people are the happiest when they are
  - If I gain a pound, I worry that I will keep gaining
  - I feel that I am a worthwhile person

|  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
| 51. When I am upset, I don't know if I am sad, frightened, angry                               |  |  |  |  |  |  |
| 52. I feel that I must do things perfectly, or not do them at all                              |  |  |  |  |  |  |
| 53. I have thought of trying to vomit in order to lose weight                                  |  |  |  |  |  |  |
| 54. I need to keep people at a distance (feel uncomfortable if someone tries to get too close) |  |  |  |  |  |  |
| 55. I think that my thighs are just the right size   |  |  |  |  |  |  |
| 56. I feel empty inside (emotionally)  |  |  |  |  |  |  |
| 57. I can talk about my personal thoughts or feelings  |  |  |  |  |  |  |
| 58. The best years of your life are when you become an adult                                   |  |  |  |  |  |  |
| 59. I think that my buttocks are too large   |  |  |  |  |  |  |
| 60. I have feelings I can't quite identify   |  |  |  |  |  |  |
| 61. I eat and drink in secrecy   |  |  |  |  |  |  |
| 62. I think that my hips are just the right size   |  |  |  |  |  |  |
| 63. I have extremely high goals  |  |  |  |  |  |  |
| 64. When I am upset, I worry that I will start eating  |  |  |  |  |  |  |

## BULIMIC INVESTIGATORY TEST, EDINBURGH

### *Circle Yes or No*

1. Do you have a regular daily eating pattern?

Yes No

2. Are you a serious dieter?

Yes No

3. Do you feel a failure if you break your diet once?

Yes No

4. Do you count the calories of everything you eat?  
even when you not on a diet?

Yes No

5. Do you ever fast for a whole day?

Yes No

6. If yes, how often is this?

Every second day 5 2-3 times a week 4

Once a week 3 now and then 2 have once 1

7. Do you do any of the following to help you lose weight?

(circle the number)

|                     | never | occasionally | once   | 2-3 times | daily | 2-3 times | 5 times |
|---------------------|-------|--------------|--------|-----------|-------|-----------|---------|
|                     |       |              | a week | a week    |       | a day     | a day   |
| Take diet pills     | 0     | 2            | 3      | 4         | 5     | 6         | 7       |
| Take diuretics      | 0     | 2            | 3      | 4         | 5     | 6         | 7       |
| Take laxatives      | 0     | 2            | 3      | 4         | 5     | 6         | 7       |
| Make yourself vomit | 0     | 2            | 3      | 4         | 5     | 6         | 7       |

8. Does your pattern of eating severely disrupt your life?

Yes No

9. Would you say that food dominated your life?

Yes No

10. Do you ever eat and eat until you are stopped by physical discomfort?

Yes No

11. Are there times when all you think about is food?

Yes No

12. Do you eat sensibly in front of others and make up in private?

Yes No

13. Can you always stop eating when you want to?

Yes No

14. Do you ever experience-overpowering urges to eat and eat and eat?  
Yes No
15. When you are feeling anxious do you intend to eat a lot?  
Yes No
16. Does the thought of becoming fat terrify you?  
Yes No
17. Do you ever eat large amount of food rapidly (not a meal)?  
Yes No
18. Are you ashamed of your eating habits?  
Yes No
19. Do you worry that you have no control over how much you eat?  
Yes No
20. Do you turn to food for comfort?  
Yes No
21. Are you able to leave food on the plate at the end of a meal?  
Yes No
22. Do you deceive other people about how much you eat?  
Yes No
23. Does your hungry you feel determine how much you eat?  
Yes No
24. Do you ever binge on large amounts of food?  
Yes No
25. If yes, do such binges leave you feeling miserable?  
Yes No
26. If you binge do you binge, is this only when you are alone?  
Yes No
27. If you binge, how often is this?
- |             |   |                  |   |
|-------------|---|------------------|---|
| Hardly ever | 1 | Once a month     | 2 |
| Once a week | 3 | 2-3 times a week | 4 |
| Daily       | 4 | 2-3 times a day  | 6 |
28. Would you go to great lengths to satisfy an urge to binge?  
Yes No
29. If you over eat do you feel very guilty?  
Yes No
30. Do you ever eat in secret?  
Yes No
31. Are your eating habits what you would consider to be normal?  
Yes No
32. Would you consider yourself to be compulsive eater?  
Yes No

**33. Does your weight fluctuate by more than 5 pounds in a week?**

Yes    No