

**A RESEARCH REPORT OF  
THE RESEARCH CONSORTIUM OF  
COUNSELING & PSYCHOLOGICAL SERVICES IN  
HIGHER EDUCATION**

---

**Highlights of the Research Consortium 2002  
Non-Clinical Sample Study**

**by Lisa K. Kearney and Augustine Barón  
Counseling & Mental Health Center  
The University of Texas at Austin**

Published on-line by  
The Counseling & Mental Health Center  
The University of Texas at Austin  
100W. Dean Keeton St.  
1 University Station A3500  
Austin, Texas 78712-5731

<http://www.utexas.edu/student/cmhc/research/rescon.html>

©2003  
Research Consortium

**Technical Report**  
**Highlights of the Research Consortium 2002 Non-Clinical Sample Study**

**Lisa Kearney & Augustine Barón**

Counseling & Mental Health Center

The University of Texas at Austin

September, 2003

By way of background, The Research Consortium of Counseling and Psychological Services in Higher Education was founded in 1990. An interim steering committee of 10 university counseling center directors met in Austin in March, 1990 to design the structure of the consortium and the first study to be conducted. Subsequently, an additional 22 centers were recruited for the first study based on regional representation and each director's expressed interest in research endeavors

**Project 1:** In 1991, The Research Consortium implemented its first study, "Nature and Severity of College Students' Counseling Concerns," which was a survey of students seeking counseling services. The main goal was to establish baseline measures about the severity of students' concerns so that changes or fluctuations over time could be ascertained. In essence, we are attempting to provide data about the variations in types and severity of presenting problems over the next several years. A four-page optical scan booklet, the Counseling Concerns Survey, was constructed with the following sections: a demographics page (including age, classification, major, college/school, ethnicity) with questions about previous counseling and use of prescribed psychiatric medication, a 42-item Presenting Problems List constructed from lists submitted by 12 member centers, the Brief Symptom Inventory, and an 18-item list of Family Experiences involving various dysfunctional family history characteristics. Students seeking services at the counseling centers involved in the consortium were surveyed over the course of 12 months, resulting in some 3,000 clients from 32 centers.

**Project 2:** In 1994-95, The Research Consortium conducted a similar study focused on the mental health concerns of students who had not sought counseling (i.e., a non-clinical sample) so that we could compare them to the clinical sample. The same Counseling Concerns Survey was used in this second study so that direct comparisons could be made. Each center recruited as diverse a sample as it could from students who had not sought counseling at the time of contact, resulting in some 2,500 participants from 28 campuses. Both of these projects demonstrated that the consortium was a viable mechanism for conducting nationwide studies with sizable samples.

**Project 3.** Building on the success of these first two projects, The Research Consortium implemented a psychotherapy process/outcome study to investigate the impact of counseling services on the mental health concerns of college students. Students were recruited for the study during the 1997-98 school year when they came to the counseling centers for their intake. The student agreed to participate by filling out a consent form and was then instructed to complete the following forms before the start of the intake: Counseling Concerns Survey and the Stages of Change Measure. Before each subsequent individual therapy session, the client filled out the Outcome Questionnaire-45 (OQ-45) (see description below). An optional, though highly recommended, measure that each center was encouraged to include is the Working Alliance Inventory completed by both the client and the therapist before the start of the fourth session of therapy. Six weeks from the date of termination, the student was mailed the OQ-45 and the Service Satisfaction Scale-30 as follow-up measures. Information about therapist theoretical orientation was obtained using the Coan Theoretical Orientation Survey. Data were obtained on 4,500 clients and 241 therapists across 42 centers.

**Project 4.** Completed in the Spring Semester of 2002, the purpose of this data collection was to reveal the mental health concerns of students not currently seeking counseling services at their respective universities (i.e., a second non-clinical/non-help-seeking sample). The main intent is to compare these data to those collected in previous Research Consortium studies from both clinical and non-clinical samples as noted above.

The following information provides the basic descriptive data from the 2002 non-clinical sample, specifically looking at gender differences and similarities on each of the key measures in the survey booklet. Unfortunately, the sample sizes of the various racial/ethnic groups were not large enough to provide accurate reports on differences and similarities across these groups. Future reports will aim to provide more in-depth comparisons among the 2002 sample and other samples collected by the Research Consortium.

## **Methodology**

### *Participants*

Participants ( $n = 1586$ ) were recruited from 15 schools participating in the 2002 study of the Research Consortium. The mean age of students was 21.05 ( $SD = 4.11$ ). Students reported a mean grade point average of 2.88 ( $SD = .92$ ). Classification of students were reported as follows: Freshmen - 32.6%, Sophomores - 18.5%, Juniors - 22.5%, Seniors - 23.0%, Graduate Students - 3.0%, and other students - .3%. Females comprised 62.1% of the sample,

while males comprised 37.9%. The ethnic breakdown of the sample was: African American - 4.4%, Asian American - 4.0%, Hispanic American - 6.9%, Alaska Native/American Indian - .3%, Caucasian - 80.7%, and International Students - 3.7%.

In response to the question about personal counseling, only 4.6% of the sample indicated they were presently receiving psychological counseling; however, 27.3% of the sample reported they had received counseling at some time in the past. When asked about psychotropic medication for mental health concerns, 6.1% reported currently taking medication and 11.8% reported having taken medication in the past. When asked about physical and mental disabilities, 8.1% of the sample indicated they had been treated for a disability. (NOTE: Epidemiologically, an incidence or prevalence rate of 10% or more on a given dimension is considered potentially significant as a public health issue.)

### *Procedure*

For this study, participants filled out several different self-report measures contained in a single survey booklet, including information about demographic characteristics, presenting problems, family experiences, and substance use. The demographics collected covered such variables as age, race, gender, academic classification, major, and grade point average. Questions about current and past psychotherapy, psychiatric medication history, and disabilities are also included. Demographic information was obtained first, followed by the presenting concerns questionnaire, the Outcome Questionnaire 45, the Family Experiences Questionnaire, and several questions regarding substance use. These questionnaires are described below.

### *Measures*

Presenting Problems Questionnaire. The presenting problems questionnaire is a 46-item Likert scale instrument which was constructed by the Research Consortium to identify students' key areas of distress. This measure is based on a distillation of presenting problems lists submitted by 10 counseling to the Research Consortium. These items cover such problems as: academic concerns, relationship concerns, depression/anxiety, eating problems, health concerns, financial problems, and sexuality issues. Participants are instructed to indicate their current amount of distress for each item and the duration of this concern. Thus, two responses are required for each item. Levels of distress responses range from 0, "not at all," to 4, "extremely," while duration of concern responses range from 1, "less than a week," to 6, "over three years." Participants are given the following instructions for this

questionnaire, "Below is a list of problems people sometimes face. Carefully read each problem. Then for each problem which is currently causing you distress, fill in the appropriate oval to the right indicating the current amount of distress. Then fill in the appropriate oval which indicates how long you have had this problem. If a problem is not causing you distress, then do not rate the duration of concern." Cronbach's coefficient alpha for the distress responses on the scale was .91, indicating good reliability. An sample item from the scale is: "How much are you currently distressed by academics/school work/grades?"

Outcome Questionnaire. The Outcome Questionnaire 45 (OQ45) was developed by Lambert, Lunnen, Umphress, Hansen, and Burlingame (1994). The OQ45 consists of 45 Likert-scale items ranging from "never" to "almost always." The total scale contains three subscales measuring Symptom Distress (SD), Social-Role Functioning (SR) and Interpersonal Relationships (IR). The SD subscale taps into general emotional and lifestyle stressors such as depression, anxiety, stress, substance abuse, and suicidality. The SR subscale measures clients' work relations and leisure activities. The IR subscale assesses clients' satisfaction with interpersonal relationships, especially marital and family relationships and friendships. The SD, SR and IR subscales consist of 22, 9, and 11 items, respectively, without the use of items 11, 27, and 40. The SD subscale includes 22 items: 2, 3, 5, 6, 8, 9, 10, 13, 15, 22, 23, 24, 25, 29, 31, 33, 34, 35, 36, 41, 42, and 45 with scores thus ranging from 0 to 88. The SR subscale consists of the following 9 items: 4, 12, 14, 21, 28, 32, 38, 39, and 44, with scores ranging from 0 to 36. Lastly, the IR subscale entails 11 items, specifically: 1, 7, 16, 17, 18, 19, 20, 26, 30, 37, and 43. Test-retest reliability for subscale scores have been estimated to range from .78 to .82 with internal consistency estimates from .71 to .92 (Lambert et al., 1994). The following items on the OQ45 should be reverse scored: 1, 12, 13, 20, 21, 24, 31, 37, 43.

Reliability and validity studies indicate that the OQ45 is a reliable and valid instrument, which distinguishes well between clinical and non-clinical subjects. Previous psychometric testing revealed internal consistency levels of .93 and test-retest reliability of .84. Concurrent validity has been shown with other measures, such as the Beck Depression Inventory, Symptom Checklist-90-R, and Social Adjustment Scale, with ranges from .53 to .88. In the present sample, the scores on the OQ45 resulted in a coefficient alpha of .93, indicating good reliability.

Family Experiences Questionnaire. The family experiences questionnaire, constructed by the Research Consortium, is an 18-item survey which assesses participants' experiences of

troubled family occurrences that may impact psychological development. These experiences include: divorce, frequent moving, parental unemployment, frequent, hostile conflict in the home, death of a parent, parents with drinking/drug problems or gambling problems, physical or sexual abuse in the home, rape/sexual assault, a family member with severe mental health problems, suicide, family member with severe illness, family member with an eating problem, and family member with criminal activity. Participants are given the following instructions for completing the questionnaire: Below is a list of experiences which may occur in families. Read each experience carefully. Some of these may have been true at one point in your life, but not true at another point. Think about your childhood and your adolescence. If the experience happened in your family during either of these periods, please fill in the oval labeled, 'Yes.' If the experience never happened in your family, please fill in the oval labeled, 'No.' If you are unsure whether or not the experience occurred in your family at some time, please fill in the oval labeled, 'Unsure.' A sample item is, " Did the following occur in your family: frequent, hostile arguing among family members?"

Substance Use Questionnaire. A 7-item Likert scale questionnaire was constructed by the Research Consortium to assess participant's alcohol and drug use. These items measure if participants exceed the threshold for alcohol abuse for males and females (i.e., 5 vs. 4 drinks in a 24-hour period), how often they miss classes because of their drinking or drug use, their level of use of recreational drugs, and forgetfulness after using drugs or alcohol. Responses range from 0, "never," to 5, "daily." A sample item is "I have missed a class due to taking recreational drugs." Cronbach's coefficient alpha for the scores on this scale was .83.

### **Descriptive Results**

Descriptive statistics for each of the scales are provided below for informational purposes.

#### *Presenting Problems*

The greatest concern for all students was academics, followed by procrastination/motivation problems, and career decisions.

For women, the top ten greatest concerns reported were: 1) academics, 2) weight problems, 3) decision about career, 3) anxiety/fears/worries, 5) procrastination/getting motivated, 6) uncertainty about future and life after college, 7) finances, 8) time management, 9) stress management, and 10) self-esteem/self-confidences.

For men, the top ten greatest concerns reported were: 1) academics, 2) procrastination/getting motivated, 3) finances, 4) decisions about career, 5) uncertainty about future and life after college, 6) anxiety/fears/worries, 7) time management, 8) concentration, 9) dating concerns, and 10) reading/study skills problems.

In order to compare differences in level of distress between males and females, a t-test was run with gender as the classifier variable and total score on the presenting problems checklist as the dependent variable. Females reported significantly more distress than males [ $t(1001)=6.97, p<.01$ ]. Means and standard deviations for scores on each of the presenting problems are presented in Table 1 (see Table 1 on the next page).

**Table 1**  
**Means and Standard Deviations on the Presenting Problems Checklist**

Problem	<u>Females</u>		<u>Males</u>		<u>Total</u>	
	Mean	SD	Mean	SD	Mean	SD
Academics	2.47	.97	2.11	1.00	2.33	1.01
Adjustment to University	.77	1.00	.67	.94	.73	.98
Alcohol/Drugs	.28	.67	.36	.79	.32	.73
Anxiety/Fear/Worries	1.66	1.23	1.21	1.13	1.48	1.21
Assertiveness	.70	.96	.63	.94	.69	.96
Breakup/Loss of Relationship	.84	1.21	.75	1.18	.81	1.21
Concentration	1.14	1.18	.98	1.14	1.08	1.17
Confusion about Beliefs/Values	.63	.98	.59	.98	.61	.97
Credit Card Debt	.66	1.15	.55	1.03	.63	1.11
Dating Concerns	1.01	1.17	.96	1.14	1.00	1.16
Death	.65	1.13	.51	.98	.59	1.07
Decisions about Career/Major	1.66	1.36	1.40	1.27	1.56	1.33
Depression	.81	1.17	.59	.98	.72	1.10
Developing Independence	.80	1.18	.55	.98	.70	1.11
Excessive Internet Use	.21	.66	.30	.77	.25	.71
Ethnic/Racial Discrimination	.25	.72	.22	.65	.25	.71

Problem	<u>Females</u>		<u>Males</u>		<u>Total</u>	
	Mean	SD	Mean	SD	Mean	SD
Eating Probs– Bulimic	.42	.97	.12	.51	.31	.84
Eating Probs– Anorexic	.48	.98	.19	.60	.36	.86
Finances	1.58	1.35	1.41	1.24	1.52	1.30
Gambling	.02	.20	.13	.55	.07	.38
Homesickness	.52	.91	.26	.64	.41	.82
Irritability/ Anger/ Hostility	.70	1.02	.61	.96	.66	.99
Making Friends	.70	1.04	.48	.85	.61	.97
Perfectionism	1.11	1.29	.73	1.06	.96	1.22
Physical Health Problems	.96	1.18	.51	.88	.77	1.08
Problem Pregnancy	.09	.45	.10	.50	.09	.46
Procrastination /Getting Motivated	1.60	1.33	1.55	1.34	1.57	1.33
Rape/Sexual Assault	.23	.72	.09	.47	.17	.64
Reading/Study Skills Probs	.86	1.13	.89	1.15	.89	1.15
Relationships with Family	.72	1.11	.47	.93	.62	1.04
Relationships with Peers	.85	1.09	.56	.93	.73	1.03

Problem	<u>Females</u>		<u>Males</u>		<u>Total</u>	
	Mean	SD	Mean	SD	Mean	SD
Relationship with Romantic Partner/Spous	.86	1.21	.68	1.08	.80	1.17
Religious/Spiritual Concerns	.57	.98	.52	.95	.55	.97
SelfEsteem/Self Confidence	1.15	1.27	.71	1.05	.98	1.21
Sexual Concerns	.49	.95	.42	.88	.46	.92
Sexual Identity/Orientation	.09	.42	.16	.64	.12	.51
STDs	.25	.71	.29	.76	.27	.73
Shyness	.71	1.10	.58	1.01	.66	1.07
Sleeping Problems	.78	1.19	.60	1.04	.71	1.13
Stress Management	1.21	1.25	.65	1.02	.99	1.19
Suicidal Feelings/Thoughts	.23	.68	.19	.63	.21	.65
Test/Speech/Performance Anxiety	1.11	1.29	.79	1.12	.99	1.23
Time Management	1.32	1.26	1.11	1.16	1.26	1.22
Uncertain About Future	1.59	1.43	1.36	1.33	1.50	1.39
Weight Problems/Body Image	1.69	1.40	.75	1.11	1.32	1.37
<b>Total Problems Score</b>	<b>36.15</b>	<b>22.50</b>	<b>27.36</b>	<b>18.88</b>	<b>32.61</b>	<b>21.52</b>

*OQ Results*

The mean scores on the subscales of the OQ were as follows: 1) Symptom Distress,  $M = 23.32$  ( $SD = 12.25$ ), Interpersonal Relationships,  $M = 10.58$  ( $SD = 6.37$ ), and Social Roles,  $M = 10.60$  ( $SD = 4.22$ ). The mean score on the total scale of the OQ was  $46.28$  ( $SD = 21.35$ ), falling well below the cutoff score for clinical significance of 63. An ANOVA was run to determine differences between the genders on the total scale score of the OQ, with gender of the participant as the independent variable and total OQ score as the dependent variable. A significant difference was found [ $F(1,1175) = 5.57, p = .02$ ], with women reporting significantly greater distress than men. Post-hoc ANOVAs were then run on each of the OQ subscales to determine gender differences on each of these factors. Significant differences were found on the Symptom Distress subscale only [ $F(1, 1281) = 20.03, p < .01$ ], with women reporting greater symptom distress than men. Means and standard deviations by sex are reported in the table below (see Table 2).

**Table 2**  
**Means and Standard Deviations on the OQ 45**

Scale	<u>Females</u>		<u>Males</u>		<u>Total</u>	
	Mean	SD	Mean	SD	Mean	SD
OQ Total Score	47.36	21.34	44.36	20.84	46.28	21.35
Symptom Distress	24.58	12.31	21.46	11.75	23.32	12.25
Interpersonal Relationships	10.29	6.44	10.86	6.13	10.58	6.37
Social Roles	10.69	4.13	10.26	4.19	10.60	4.22

*Family Experiences*

Frequency of experiencing different types of family distress was analyzed by gender. These descriptive data are presented in the table below (see Table 3).

**Table 3**

**Frequency of Experiencing Different Types of Family Distress**

Item	Female			Male			Both		
	Yes	No	Not sure	Yes	No	Not sure	Yes	No	Not sure
Parents divorced or separated before you were 18.	25.5%	74.4%	.1%	26.3%	73.0%	.8%	25.5%	73.9%	.5%
Family frequently moved.	18.0%	81.7%	.2%	18.0%	81.1%	.9%	18.3%	88.1%	.6%
Parent(s) unemployed for an extended period of time.	13.3%	85.4%	1.3%	14.3%	84.2%	1.5%	13.3%	85.4%	1.2%
Frequent, hostile arguing among family members.	30.4%	67.8%	1.8%	23.8%	74.5%	1.7%	28.0%	70.2%	1.7%
Death of parent(s) before you were 18.	3.9%	96.1%	0%	5.1%	94.7%	.2%	4.5%	95.4%	.1%
Parent(s) with a drinking problem.	15.4%	82.7%	1.8%	15.0%	82.9%	2.1%	15.9%	82.2%	1.9%
Parent(s) with a drug problem.	4.9%	94.1%	.9%	7.3%	91.7%	.9%	5.7%	93.5%	.8%
Parent(s) with a gambling problem.	1.7%	97.5%	.8%	2.6%	96.8%	.6%	2.2%	97.1%	.7%
Physical abuse in your family.	10.1%	88.9%	1.0%	6.6%	91.7%	1.7%	9.1%	89.7%	1.3%

Continued...

Item	Female			Male			Both		
	Yes	No	Not sure	Yes	No	Not sure	Yes	No	Not sure
Sexual abuse in your family.	4.5%	94.4%	1.1%	1.7%	97.0%	1.3%	3.6%	95.2%	1.2%
Rape/sexual assault of yourself or family member	11.4%	87.6%	1.0%	4.1%	95.1%	.8%	8.6%	90.4%	1.0%
Family member hospitalized for emotional problems.	11.7%	86.8%	1.5%	8.1%	90.8%	1.1%	10.6%	88.0%	1.4%
Family member diagnosed with a mental disorder	19.7%	77.4%	2.9%	10.5%	88.7%	.8%	16.1%	81.9%	2.0%
Family member attempted suicide	12.5%	85.2%	2.3%	7.3%	91.2%	1.5%	10.4%	87.7%	1.9%
Family member committed suicide	4.1%	95.4%	.5%	3.4%	96.0%	.6%	3.8%	95.7%	.5%
Family member with a debilitating illness, injury, or handicap	17.0%	81.4%	1.6%	10.7%	87.6%	1.7%	14.5%	84.1%	1.5%
Family member prosecuted for criminal activity	8.5%	90.1%	1.4%	10.3%	88.3%	1.3%	9.7%	89.1%	1.2%
Family member with an eating problem	15.9%	81.1%	3.0%	9.0%	88.1%	2.8%	13.3%	83.8%	2.9%

*Drinking and Drug Use Behavior*

Chi-square analyses were run to determine gender differences on each of the seven items measuring drinking and drug use. Men reported drinking 5 or more drinks in a 24-hour period more often than women [ $X^2(5, N=1398) = 102.67, p < .01$ ] and 4 or more drinks more often than women [ $X^2(5, N=1396) = 91.64, p < .01$ ]. Men also reported missing class more

often than women as a result of drinking [ $X^2(5, N=1396) = 43.36, p < .01$ ] and experiencing more memory loss after drinking than women [ $X^2(5, N=1392) = 29.31, p < .01$ ]. In regard to recreational drug use, men reported using recreational drugs more often than women [ $X^2(5, N=1393) = 59.69, p < .01$ ], missing class more often than women as a result of drug use [ $X^2(5, N=1394) = 30.95, p < .01$ ], and experiencing more memory loss than women after drug use [ $X^2(5, N=1398) = 32.08, p < .01$ ]. Frequencies for each type of behavior are presented in the table below (see Table 4 on the next page).

Please Note: The response of “Seldom” may still be problematic on some of the alcohol and drug use items since they can denote significant signs of substance abuse. For example, 29.9% of the total sample indicated that they “Seldom” forgot where they were or what they did when using substances. This can be taken to mean that such behavior (i.e., blackouts) did indeed occur from time to time. Clinically, then, a response of “Seldom” on this item may still indicate a potential problem with substance use that is worth exploring further with the respondent. In short, “Seldom” may mean “one or two times too many,” and could thus serve as an early warning sign for substance abuse problems.

**Table 4**  
**Frequency of Drinking and Drug Use Behavior**

<b>Sex</b>	<b>Item</b>	<b>Never</b>	<b>Seldom</b>	<b>1/ Month</b>	<b>2+/ Month</b>	<b>Weekly</b>	<b>Daily</b>
Both	I drink 5 or more drinks in a 24-hour period	40.3%	19.2%	8.4%	13.6%	17.6%	.9%
	I drink 4 or more drinks in a 24-hour period.	35.2%	19.9%	9.1%	15.5%	19.4%	1.0%
	I have missed a class due to drinking.	68.5%	22.0%	4.4%	3.3%	1.4%	.4%
	After drinking, I have forgotten where I was or what I did.	61.0%	29.9%	4.5%	2.5%	1.5%	.5%
	I use other recreational drugs.	67.0%	16.2%	3.7%	4.1%	4.6%	4.4%
	I have missed class due to taking recreational drugs.	90.4%	6.4%	.7%	1.2%	.7%	.5%
	After taking recreational drugs, I have forgotten where I was or what I did.	88.9%	8.6%	.8%	.7%	.5%	.6%
Female	I drink 5 or more drinks in a 24-hour period	47.4%	20.3%	8.5%	12.3%	11.4%	.1%
	I drink 4 or more drinks in a 24-hour period.	40.3%	21.9%	9.9%	14.6%	13.1%	.1%
	I have missed a class due to drinking.	73.2%	20.8%	3.1%	2.4%	.5%	0%
	After drinking, I have forgotten where I was or what I did.	65.0%	28.2%	3.7%	2.1%	.9%	.1%
	I use other recreational drugs.	73.1%	16.1%	2.4%	2.4%	3.2%	2.8%

Continued...

Sex	Item	Never	Seldom	1/ Month	2+/ Month	Weekly	Daily
	I have missed class due to taking recreational drugs.	93.6%	4.7%	.2%	.7%	.5%	.2%
	After taking recreational drugs, I have forgotten where I was or what I did.	92.4%	6.5%	.5%	.5%	0%	.2%
Male	I drink 5 or more drinks in a 24-hour period	27.8%	18.5%	8.3%	14.6%	28.9%	1.9%
	I drink 4 or more drinks in a 24-hour period.	25.4%	18.0%	7.8%	16.1%	30.7%	2.1%
	I have missed a class due to drinking.	62.2%	22.7%	6.4%	4.7%	2.8%	1.1%
	After drinking, I have forgotten where I was or what I did.	53.2%	33.7%	6.5%	3.0%	2.5%	1.1%
	I use other recreational drugs.	57.6%	16.1%	4.9%	7.0%	7.0%	7.4%
	I have missed class due to taking recreational drugs.	85.4%	8.3%	1.5%	2.5%	1.3%	.9%
	After taking recreational drugs, I have forgotten where I was or what I did.	84.0%	11.3%	1.1%	1.1%	1.1%	1.3%

### Summary

This technical report provides a basic summary and highlights of findings from the 2002 non-clinical sample collected by the Research Consortium. It included preliminary analyses exploring gender differences. Future technical reports will attempt to compare and contrast data previously collected on two clinical samples (in 1991 and 1997-1998) and another non-clinical sample (in 1994-95). These comparisons may provide interesting results about changes in college students' mental health concerns over time. Some cursory comparisons between the 2002 non-clinical sample and the 1997-1998 clinical sample can be made by the reader by accessing data tables from the latter study available at

<http://www.utexas.edu/student/cmhc/research/RCPres98.pdf>