Professional Help Use Among Black Americans: Implications for Unmet Need[1]

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Previous findings on black utilization have been largely obtained from racial comparison studies. Little attention has been paid to socio-demographic differences or the social psychological processes that affect help-seeking behavior within the black group. The present study analyzed data obtained from a national probability sample of the black population. A multidimensional contingency table analysis revealed that problems experienced by the lower income group were more serious than those experienced by the upper income group. Low-income respondents were also more likely to state that their personal distress was caused by a physical health problem. Income, however, was not related to the decision to seek professional help. The implications of these findings for understanding black illness behavior and the underutilization of services was discussed.

The investigation of the various social and social psychological processes that influence help-seeking for personal problems among black Americans has received little attention. Most information on black help-seeking behavior has been gained from studies which compare black and white utilization rates of professional helping facilities (Andersen, Greeley, Kravits, & Anderson, 1972; Cannon & Locke, 1977; Fischer, 1969; Kravits & Schneider, 1975; Robertson, Kosa, Alpert, & Heagerty, 1967). Such

statistics, however, only describe the characteristics of those blacks who have obtained professional treatment. They do not describe the factors influencing the decisions made during the help-seeking process. Nor do they address the fact that there are many blacks with personal problems who do not seek professional health care. Furthermore, the majority of studies which have explored the relationship between social processes and black help-seeking have been conducted on small nonrepresentative samples (Brody, Derbyshire, & Schlefer, 1967; Fabrega & Roberts, 1972; Hendricks, Howard, & Gary, 1981; Leashore, 1980). As a result, these studies cannot accurately describe the heterogeneity of black help-seeking experiences.

The present study addresses these shortcomings in several ways. The group studied comprises the first nationally representative probability sample of the black American population. As a result, the size of this data set permits the application of multivariate analysis techniques not possible in prior studies. Theoretically, this study is an investigation of illness behavior, the ways in which personal problems may be differentially perceived, evaluated, and acted upon by different groups (Mechanic, 1962). This conceptual framework is more comprehensive than those employed in previous studies of black help-seeking. From this perspective, the seeking of professional help can be conceptualized as a series of stages involving the following decisions: (a) the decision that something is wrong; (b) the decision that some type of outside help is needed, (c) the decision to seek some type of professional help, and (d) the choice of a particular source of professional help (Gurin, Veroff, & Feld, 1960; Kadushin, 1958). The present paper is primarily concerned with the third decision. That is, given the experience of a stressful personal problem and the decision that some outside assistance is needed, how is income related to the decision to seek professional help?

Income differences in the use of help was chosen as the focus of this investigation for two main reasons. First, a number of studies have shown that those in the lower socioeconomic strata are the most in need of help yet have the least access to professional services (Andersen et al., 1972; Kravits & Schneider, 1975; Lerner, 1975; McKinlay, 1975; Mechanic, 1969; Ross, 1962). From a health-planning and service delivery perspective, there is much to be gained from clarifying the extent to which services are available to and used by those most in need. Second, because a disproportionate number of blacks are in the lower economic strata, income is often introduced as a third variable and in an attempt to clarify the relationship between race and the use of services (Andersen et al., 1972; Bice, Eichorn, & Fox, 1972; Kravits & Schneider, 1975; Wilson & White, 1977).

In addition to focusing on this important sociodemographic variable, this study will also investigate some of the social psychological factors that

influence help-seeking behavior. It has been argued that utilization research should focus less on simple bivariate relationships between social status and use and more on possible intervening mechanisms (McKinlay, 1972; Mechanic, 1975). The present study investigates two of those intervening variables, problem severity and problem definition. Given that very few studies have investigated these issues in an all-black sample, it is difficult to hypothesize about the nature of the relationships among the variables to be analyzed here. Based on a review of the general help-seeking literature, however, it is expected that the following relationships will be found: (a) the low-income group will be more likely than the upper income group to experience their personal problems at the highest level of problem severity; (b) the low-income group will be less likely than the upper income group to utilize professional services in response to their personal problem.

METHOD

Sample

The analyses reported were conducted on a nationally representative cross-section of the adult (18 years old and older) black population living in the continental United States. The sample was drawn according to a multistage area-probability procedure designed to insure that every black household had the same probability of being selected for the study. This self-weighting sample is unique because never before has a set of procedures been developed that would permit a true probability sample of the entire black population.

Based on the 1970 census (and subsequent updates) distribution of the black populatoin, 76 primary areas were selected. These sites were stratified according to racial composition and income; then smaller geographical areas (clusters) were randomly chosen. Actual sampling and interviewing were conducted in these smaller geographical areas generally representing city blocks or groups of blocks. Preliminary scouting of the selected clusters within each primary area provided a check for new construction, destruction, number of households, and racial composition.

Since correct identification of eligible dwelling units was critical, two special screening procedures were developed for finding black households. The Standard Listing And Screening Procedure (SLASP) which was applied in mixed and mostly black areas provided a unique method of identifying black households by using reference housing units. When all housing units

were identified by referents as black-occupied or "other"-occupied, the selection of eligible housing units was taken from the list of black housing units. A subset of the "other"-occupied housing units were selected for screening to assess the accuracy of the informants in the reference housing units. The Wide Area Screening Procedure (WASP) was developed for use in areas with few or no black-occupied housing units. Wheras the SLASP interviewers listed and classified each housing unit in a cluster, the WASP interviewers asked the reference housing unit about blacks in the area and listed only the black-occupied housing units. In order to check the effectiveness of the procedure, 20% of the WASP clusters were chosen at random and received the more thorough SLASP coverage. The WASP procedure allowed the self-weighting probability sample to be obtained because it permitted (for minimal cost) the screening of large areas of the country where blacks represented less than 1% of the population. These blacks had the same probability of selection as blacks who lived in areas that were more heavily black-occupied.

Within each selected black household, a single person was chosen randomly to be interviewed. No substitutions were allowed. If the selected person refused to be interviewed, such an action resulted in that household being classified as a nonresponse. All interviewing was conducted by professionally trained black interviewers. This sampling and interviewing procedure resulted in 2,107 completed interviews conducted during 1979 and 1980, representing a response rate of 69%. The black population is disproportionately distributed within urban areas where response rates have traditionally been low. The relatively high overall response rate was achieved by intensifying efforts in these urban areas through repeated callbacks. Table I shows the distribution of selected demographic characteristics of the sample.[3]

Measures

In order to examine the help-seeking behavior of blacks, respondents were asked to report *one* situation they had experienced that had caused them a significant amount of distress. We then asked respondents how they tried to adapt to his stressful event. The specific questions used to elicit in-

[3]Comparisons of this sample with the black population indicate a slight tendency to underrepresent younger people of both sexes and to overrepresent older women. The percentage breakdown of males and females is not different from other studies on black samples. Analyses have also revealed that there are no sex differences between respondents and nonrespondents. More detailed information on the sample is available from The Program for Research on Black Americans upon request.

Table I. Major Demographic Characteristics of the Sample

Demographic variables	n	%
Gender		
Male	797	37.8
Female	1,310	62.2
Age		
18-25	395	18.8
26-34	464	22.1
35-54	661	31.5
55-64	240	11.4
65+	341	16.2
Marital status		
Married	876	41.7
Divorced	245	11.7
Separated	207	9.9
Widowed	304	14.5
Never married	467	22.2
Family income		
$0-4,999	461	25.1
$5,000-9,999	469	25.6
$10,000-19,999	492	26.8
$20,000 and over	413	22.5
Education		
Less than high school	919	44.0
High school graduate	650	31.1
Some college	334	16.0
College graduate	184	8.9
Employment status		
Working	1,197	56.9
Not working	907	43.1
Urbanicity		
Urban	1,665	79.0
Rural	442	21.0
Region		
Northeast	391	18.6
Northcentral	467	22.2
South	1,125	53.4
West	124	5.9

formation about this personal problem were: 1. "When problems come up, has there ever been a time when you were about at the point of a nervous breakdown?" 2. (If answered "no" to the first question) "Has there ever been a time when you had a personal problem where you felt so nervous you couldn't do much of anything?" 3. (If answered "no" to 2) "Has there ever been a time when you felt down and depressed, so low that you felt you just couldn't get going?" 4. (If answered "no" to 3) "Have you ever had a personal problem you couldn't handle by yourself?" 5. (If answered "no" to 4) "Have you ever had what you thought was a serious personal problem that you tried to handle by yourself?"

Problem Severity. The concept of "need" for professional help is viewed as a rough approximation of how much the problem interfered with the person's ability to perform their usual social obligations. It was constructed from the above set of five questions. Those respondents who experienced their problem at the point of a nervous breakdown represent high problem severity, while those who experienced their problem at some level of distress below the nervous breakdown point (questions 2 through 5) represent low problem severity.

Problem Type. Every respondent who said they had experienced a problem was asked the following question: "Thinking about the last time you felt this way, what was the problem about?" This question was designed to ascertain how the respondent conceptualized the nature of the distress experienced. The answer to this question represents the specific locus to which the respondent attributed the cause of his/her personal distress. For analytic purposes, responses to this question were categorized into five problem categories: (a) physical health problems, (b) interpersonal difficulties (marital problems, problems with the opposite sex, and interpersonal relationships in general), (c) emotional adjustment problems (references to mood disturbances, self-doubt, and personal adjustment issues in general), (d) death of a loved one, and (e) economic difficulties.

Professional Help Utilization. If the respondents had experienced a problem, they were presented with a list of professional helping facilities and asked if they had gone to any of the places listed for help with their personal problem. That list included the following professional help sources: hospital emergency room, medical clinic, social services, mental health center, private mental health therapist, doctor's office, minister, lawyer, police, school, employment agency. In the present report, the decision to seek professional help is operationally defined by a dichotomous variable, indicating the number of respondents with a problem who sought help from at least one of the professional helping services included in the above list.

Income. The socioeconomic status indicator used in this analysis is family income and was measured by the following item: "What was the total income of all persons living in your household, that is considering all sources such as salaries, profits, wages, interest and so on, from *all* family members?" Respondents were categorized as low income if their families made between $0 and $9,999 and as high income if they made $10,000 or more.

Analysis

The analysis proceeds in two phases, moving from the presentation of a series of bivariate relationships to a more complex multivariate model.

The multivariate analysis employs a log-linear approach to multidimensional contingency table analysis. In the present analysis, the relationships among income, problem type, problem severity, and the use of professional help are explored. Utilization is the dependent variable. The mathematical structure used to analyze this relationship can be expressed in an additive model where the dependent variable is the expected log-odds of using help (Equation 1); or a multiplicative model where the dependent variable is the expected odds of using help (Equation 2).

$$\Phi^U_{ijk} = \beta^U + \beta^{IU}_i + \beta^{TU}_j + \beta^{SU}_k + \beta^{ITU}_{ij} + \beta^{ISU}_{ik} + \beta^{TSU}_{jk} + \beta^{ITSU}_{ijk} \qquad (1)$$

$$\Omega^U_{ijk} = \tau^U \, \tau^{IU}_i \, \tau^{TU}_j \, \tau^{SU}_k \, \tau^{ITU}_{ij} \, \tau^{ISU}_{ik} \, \tau^{TSU}_{jk} \, \tau^{ITSU}_{ijk} \qquad (2)$$

These two equations are mathematically equivalent. This study used the multiplicative version and therefore results are discussed in terms of the odds on using help. To describe the direction and magnitude of the relationships among the variables, odds ratios based on the expected cell frequencies estimated by the preferred model are calculated. In the following four-way classifications of professional help use {U}, income {I}, problem type {T}, and problem severity {S}, the {ITS} term is included in each model where {U} is viewed as the dependent variable.[4]

RESULTS

Table II shows the bivariate realtionships between problem severity, problem type, income, and the use of professional help. Experiencing a personal problem at the nervous breakdown level significantly increases the likelihood of seeking professional help. Specifically, 55.1% of those respondents who indicated feelings of a nervous breakdown sought professional help, as compared to 42.6% of those who experienced their problem at some point beneath the nervous breakdown level. Table II also reveals that problem type is significantly related to the use of professional help. The most notable aspect of this relationship is that professional help use is most often reported for physical health problems, 69.4%. For all other problem

[4]In the short-hand notation for describing log-linear models, letters enclosed in brackets refer to variables entered into the cross-tabulation. If one letter appears, it indicates that the marginals for that variable are included in the model in an attempt to reproduce the cross-tabulation. If two letters appear, then the interaction of those two variables are included to reproduce the observed cross-tabulation. If three or more appear, then an interaction of those variables is included to reproduce the observed cross-tabulation.

Table II. Problem Severity, Problem Type, Income, and the Use of Professional Help

Independent variables	% using help	n
Problem severity[a]		
Nervous breakdown	55.1	619
Beneath breakdown	42.6	676
Problem Type[b]		
Physical	69.4	186
Interpersonal	48.8	490
Emotional	42.9	140
Death	43.8	105
Economic	45.7	254
Income		
Under $10,000	50.4	568
$10,000 & above	45.4	573

[a]$\chi^2(1) = 20.16, p < .001.$
[b]$\chi^2(4) = 34.52, p < .001.$

types the percentage of respondents who used help ranges between 43% and 49%. Finally, Table II reveals that income is not related to the use of professional help. Only five percentage points separate the two income groups with respect to utilization (50.4% vs. 45.4%).

Table III shows that income is related to problem severity. The lower income group is more likely to experience their problem at the nervous breakdown level. Over half (53.4%) of those respondents with family incomes less than $10,000 experienced feelings of a nervous breakdown while about 40% of the upper income group did so. Table IV shows that income is also related to problem type. The most notable pattern here is that more of the lower income group had a physical problem (20.4% vs. 11.3%) while more of the upper income group experienced an interpersonal difficulty (47.3% vs. 37.1%).

In order to conduct a more rigorous test of the relationships among these variables, a multivariate analysis was performed. It is possible, for example, that income is related to the decision to seek help, but only under specific conditions, i.e., for certain types of problems or for various levels of problem severity. Table V shows the series of models fit to the four-way table of income, problem type, problem severity, and the decision to seek

Table III. Income and Problem Severity[a]

Income	% experiencing breakdown	n
Under $10,000	53.4	579
$10,000 & above	39.9	586

[a]$\chi^2(1) = 21.13, p < .001.$

Table IV. Income and Problem Type[a]

Income	Problem type					
	Physical	Interpersonal	Emotional	Death	Economic	n
Under $10,000	20.4	37.1	10.9	9.0	22.7	525
$10,000 & above	11.3	47.3	12.3	9.5	19.7	529

[a]$\chi^2(4) = 21.64$, $p < .001$.

professional help. The baseline model, M1, hypothesizes that none of the independent variables has a significant relationship to the dependent variable. Table V shows that the χ^2 for this model is 60.89 with 19 degrees of freedom, $p = .001$. Thus, this model is rejeced and it is concluded that the use of professional help is related to either income, problem type, or problem severity.

Next the set of models which each add one bivariate relationship involving the use of professional help (M2, M3, M4) is examined. Even though none of these models fits the observed data, the reduction of the χ^2 value in comparison to M1 will provide information about the significance of zero-order relationships. Results of these contrasts indicate that M3 is significantly different from M1 ($\chi^2_{19} - \chi^2_{15} = 30.99$, $p = .001$), as is M4 ($\chi^2_{19} - \chi^2_{18} = 15.26$, $p = .001$).

Comparing M1 and M2, which tests for the importance of the two-way effect of income and the use of help, reveals that these two models are marginally significantly different from each other, $\chi^2_{19} - \chi^2_{18} = 3.94$, $p = .047$. Since both {UT} and {US} substantially reduce the χ^2 relative to their cost in degrees of freedom, it is tentatively concluded that the two-way interactions between problem type and the use of help and problem severity and the use of help are important effects in this four-variable system. However, since the addition of {UI} (the two-way effect of income and use) only reduces the χ^2 by 3.94 for 1 degree of freedom, it is doubtful that it will be included in the final model.

Next M5, M6, and M7 are examined, each of which fits two of the three bivariate effects to the data. Of these three models, only M7 provides an acceptable fit to the observed data, $\chi^2_{14} = 13.50$, $p = .488$. It is reasonable that neither M5 nor M6 fits the data because both of these models exclude a term which the previous model comparisons indicated was a powerful effect in this four-way classification. At this point it appears that M7 is the preferred model. As a further test of M7, M8 (which includes all three bivariate effects) was computed. This model also fits the data, but a contrast of χ^2 fits which test for the ability to drop the {UI} term reveals that this "all bivariates" model fits the data no better than the more parsimonious M7, $\chi^2_{14} - \chi^2_{13} = 70$, $p = .403$.

Even though M7 appears to be the preferred model, an even better job of reproducing the data may be possible by adding higher order interaction terms. Substantively, the interest is in whether or not income is related to the use of professional help only under specific conditions of problem type or problem severity. Thus, M9 (which contains a three-way interaction between income, problem type, and use) and M10 (which has the trivariate interaction term of income, problem severity, and use) are estimated. Table V shows that both of these models fit the data. But the appropriate con-

Table V. Log-Linear Hierarchical Models of Effects of Income (I), Problem Type (T), and Problem Severity (S) on the Use of Professional Help (U)

Model[a]	Fitted marginals	$LR_{\chi}{}^2$	df	p value
M1	{U}	60.89	19	.001
M2	{UI}	56.95	18	.001
M3	{UT}	29.90	15	.012
M4	{US}	45.63	18	.001
M5	{UI} {UT}	27.84	14	.015
M6	{UI} {US}	43.60	17	.001
M7	{UT} {US}	13.50	14	.488
M8	{UI} {UT} {US}	12.80	13	.463
M9	{UIT} {US}	8.43	9	.491
M10	{UIS} {UT}	10.31	12	.589

[a]All models fit {ITS}.

trasts revealed that neither the {UIT} nor the {UIS} interaction terms significantly improve the fit over the more parsimonious M8, which has already been shown to be no better than M7. Thus, M7 is the preferred model. Substantively, this model states that both problem type and problem severity are significantly related to the use of professional help, net of the effects of each other. Since the {UI} term is not included in the preferred model, it is concluded that income is not related to the use of help in this four-way classification.

Table VI displays the odds ratios which describe the direction and magnitude of the effect of problem type and problem severity on the use of professional help (see Appendix for an explanation of how these odds ratios were calculated). Using economic problems as the base category, it can be seen that respondents with physical problems are 2¾ times more likely to have used professional help than persons with economic problems. The odds on using professional help are 22% higher for persons with interpersonal problems than economic problems. Having an emotional problem decreases the odds on using professional help by about 15% in comparison

Table VI. Odds Ratios Describing the Effects of Problem Type and Problem Severity on the Decision to Seek Professional Help ($n = 1,038$)[a]

Variable	Odds ratio
Problem type	
Physical/economic	2.74
Interpersonal/economic	1.22
Emotional/economic	.85
Death/economic	.92
Problem severity	
High/low	1.66

[a]{UT} {US} {ITS}, $LR_{\chi}{}^2 = 13.50$, $df = 14$, $p = .4878$.

to help-seeking for economic problems, while persons with death problems use professional help almost at the same rate as respondents with economic problems. Finally, Table VI reveals that persons with problems characterized as high severity are more than half as likely as persons with low severity problems to seek professional help.

DISCUSSION

The present analyses revealed how income and two social psychological variables (problem severity and problem type) combine to affect black help-seeking. The bivariate analyses indicated that the low-income group was more likely than the high-income group to have experienced their problem at the nervous breakdown level. In addition, the low-income group was slightly more likely to have attributed the cause of their distress to having a physical health problem.[5] Since these two factors increased the likelihood of utilization, one would expect the lower income group to be more likely than upper income respondents to have used professional help. It is within this context that the finding of no income differences in the decision to seek professional help can best be understood. The fact that there are no large income inequities for blacks in access to professional assistance is an encouraging finding. Parity in utilization, however, is not enough if the underlying need for help is greater among low-income blacks than it is for high-income blacks. If there were equal access to health care, high utilization rates would be expected among the low-income group. Thus, the most important issue uncovered by these analyses has to do with the concept of unmet need. A little more than half of those who admitted to having had a serious personal problem did not seek professional help. More importantly, about half of the respondents who felt they were about at the point of a nervous breakdown did not seek professional help. More information is needed on how those blacks who did not seek professional help cope with their personal problems. It should be noted that just because these blacks did not use professional assistance does not mean they received no help for their problems. Only 1 in 10 reported no outside help if the use of informal and professional help in combination is considered (Neighbors, Jackson, Bowman, & Gurin, 1983). In other words, many blacks utilize the informal social network for help with their personal problems.

It is recognized that the lay network can be a source of assistance in times of need. More information, however, is needed on the type and qual-

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[5]This may be due to the fact that low income persons (especially the black poor) are more likely to describe all types of mental health related problems in somatic terms.

ity of help offered by nonprofessionals. Equally important is the need to ascertain how effective this help is in relation to the specific type of problem experienced by the person seeking help. Although the lay treatment network can do an adequate job of resolving many types of personal problems, there are conditions which the professional community is more capable of handling. What should be avoided is a mismatch of problem type with type of helper (lay vs. professional). Problems which could be better helped by professionals should not be treated by members of the informal social support network. Conversely, it may not be necessary to consult professionals about problems which can be solved by lay helpers. Lay referral sources need to be able to make these types of discriminations. After these issues are more fully explored, better methods of identifying certain population groups as underutilizing or overutilizing professional services can be developed.

Conclusions about the apparent overuse or underuse of services differ because the majority of studies focus on income differences in the use of one type of service only and then generalize about utilization behavior in general. Observations about the utilization behavior of the black poor may also be inconsistent because many studies merely count isolated units of service gathered from agency records instead of taking a process orientation to studying the use of services. As a result these studies fail to consider the fact that income may have an effect at different stages of the help-seeking process. For example, even though it was found that income is not related to the decision to seek professional help, it is expected that different income patterns of utilization will emerge when the use of specific help sources is investigated. Furthermore, many studies fail to measure the seriousness of the health condition. Finally, rarely is the laymen's perspective on the nature of his/her distress considered in explaining utilization behavior. The results reported here clearly indicate that all of these factors must be taken into consideration in order to adequately account for the utilization behavior of black Americans.

Because this study stems from a social psychological perspective, it has focused on the individual characteristics that influence utilization. In doing so, the health care systems perspective has been deemphasized. McKinlay (1972; 1975) has pointed out that many theories used to explain help-seeking imply that the individuals themselves are responsible for the overuse or underuse of services. It is recognized that system variables can also have a profound impact on help-seeking. In fact, there is evidence that structural barriers to professional help utilization are especially important for blacks (Dutton, 1978). Black people may not perceive certain types of services as beneficial or effective in dealing with their problems; or they may view certain types of professional services (ministers, for example) as more congruent with black norms, beliefs, or life-styles. In short, utilization

behavior may be determined as much by individual perceptions of the manner in which services are delivered as well as by perceptions of distress. The findings presented here suggest that such individual perceptions are important determinants of professional help utilization among black Americans.

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APPENDIX

Calculation of Odds and Odds Ratios

In this Appendix an example of how the odds and odds ratios used to describe the direction and magnitude of the effects present in the data is given. First the odds ratios involving problem severity and the use of help are presented. Page (1977) recommends that the analyst not pool over all levels of other variables in the model when computing odds ratios. Rather, the odds should be computed for fixed levels of the other factors. In addition, Page suggests using the modeled frequencies rather than the raw data. This allows the analyst to take into account the simplifications that the model says are appropriate. Using the expected cell frequencies generated from the preferred model, it can be shown that the odds on using help for low-income persons with a physical problem which brought them to the point of a nervous breakdown are 42.2/14.8 = 2.85 (Table A). The odds on using among low-income persons with a physical problem experienced at some point below the nervous breakdown level are 29.7/17.3 = 1.72. Taking the ratio of these ratios (2.85/1.72) yields an odds ratio of 1.66. Since the preferred model does not include an effect for income, it does not matter which income group was used to compute these odds ratios. For example, the odds on using help among high-income respondents with a physical problem at the nervous breakdown level are 11.9/4.1 = 2.90. The odds among the same income group experiencing the problem beneath the breakdown level are 25.2/14.8 = 1.70. Again an odds ratio of about 1.66 is obtained (2.9/1.7, slight discrepancies due to rounding). In addition, if we were to compute the odds ratio for problem severity and use for all levels of problem type, we would always get a number of about 1.66. This is because the preferred model states that the {SU} relationship is not dependent upon {T}.

Table A. Observed and Expected Cell Frequencies for the Four Variable Table of Income, Problem Severity, Problem Type, and the Use of Professional Help ($n = 1,038$)

Severity	Type	Income	Actual Used	Actual Did not use	Expected[a] Used	Expected[a] Did not use
High	Physical	Low	39	18	42.2	14.8
High	Physical	High	13	3	11.9	4.1
High	Interpersonal	Low	61	49	61.5	48.5
High	Interpersonal	High	64	41	58.7	46.3
High	Emotional	Low	18	16	15.9	18.1
High	Emotional	High	13	13	12.1	13.9
High	Death	Low	10	11	10.3	10.7
High	Death	High	9	9	8.8	9.2
High	Economic	Low	32	33	33.1	31.9
High	Economic	High	19	27	23.5	22.5
Low	Physical	Low	30	17	29.7	17.3
Low	Physical	High	27	13	25.2	14.8
Low	Interpersonal	Low	37	47	36.2	47.8
Low	Interpersonal	High	56	87	61.6	81.4
Low	Emotional	Low	10	12	7.6	14.4
Low	Emotional	High	8	31	13.4	25.6
Low	Death	Low	11	14	9.1	15.9
Low	Death	High	10	22	11.7	20.3
Low	Economic	Low	24	28	19.9	32.1
Low	Economic	High	23	33	21.5	34.5

[a]Based in model {UT} {US} {ITS}.

Table B. Odds and Odds Ratios Describing the Relationship of Problem Type to the Use of Professional Help

	Physical	Interpersonal	Emotional	Death	Economic
Odds on use	2.85	1.27	.88	.96	1.04
Odds ratio	2.74	1.22	.85	.92	—

For polytomous variables a baseline level against which to compare other levels is needed. In this analysis, problem type is the only polytomy. Using the same four-way table as above, and choosing economic problems as the base against which to compare utilization for other problem types, the odds ratios that appear in row 2 of Table B (high problem severity only) is obtained. Because problem severity has no effect on the problem type–utilization relationship, the odds and odds ratios for low-severity problems are not shown. The odds ratio of 2.74 means that a person with a physical health problem is about 2¾ times more likely to seek professional help than a person with an economic problem (regardless of income level or degree of problem severity). The odds ratios for the other problem types can be interpreted in a similar manner.