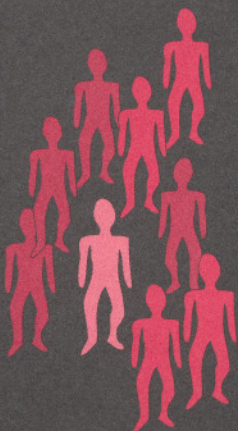


**Public Views of  
Psychiatric Medications in  
Light of Health and  
Health Care**

Public Report on the Pressing  
Issues in Health and Medical  
Care Module of the 1998  
General Social Survey



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**Funded with support from:**

The National Institute of Mental Health  
The National Science Foundation  
Eli Lilly & Co.,

**Suggested citation:** Martin, J.K., B.A. Pescosolido, Public Views of Psychiatric Medications in Light of Health and Health Care. Bloomington, IN: Indiana Consortium for Mental Health Services Research, 2005

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## I. EXECUTIVE SUMMARY

### **MENTAL HEALTH:**

A Report of the Surgeon General issues a call for research to “confront the attitudes, fear, and misunderstanding that remain as barriers” to the effective and appropriate treatment of mental illness (Satcher 1999, Preface). The “*most formidable obstacle to future progress in the arena of mental illness and health*” cited in that Report is stigma (p.3). While stigma includes “*bias, distrust, stereotyping, fear, embarrassment, anger and/or avoidance*” (p. 6), it also embraces attitudes and behaviors toward persons with mental illness and the system of treatment. This report focuses on two of the most critical aspects of the public reaction to mental illness – the assessment of the efficacy of psychiatric medications, and the willingness to use them for one’s own problems. Both public attitudes toward the generic category of psychiatric medications and the specific, highly publicized SSRI, Prozac®, form the target of the data and analyses presented here.

The data for this report come from the 1998 General Social Survey, a nationally representative face-to-face survey of Americans conducted by the National Opinion Research Center (NORC) at the University of Chicago. On one of the two national samples surveyed in 1998, a 73-item module, *Pressing Issues in Health and Medical Care* (PIHMC), included questions on psychiatric medications.

The major findings of this research are as follows:

- The 1998 GSS data are broadly representative of the American population with the exception of a slight under-representation of men.
- The response rate of the sample of GSS which includes the PIHMC module is 76.6% (Sampling error approximately +/-3.2%).
- GSS respondents have an average age of 45 years, \$35,000 to \$39,000 incomes and 13.6 years of education.
- Most Americans (78%) indicate they are in good or excellent health and have some form of health insurance (86%).
- Most GSS (60%) respondents have either used or know someone who has used mental health services. A significant minority (12%) report personal use of mental health services.
- The GSS survey results mirror in other research findings which suggest that Americans have a positive opinion of their own physicians but are less sanguine about physicians in general.
- A majority of Americans (from 50-77%) see psychiatric medications as effective.
- A much smaller percentage (23-35%) report concerns with potential negative effects of psychiatric medications.
- Almost half of Americans (47%) report that the use of psychiatric medications should be discontinued when symptoms abate.
- Non-whites and those reporting higher levels of concern with physician quality are more likely to endorse negative statements about psychiatric medications.
- Whites, older Americans, those who have had personal contact with the mental health system themselves or through others, those who trust their personal physicians, and those who are concerned with possible denial of treatment report more positive attitudes toward psychiatric medication.
- The percentage of Americans reporting a willingness to use psychiatric medications is significantly lower than the proportion who endorse the efficacy of these medications.
- Over half (56%) of Americans report a willingness to take psychiatric medications for conditions that indicate panic attacks and just under half (41%) would do so for depression.
- Many fewer Americans report a willingness to take psychiatric medications for personal troubles (24%) or stress (37%).
- Only about a third of Americans (37%) report a willingness to take psychiatric medications for any of the conditions listed above.
- Americans’ willingness to use psychiatric medications is associated with their evaluation of the effectiveness and negative aspects of psychiatric medications.
- Previous knowledge of the mental health system as well as concerns with denial of medical treatment are associated with a greater willingness to use psychiatric medication.
- Better self-reported health and having medical insurance are associated with less willingness to use psychiatric medications.
- The vast majority of Americans (86%) have heard of the drug Prozac® and a majority (56%) know someone who has used it.

- A small percentage of GSS respondents (8%) have used Prozac®.
- While almost 1 in 10 Americans who have heard of Prozac® do not know what it is used for, respondents who offer an indication cite its use for depression (43%), mental illness generally (17%) and anxiety/stress (12%).
- Women, whites, younger respondents and those with some contact with the mental health system are more likely to know of Prozac® and someone who has used it.
- Those who report better health status are less likely to report using Prozac®. Americans at high and low levels of educational attainment as well as those with direct or indirect contact with the mental health system are more likely to report the use of Prozac®.
- Americans report that Prozac® is effective although the percentage reporting so is consistently lower than the proportion reporting on the effectiveness of psychiatric medications more generally.
- While few Americans report that Prozac® has negative effects (about 25%), more respondents (45-54%) indicate that they are uncertain about these effects compared to their reports of the negative aspects of psychiatric medications generally.
- Almost half of Americans (49%) endorse the use of Prozac® for depression but reject its use for personality enhancement (51%).
- As with psychiatric medications generally, almost half of Americans (47.6%) report that Prozac® should be discontinued when symptoms abate.
- Knowing someone who has used Prozac® and having trust in one's personal physician is associated with positive attitudes toward the effectiveness of Prozac®.
- While half of Americans indicate a willingness to use Prozac® for depression and almost half (44.5%) for panic symptoms, these levels are also significantly lower than for psychiatric medications generally.
- Almost half of Americans (48%) indicate an unwillingness to use Prozac® for any of the four conditions presented.
- Americans with more positive attitudes toward Prozac®, who believe that Prozac® enhances personality, who trust their personal physicians, who have used Prozac® in the past, or who report a greater willingness to use psychiatric medications more generally are more likely to report a willingness to use Prozac®.

## II. INTRODUCTION

### A. BACKGROUND

In *Mental Health: A Report of the Surgeon General*, (1999; hereafter referred to as *The Surgeon General's Report*), the directors of the three federal agencies created to address problems of mental health in the United States point to critical challenges that remain. Nelba Chavez (Substance Abuse and Mental Health Services Administration), Steven E. Hyman (National Institute of Mental Health) and Bernard S. Arons (Center for Mental Health Services) called for research that continues to dispel the shroud of fear and misunderstanding that surrounds mental illness. Despite the progress that has been made in research on effective and appropriate treatments, the issue of stigma continues to loom large in the public's understanding of mental illness and their willingness to use mental health services.

Despite the many efforts of providers, consumer and advocacy groups, and others, the contention that the public understands and accepts mental illness and its treatment as they do other physical illnesses has not been subjected to systematic empirical examination. Existing national studies were dated and more recent studies revealed inconsistent results. In 1998, the General Social Survey, the nation's leading monitor of social and political attitudes, asked a series of questions about one form of treatment for mental illness – the use of medications. This report presents the data collected in this important national study. It examines both the public's assessment of the efficacy of these medications and their willingness to use them in particular situations that threaten mental health. Since it has been repeatedly reported that only a small proportion of Americans who have mental health problems seek treatment, these data allow an examination of one of the most important barriers. That is, the public's attitudes – attitudes on whether they think effective medications are available and how predisposed they are to use them. Even more important, it also provides for an examination of the "disconnect" between efficacy and potential use among Americans. Further, given the amount of public discussion about the potential positive and negative aspects of the newer generation of anti-depressant and concerns about its misuse, the report focuses on one of the most controversial of the available psychiatric medications, Prozac®.

### B. OVERVIEW OF THE GENERAL SOCIAL SURVEY

Data for these analyses are taken from the Pressing Issues in Health and Medical Care Module (PIHMC) of the 1998 General Social Survey (GSS) conducted for the National Data Program for the Social Sciences at the National Opinion Research Center (NORC) of the University of Chicago. Extending back to 1972, the GSS is a face-to-face interview survey and represents the longest standing on-going cross-sectional survey of American public opinion. Principal Investigators for the 1998 GSS were James A. Davis, Tom W. Smith, and Peter V. Marsden.

The GSS is conducted biennially in February, March, and April and includes questions of three basic types: 1) permanent ("core") questions that occur on every survey; 2) rotating questions that occur on two of every three surveys; and 3) occasional questions such as split ballot experiments that occur in a single survey. Median interview length is approximately 90 minutes. The 1998 GSS utilized a three-stage full probability sampling design and reports data on 2832 respondents. This sample is representative of the adult (i.e., 18 years old and above), non-institutionalized population of the contiguous United States. The analyses reported here are based on the responses of a split ballot of approximately 1,400 respondents who were administered the 73-item PIHMC module. Sampling error for this subsample is approximately +/- 3.2 percent.

Primary funding for the 73-item PIHMC was provided by Eli Lilly Corporation, with supplemental support provided by the National Institute of Mental Health and the Indiana Consortium for Mental Health Services Research. Complete item wording and response categories for the PIHMC questions are provided in *Appendix A*.

### C. CHARACTERISTICS OF RESPONDENTS

*Table 1* details several socio-demographic background attributes of the PIHMC respondents. Examination of these data indicate that, within sampling error, the distribution of GSS respondents across demographic categories (i.e., race, marital status, place of residence) is broadly representative of the general population. Similarly, with an average age of 45.4, average education of 13.6 years, and average income in the \$35,000 - \$39,999 range, the PIHMC subsample mirrors national norms for the adult population. It is appropriate to note, however, that with only 42% men, the PIHMC subsample over-represents

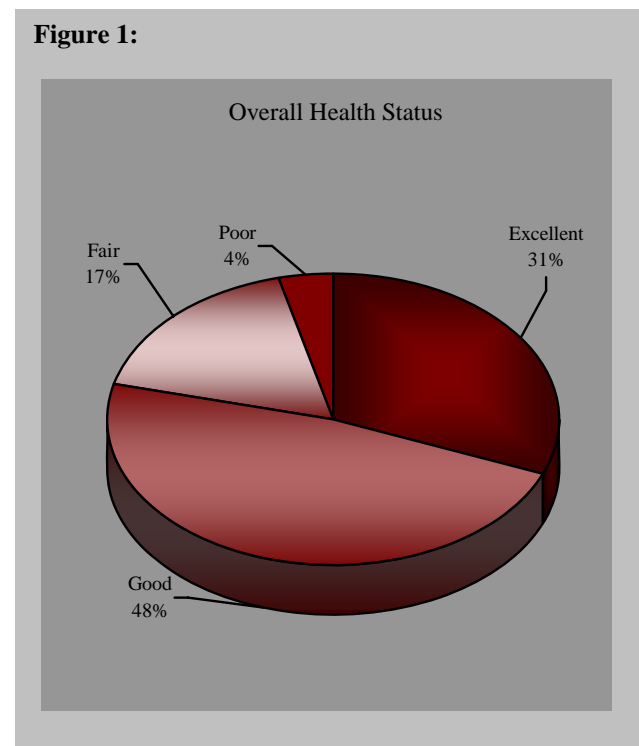
**Table 1: Sociodemographic Background Attributes of Respondents, 1998 General Social Survey, PIHMC Subsample**

<b>MARITAL STATUS:</b>		
	<b>f</b>	<b>%</b>
Married	661	48.3
Divorced	267	19.5
Widowed	132	9.6
Never Married	308	22.5
<b>GENDER:</b>		
Men	574	41.9
Women	795	58.1
<b>RACE:</b>		
Whites	1085	79.3
Non-whites	284	20.7
<b>RESIDENCE:</b>		
Urban	520	38.0
Suburban	507	37.0
Rural	342	25.0
<b>AGE:</b>		
18-30	280	20.5
31-40	352	25.7
41-50	277	20.2
51-60	182	13.3
61+	278	20.3
<b>(mean):</b>	<b>45.4</b>	
<b>EDUCATION (Years):</b>		
0-11	224	16.4
12	425	31.2
13-15	362	26.5
16	211	15.5
17+	142	10.4
<b>(mean):</b>	<b>13.6</b>	
<b>INCOME:</b>		
LT \$20,000	311	23.8
\$20,000-\$39,999	370	28.4
\$40,000-\$59,999	237	18.2
\$60,000-\$89,999	183	14.0
\$90,000+	204	15.6
<b>(mean):</b>	<b>\$35,000-\$39,999</b>	

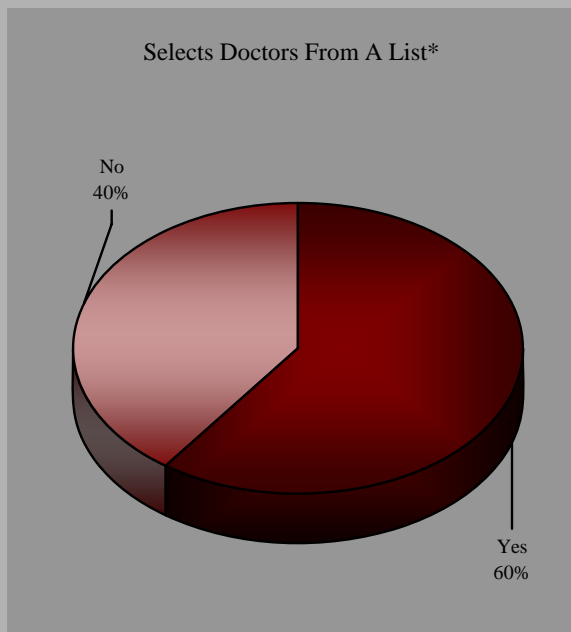
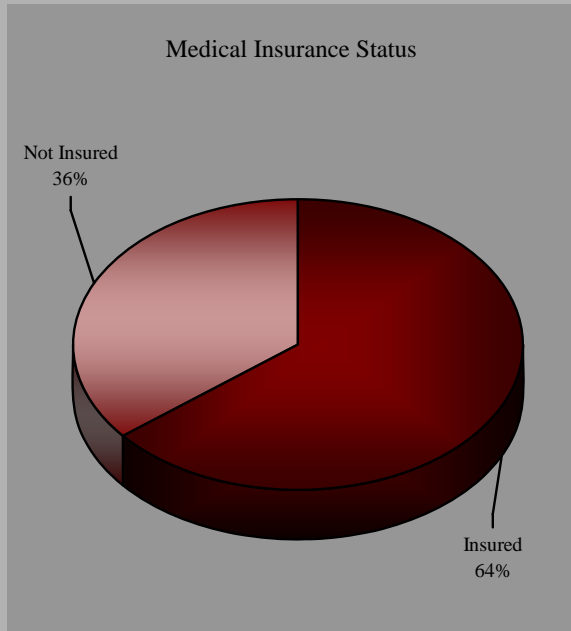
women. This realization is important as a gender bias introduces a potential confound in the current analyses. Simply stated, women are more likely than men to seek medical care for physical or mental health problems, and are also more likely to assume caretaker roles that place them in direct contact with medical treatment systems. As such, women’s knowledge and opinions with respect to the medical profession and treatment systems may be more crystallized than are those of their male counterparts.

In addition to providing information on the sociodemographic attributes of respondents, several items in the GSS interview ask for specific information on the respondent’s health status. Responses to these items are displayed in *Figure 1*. According to these data, the vast majority of respondents (79.2%) rate their overall health status as either excellent (30.6%) or good (48.6%), with fewer than one in four indicating their health is only fair or poor. Consistent with national estimates, nearly nine of ten (86%) of GSS respondents report having either private health insurance or access to Medicare or Medicaid, and among those with access to health insurance, nearly 60 percent operate in a managed care environment (i.e., they must select their health care provider from a list). Examination of the other health-related items displayed in *Figure 1A* indicates that the majority of respondents (59.0%) report either having personally used mental health services, or knowing someone who has used these services. This pattern is consistent with patterns reported in the 1996 GSS where

**Figure 1:**



**Figure 1: (continued)**



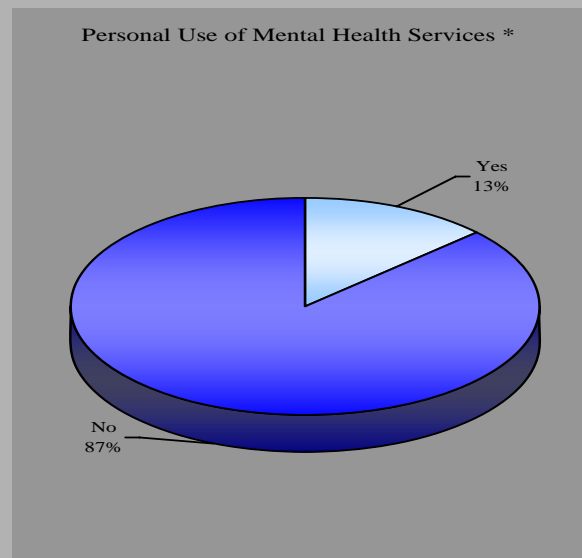
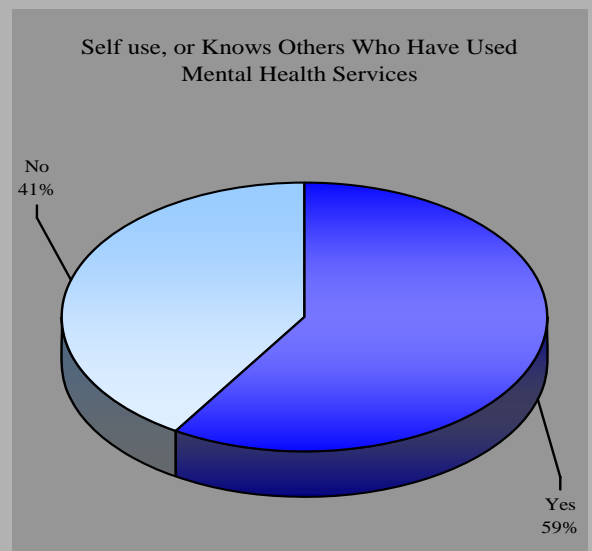
\*asked only of respondents with health insurance/medical coverage

a majority of respondents were also found to have at least some first-hand knowledge of the mental health treatment system. It is also interesting to note that thirteen percent of respondents report having personally used mental health services. While this number is somewhat lower than the twenty percent that is

frequently cited as the proportion of persons who will seek mental health care at some point in their lives, it is more-or-less consistent with estimates from the National Co-morbidity Survey. Moreover, since the GSS sample eliminates institutionalized individuals, this estimate may be somewhat attenuated.

In addition to socio-demographic attributes and health-related assessments, attitudes towards physicians and the medical profession are included as independent variables in all subsequent analyses. Following from the early and the more recent work, public sentiments regarding physicians have been found to be important correlates of a host of medical outcomes

**Figure 1A:**



\*Asked only of respondents with health insurance/medical coverage



(e.g., knowledge, utilization, and adherence). As such, attitudes toward physicians represent potentially important components to the models tested here. The PIHMC Module contains twenty items tapping respondents' levels of positive and negative affect toward physicians and the health care system. The texts of these individual items are provided in *Appendix A*. Factor analyses of these items indicate that these items tap four distinct dimensions: 1) Trust in one's personal physician (i.e., "my Dr. is a real expert in taking care of medical problems like mine", "I trust my Dr's judgments about my medical care", etc.); 2) general concerns about physician quality (i.e., "sometimes Drs. take unnecessary risks...", "Drs. aren't as thorough as they should be", etc.); 3) overall trust in physicians (i.e., "Drs. always treat their patients with respect", "Drs. always avoid unnecessary expenses", etc.) and 4) concerns about the possibility of being denied needed medical treatment (i.e., "...worry that my Dr. is prevented from telling me about the range of available treatment", "...worry that I will be denied the treatment or services I need", etc.).

*Table 2* presents the scale distributions and reliability coefficients on the four measures of positive and negative attitudes toward physicians. Component items on these scales were coded such that respondents who agreed with the statement (i.e., strongly agree or agree) were scored as "1", and respondents who were uncertain or disagreed with the statement were coded "0". Scale values are the simple sum of the component items. Examination of these data reveals several interesting patterns. To begin, respondents' levels of trust in their personal physicians are quite high. Indeed, 6 of 10 respondents agreed with 5 or more of the 7 positive statements regarding the expertise and competence of their physician. Second, notwithstanding the frequently cited loss of autonomy in treatment decisions assumed to result from the movement to managed care, only a minority (38.4%), agree with 1 or more statements indicating that necessary treatment might be withheld.

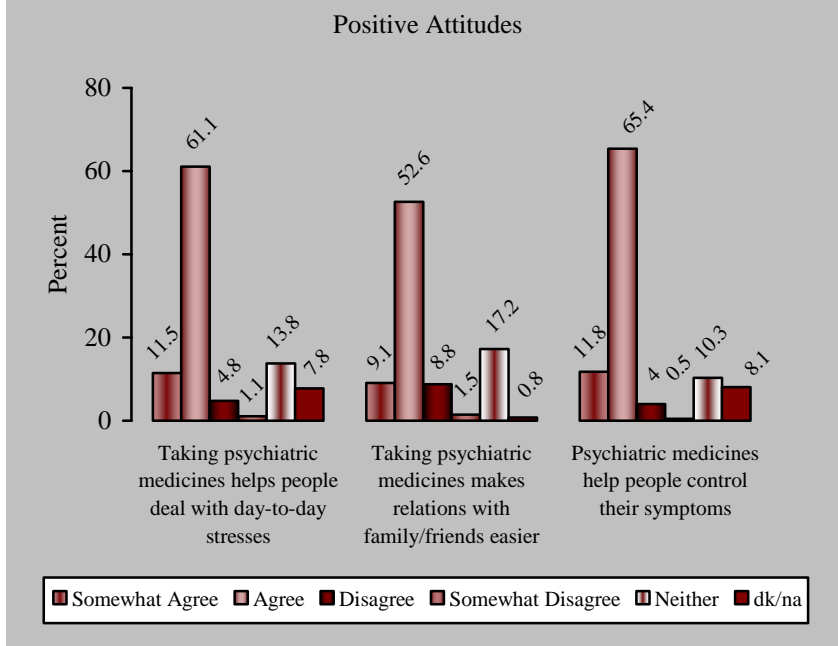
While these data indicate high levels of confidence in personal physicians and only nominal concerns for the likelihood that needed treatment would be withheld, a somewhat different picture emerges when the focus is on assessments of physicians more generally. For example, nearly half (49.1%) of the GSS respondents agreed with 2 or more of 5 negative statements indicating a concern for the general quality of care received from physicians, and a majority (59.9%) agreed with 2 or fewer of 5 positive statements indicating an overall level of trust in all physicians. This pattern of high levels of trust in personal physicians but substantially lower levels of trust in other physicians has been documented in previous research.

**Table 2: Scale Distributions, Attitudes Toward Physicians, 1998 General Social Survey**

TRUST IN PERSONAL PHYSICIANS:		f	%
LOW	0	37	3.9
	1	61	4.9
	2	89	7.2
	3	105	8.5
	4	122	8.9
	5	161	11.8
	6	244	17.8
HIGH	7	422	30.8
Cronbach's Alpha:	.826		
Mean:	5.048		
Standard deviation:	2.043		
WORRY ABOUT DENIAL OF NECESSARY TREATMENT:			
LOW	0	806	61.6
	1	223	17.0
	2	149	11.4
HIGH	3	131	10.0
Cronbach's Alpha:	.803		
Mean:	0.698		
Standard deviation:	1.020		
CONCERNS ABOUT PHYSICIAN QUALITY:			
LOW	0	336	26.9
	1	360	24.0
	2	272	21.8
	3	210	16.8
	4	96	7.7
HIGH	5	35	2.8
Cronbach's Alpha:	.669		
Mean:	1.628		
Standard deviation:	1.381		
OVERALL TRUST IN PHYSICIANS:			
LOW	0	285	22.4
	1	239	16.8
	2	263	20.7
	3	217	17.1
	4	175	13.8
HIGH	5	93	7.3
Cronbach's Alpha:	.708		
Mean:	2.029		
Standard deviation:	1.570		

### III. PSYCHIATRIC MEDICATIONS

**Figure 2: Item distributions (%) on Attitudes Toward the Use of Psychiatric Medicine, 1998 General Social Survey**

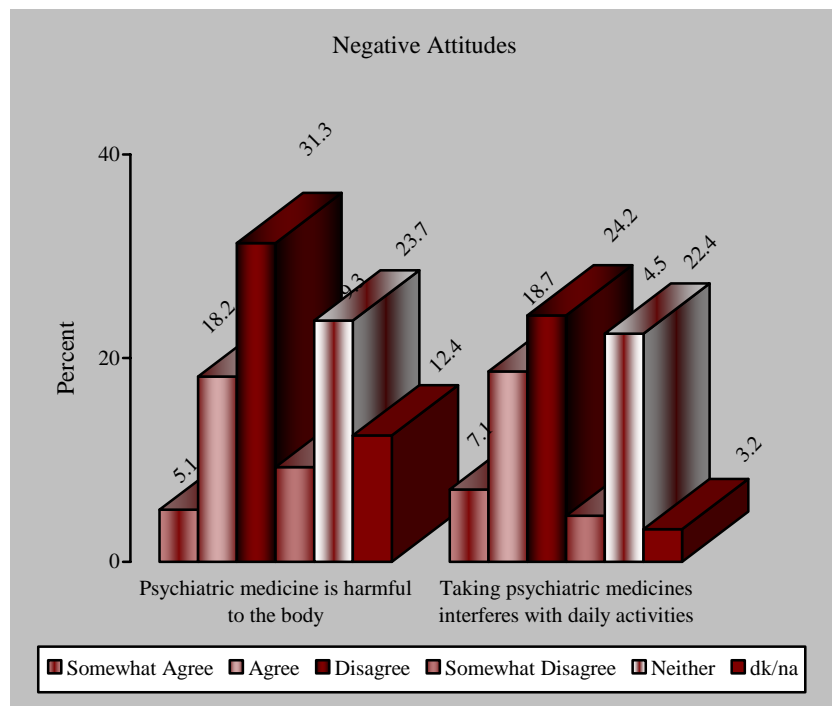


#### A. ATTITUDES TOWARD PSYCHIATRIC MEDICATIONS

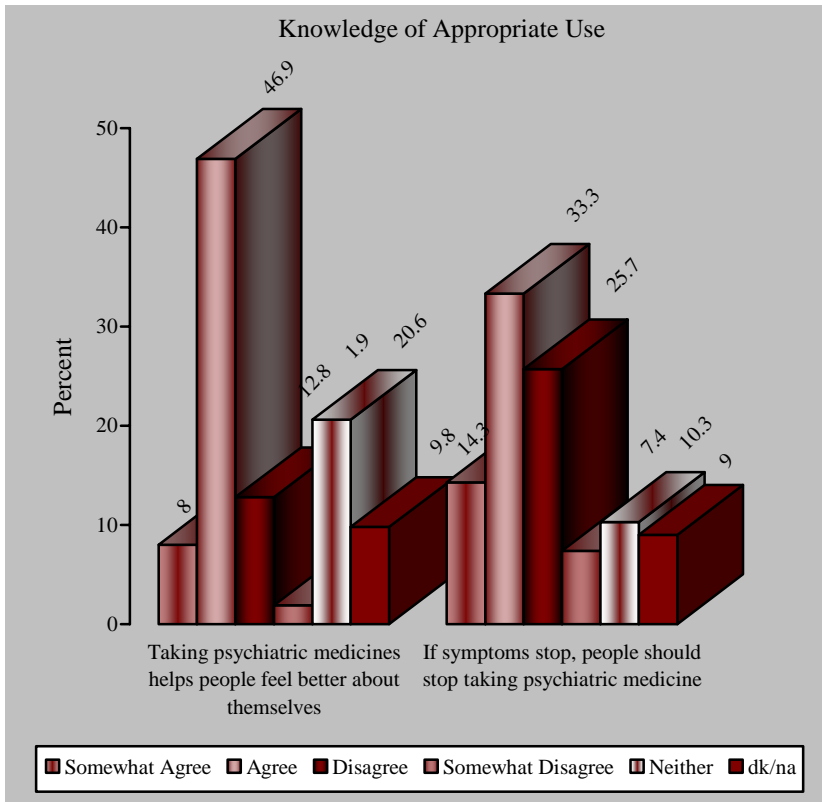
A major goal of the PIHMC module was to assess public attitudes about psychiatric medications. Toward this end, a series of seven items asked respondents for their opinions on the efficacy of these medications and an additional four items asked whether respondents would be willing to personally take these medications when faced with specific problems. Responses to the first set of seven attitudinal items are detailed in *Figure 2*.

Examination of the data in *Figure 2* suggest that overall, respondents view psychiatric medications as being effective and the source of few negative outcomes. For example, 72.6 percent of respondents agree (strongly agree & agree, combined) that taking psychiatric medications helps people deal with daily stressors. Similarly large proportions agree that psychiatric medications help people control symptoms (77.2%), make relationships with family & friends easier (61.7%), and help people feel better about themselves (54.9%). On the other hand, when asked if psychiatric medications are harmful to the body or interfere with daily activities, only a minority (23.3% and 35.8%, respectively) agree with these negative assessments.

While the data in *Figure 2* suggest that most GSS respondents report largely positive attitudes regarding the efficacy of psychiatric medicine, (i.e., respondents answering “neither agree nor disagree” or “don’t know”) are significantly higher on the two items expressing negative evaluations of psychiatric medications. Indeed, over a third of respondents are uncertain whether these medications are harmful to the body (36.1%) or interfere with daily activities (25.6%). Finally, it is somewhat distressing to note that nearly half of respondents (47.7%) agree that people should discontinue use of psychiatric medications when symptoms are absent. This finding suggests that perhaps a key issue in effective mental health treatment is not simply providing easy entry to care, but also insuring continuity and adherence to treatment.



**Figure 2: (Continued)**



**TABLE 3: Scale Distributions, Attitudes Toward the use of Psychiatric Medicine, 1998 General Social Survey**

NEGATIVE ATTITUDE TOWARD THE USE OF PSYCHIATRIC MEDICINE:		f	%
LOW	0	577	51.0
	1	341	16.830.2
HIGH	2	213	14.118.8
Cronbach's Alpha:		.665	
Mean:		0.678	
Standard deviation:		0.772	
POSITIVE ATTITUDE TOWARD THE USE OF PSYCHIATRIC MEDICINE:		f	%
LOW	0	106	9.0
	1	85	7.2
	2	143	12.1
	3	274	23.2
HIGH	4	575	42.0
Cronbach's Alpha:		.800	
Mean:		2.953	
Standard deviation:		1.304	

Factor analysis of the seven items assessing attitudes toward the efficacy of psychiatric medications indicate that 4 items load on a factor tapping Positive Attitudes Toward Psychiatric Medications, and 2 items load on a factor tapping Negative Attitudes Toward Psychiatric Medications.

Coded as in the previous scales of attitudes toward physicians (i.e., “strongly agree” and “agree” = 1, else = 0), two multi-item summative scales were constructed. Distributions and scale statistics on these measures are displayed in *Table 3*. Two items (harmful and interferes) provide the measure of negative attitudes. Four items (deal with stress, makes things easier, control symptoms, and feel better) are combined to create the measure of positive attitudes. Internal consistency reliability estimates for the scales are acceptable (.66 and .80, respectively).

As might be expected from the individual item distributions reported in *Figure 2* and displayed in *Table 3*, scale distributions of the measures of positive and negative attitudes toward psychiatric medications indicate overall high levels of positive affect and relatively low levels of negative affect. Indeed more than 40 percent of respondents agree with all four positive statements about psychiatric medications, compared to a much smaller proportion (18.5%), who agreed with both negative statements. According to these data, then, it would seem that large numbers of the American public recognize psychiatric medications to be relatively effective ways of helping persons with mental disorders.

Knowing that most Americans are positive about psychiatric medications, while an important finding, begs the related question of “what attributes or attitudes (if any) are related to these positive or negative sentiments?” To provide a partial answer to this question we regressed the scales of positive and negative

**TABLE 4: Unstandardized Estimates for the Regression of Attitudes Toward Psychiatric Medicines on Socioeconomic Background Attributes, Health-Related Dimensions, and Attitudes Toward Physicians, 1998 General Social Survey.**

ATTITUDES	NEGATIVE ATTITUDES			POSITIVE ATTITUDES		
	1	2	3	4	5	6
<b>BACKGROUND ATTRIBUTES:</b>						
Women	-.087	-.071	-.081	-.012	-.062	-.073
Whites	-.303***	-.277***	-.239***	.307**	.234**	.200
Education	-.037	-.032	-.017	.044	.027	.030
Education <sup>2</sup>	.001*	.001*	.001	-.001	-.001	-.001
Income	-.010	-.078	-.005	.002	-.002	-.003
Urban	-.034	-.036	-.038	-.047	-.035	-.044
Rural	.038	.035	-.014	.131	.164	.150
Widowed	-.046	-.041	.002	.058	.050	.103
Divorced Separated	.014	.024	.034	.114	.053	.081
Never Married	-.072	-.068	-.034	.108	.091	.073
Age (years)	.001	.001	.001	.006*	.008*	.007*
<b>HEALTH-RELATED DIMENSIONS:</b>						
General Health Status		-.031	-.014		.015	.015
Insured		-.058	.009		-.120	-.112
Seen a MH Prof./Knows User		-.103	-.197		.419***	.441***
Selects doctors from a List		.030	.008		.054	.036
<b>ATTITUDES TOWARD PHYSICIANS:</b>						
Trusts Personal Physician			.013			.122***
Worried about Denial of Treatment			-.019			.100*
General Concern for Physician Quality			.155***			-.002
General Trust in Physicians			.033			-.020
Intercept	1.538	1.617	0.892	1.787	1.772	1.248
Rsq	.055***	.059***	.117***	.026*	.047***	.076***
Increment		.004	.058***		.021***	.029***

\*p<.050;  
\*\*p<.010;  
\*\*\*p<.001

attitudes toward psychiatric medications on socio-demographic background attributes, health-status dimensions, and attitudes toward physicians. Results of this analysis are presented in *Table 4*.

Turning first to the correlates of negative attitudes toward psychiatric medications, we see that of the 11 variables indexing background attributes, only 2, race and education, have significant influences on levels of negative attitudes. Non-white respondents, and those at the highest levels of schooling, emerge as more likely to view psychiatric medications in negative terms. These patterns remain when the four health status dimensions are added, and none of the four health variables are related to negative attitudes in an important way. Finally, when respondents' attitudes toward physicians are added, non-whites remain more negative and respondents indicating an

overall concern for physician quality also report significantly higher levels of negative attitudes toward these medications.

A somewhat different picture is evidenced when we consider the correlates of positive attitudes toward psychiatric medication (columns 4, 5 & 6 of *Table 4*). Repeating the strategy utilized for the analysis of negative attitudes, we first find that positive attitudes toward these medications are significantly higher among whites and increase with the respondents' age. Moreover, when the health status dimensions are entered, either having personally seen, or knowing someone who has seen a mental health professional has a moderately powerful influence on reporting positive attitudes toward psychiatric medications. Finally, when we enter attitudes toward physicians, respondents who trust their personal physician, and who indicate concern for a possible denial of treatment, emerge as significantly more likely to have a positive attitude toward psychiatric medications.

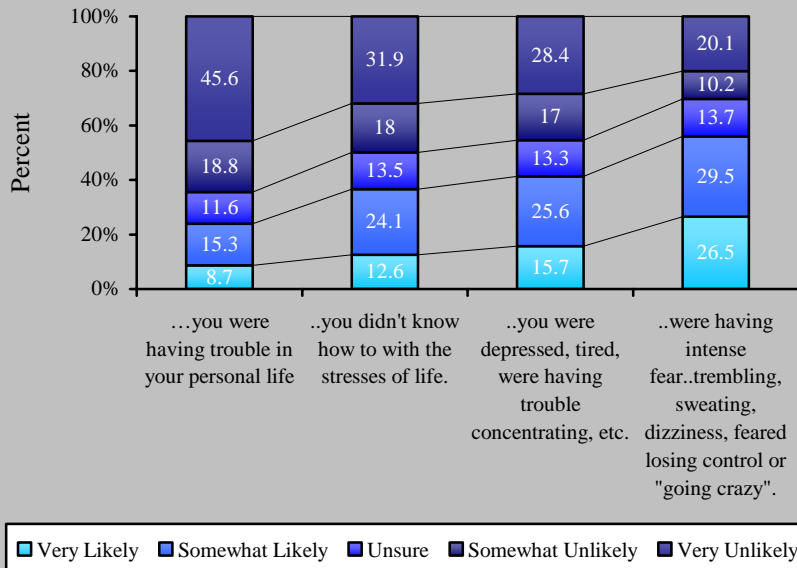
## B. LIKELIHOOD OF TAKING PSYCHIATRIC MEDICATIONS

Having documented that the American public is generally positive regarding the efficacy of psychiatric medications, and that this positive assessment is more-or-less uniform among various groups, we now turn our attention to whether the public is likely to personally take these medications. The PIHMC module asked respondents how likely they would be to take psychiatric medications under four specific circumstances. These were: when having trouble in personal life; when unable to deal with the stresses of life; when feeling depressed, tired, etc., and when experiencing fear, trembling, loss of control, etc. Responses to these items are reported in *Figure 3*.

According to the data in *Figure 3*, only a minority of respondents (between 11.6% and 13.7%) were unsure whether they would take

**Figure 3: Individual Likelihood of Taking Psychiatric Medications (%) Under Specific Conditions, 1998 General Social Survey\***

(ITEMS: Likely to take psychiatric medications because....)



\* excludes respondents answering "don't know", or providing no answer to the individual items

psychiatric medications under the four circumstances. Respondents were most likely to say they would take these medications if they were experiencing fear, trembling, etc. (56% being "very likely" or "somewhat likely"), or were feeling depressed, tired, having trouble concentrating, etc. (41.2% being "very likely" or "somewhat likely"). On the other hand, respondents indicated they were not likely to take these medications to deal with stress (49.9% being "somewhat" or "very unlikely") or personal troubles (63.4% being "somewhat" or "very unlikely"). The data in *Figure 3* also point to an interesting pattern. Specifically, notwithstanding public beliefs in the efficacy of psychiatric medicine, it appears that most respondents do not think it likely that they personally would take these medications, even if they were experiencing symptoms of mental disorder.

Factor analysis of the four items assessing reported likelihood of taking psychiatric medications indicate that the four items tap a uni-dimensional construct. Thus, these four items were combined to create a summative scale of likelihood of taking psychiatric medications. Individual items were coded such that the responses of "very likely" and "somewhat likely" were coded 1 and all other responses were coded 0. The resulting scale ranges from unlikely to take psychiatric medications under any circumstances (0) to likely to take these medications under all four circumstances. The distribution of responses on this scale, along with reliability statistics are displayed in *Table 5*.

**TABLE 5: Scale Distribution, Overall Likelihood of Using Psychiatric Medicine, 1998 General Social Survey.**

OVERALL LIKELIHOOD OF USING PSYCHIATRIC MEDICINE:	f		%	
LOW	0	428		37.1
	1	216		16.8
	2	181		14.1
	3	195		15.1
HIGH	4	218		18.9
Cronbach's Alpha:			.883	
Mean:			1.58	
Standard deviation:			1.52	

As noted, the distribution of scale scores indicates that a relatively large number of respondents (37.1%) report being unlikely to use psychiatric medicines under any of the four circumstances described. In other words, while a majority of respondents report positive attitudes toward the use of psychiatric medications, most have serious reservations about personally taking these medications. This paradoxical pattern remains to be fully understood.

In an attempt to determine who is likely to say that they would take psychiatric medications, we regressed overall likelihood of use on socio-demographic attributes, attitudes toward psychiatric medications, health status dimensions, and attitudes towards physicians. The results of these analyses are presented in *Table 6*. In this table, column 1 displays a baseline model that expresses likelihood of use as a function of the eleven socio-demographic attributes. Estimates for the effects of positive and negative attitudes toward psychiatric medications are added in column 2. Column 3 adds estimates for the effects of the four health status dimensions, and finally, column 4 adds estimates for the influences of respondents' attitudes toward physicians.

Examination of the data in *Table 6* reveals several interesting patterns. To begin, according to the estimates in column 1, only 1 of the 11

**TABLE 6: Unstandardized Estimates for the Regression of Overall Likelihood of Using Psychiatric Medicines on Socioeconomic Background Attributes, Attitudes Toward Psychiatric Medicines, Health-Related Dimensions, and Attitudes Toward Physicians, 1998 General Social Survey**

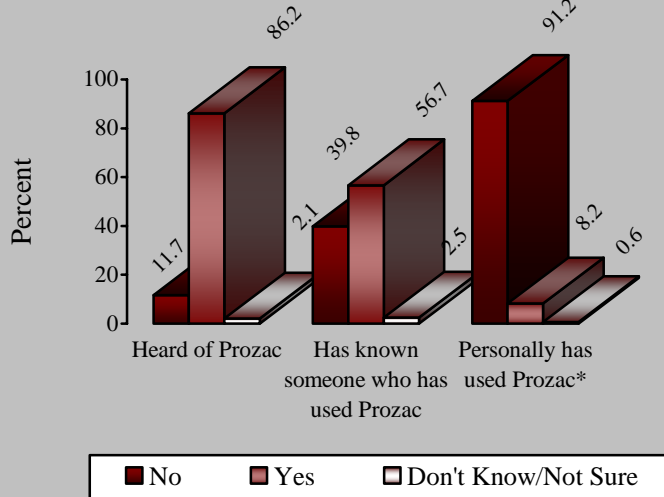
<b>BACKGROUND ATTRIBUTES:</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
Women	.189	.164	.170	.167
Whites	.202	.006	.012	-.018
Education	-.009	-.037	-.028	-.030
Education <sup>2</sup>	.001	.001	.001	.001
Income	-.020	-.022*	-.015	-.016
Urban	.074	.085	.088	.085
Rural	-.100	-.131	-.120	-.121
Widowed	-.449	-.506*	-.500*	-.511*
Divorced – Separated	.245	.198	.137	.139
Never Married	.009	.032	.003	.006
Age (years)	.009*	.006	.006	.006
<b>ATTITUDES TOWARD PSYCHIATRIC MEDICATIONS:</b>				
Negative Attitudes		-.279***	-.289***	-.297***
Positive Attitudes		.348***	.330***	.318***
<b>HEALTH-RELATED DIMENSIONS:</b>				
General Health Status			-.272***	-.254***
Insured			-.355*	-.295+
Seen a MH Prof./Knows User			.271**	.279
Selects Doctors from a List			.007	-.022
<b>ATTITUDES TOWARD PHYSICIANS:</b>				
Trusts Personal Physician				.041
Worried about Treatment Decisions				.129*
General Distrust of Physicians				-.057
General Trust in Physicians				-.018
<b>INTERCEPT</b>	<b>1.393</b>	<b>1.210</b>	<b>2.032</b>	<b>1.745</b>
<b>RSQ</b>	<b>.024*</b>	<b>.144***</b>	<b>.174***</b>	<b>.181***</b>
<b>INCREMENT</b>		<b>.120***</b>	<b>.030***</b>	<b>.007</b>
*P<.050; **P<.010; *** P<.001				

socio-demographic attributes, age, has a significant influence on the likelihood of taking psychiatric medications. Older respondents are nominally more likely to say they would take these medications. The influence of age does not persist, however, when positive and negative attitudes toward psychiatric medications are added. As seen in column 2, both attitudes toward these medications have significant effects in the expected directions. That is, positive attitudes are associated with greater likelihood of use, and negative attitudes are associated with reduced likelihood of use.

The independent effects of the general attitude dimensions persist when the 4 health status dimensions are added. It is important to note, however, that three of these health-related variables also have significant independent influences. Specifically persons who enjoy better health, and those who have health insurance report a significantly reduced likelihood of use. A greater likelihood of use, on the other hand, is reported by respondents who have personally seen or know someone who has seen a mental health professional. Finally, the addition of the four measures of attitudes toward physicians does little to alter either the pattern or a significance of the influences reported in column 3. It is appropriate to note, however, that respondents who report a concern for being denied necessary treatments also report a significantly greater likelihood of using psychiatric medications.

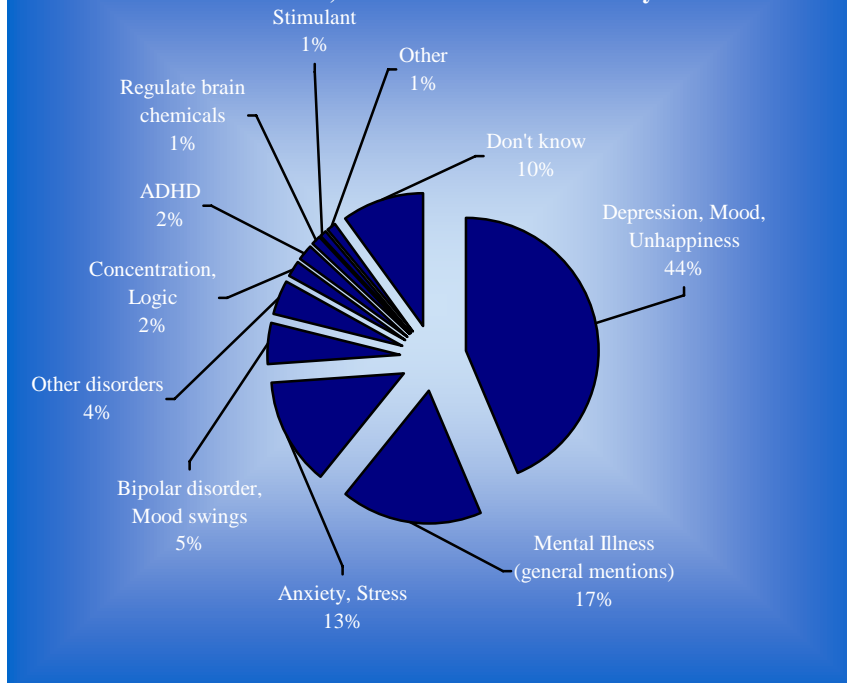
## IV. PROZAC®

**Figure 4: Item Distributions, Knowledge of Prozac®, 1998 General Social Survey**



\*excludes respondents who haven't heard of Prozac®

**Figure 5: Responses to the Question, "What is Prozac® Used For?", 1998 General Social Survey\***



\*respondents answering "no" or "don't know/not sure" to having heard of Prozac® excluded (n=190).

\*respondents could elect up to three uses.

### A. KNOWLEDGE OF PROZAC®

In addition to assessing general public attitudes and support for the uses of psychiatric medicine, a related goal of the PIHMC was to examine these same public attitudes, knowledge, and support for the uses of the widely publicized SSRI, Prozac®. We chose Prozac® because of its place as the first of the SSRIs and its status as a cultural icon, or perhaps as a lightning rod for what is perceived to be a new era in the use, advertisement and attention to psychiatric medications (see, for example, Kramer's, *Prozac Nation*). Toward this end, the PIHMC included a series of 17 items tapping knowledge of Prozac® and its uses, attitudes toward the efficacy of Prozac®, and the likelihood of personally using Prozac® under specific circumstances.

Respondents were first asked whether they had ever heard of the psychiatric medication Prozac®, have ever known someone who has used Prozac®, and had personally ever used Prozac®. Responses to these items are summarized in Figure 4. According to these data, the vast majority of respondents (86.2%) have previously heard of Prozac®. Moreover, a clear majority (56.7%) of respondents also report knowing someone who has used Prozac®. Finally, a small proportion (8.2%) of the GSS respondents indicated that they personally have taken Prozac®.

Those respondents who reported having heard of the SSRI Prozac® were asked an additional series of questions about the uses of the drug and their personal attitudes toward Prozac®. First, respondents were asked to indicate their understanding of the reason Prozac® was prescribed. Responses to this question are reported in Figure 5.

According to Figure 5, the largest proportion of respondents correctly report that Prozac® is used

in the treatment of depression. Moreover, an additional 17 percent are aware that Prozac® is a psychiatric medication used in the treatment of mental illness. It is interesting to note, however, that among those who have heard of Prozac®, nearly one in ten “don’t know” why Prozac® is prescribed.

In an attempt to further explicate factors related to the public’s knowledge of Prozac® we conducted a multivariate analysis of the socio-demographic and health status correlates of knowledge of Prozac®. The results of these analyses are displayed in *Table 7*. In this table we report the results of a series of logistic regressions of 1) whether the respondent has heard of Prozac®; 2) whether the respondent has known someone who has used Prozac®; and 3) whether the respondent has personally taken Prozac®.

Turning first to overall knowledge of Prozac®, the regression estimates reported in columns 1 and 2 of *Table 7* indicate that women, whites, younger respondents, and respondents who have seen, or know someone who has seen a mental health professional, are significantly more likely to have heard of Prozac®. Indeed, those who have used or know a user of mental health services are over 5 times more likely to have heard of Prozac®. Similarly, whites are over three more times likely than non-whites, and women over 50 percent more likely than men, to have heard of Prozac®.

**TABLE 7: Odds Ratios for the Logistic Regression of Familiarity with Prozac® on Socioeconomic Background Attributes and Health-Related Dimensions, 1998 General Social Survey.**

Background Attributes:	Heard of Prozac®		Knows Prozac® User		Has Used Prozac®	
	1	2	3	4	5	6
Women	1.83**	1.54*	1.57*	1.38*	1.20	1.11
Whites	4.02**	3.36**	2.17**	1.77**	1.54	1.34
Education	1.05	1.06	1.03	1.10	.69*	.71*
Education <sup>2</sup>	1.01	1.00	1.00	1.00	1.01*	1.01*
Income	1.01	1.01	1.00	1.00	.98	.99
Urban	1.00	1.01	1.19	1.21	.98	.85
Rural	.97	1.10	1.17	1.34	1.04	1.04
Widowed	.91	.85	.94	.82	.52	.55
Divorced – Separated	1.22	1.10	1.23	1.09	1.07	.86
Never Married	.87	.86	.94	.91	.88	1.06
Age (years)	.97**	.98**	.98**	.99**	1.01	1.01
<b>Health-Related Dimensions:</b>						
General Health		.96		.89		.62**
Insured		1.51		1.03		.56
Seen a MH Prof./Knows User		5.35**		1.47**		4.12**
Used Mental Health Benefits		1.31		1.32		4.86**
Overall Chisq	140.20**	199.30**	52.80**	173.40**	13.10	95.20*
Increment Chisq		66.80**		131.30**		83.30*

\*p<.050;  
\*\*p<.010

A similar pattern obtains in the regression of knowledge of someone who has used Prozac® (columns 3 & 4 of *Table 7*). In this case, women are 38 percent more likely than men, whites are 77 percent more likely than non-whites, and those who have used, or know a user of mental health services are four and a half times more likely than others, to report knowing someone who has used Prozac®. Finally, columns 5 and 6 of *Table 7* regress personal use of Prozac® on the various socio-demographic and health status variables. These estimates suggest that personal use of Prozac® is significantly less likely among respondents in “good” or “excellent” health, but is somewhat more likely among the least educated and the best educated respondents (i.e., the relationship is curvilinear). Most notably, however, respondents who have used, or know a user of mental health services, and those who have personally seen a mental health professional, are over four times more likely than others to have personally used Prozac®.

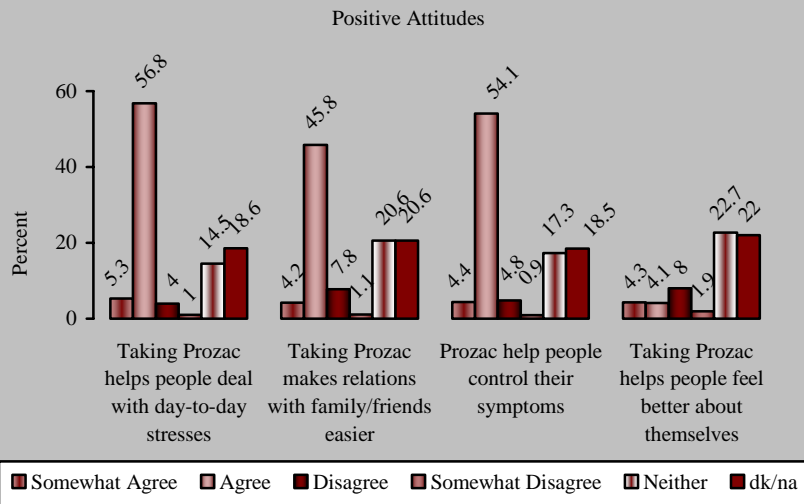
It would seem that relatively large numbers of Americans have heard of the SSRI Prozac® and personally know someone who has taken this drug. Less clear, however, is how the public perceives the efficacy (or lack thereof) of Prozac®. In *Figure 6* we turn our attention to this question. Specifically, *Figure 6* provides the univariate distributions on 6 items assessing positive and negative attitudes towards Prozac® efficacy, as well as 3 additional items assessing public knowledge of the appropriate uses of Prozac®. The reader will note that the positive and negative items repeat the same question stems used in the analysis of general attitudes toward the uses of psychiatric medications examined in the previous section of this report.

Examination of the data in *Figure 6* suggest that as was the case with psychiatric medications generally, overall, respondents view Prozac® as being effective and likely



to be the source of few negative outcomes. For example, 62.5 percent of those who had heard of Prozac® either “strongly agreed” or “agreed” with the statement that Prozac® helps people deal with day-to-day stresses. A majority (58.5%) agreed that Prozac® helps control symptoms, and half of those polled agreed that taking Prozac® makes relations easier with family and friends. A somewhat smaller percentage (44.3%) also agreed that people who take Prozac® feel better about themselves.

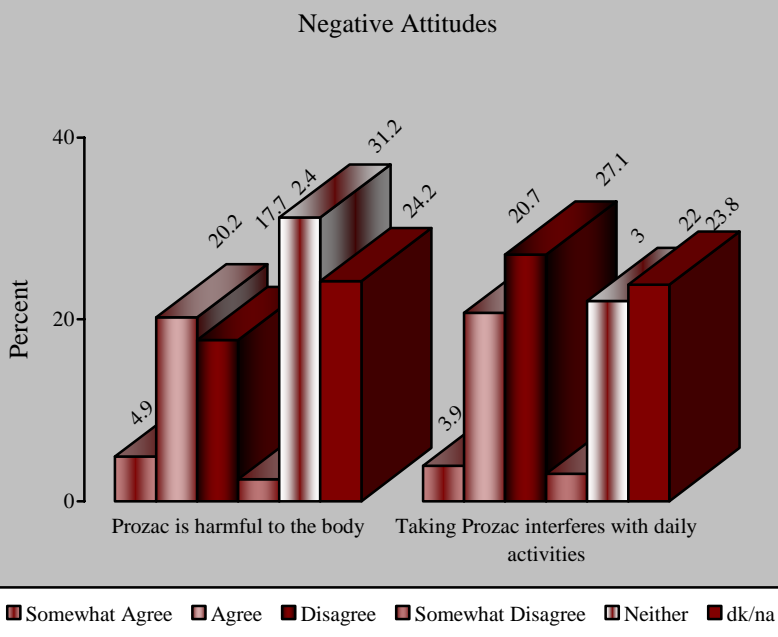
**Figure 6: Item Distributions (%) on Attitudes Toward the Use of Prozac®, 1998 General Social Survey**



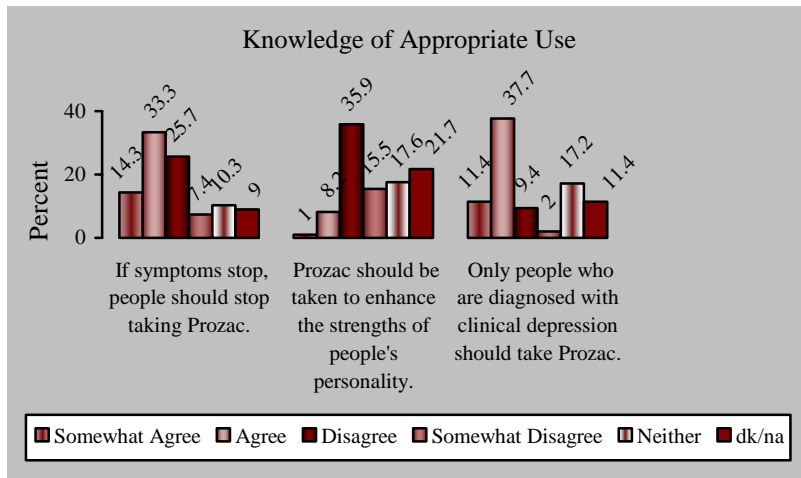
While it seems that the public is inclined to agree with the efficacy of Prozac®, it is appropriate to note that the level of agreement regarding the efficacy of Prozac® is significantly less than that for psychiatric medications more generally. For example comparisons of positive responses in *Figure 6* with those discussed earlier in *Figure 2* indicate that 72.6% believe that psychiatric medications help people deal with stresses (compared to 62.5% for Prozac®), 77.2 percent agree that psychiatric medications help control symptoms (compared to 62.5% for Prozac®), 77.2 percent agree that psychiatric medications help control symptoms (compared to 58.5% for Prozac®), 61.7 percent feel that psychiatric medications make relations with family and friends easier (compared with 50% for Prozac®), and 54.9 percent agree that taking psychiatric medications helps people feel better about themselves (compared to 44.3% for Prozac®).

It is interesting to note that the somewhat lower levels of agreement as to the efficacy of Prozac® is not a function of an increased frequency of negative assessments of Prozac®. Indeed, similar to opinions regarding general psychiatric medications, only about one in four respondents agree that Prozac® is harmful to the body (25.1%), or interferes with daily activities (24.6%). These proportions are similar to those reported earlier in *Figure 2*. What does emerge as being quite different, however, is the percentage of respondents who say they “neither agree nor disagree” or that they “don’t know”. Even among those who have heard of Prozac®, the percentage of respondents providing answers indicating some level of uncertainty ranges from 55.4 percent to 45.8%.

Three of the items in *Figure 6* assess the public’s knowledge of the appropriate uses of Prozac®. Examination of the responses to these items reveals that the largest



**Figure 6: (Continued)**



proportion of respondents (59.1%) correctly agree that only persons diagnosed with depression should take Prozac®, and a majority (51.4%) correctly disagree that Prozac® should be taken to enhance personality. As in the case of general psychiatric medications, however, a large number of respondents (47.6%), incorrectly agree that persons taking Prozac® should discontinue use if their symptoms are no longer present.

As evidenced by the data in Table 8, large numbers of respondents perceive Prozac® to be an effective medication. Indeed, 61 percent of those who have heard of Prozac® agree with three or more of the four positive statements. Moreover, compared to the scale of positive attitudes toward general psychiatric medications displayed in Table 4, respondents were somewhat more likely to agree with all four positive Prozac® statements (43.5% for Prozac® vs. 42% for general psychiatric medications). It is also interesting to note, however, that respondents were also more likely to not agree with any of the positive Prozac® statements (15.9% for Prozac® vs. 9% for general psychiatric medications).

**TABLE 8: Scale Distribution, Positive Attitude Toward the Use of Prozac®, 1998 General Social Survey.**

POSITIVE ATTITUDE TOWARD THE USE OF PROZAC®:		f	%
LOW	0	144	15.9
	1	81	9.0
	2	111	12.3
	3	158	17.5
HIGH	4	409	43.5
Cronbach's Alpha:		.840	
Mean:		2.673	
Standard deviation:		0.787	

In an attempt to determine which factors are associated with having a positive attitude toward the efficacy of Prozac®, we regressed this outcome on the various socio-demographic attributes, health status dimensions, familiarity with Prozac®, and attitudes toward physicians. Results of this analysis are reported in Table 9. Looking first at the socio-demographic correlates displayed in column 1, whites and better educated respondents are significantly more likely to agree with the positive statements regarding Prozac®. These demographic correlates do not persist, however, when health status dimensions are added. In particular, having seen, or knowing someone who has seen a mental health professional significantly increases positive attitudes, and the inclusion of this variable reduces the effects of race and education to non-significance.

In column 3 we add the two 'familiarity with Prozac®' items to the model. According to these estimates, knowing someone who has used Prozac® has a moderately powerful influence on positive Prozac® attitudes. Moreover, the inclusion of this variable reduces to non-significance the previously noted effect of having seen, or knowing someone who has seen, a mental health professional. Surprisingly, however, reported personal use of Prozac® is not an important correlate of positive Prozac® attitudes. Finally, in column 4 we add the four measures of trust in physicians. Only one of these dimensions, trust in one's personal physician has a significant effect, with those respondents who report higher levels of trust also reporting more positive attitudes toward Prozac®. It is interesting to note, however, with all variables in the model, only two – knowing a Prozac® user and trust in one's personal physician - have important effects on positive attitudes toward Prozac®'s efficacy.

**TABLE 9: Unstandardized Estimates for the Regression of Positive Attitudes Toward Prozac® on Socioeconomic Background Attributes, Health-Related Dimensions, and Attitudes Toward Physicians, 1998 General Social Survey.**

BACKGROUND ATTRIBUTES	1	2	3	4
Women	.128	.088	.068	.068
Whites	.327*	.278	.241	.241
Education	.064*	.048	.049	.054
Education <sup>2</sup>	-.001*	-.001	-.001	-.001
Income	-.009	-.012	-.012	-.010
Urban	.059	.072	.058	.051
Rural	.082	.112	.076	.054
Widowed	.197	.200	.181	.140
Divorced-Separated	-.024	-.055	-.057	-.023
Never Married	.200	.189	.201	.204
Age (years)	.005	.007	.007	.005
<b>HEALTH-RELATED DIMENSIONS:</b>				
General Health Status		.046	.049	.031
Insured		-.010	.003	.040
Seen a MH Prof./Knows User		.316*	.161	.216
Selects Doctors from a List		.062	.042	.018
<b>FAMILIARITY WITH PROZAC®:</b>				
Known Prozac® User			.433***	.416***
Personal Use of Prozac®			.013	-.043
<b>ATTITUDES TOWARD PHYSICIANS:</b>				
Trust my Doctor				.119***
Worry Treatment				.064
Distrust Physicians				.063
Trust Physicians				.005
<b>INTERCEPT</b>	<b>1.363</b>	<b>1.205</b>	<b>1.034</b>	<b>0.299</b>
<b>RSQ</b>	<b>.019</b>	<b>.028</b>	<b>.043*</b>	<b>.063***</b>
<b>INCREMENT</b>		<b>.009</b>	<b>.015**</b>	<b>.020**</b>

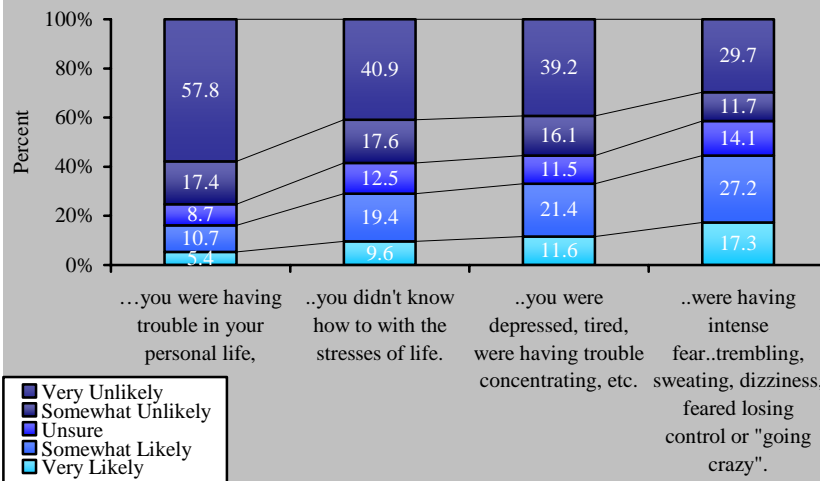
**B. LIKELIHOOD OF TAKING PROZAC®.**

In an attempt to determine how willing the public is to take Prozac®, we asked the same four questions about general psychiatric medications asked earlier; regarding whether the respondent would be likely to take Prozac® if he/she was having personal troubles, having difficulty managing stress, was feeling depressed, or feared losing control. Univariate distributions on these four items are displayed in Figure 7.

According to the percentages in Figure 7, respondents are most likely to say that they were willing to take Prozac® if they feared losing control (44.5%) report being “very” or “somewhat likely”. This proportion is significantly lower than that obtained for willingness to use general psychiatric medications reported in Figure 3 where the percentage for the likelihood of taking psychiatric medications when fearing losing control or feeling depressed were 56 percent and 41.2 percent, respectively. Moreover, across all four problems indexed here, the percentage of respondents who say it is “very unlikely” they would take Prozac® for the problem is markedly higher than for general psychiatric medications. This finding highlights an interesting inconsistency. As evidenced in Table 8, most respondents recognize the efficacy of Prozac® in treating persons with mental health problems, yet at the same time, are unwilling to have Prozac® prescribed if they personally experience these problems.

These four items were combined to create a summative scale of likelihood of taking Prozac®. Individual items were coded such that the responses of “very likely” and “somewhat likely” were coded 1 and all other responses were coded 0. The resulting scale ranges from unlikely to take Prozac®

**Figure 7: Individual Likelihood of Taking Prozac® (%) Under Specific Conditions, 1998 General Social Survey**  
ITEMS: Likely to take Prozac because....



under any circumstances (0) to likely to take Prozac® under all four situations. The distribution of responses on this scale along with reliability statistics, are reported in *Table 10*.

**TABLE 10: Scale Distribution, Overall Likelihood of Using Prozac®, 1998 General Social Survey.**

OVERALL LIKELIHOOD OF USING PROZAC®:			
		f	%
LOW	0	510	48.1
	1	181	17.1
	2	122	11.5
	3	117	11.0
	4	130	12.3
HIGH			
Cronbach's alpha			.892
Mean:			1.22
Standard deviation:			1.46

As expected from the univariate distributions reported in *Figure 7*, the distribution on the scale of overall likelihood of taking Prozac® reported in *Table 10* indicates that nearly half of all respondents who have heard of Prozac® (48.1%) say they are unlikely to take this medication regardless of the circumstance. Moreover, this proportion is significantly higher than the 37.1 percent of respondents who reported a similar reluctance to use any psychiatric medications reported in *Table 5*.

In *Table 11* we turn our attention to the various correlates of reported likelihood of using Prozac®. As in the earlier analysis of willingness to take any psychiatric medicines, we enter of predictor variables in a series of six sets steps. In column 1 we first examine the socio- demographic correlates of reported willingness to use Prozac®, where only one of the eleven socio-demographic predictors, the binary variable for being white, has a significant influence. Consistent with earlier findings, whites are more likely to report a willingness to use Prozac®

**TABLE 11: Unstandardized Estimates for the Regression of Likelihood of Using Prozac® on Socioeconomic Background Attributes, Attitudes Toward Prozac®, Health-Related Dimensions, Familiarity with Prozac®, and Attitudes Toward Physicians, 1998 General Social Survey.**

	1	2	3	4	5	6
<b>BACKGROUND ATTRIBUTES:</b>						
Women	.091	.033	.041	.049	.051	-.005
Whites	.411**	.233	.212	.194	.121	-.020
Education	.033	.003	.002	.007	.001	.008
Education <sup>2</sup>	-.001	-.001	-.001	-.001	-.001	-.001
Income	-.022	-.025*	-.018	-.014	-.017	-.007
Urban	-.091	-.134	-.110	-.111	-.122	-.072
Rural	-.251	-.340*	-.306*	-.308*	-.311*	-.123
Widowed	-.363	-.448	-.418	-.388	-.410	-.221
Divorced-Separated	-.015	-.060	-.128	-.105	-.129	-.255*
Never Married	.121	.050	.017	.033	.022	-.068
Age (years)	.006	.004	.004	.003	.003	-.003
<b>ATTITUDES TOWARD PROZAC®:</b>						
Positive Prozac® Attitudes		.229***	.218***	.2185***	.207***	.116***
Prozac® Harmful to the Body		-.452***	-.500***	-.486***	-.5011***	-.319**
Prozac® Interferes with Activities		-.086	-.113	-.106	-.095	-.038
Discontinue Use if no Symptoms		-.279**	-.250*	-.244*	-.242*	-.120
Prozac® Enhances Personality		.635***	.619***	.622***	.648***	.515***
Prozac® for Depression only		.070	.087	.098	.088	-.037
Overall Willingness use PsyMed.		----	----	----	----	.518***
<b>HEALTH-RELATED DIMENSIONS:</b>						
General Health Status			-.145*	-.092	-.079	.034
Insured			-.502**	-.466**	-.426**	-.255
Seen a MH Prof./Knows User			.227	.147	.168	.022
Selects Doctors from a List			.188	.165	.137	.125
<b>FAMILIARITY WITH PROZAC®:</b>						
Known User Prozac®				-.073	-.087	-.105
Personal Use Prozac®				.963***	.932***	.440**
<b>ATTITUDES TOWARD PHYSICIANS:</b>						
Trusts Personal Physician					.064*	.054*
Worried about Treatment Decisions					.137*	.090
General Distrust of Physicians					-.041	-.024
General Trust in Physicians					-.073	-.057
INTERCEPT	0.754	1.083	1.642	1.405	1.354	0.498
RSQ	.024	.173***	.194***	.232***	.244***	.474***
INCREMENT		.149***	.021**	.038***	.012*	.230***
*P<.050; **P,.010; ***P<.001						

In column 2 we increment the socio- demographic baseline model by adding estimates for the effects of attitudes toward the use of Prozac® and knowledge of Prozac®'s appropriate uses. Of the six estimates indexing these dimensions, four are significant. As expected, reported likelihood of Prozac® use is significantly greater among those who hold positive attitudes regarding Prozac®'s efficacy, and significantly lower among those who believe that the effects of Prozac® are harmful to the body. Less clear are the effects of two of the items tapping knowledge of the appropriate uses of Prozac®. Specifically, the reported likelihood of Prozac® use is significantly lower among those who believe Prozac® use should be discontinued if symptoms are absent, and is significantly higher among those who believe that Prozac® use enhances the individual's personality. Note also that when attitudes toward Prozac® are controlled, rural dwellers emerge as being significantly less likely to report a willingness to use Prozac®, and the influence of race is reduced to non-significance.

Column 3 adds estimates for the effects of the four health status dimensions. Two of these variables have significant independent influences. Respondents are less likely to report a willingness to use Prozac® if they indicate that their overall health is good or excellent and if they have health insurance. The addition of these variables does little, however, to alter either the pattern or the significance of the estimates reported in column 2.

In column 4 the two items indexing familiarity with Prozac® use are added. Not surprisingly, having personally used Prozac® emerges as a powerful predictor of the reported likelihood of future/further use. The inclusion of this variable reduces the effects of overall health status to non-significance. Knowledge of someone else who has used Prozac®, however, is not a significant correlate.

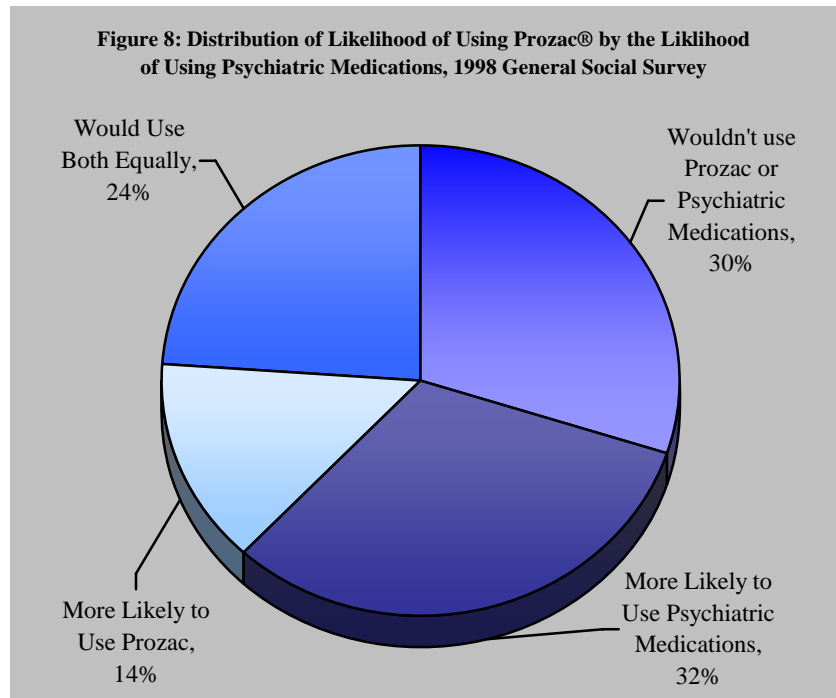
Estimates for the effects of the four measures of attitudes toward physicians are entered into the model in column 5. Two of these variables have significant influences. Reported likelihood of Prozac® use is higher among respondents who trust their personal physicians and who report being worried about the denial of necessary treatment. Note also, however, that the inclusion of these estimates in the model has only trivial impact on the coefficients reported in column 4.

In our final model reported in column 6, we assess the possibility that a willingness to use Prozac® is actually tapping an overall willingness to use any form of psychiatric medication. Thus, in column 6 we add the four-item measure of overall likelihood of taking psychiatric medications. As expected, persons who report an overall willingness to use psychiatric medications are also significantly more likely to report a similar willingness to use Prozac®. On the other hand, while the inclusion of this dimension attenuates the effects of several of the previous identified predictors of the likelihood of Prozac® use, the various attitudinal and familiarity variables continue to have statistically significant independent effects on the dependent variable. In other words, not all of the reported willingness to use Prozac® can be accounted for by a more general willingness to take any psychiatric medications.

## V. COMPARISON OF THE LIKELIHOOD OF USING PROZAC® AND THE LIKELIHOOD OF USING PSYCHIATRIC MEDICATIONS

Throughout these analyses we have documented a pattern of reported reluctance to use psychiatric medications generally, and Prozac® specifically. This reluctance is perplexing when informed by the realization that large numbers of the American public perceive these medications to be effective in the treatment of problems associated with mental disorders. In an attempt to examine this pattern more completely we conducted additional analyses to examine the bivariate relationship of the likelihood of using psychiatric medications with the likelihood of using Prozac®. Results of these analyses are reported in *Figure 8*.

*Figure 8* presents the bivariate frequency distribution on the two likelihood of use scales. Not surprisingly, this table indicates that responses to these two sets of items are highly inter-related. In this regard, we find that nearly one in three respondents indicate an unwillingness to use any form of psychiatric medication, including Prozac®. Interestingly, roughly an additional third of respondents emerge as being more likely to report a willingness to use psychiatric medications than they are to use Prozac® specifically. On the other hand, only a small proportion of respondents report being more willing to use Prozac® than they are to use other forms of psychiatric medications. Finally, approximately one in four of respondents provided consistent responses to the likelihood of use items.



## VI. CONCLUSIONS

This report documents a clear and consistent message: Americans endorse the effectiveness of psychiatric medications including Prozac®, but fewer are willing to use them across a variety of conditions that indicate mental health problems. With regard to “The Prozac® Revolution”, these findings do document a widespread familiarity with the drug and with people who have used it. Further, Americans appear to understand its use for depression and mental illness but few endorse its controversial use as a personality enhancement drug. Fewer Americans do, however, report a willingness to take Prozac® in comparison with the general category of psychiatric medications.

These results suggest that there is an important “disconnect” between perceived effectiveness and the willingness to use psychiatric medications. From the point of view of the Surgeon General’s Report, this represents a barrier to treatment. Whether this a function of the continued stigma associated with mental illness and its treatment or more general aversion of the public to prescription medications cannot be uncovered with

these data. Further research needs to explore these possibilities.

Concern about the “The Prozac® Revolution” reveals mixed findings in these data. A remarkably high percentage of Americans have heard of the drug, and those who offer some indication of its use, identify standard uses (depression, mental illness). Far fewer, however, recognize or endorse the use of Prozac® for its “personality enhancing” possibilities. There also appears to be a more negative reaction to Prozac® than psychiatric medications more generally. This may indicate that the public controversy has had an impact on American opinion. Unfortunately, the survey did not ask respondents whether they have a specific psychiatric medication in mind when they responded to the general questions. Further, we cannot ascertain from these data whether any specific medication would fare better or worse than the general category. Finally, because we asked only about psychiatric medications, we do not know the extent to which this reflects a general unwillingness to take prescriptions medications.

**APPENDIX A**

**GSS 1998  
AMERICA'S SOCIAL SURVEY**

**General Social Survey**

**NORC  
University of Chicago**

INTERVIEWER: ADMINISTER THIS QUESTIONNAIRE AND  
SAQ-A (RED) TO SCIENTIFICALLY SELECTED RESPONDENT  
ONLY AT ADDRESS BELOW:

ORIGINAL CASE ID \_\_\_\_\_  
CASE ID (IF ADDINT THIS CASE, INCREASE ORIGINAL  
NUMBER BY "1") \_\_\_\_\_  
AQID \_\_\_\_\_  
ADDRESS:

5540 GSS 1998 National Opinion Research Center,  
1155 E. 60<sup>th</sup> St. Chicago, IL 60637  
Phone: 773-256-6000



### Section C

1. Do you think of yourself as a trusting person? Are you...

- Very trusting.....1
- Somewhat trusting.....2
- Somewhat distrusting.....3
- Very distrusting.....4
- DON'T KNOW.....8

---

**Next, I'd like to ask you about your opinions about medicine, health, and health care.**

2. Have you or has anyone else you know ever seen a psychiatrist, psychologist, or counselor?

- Yes.....1
- No.....2
- DON'T KNOW.....8

### Section C

3. Please tell me how much you agree or disagree with the following statements about medicines prescribed by doctors to help people who are having problems with their emotions, nerves or their mental health:

Do you:	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	DON'T KNOW
A. Psychiatric medicine is harmful to the body:	1	2	3	4	5	8
B. If symptoms are no longer present, people should stop taking these medications:	1	2	3	4	5	8
C. Taking these medications interferes with daily activities:	1	2	3	4	5	8
D. Taking these medications helps people deal with day-to-day stresses:	1	2	3	4	5	8
E. Taking these medications makes things easier in relations with family and friends:	1	2	3	4	5	8
F. These medications help people control their symptoms:	1	2	3	4	5	8
G. Taking medication helps people feel better about themselves:	1	2	3	4	5	8

4. How likely would you be to take doctor-prescribed psychiatric medication in the following situations?

	Very Likely	Somewhat Likely	Mixed	Somewhat Unlikely	Very Unlikely	DON'T KNOW
A. ...because you were having trouble in your personal life.	1	2	3	4	5	8
B. ...because you didn't know how to cope anymore with the stresses of life.	1	2	3	4	5	8
C. ...because you were feeling depressed, tired, were having trouble sleeping and concentrating, and felt worthless.	1	2	3	4	5	8
D. ...for no apparent reason, you were having periods of intense fear in which you were trembling, sweating, feeling dizzy, and feared losing control or going crazy.	1	2	3	4	5	8

**Section C**

5. How likely would you be to give doctor-prescribed psychiatric medication to your child or a child you were responsible for in the following situations (A child would be considered anyone between the ages of 8 and 15):

	<b>Very Likely</b>	<b>Somewhat Likely</b>	<b>Mixed</b>	<b>Somewhat Unlikely</b>	<b>Very Unlikely</b>	<b>DON'T KNOW</b>
A. because s/he is hostile, often loses his/her temper, often argues with adults, actively defies authority and seems spiteful or vindictive.	1	2	3	4	5	8
B. because s/he is not paying attention at school, does not follow through with school work and chores, has difficulty organizing activities, is easily distracted, talks excessively and seems to run around or fidget constantly.	1	2	3	4	5	8
C. because s/he was talking about killing him or herself.	1	2	3	4	5	8

6. If you were to seek services for a problem with your emotions, nerves, or your mental health, how much would you agree or disagree with the following options?

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neither Agree or Disagree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>DON'T KNOW</b>
A. I would prefer to go directly to a mental health care specialist, rather than being referred by my primary care physician.	1	2	3	4	5	8
B. I would trust my family physician to prescribe psychiatric medication.	1	2	3	4	5	8
C. I would only trust a Psychiatrist to prescribe psychiatric medication.	1	2	3	4	5	8

7. First, are you , yourself, covered by health insurance, a government plan like Medicare or Medicaid, or some other plan that pays for your medical care?

- Yes, Covered .....1  
 No, not Covered .....(Go to Q.14).....2

**Section C**

8. There are many different types of health care plans. I'd like to know which type of plan is most like yours. Please tell me if your plan has any of these features:

A. Is there a book, directory or list of doctors whom you must use?

Yes ..... 1  
No .....2  
DON'T KNOW ..... 8

B. Can you choose any doctor you like in your community or elsewhere, perhaps paying part of the bill?

Yes .....1  
No .....2  
DON'T KNOW ..... 8

---

9. Have you ever switched your plan or the medical care provider within your plan due to dissatisfaction with a prior plan?

Yes .....1  
No .....2  
CAN'T SWITCH .....3  
DON'T KNOW .....8

---

10. Since you joined this plan, have you sought medical care from problems with your emotions, nerves, or mental health?

Yes .....1  
No .....(GO TO Q.14).....2

---

**IF YES TO Q.10, ASK Q.11**

11. Were you able to get the treatment you sought?

Yes .....1  
No .....(GO TO Q.13).....2

---

**IF YES TO Q.11, ASK Q.12**

12. How difficult was it to get the treatment that you sought: very difficult, somewhat difficult, or not at all difficult?

Very difficult .....1  
Somewhat difficult .....2  
Not difficult at all .....3

---

13. Were you denied services under your plan's benefit package?

Yes .....1  
No .....2  
DON'T KNOW .....8

**Section C**

14. The health care system is changing rapidly with more and more people being treated in Health Maintenance Organizations and in managed care plans. How much do you agree or disagree with how these HMOs and managed care plans are working?

	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neither Agree nor Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>	<b>DON'T KNOW</b>
A. They improve the quality of care.	1	2	3	4	5	8
B. They prevent doctors from prescribing tests necessary for treatment.	1	2	3	4	5	8
C. They help to control costs.	1	2	3	4	5	8
D. They prevent people from getting the care they need.	1	2	3	4	5	8
E. They damage the trust between doctors and patients.	1	2	3	4	5	8
F. They take important medical decisions out of the hands of physicians.	1	2	3	4	5	8
G. They make it more difficult to see a specialist for problems like emotional, nervous, and mental health problems.	1	2	3	4	5	8

### Section C

15. As you read each of the following statements, please think about the medical care you are now receiving. If you have not received any medical care recently, circle the answer based on what you would expect if you had to seek care today. Even if you are not entirely certain about your answers, we want to remind you that your best guess is important for each statement.

HAND CARD 30

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Uncertain</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>DON'T KNOW</b>
A. Doctors aren't as thorough as they should be.	1	2	3	4	5	8
B. Doctors always do their best to keep the patient from worrying.	1	2	3	4	5	8
C. Sometimes doctors take unnecessary risks in treating their patients.	1	2	3	4	5	8
D. Doctors are very careful to check everything when examining their patients.	1	2	3	4	5	8
E. Doctors always treat their patients with respect.	1	2	3	4	5	8
F. I hardly ever see the same doctor when I go for medical care.	1	2	3	4	5	8
G. Doctors always avoid unnecessary patient expenses.	1	2	3	4	5	8
H. Doctors cause people to worry a lot because they don't explain medical problems to patients.	1	2	3	4	5	8
I. The medical problems I've had in the past are ignored when I seek care for a new medical problem.	1	2	3	4	5	8
J. Doctors never recommend surgery (an operation) unless there is no other way to solve the problem.	1	2	3	4	5	8
K. My doctor is willing to refer me to a specialist when needed.	1	2	3	4	5	8
L. I worry that my doctor is being prevented from telling me the full range of options for my treatment.	1	2	3	4	5	8
M. I worry that I will be denied the treatment or services I need.	1	2	3	4	5	8
N. I worry that my doctor will put cost considerations above the care I need.	1	2	3	4	5	8

**Section C**

16. How much do you agree or disagree with the following statements?

HAND CARD 12

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neither Agree nor Disagree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>DON'T KNOW</b>
A. I doubt that my doctor really cares about me as a person.	1	2	3	4	5	8
B. I trust my doctor's judgment about my medical care.	1	2	3	4	5	8
C. I feel my doctor does not do everything s/he should for my medical care.	1	2	3	4	5	8
D. I trust my doctor to put my medical needs above all other considerations when treating my medical problems.	1	2	3	4	5	8
E. My doctor is a real expert in taking care of medical problems like mine.	1	2	3	4	5	8
F. I trust my doctor to tell me if a mistake was made about my treatment.	1	2	3	4	5	8

17. Next, I'd like to ask you some questions about the medication called Prozac [TM].

	<b>Yes</b>	<b>No</b>	<b>NOT SURE/ CAN'T REMEMBER</b>
A. Have you ever heard of Prozac [TM]? (IF NO, SKIP TO SECTION D)	1	5	8
B. Have you, yourself, ever taken Prozac [TM]?	1	5	8
C. Have you ever personally known anyone who took Prozac [TM]?	1	5	8

### Section C

18. What can you tell me about what Prozac [TM] is used for?

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19. How much do you agree or disagree with the following statements?

HAND CARD 6

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neither Agree nor Disagree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>DON'T KNOW</b>
A. Prozac [TM] is harmful to the body.	1	2	3	4	5	8
B. If symptoms are no longer present, people should discontinue Prozac [TM].	1	2	3	4	5	8
C. Taking Prozac [TM] interferes with daily activities.	1	2	3	4	5	8
D. Taking Prozac [TM] helps people deal with day-to-day stresses.	1	2	3	4	5	8
E. Taking Prozac [TM] makes things easier in relations with family and friends.	1	2	3	4	5	8
F. I think Prozac [TM] helps people control their symptoms.	1	2	3	4	5	8
G. Taking Prozac [TM] makes people feel better about themselves.	1	2	3	4	5	8
H. Prozac [TM] should be taken to enhance the strength of people's personalities.	1	2	3	4	5	8
I. Only people who are diagnosed with clinical depression should take Prozac [TM].	1	2	3	4	5	8



**Section C**

20. How likely would you be to take doctor prescribed Prozac [TM] in the following situations?

HAND CARD 31

	<b>Very Likely</b>	<b>Somewhat Likely</b>	<b>Mixed</b>	<b>Somewhat Unlikely</b>	<b>Very Unlikely</b>	<b>DON'T KNOW</b>
A. ...because you were having trouble in your personal life.	1	2	3	4	5	8
B. ...because you didn't know how to cope anymore with the stresses of life.	1	2	3	4	5	8
C. ...because you were feeling depressed, tired, were having trouble sleeping and concentrating, and felt worthless.	1	2	3	4	5	8
D. ...for no apparent reason, you were having periods of intense fear in which you were trembling, sweating, feeling dizzy, and feared losing control or going crazy.	1	2	3	4	5	8

21. How likely would you be to give **doctor prescribed** Prozac [TM] to your child or a child you were responsible for in the following situations (A child would be considered anyone between the age of 8 and 15):

	<b>Very Likely</b>	<b>Somewhat Likely</b>	<b>Mixed</b>	<b>Somewhat Unlikely</b>	<b>Very Unlikely</b>	<b>DON'T KNOW</b>
A. ...because s/he is hostile, often loses his/her temper, often argues with adults, actively defies authority and seems spiteful or vindictive.	1	2	3	4	5	8
B. ...because s/he is not paying attention at school, does not follow through with school work and chores, has difficulty organizing activities, is easily distracted, talk excessively, and seems to run around or fidget constantly.	1	2	3	4	5	8
C. ...because s/he was talking about killing him or herself.	1	2	3	4	5	8

**END OF SECTION C**