

THE PATIENT SATISFACTION QUESTIONNAIRE SHORT-FORM (PSQ-18)

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## Abstract

This article reports on the development and psychometric properties of a short-form version of the 50-item Patient Satisfaction Questionnaire III (PSQ-III). The short-form instrument, the PSQ-18, contains 18 items tapping each of the seven dimensions of satisfaction with medical care measured by the PSQ-III: general satisfaction, technical quality, interpersonal manner, communication, financial aspects, time spent with doctor, and accessibility and convenience. PSQ-18 subscale scores are substantially correlated with their full-scale counterparts and possess generally adequate internal consistency reliability. Moreover, both the magnitude of the correlation coefficients and the overall pattern of correlations among PSQ-18 subscales are highly similar to those observed for the PSQ-III. These preliminary analyses support the use of the PSQ-18 in situations where the need for brevity precludes administration of the full-length PSQ-III.

### The Patient Satisfaction Questionnaire Short-Form (PSQ-18)

Patient satisfaction has emerged as a critical outcome of medical care due to increasing emphasis on patients as consumers of services in the medical marketplace (Davies & Ware, 1988). The extent to which different delivery systems satisfy their patients is a major determinant of viability in this highly competitive environment. Patient satisfaction has been associated with patient adherence to medical recommendations (Korsch, Gozzi, & Francis, 1968; Sherbourne, Hays, Ordway, Dimatteo, & Kravitz, 1992), willingness to initiate malpractice litigation (Vaccarino, 1977), doctor shopping (Marquis, Davies, & Ware, 1983), and disenrollment from prepaid health plans (Ware & Davies, 1983).

Recognizing the importance of patient satisfaction in assessing quality of medical care, Ware and his colleagues developed the Patient Satisfaction Questionnaire (PSQ; Ware, Snyder, & Wright, 1976a, b). The initial measure consisted of 80 items and was intended to be applicable in general population studies and to be useful for planning, administration, and evaluation of health services delivery programs (Ware, Snyder, Wright, & Davies, 1983). In subsequent years, revisions of the instrument have been fielded in the RAND Health Insurance Experiment (Davies, Ware, Brook, Peterson, & Newhouse, 1986), the RAND Medical Outcomes Study (Marshall, Hays, Sherbourne & Wells, 1993), and various national surveys (Andersen, & Fleming, 1980; Aday, Fleming, & Andersen, 1984).

The most recent version of the instrument, the PSQ-III, consists of 50 items tapping global satisfaction with medical care as well as satisfaction with six aspects of care: technical quality, interpersonal manner, communication, financial aspects of care, time spent with doctor and accessibility of care. The

PSQ-III contains several improvements over earlier versions. Recent research attests to the desirable psychometric properties of PSQ-III, and provides support for a hierarchical conceptualization of satisfaction with medical care (Marshall et al., 1993). Within this framework, satisfaction with care can be simultaneously represented as both an overarching general domain and a set of dimensions tapping unique aspects of satisfaction.

Despite the noteworthy characteristics of the PSQ-III, its 50-item length places significant burden on respondents, requiring approximately 10-15 minutes to complete. Development of an abbreviated, yet reliable and valid, version of the PSQ would increase the ease with which patient satisfaction could be measured and encourage its assessment for monitoring the delivery of medical care. The aim of the current research was to develop and assess the adequacy of a short-form version of the PSQ. In developing the short-form, a multiple-step strategy was adopted. First, using the full PSQ subscales as criteria, empirical and conceptual considerations were taken into account in selecting a set of items to comprise a short-form scale. Second, the dimensional structure of the short-form, the PSQ-18, was compared to that of the long-form. Third, the associations of the PSQ-18 scales with the corresponding long-form scales was assessed.

## Method

### Study Design and Sampling

The MOS, a four-year prospective study, was designed to examine the influence of specific characteristics of providers, patients, and health systems on outcomes of care. Detailed information on sampling strategies employed in the MOS has been described elsewhere (Rogers et al., 1992; Tarlov et al., 1989). Briefly, data were obtained from patients visiting physicians (general internists, family physicians, cardiologists, endocrinologists, diabetologists,

psychiatrists), psychologists, and other mental health providers practicing within three systems of care (health maintenance organizations, large multispecialty groups and solo practices) in three cities (Boston, Chicago, and Los Angeles).<sup>1</sup>

The MOS includes both a cross-sectional and a longitudinal component. For the cross-sectional component, patients were sampled from among literate English-speaking adults visiting participating practices during 9-day (on average) screening periods in 1986. Complete questionnaires were obtained for 74% of eligible patients in group practices (i.e., HMO and multispecialty groups) and 65% of patients in single specialty solo or small group practices (N = 22,462). A telephone interview was conducted with 5,341 patients to collect additional information and to ask them to enroll in the longitudinal panel. Ninety-one percent (N = 4,824) of interviewed patients agreed to enroll in the longitudinal study. Of these, a subset of 2,546 patients was selected. The MOS longitudinal panel consisted of adult (ages 18 and over) English-speaking patients who agreed to enroll in the study, completed a screening questionnaire, and suffered from one or more of four conditions: diabetes (N = 495), hypertension (N = 1311), heart disease (N = 303), and symptoms of depression (N = 886). Patients who enrolled in the MOS were better educated than those who did not enroll (Rogers et al., 1992).

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<sup>1</sup>Physicians were sampled from lists obtained from the HMOs and national professional associations; only those who were board-certified and between the ages of 31 and 55 were eligible. The final sample of practitioners for this analysis included 362 medical specialty providers (194 internists, 91 family practice physicians, 40 cardiologists, 24 endocrinologists, 13 nurse practitioners) and 161 mental health specialty providers (76 psychiatrists, 74 psychologists, 11 master-level mental health providers).

### Subjects

Patients for whom complete MOS baseline data were available for all analytic variables (N = 2,197) were included in these analyses. With respect to demographic characteristics, study participants averaged 55.83 years of age (SD = 16.21); 40% were male; 57% were married. Eighty percent were White, 14% were Black, 3% were Hispanic, 1% were Asian or Pacific Islander, and 2% were from other ethnic groups.

### Measures

The PSQ-III was mailed to study participants approximately three months following their office visit in which they were screened for the study.

Patient satisfaction with medical care. The PSQ-III (see Appendix C) consists of 50 items<sup>2</sup> tapping seven aspects of satisfaction with care: general satisfaction (6 items), technical quality (10 items), interpersonal manner (7 items), communication (5 items), financial aspects (8 items), time spent with doctor (2 items), and accessibility and convenience (12 items). To control for acquiescent responding (Ware, 1978), the instrument contains both positively-worded and negatively-worded items. Participants were asked to indicate how they feel about the medical care they receive in general, with no reference to a specific time frame or visit. Responses to each item are given on a 5-point scale ranging from strongly agree to strongly disagree.

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<sup>2</sup> An additional item is included among the PSQ-III items. This item, number 30, does not measure satisfaction with care and is not included in scoring.



### Development of the Short-Form

Items were selected for inclusion in the short-form version on the basis of their association with long-form scale scores, subject to the restriction that each subscale be composed of an equal number of positively- and negatively-worded items. Item-scale correlations were generated using the Multitrait Analysis Program (Hays & Hayashi, 1990). Correlations were adjusted downward as necessary to correct for inflation caused by item-scale auto correlation. Internal consistency reliability estimates for the PSQ-18 scales were calculated using Cronbach's (1951) coefficient alpha.

### Results

The 18 items that were selected to comprise the PSQ-18, as well as their means and standard deviations, are shown in Table 1. The PSQ-18 instrument is provided in Appendix A and the scoring instructions are included in Appendix B (Appendix C provides the long form PSQ-III). As shown in Table 2, all PSQ-18 subscales have generally acceptable internal consistency reliability, although the coefficients for the interpersonal and communication scales fall below the 0.70 standard advocated by Nunnally (1978) for group-level comparisons. Moreover, as displayed in Table 2, PSQ-18 short-form and PSQ-III long-form versions of corresponding subscales are substantially correlated. In addition, as revealed in Table 3, the pattern of correlations among short-form subscales is highly similar to the pattern of correlations among long-form scales. Finally, as shown in Table 4, many of the PSQ-18 items were substantially correlated with multiple subscales. For example, items tapping satisfaction with communication and time spent with doctor were highly correlated with several other subscales. By contrast, items measuring financial satisfaction and satisfaction with access to care showed fairly good item discrimination across scales. Preliminary PSQ-III and PSQ-18 normative

data for various patient populations and sociodemographic characteristics are shown in Appendix D.

### Discussion

This article reports on the development and psychometric properties of a short-form version of the PSQ-III (Marshall et al., 1993). This 18-item instrument, the PSQ-18, retains many characteristics of its full-length counterpart, despite its shortened length. In particular, the PSQ-18 subscales show acceptable internal consistency reliability, especially in view of their abbreviated length. Furthermore, corresponding PSQ-18 and PSQ-III subscales are substantially correlated with one another. With one exception, these correlations exceed 0.90. In addition, both the magnitude of the correlation coefficients and the overall pattern of correlations among PSQ-18 subscales are highly similar to those observed for the PSQ-III. In sum, these preliminary analyses suggest that the PSQ-18 may be appropriate for use in situations where the need for brevity precludes administration of the full-length PSQ-III. We estimate that the PSQ-18 requires about 3-4 minutes to complete whereas the long form PSQ-III requires 9-12 minutes.

We are now pursuing several additional lines of evidence to evaluate more fully the reliability and validity of the PSQ-18. First, we are comparing the psychometric properties of the PSQ-18 with alternative short-form versions of the PSQ-III.<sup>3</sup> Second, inasmuch as the analyses reported here focus on the internal structure of alternative item sets, we are now evaluating the relative ability of the PSQ-18 and alternative instruments to predict key external criteria. Finally, additional research is required to determine the practical

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<sup>3</sup>The substantial covariation of subscales measuring satisfaction with physician care (i.e., Communication, Interpersonal Manner, Technical Quality, and Time Spent with Doctor) coupled with the modest reliability of two of these subscales suggests -- at least for certain purposes -- that these 10 items might be combined into a single index. The internal consistency reliability (coefficient alpha) of such a subscale in this data set is 0.89.

utility of distinguishing among separate dimensions of satisfaction with medical care. Substantial covariation was found among most PSQ-18 subscales. Similar findings have been reported on the full-scale PSQ-III (Marshall et al., 1993), indicating that this issue is not unique to the PSQ-18.

Table 1  
Univariate Statistics for PSQ-18 Subscales and Constituent Items

Subscale and Item	Mean	SD
<u>General Satisfaction</u> (Mean = 3.58, SD = 0.94)		
3. The medical care I have been receiving is just about perfect. (11)	3.68	1.00
17. I am dissatisfied with some things about the medical care I receive. (49)	3.48	1.11
<u>Technical Quality</u> (Mean = 3.68, SD = 0.76)		
2. I think my doctor's office has everything needed to provide complete care. (8)	3.94	0.91
4. Sometimes doctors make me wonder if their diagnosis is correct. (12)	3.19	0.92
6. When I go for medical care, they are careful to check everything when treating and examining me. (15)	3.74	0.98
14. I have some doubts about the ability of the doctors who treat me. (45)	3.84	0.96
<u>Interpersonal Manner</u> (Mean = 4.09, SD = 0.69)		
10. Doctors act too businesslike and impersonal toward me. (29)	3.88	0.89
11. My doctors treat me in a very friendly and courteous manner. (34)	4.29	0.98
<u>Communication</u> (Mean = 3.74, SD = 0.87)		
1. Doctors are good about explaining the reason for medical tests. (6)	3.09	1.00
13. Doctors sometimes ignore what I tell them. (38)	3.58	1.02
<u>Financial Aspects</u> (Mean = 3.78, SD = 0.94)		
5. I feel confident that I can get the medical care I need without being set back financially. (14)	3.74	1.08
7. I have to pay for more of my medical care than I can afford. (24)	3.83	1.05

Table 1 (Continued)  
Univariate Statistics for PSQ-18 Subscales and Constituent Items

Subscale and Item	Mean	SD
<u>Time Spent with Doctor</u> (Mean = 3.59, SD = 0.94)		
12. Those who provide my medical care sometimes hurry too much when they treat me. (35)	3.52	1.08
15. Doctors usually spend plenty of time with me. (46)	3.67	1.00
<u>Accessibility and Convenience</u> (Mean = 3.76, SD = 0.74)		
8. I have easy access to the medical specialists I need. (25)	3.86	0.92
9. Where I get medical care, people have to wait too long for emergency treatment. (28)	3.55	0.98
16. I find it hard to get an appointment for medical care right away. (48)	3.65	1.08
18. I am able to get medical care whenever I need it. (51)	3.96	0.90

Note. (N=2,197). Numbers in parentheses correspond to item placement within the PSQ-III at baseline of the Medical Outcomes Study (Marshall et al., 1993). Possible scores range from 1-5. SD = Standard deviation.

Table 2  
Internal Consistency Reliabilities and Correlations  
between PSQ-III and PSQ-18 Subscales

Subscale	Internal Consistency Reliabilities		<i>r</i>
	PSQ-III	PSQ-18	
General Satisfaction	0.88 (6)	0.75 (2)	0.92
Technical Quality	0.85 (10)	0.74 (4)	0.92
Interpersonal Manner	0.82 (7)	0.66 (2)	0.83
Communication	0.82 (5)	0.64 (2)	0.92
Financial Aspects	0.89 (8)	0.73 (2)	0.90
Time Spent with Doctor	0.77 (2)	0.77 (2)	1.00
Accessibility and Convenience	0.86 (12)	0.75 (4)	0.91

Note. (N=2,197). The number of items in each subscale is shown in parentheses. *r* = Product - moment correlation coefficient.

Table 3  
Correlations among PSQ-III and PSQ-18 Subscales

Subscale	1	2	3	4	5	6	7
1. General Satisfaction	--	.74	.57	.66	.30	.65	.64
2. Technical Quality	.81	--	.60	.70	.35	.63	.60
3. Interpersonal Manner	.71	.78	--	.61	.25	.62	.55
4. Communication	.74	.78	.80	--	.31	.64	.56
5. Financial Aspects	.32	.33	.33	.31	--	.23	.31
6. Time Spent with Doctor	.70	.69	.71	.70	.23	--	.58
7. Accessibility and Convenience	.73	.69	.67	.67	.37	.60	--

Note. (N=2,197). PSQ-18 correlations are shown in the upper triangle of the matrix; PSQ-III correlations are shown in the lower triangle of the matrix.

Table 4  
Item-Scale Correlations for PSQ-18 Subscales

	Gen	Tech	Int	Com	Fin	Time	Access
<i>General Satisfaction (Gen)</i>							
Item 3	<b>.71</b>	.68a	.58	.61	.30	.55	.57
Item 17	<b>.73</b>	.69a	.61	.62	.24	.60	.62
<i>Technical Quality (Tech)</i>							
Item 2	.51a	<b>.50</b>	.44	.45	.26	.37	.46
Item 4	.57a	<b>.61</b>	.53	.55	.27	.46	.44
Item 6	.68a	<b>.66</b>	.62a	.68a	.30	.59	.58
Item 14	.61a	<b>.64</b>	.58	.56	.23	.49	.50
<i>Interpersonal Manner (Int)</i>							
Item 10	.56	.59	<b>.67</b>	.62	.26	.56	.54
Item 11	.53	.56	<b>.61</b>	.58a	.18	.52	.49
<i>Communication (Com)</i>							
Item 1	.57a	.60a	.58a	<b>.61</b>	.27	.49	.51
Item 13	.59a	.63a	.55a	<b>.47</b>	.27	.62a	.50
<i>Financial Aspects (Fin)</i>							
Item 5	.36	.35	.35	.35	<b>.71</b>	.27	.37
Item 7	.20	.24	.24	.21	<b>.70</b>	.13	.25
<i>Time Spent with Doctor (Time)</i>							
Item 12	.65a	.64a	.64a	.64a	.23	<b>.61</b>	.54
Item 15	.60a	.61a	.64a	.62a	.20	<b>.62</b>	.54
<i>Accessibility and Convenience (Access)</i>							
Item 8	.52	.53	.49	.48	.31	.42	<b>.58</b>
Item 9	.49	.48	.47	.42	.23	.48	<b>.57</b>
Item 16	.52	.48	.47	.45	.17	.46	<b>.63</b>
Item 18	.57	.52	.50	.50	.25	.47	<b>.67</b>

Note. (N=2,197). Correlation coefficients are adjusted downward as necessary to correct for inflation caused by item-scale auto correlation. Complete item content is shown in Table 1. Coefficients in boldface indicate subscale assignment. Standard error of correlation  $\approx 0.02$ .

aIndicates that the item-scale correlation is within 2 standard errors of the item-scale correlation for the hypothesized scale.



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# APPENDIX A

Short-Form Patient Satisfaction Questionnaire (PSQ-18)

**SHORT-FORM PATIENT SATISFACTION QUESTIONNAIRE (PSQ-18)**  
**These next questions are about how you feel about the medical care you receive.**

On the following pages are some things people say about medical care. Please read each one carefully, keeping in mind the medical care you are receiving now. (If you have not received care recently, think about what you would expect if you needed care today.) We are interested in your feelings, good and bad, about the medical care you have received.

How strongly do you AGREE or DISAGREE with each of the following statements?

(Circle One Number on Each Line)

	<u>Strongly Agree</u>	<u>Agree</u>	<u>Uncertain</u>	<u>Disagree</u>	<u>Strongly Disagree</u>
1. Doctors are good about explaining the reason for medical tests .....	1	2	3	4	5
2. I think my doctor's office has everything needed to provide complete medical care .....	1	2	3	4	5
3. The medical care I have been receiving is just about perfect .....	1	2	3	4	5
4. Sometimes doctors make me wonder if their diagnosis is correct .....	1	2	3	4	5
5. I feel confident that I can get the medical care I need without being set back financially .....	1	2	3	4	5
6. When I go for medical care, they are careful to check everything when treating and examining me .....	1	2	3	4	5
7. I have to pay for more of my medical care than I can afford .....	1	2	3	4	5
8. I have easy access to the medical specialists I need .....	1	2	3	4	5

How strongly do you AGREE or DISAGREE with each of the following statements?

(Circle One Number on Each Line)

	<u>Strongly</u> <u>Agree</u>	<u>Agree</u>	<u>Uncertain</u>	<u>Disagree</u>	<u>Strongly</u> <u>Disagree</u>
9. Where I get medical care, people have to wait too long for emergency treatment .....	1	2	3	4	5
10. Doctors act too businesslike and impersonal toward me .....	1	2	3	4	5
11. My doctors treat me in a very friendly and courteous manner .....	1	2	3	4	5
12. Those who provide my medical care sometimes hurry too much when they treat me .....	1	2	3	4	5
13. Doctors sometimes ignore what I tell them .....	1	2	3	4	5
14. I have some doubts about the ability of the doctors who treat me .....	1	2	3	4	5
15. Doctors usually spend plenty of time with me .....	1	2	3	4	5
16. I find it hard to get an appointment for medical care right away .....	1	2	3	4	5
17. I am dissatisfied with some things about the medical care I receive .....	1	2	3	4	5
18. I am able to get medical care whenever I need it .....	1	2	3	4	5

# **APPENDIX B**

Instructions for Scoring the PSQ-18



Instructions for Scoring the PSQ-18

The PSQ-18 yields separate scores for each of seven different subscales: General Satisfaction (Items 3 and 17); Technical Quality (Items 2, 4, 6, and 14); Interpersonal Manner (Items 10 and 11); Communication (Items 1 and 13); Financial Aspects (Items 5 and 7); Time Spent with Doctor (Items 12 and 15); Accessibility and Convenience (Items 8, 9, 16, and 18).

Some PSQ-18 items are worded so that agreement reflects satisfaction with medical care, whereas other items are worded so that agreement reflects dissatisfaction with medical care. All items should be scored so that high scores reflect satisfaction with medical care (see Appendix B Table 1). After item scoring, items within the same subscale should be averaged together to create the 7 subscale scores.

We recommend that items left blank by respondents (missing data) be ignored when calculating scale scores. In other words, scale scores represent the average for all items in the scale that were answered.

Appendix B Table 1  
Scoring Items

Item Numbers	Original Response Value	Scored Value
1, 2, 3, 5, 6, 8, 11, 15, 18	1 ----->	5
	2 ----->	4
	3 ----->	3
	4 ----->	2
	5 ----->	1
4, 7, 9, 10, 12, 13, 14, 16, 17	1 ----->	1
	2 ----->	2
	3 ----->	3
	4 ----->	4
	5 ----->	5

Appendix B Table 2  
Creating Scale Scores

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Scale	Average These Items
General Satisfaction	3, 17
Technical Quality	2, 4, 6, 14
Interpersonal Manner	10, 11
Communication	1, 13
Financial Aspects	5, 7
Time Spent with Doctor	12, 15
Accessibility and Convenience	8, 9, 16, 18

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Note. Items within each scale are averaged after scoring as shown in Appendix Table 1.

# APPENDIX C

Long-Form Patient Satisfaction Questionnaire (PSQ-III)

**LONG-FORM PATIENT SATISFACTION QUESTIONNAIRE (PSQ-III)**  
**These next questions are about how you feel about the medical care you receive.**

On the following pages are some things people say about medical care. Please read each one carefully, keeping in mind the medical care you are receiving now. (If you have not received care recently, think about what you would expect if you needed care today.) We are interested in your feelings, good and bad, about the medical care you have received.

How strongly do you AGREE or DISAGREE with each of the following statements?

(Circle One Number on Each Line)

	<u>Strongly Agree</u>	<u>Agree</u>	<u>Uncertain</u>	<u>Disagree</u>	<u>Strongly Disagree</u>
1. If I need hospital care, I can get admitted without any trouble.....	1	2	3	4	5
2. Doctors need to be more thorough in treating and examining me.....	1	2	3	4	5
3. I am very satisfied with the medical care I receive.....	1	2	3	4	5
4. I worry sometimes about having to pay large medical bills.....	1	2	3	4	5
5. It is easy for me to get medical care in an emergency.....	1	2	3	4	5
6. Doctors are good about explaining the reason for medical tests.....	1	2	3	4	5
7. I am usually kept waiting for a long time when I am at the doctor's office...	1	2	3	4	5
8. I think my doctor's office has everything needed to provide complete medical care.....	1	2	3	4	5
9. The doctors who treat me should give me more respect.....	1	2	3	4	5
10. Sometimes it is a problem to cover my share of the cost for a medical care visit.....	1	2	3	4	5

How strongly do you AGREE or DISAGREE with each of the following statements?

(Circle One Number on Each Line)

	<u>Strongly Agree</u>	<u>Agree</u>	<u>Uncertain</u>	<u>Disagree</u>	<u>Strongly Disagree</u>
11. The medical care I have been receiving is just about perfect.....	1	2	3	4	5
12. Sometimes doctors make me wonder if their diagnosis is correct.....	1	2	3	4	5
13. During my medical visits, I am always allowed to say everything that I think is important.....	1	2	3	4	5
14. I feel confident that I can get the medical care I need without being set back financially.....	1	2	3	4	5
15. When I go for medical care, they are careful to check everything when treating and examining me.....	1	2	3	4	5
16. It's hard for me to get medical care on short notice.....	1	2	3	4	5
17. The doctors who treat me have a genuine interest in me as a person.....	1	2	3	4	5
18. Sometimes doctors use medical terms without explaining what they mean.....	1	2	3	4	5
19. Sometime I go without the medical care I need because it is too expensive.....	1	2	3	4	5
20. The office hours when I can get medical care are convenient (good) for me.....	1	2	3	4	5
21. There are things about the medical system I receive my care from that need to be improved.....	1	2	3	4	5
22. The office where I get medical care should be open for more hours than it is.....	1	2	3	4	5

How strongly do you AGREE or DISAGREE with each of the following statements?

(Circle One Number on Each Line)

	<u>Strongly Agree</u>	<u>Agree</u>	<u>Uncertain</u>	<u>Disagree</u>	<u>Strongly Disagree</u>
23. The medical staff that treats me knows about the latest medical developments.....	1	2	3	4	5
24. I have to pay for more of my medical care than I can afford.....	1	2	3	4	5
25. I have easy access to the medical specialists I need.....	1	2	3	4	5
26. Sometimes doctors make me feel foolish.....	1	2	3	4	
27. Regardless of the health problems I have now or develop later, I feel protected from financial hardship.....	1	2	3	4	5
28. Where I get medical care, people have to wait too long for emergency treatment.....	1	2	3	4	5
29. Doctors act too businesslike and impersonal toward me.....	1	2	3	4	5
30. There is a crisis in health care in the United States today.....	1	2	3	4	5
31. Doctors never expose me to unnecessary risk.....	1	2	3	4	5
32. The amount I have to pay to cover or insure my medical care needs is reasonable .....	1	2	3	4	5
33. There are some things about the medical care I receive that could be better.....	1	2	3	4	5
34. My doctors treat me in a very friendly and courteous manner.....	1	2	3	4	5
35. Those who provide my medical care sometimes hurry too much when they treat me.....	1	2	3	4	5

How strongly do you AGREE or DISAGREE with each of the following statements?

(Circle One Number on Each Line)

	<u>Strongly Agree</u>	<u>Agree</u>	<u>Uncertain</u>	<u>Disagree</u>	<u>Strongly Disagree</u>
36. Some of the doctors I have seen lack experience with my medical problems.	1	2	3	4	5
37. Places where I can get medical care are very conveniently located.....	1	2	3	4	5
38. Doctors sometimes ignore what I tell them.....	1	2	3	4	5
39. When I am receiving medical care, they should pay more attention to my privacy.....	1	2	3	4	5
40. If I have a medical question, I can reach a doctor for help without any problem.....	1	2	3	4	5
41. Doctors rarely give me advice about ways to avoid illness and stay healthy.	1	2	3	4	5
42. All things considered, the medical care I receive is excellent.....	1	2	3	4	5
43. Doctors listen carefully to what I have to say.....	1	2	3	4	5
44. I feel insured and protected financially against all possible medical problems.....	1	2	3	4	5
45. I have some doubts about the ability of the doctors who treat me.....	1	2	3	4	5
46. Doctors usually spend plenty of time with me.....	1	2	3	4	5
47. Doctors always do their best to keep me from worrying.....	1	2	3	4	5
48. I find it hard to get an appointment for medical care right away.....	1	2	3	4	5
49. I am dissatisfied with some things about the medical care I receive.....	1	2	3	4	5



How strongly do you AGREE or DISAGREE with each of the following statements?

(Circle One Number on Each Line)

	Strongly <u>Agree</u>	<u>Agree</u>	<u>Uncertain</u>	<u>Disagree</u>	Strongly <u>Disagree</u>
50. My doctors are very competent and well-trained.....	1	2	3	4	5
51. I am able to get medical care whenever I need it.....	1	2	3	4	5

# APPENDIX D

PSQ-III and PSQ-18 Subscale Scores by Demographic Groups

APPENDIX D  
Table 1

PSQ-18 Subscale Scores by Demographic Groups

<u>PSQ-18 Subscale</u>	<u>Gender</u>		<u>Race</u>			<u>Employment Status<sup>a</sup></u>	
	Males (N=871)	Females (N=1326)	White (N=1771)	African- American (N=304)	Other (N=426)	Employed (N=1077)	Unemployed (N=1120)
General Satisfaction	65.05 (22.96)	64.23 (23.89)	64.41 (23.36)	64.84 (24.44)	65.17 (24.22)	62.06 (23.66)	66.96 (23.15)
Technical Quality	67.14 (18.19)	67.07 (19.60)	67.16 (18.67)	66.87 (21.06)	66.84 (20.58)	65.49 (19.53)	68.64 (18.45)
Interpersonal Manner	77.81 (16.58)	76.85 (17.81)	77.25 (17.40)	78.18 (16.80)	77.15 (17.06)	75.85 (18.40)	78.57 (16.14)
Communication	69.40 (20.49)	67.96 (22.46)	68.54 (21.80)	69.51 (21.27)	68.50 (21.34)	66.66 (21.91)	70.34 (21.37)
Financial Aspects	71.36 (22.91)	68.38 (23.87)	69.41 (23.80)	70.92 (22.93)	70.21 (22.40)	69.31 (24.49)	69.81 (22.58)
Time Spent with Doctor	65.38 (22.75)	64.36 (23.82)	64.71 (23.50)	66.78 (22.04)	64.99 (22.98)	61.88 (23.91)	67.53 (22.55)
Accessibility and Convenience	69.93 (18.32)	68.29 (18.61)	69.60 (18.06)	67.02 (19.65)	66.22 (20.08)	67.81 (18.65)	70.04 (18.31)
<u>PSQ-18 Subscale</u>	<u>Marital Status</u>		<u>Education</u>		<u>Income<sup>b</sup></u>		
	Married (N=1247)	Not Married (N=950)	< High School (N=345)	≥ High School (N=1852)	Low (N=945)	High (N=1252)	
General Satisfaction	65.25 (23.00)	63.66 (24.18)	67.97 (22.62)	63.92 (23.64)	65.53 (23.78)	63.83 (23.31)	
Technical Quality	67.44 (18.63)	66.64 (19.59)	68.62 (19.25)	66.81 (19.00)	67.50 (19.19)	66.79 (18.94)	
Interpersonal Manner	77.77 (16.79)	76.53 (18.01)	78.62 (16.47)	76.97 (17.48)	77.58 (17.49)	76.97 (17.22)	
Communication	69.32 (21.44)	67.50 (22.02)	70.68 (21.43)	68.13 (21.74)	69.57 (21.69)	67.76 (21.70)	
Financial Aspects	71.14 (22.56)	67.51 (24.61)	66.84 (23.17)	70.08 (23.57)	66.84 (23.82)	71.61 (23.11)	
Time Spent with Doctor	64.92 (23.11)	64.57 (23.77)	68.41 (21.92)	64.09 (23.61)	66.24 (23.13)	63.65 (23.54)	
Accessibility and Convenience	69.64 (18.60)	68.03 (18.36)	68.47 (18.64)	69.03 (18.49)	67.82 (19.26)	69.79 (17.88)	

<sup>a</sup>Employed group includes all persons working full - or part-time. Unemployed group includes all persons not receiving payment for full - or part-time employment.

<sup>b</sup>Low Income: Mean = 9,363; Standard Deviation = 3,936. High Income: Mean = 30,894; Standard Deviation = 14,599. Income is adjusted for family size and is expressed in 1985 dollars.

APPENDIX D  
Table 1 (Continued)

PSQ-18 Subscale Scores by Demographic Groups

<u>PSQ-18 Subscale</u>	<u>Age</u>			
	18-44 (N=624)	45-64 (N=728)	65-74 (N=582)	75+ (N=263)
General Satisfaction	56.47 (23.99)	65.30 (22.86)	70.02 (21.88)	69.33 (22.55)
Technical Quality	61.46 (19.93)	68.17 (18.82)	70.42 (17.07)	70.12 (18.82)
Interpersonal Manner	72.60 (19.30)	77.94 (16.90)	80.26 (14.95)	79.58 (16.32)
Communication	62.36 (22.27)	68.82 (21.83)	72.91 (20.43)	72.72 (19.28)
Financial Aspects	64.87 (25.67)	70.30 (23.86)	73.46 (20.37)	70.09 (22.03)
Time Spent with Doctor	57.67 (24.69)	65.47 (23.02)	69.26 (21.52)	69.68 (21.24)
Accessibility and Convenience	63.68 (18.87)	70.05 (18.57)	72.00 (17.41)	71.58 (17.29)

  

<u>PSQ-18 Subscale</u>	<u>Medical Condition<sup>c</sup></u>			
	Hypertension (N=1293)	Diabetes (N=489)	Heart Disease (N=298)	Depressive Symptoms (N=874)
General Satisfaction	67.97 (21.81)	69.35 (22.10)	69.71 (22.92)	57.26 (25.24)
Technical Quality	69.34 (17.57)	70.77 (18.31)	70.60 (18.69)	61.55 (20.85)
Interpersonal Manner	79.09 (15.49)	80.12 (15.78)	80.96 (14.62)	73.04 (20.02)
Communication	71.34 (19.75)	73.05 (20.84)	73.15 (20.14)	61.94 (23.89)
Financial Aspects	72.25 (21.32)	71.67 (22.42)	71.02 (23.81)	63.67 (25.64)
Time Spent with Doctor	67.62 (21.92)	69.20 (22.03)	69.29 (21.52)	58.08 (25.34)
Accessibility and Convenience	70.76 (17.39)	71.95 (18.07)	73.06 (18.26)	64.59 (19.92)

<sup>c</sup>All patients have at least one of these medical conditions.

APPENDIX D  
Table 2  
PSQ-III Subscale Scores by Demographic Groups

<u>PSQ-III Subscale</u>	<u>Gender</u>		<u>Race</u>			<u>Employment Status<sup>a</sup></u>	
	Males (N=871)	Females (N=1326)	White (N=1771)	African- American (N=304)	Other (N=426)	Employed (N=1077)	Unemployed (N=1120)
General Satisfaction	63.74 (19.24)	63.19 (20.26)	63.57 (19.73)	62.86 (20.50)	62.74 (20.41)	61.03 (19.94)	65.70 (19.52)
Technical Quality	67.25 (15.48)	66.63 (16.53)	67.16 (15.90)	66.03 (17.34)	65.71 (17.01)	65.38 (16.48)	68.32 (15.65)
Interpersonal Manner	73.35 (14.83)	70.82 (16.76)	72.02 (16.06)	71.86 (15.74)	70.99 (16.07)	70.27 (16.59)	73.32 (15.40)
Communication	71.59 (17.28)	70.31 (19.26)	70.72 (18.67)	71.93 (17.87)	71.24 (17.84)	69.55 (18.54)	72.03 (18.40)
Financial Aspects	67.43 (20.89)	63.75 (22.00)	65.13 (22.03)	66.16 (20.26)	65.55 (19.94)	64.73 (22.58)	65.67 (20.69)
Time Spent with Doctor	65.38 (22.75)	66.63 (16.53)	64.71 (23.50)	66.78 (22.05)	64.99 (22.98)	61.88 (23.91)	67.53 (22.56)
Accessibility and Convenience	72.01 (14.77)	70.16 (15.36)	71.55 (14.79)	68.75 (16.35)	68.14 (16.30)	69.42 (15.34)	72.31 (14.85)
<u>PSQ-III Subscale</u>	<u>Marital Status</u>		<u>Education</u>		<u>Income<sup>b</sup></u>		
	Married (N=1247)	Not Married (N=950)	< High School (N=345)	≥ High School (N=1852)	Low (N=945)	High (N=1252)	
General Satisfaction	63.69 (19.38)	63.04 (20.48)	66.29 (19.42)	62.87 (19.90)	64.31 (20.08)	62.73 (19.67)	
Technical Quality	67.28 (15.91)	66.35 (16.40)	67.48 (15.76)	66.77 (16.19)	66.87 (16.22)	66.88 (16.06)	
Interpersonal Manner	72.45 (15.84)	71.00 (16.32)	72.11 (15.97)	71.77 (16.09)	71.45 (16.52)	72.11 (15.71)	
Communication	71.12 (18.39)	70.41 (18.66)	71.82 (18.24)	70.63 (18.55)	71.07 (18.64)	70.63 (18.41)	
Financial Aspects	67.07 (20.91)	62.77 (22.33)	61.62 (21.50)	65.88 (21.60)	62.20 (21.89)	67.48 (21.17)	
Time Spent with Doctor	64.92 (23.11)	64.57 (23.77)	68.41 (21.92)	64.09 (23.61)	66.24 (23.13)	63.65 (23.54)	
Accessibility and Convenience	71.74 (14.94)	69.77 (15.36)	70.53 (15.00)	70.96 (15.19)	69.98 (15.64)	71.58 (14.75)	

<sup>a</sup>Employed group includes all persons working full - or part-time. Unemployed group includes all persons not receiving payment for full - or part-time employment.

<sup>b</sup>Low Income: Mean = 9,363; Standard Deviation = 3,936. High Income: Mean = 30, 894; Standard Deviation = 14, 599. Income is adjusted for family size and is expressed in 1985 dollars.

APPENDIX D  
Table 2 (Continued)

PSQ-III Subscale Scores by Demographic Groups

<u>PSQ-III Subscale</u>	<u>Age</u>			
	18-44 (N=624)	45-64 (N=728)	65-74 (N=582)	75+ (N=263)
General Satisfaction	56.48 (20.37)	63.93 (19.30)	68.12 (18.76)	68.00 (17.88)
Technical Quality	62.11 (16.57)	67.58 (16.15)	69.91 (14.85)	69.56 (15.19)
Interpersonal Manner	66.20 (17.45)	72.52 (15.59)	75.45 (13.87)	75.19 (14.85)
Communication	66.32 (18.83)	71.30 (18.49)	74.00 (17.84)	73.11 (17.20)
Financial Aspects	60.06 (23.42)	66.07 (21.89)	69.00 (18.94)	66.66 (19.87)
Time Spent with Doctor	57.67 (24.69)	65.47 (23.02)	69.26 (21.52)	69.68 (21.24)
Accessibility and Convenience	65.69 (15.63)	71.62 (14.95)	74.16 (13.82)	73.97 (14.19)

  

<u>PSQ-III Subscale</u>	<u>Medical Condition<sup>c</sup></u>			
	Hypertension (N=1293)	Diabetes (N=489)	Heart Disease (N=298)	Depressive Symptoms (N=874)
General Satisfaction	66.30 (18.34)	67.08 (19.03)	69.11 (18.33)	57.22 (21.42)
Technical Quality	68.81 (14.87)	70.19 (15.63)	70.42 (15.74)	62.07 (17.46)
Interpersonal Manner	74.13 (14.27)	74.61 (15.22)	76.26 (14.01)	66.66 (18.10)
Communication	72.88 (17.04)	74.37 (17.93)	74.02 (17.50)	65.63 (20.24)
Financial Aspects	67.97 (19.81)	67.47 (21.04)	66.56 (22.26)	58.93 (23.04)
Time Spent with Doctor	67.62 (21.92)	69.20 (22.03)	69.29 (21.52)	58.08 (25.34)
Accessibility and Convenience	72.61 (14.07)	73.43 (14.76)	74.81 (15.16)	66.62 (16.23)

<sup>c</sup>All patients have at least one of these medical conditions.

