Predicting intentions to seek help from professional mental health services

Jordana K. Bayer, Marilyn Y. Peay

Objective: This study investigates the factors related to the intention to seek professional help for psychological problems utilising Ajzen and Fishbein's theory of reasoned action [1,2]. Many of the variables identified in previous studies can be subsumed within this theory, which emphasises the importance of the subjective point of view of the individual.

Method: One hundred and forty-two patients waiting for consultations at a community based general practice completed a questionnaire designed to assess the components of this theory as they relate to seeking help from mental health professionals.

Results: The results of this study supported the prediction of the intention to seek help from a mental health professional from the variables 'attitude toward the behaviour' and 'subjective norm'. However, personal attitudes toward seeking help were found to be more important than the approval or disapproval of significant others in predicting help-seeking intentions.

Conclusions: Overall, the findings indicate that a significant factor influencing people's decisions to utilise professional mental health services in Australia may be the belief that mental health professionals are not actually able to provide a great deal of help or support for people's difficulties.

Key words: help-seeking, mental health promotion, public decisions to use mental health services.

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Many people experience difficulties coping with life's demands and stresses. Although mental health professionals (i.e. psychiatrists, psychologists and social workers) offer services that can help with people's psychosocial difficulties, research indicates that many people do not seek such help for common problems or even for more serious disorders. A

number of studies in various countries have documented the underutilisation of available mental health services relative to public need (e.g. in Australia [3–9], in Great Britain [10,11], in the United States [12–23]). The present study explores the issue of why some people choose to seek help from mental health professionals while others do not, within an Australian context.

Information on the prevalence of psychological disorder and professional help-seeking rates in Australia is not substantial [3,24,25]. Nevertheless, published results are based on samples from urban, suburban and rural populations [4–9,26–29]. Together, these studies suggest that some 10–20% of the Australian population is in need of professional care for serious psychological difficulties (including

Jordana K. Bayer, PhD Student

Department of Psychology, School of Behavioural Science, University of Melbourne, Melbourne, Australia

Marilyn Y. Peay, Senior Lecturer in Behavioural Science (Correspondence)

Department of Psychiatry, University of Adelaide, Adelaide, South Australia 5000, Australia

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organic brain disorders, functional psychoses, intellectual disability, depressive states and psychoneuroses), while only about one-fifth to one-half of these people receive such care. Furthermore, these studies report much higher rates of isolated neurotic symptoms (including headache, irritability, nervousness and anxiety), some of which are prevalent in up to 50% of the population. Most people who received professional help for these difficulties saw a general practitioner, not a mental health professional.

In addition, there is little systematic research regarding why Australian mental health services are underutilised relative to need. Studies from other countries, however, can be used to supplement Australian information on this issue. Together, this literature associates a variety of factors with the decision to seek or not to seek help from mental health professionals including: psychological variables (e.g. attitudes, feelings, beliefs that mental health services are geographically inaccessible, beliefs that one's problem is too minor for professional assistance and should be handled alone, beliefs that mental health professionals cannot actually help, and a general lack of information about seeking help from a mental health professional [4,6,7, 14-17,21,23,30-41]); societal variables (e.g. the opinions of significant others, the cultural accessibility of mental health facilities to members of the public, and client referral practices of health professionals [4,7,12,13,15–17,22,23,30–32,34,36–38,41–47]); and demographic variables (e.g. gender, age, marital status and socioeconomic status [4,6,7,13,14,16,17,22,23, 31,32,34-37,41,42,48]).

There is a great deal of inconsistency among the results of these studies and within Australian literature itself regarding which of these variables are important determinants of help-seeking. Nevertheless, this body of research as a whole consistently suggests that people are less likely to seek help from mental health professionals when they believe that mental health professionals cannot actually help with their personal problems; when they lack general information about the experience of seeking help from mental health professionals; when there is a lack of appropriate referral by general practitioners to mental health professionals; and when mental health professionals are culturally inaccessible. Within Australian studies, it is also consistently indicated that being male and believing that one's problems are inappropriate for treatment by a mental health professional decrease the likelihood of professional help-seeking. While research from other countries has generally found that negative attitudes toward mental health professionals and practical considerations such as time, expense, and geographical accessibility have been deterrents to help-seeking, these factors have yielded inconsistent results in the Australian literature. Since the various studies reviewed involve a wide variety of populations and methodologies, the fact that they display a variety of inconsistent findings is not surprising.

The aim of the present research is to use a structured theoretical approach to explore the critical factors which contribute to people's decisions to use professional mental health services. Ajzen and Fishbein's [1,2] theory of reasoned action is an established conceptual framework which has contributed to the understanding of a variety of health related behaviours. The theory emphasises the importance of the subjective point of view of the individual, specifying a limited number of psychological variables defined and measured in a concise and consistent manner as sufficient to predict accurately the performance of behaviours under people's voluntary control, such as seeking help from mental health professionals. According to Aizen and Fishbein, an individual's intention (I) to perform a behaviour (B) is the immediate determinant and most accurate predictor of his or her performance of that behaviour (B~I). Intention, in turn, is a function of two basic determinants: attitude toward the behaviour (AB), which represents an individual's general positive or negative evaluation of performing the behaviour, and subjective norm (SN), which represents an individual's general belief that most others who are important to him or her would approve or disapprove of his or her performing the behaviour. For different behaviours, people tend to weight attitude toward the behaviour (W₁) and subjective norm (W₂) differently. Mathematically, the relations between these variables are expressed as follows:

$$B \sim I = W_1 \times AB + W_2 \times SN$$

At a more detailed level, an individual's attitude toward the behaviour is itself determined by his or her beliefs about the outcomes of performing the behaviour (behavioural beliefs, BB) and his or her appraisal of these outcomes as positive or negative (outcome evaluations, OE). Similarly, an individual's subjective norm is determined by his or her beliefs about the approval or disapproval of salient referents, such as family and friends (normative beliefs, NB), and his or her desire to conform to the wishes of these referents (motivations to comply, MC). The full theory of behavioural determinants is represented mathematically as follows:

$B \sim I = W_1 \Sigma (BB \times OE) + W_2 \Sigma (NB \times MC)$

Variables external to the theory (such demographic factors, personality characteristics and attitudes toward objects and people) are viewed as predictive of intention and behaviour only indirectly through the effects they may have on the components of the theory. The theory of reasoned action has received considerable empirical support through its application to various health behaviours (as well as to many other behaviours) since its development [2,49-54]. Furthermore, although the important issue of measuring people's actual help-seeking behaviour is beyond the scope of the present research, many studies have shown that the theory of reasoned action is a reasonably accurate predictor of volitional behaviour [55].

In the present study, the theory of reasoned action is employed to predict the intention to seek help from mental health professionals if one is experiencing a persistent psychosocial problem in one's life. The same methodology, developed by Ajzen and Fishbein and used in previous research with this theory, is used in this research [2,49-55]. While it is hypothesised that the specified relationships between components of the theory will be found in the present context, the main purpose of the study is to identify the critical factors in the intention to seek help. Ajzen [55, pp.206-207] concludes that: 'It is at the level of beliefs that we can learn about the unique factors that induce one person to engage in the behaviour of interest and to prompt another to follow a different course of action.' Use of the theory of reasoned action in this context could provide valuable information for coordinated strategies to enhance provision of professional mental health services and the structuring of public mental health education, focal directions of the Australian National Mental Health Policy [56,57].

Method

Subjects

Subjects were recruited by the first author from the waiting room of a community based general practice operated by a university and located in a middle class outer suburb approximately 13 km from the centre of Adelaide.

Questionnaire construction

Questionnaire construction followed the method described by Ajzen and Fishbein [2]. An initial inde-

pendent sample was first recruited to assess perceived outcomes of seeking help from a mental health professional, and to identify important persons who might influence help-seeking, for inclusion in the final questionnaire. The sample included 20 people, males and females, from a wide age range, different socioeconomic levels and different cultural backgrounds. These subjects were provided with definitions of mental health professionals (psychiatrists, psychologists and social workers) and examples of persistent personal problems appropriate for seeking professional help [58] (e.g. anxiety, depression, feelings of worthlessness, inability to sleep at night, relationship difficulties, hearing voices when there is no-one around, and feeling like committing suicide). The sample listed perceived advantages and disadvantages of seeking help from a mental health professional if they were experiencing a persistent personal problem in their lives (beliefs about the outcomes), followed by any groups or people who would approve or disapprove of their seeking such help (salient referents). On the basis of their responses, the five most commonly mentioned outcomes and the three most frequently mentioned referents were selected for inclusion in the final questionnaire (incorporating 75% of all outcomes and referents elicited [2]). The outcomes were: (i) receiving help; (ii) experiencing acceptance, understanding and confidentiality; (iii) feeling inadequate; (iv) using up a lot of time and money; and (v) dealing with a person who is difficult to relate to. The referents were: (i) family; (ii) friends; and (iii) doctor. These outcomes were incorporated into the final questionnaire as measures of behavioural beliefs and outcome evaluations, and the referents incorporated as measures of normative beliefs and motivations to comply [2]. The questionnaire also included measures of intention to seek help, attitude toward seeking help and subjective norm regarding help-seeking. Seven-point bipolar semantic differential rating scales were used to measure each of the components of the theory. Following the measures of the theory's components were measures of variables considered to be external to the model: gender; age; occupation of self and spouse; attitude toward mental illness; and attitude toward mental health professionals (the latter two variables also measured by 7-point bipolar semantic differential rating scales). Table 1 illustrates measures used in the final questionnaire.

Procedure

All adult persons seated in the waiting room of the medical practice over a period of 3 weekdays from

8.30 am to 8.00 pm were approached by the first author who invited participation in the study, explained its general aims and ensured anonymity of responses.

Responses on each of the 7-point rating scales were scored from +3 (likely, good, wise, and beneficial) through 0 (neither) to -3 (unlikely, bad, foolish, and

Table 1. Illustration of measures in the final questionnaire		
Assessment of main elements of the theory		
Intention I would seek help from a mental health professional if I were experiencing a persistent personal problem in my life.	One scale: likely-unlikely	
Attitude toward the behaviour My seeking help from a mental health professional if I were experiencing a persistent personal problem in my life would be	Three scales: good-bad/harmful- beneficial/wise-foolish	
Behavioural beliefs My seeking help from a mental health professional if I were experiencing a persistent personal problem in my life would result inreceiving help with a persistent personal problemexperiencing acceptance, understanding and confidentialityfeeling inadequateusing up a lot of time and moneydealing with a person who is difficult to relate to.	One scale for each: likely-unlikely	
Outcome evaluations Receiving help with a persistent personal problem is Experiencing acceptance, understanding and confidentiality is Feeling inadequate is Using up a lot of time and money is Dealing with a person who is difficult to relate to is	One scale for each: good-bad	
Subjective norm Most people who are important to me would think that I should seek help from a mental health professional if I were experiencing a persistent personal problem in my life.	One scale: likely-unlikely	
Normative beliefs Most members of my family would think that I should seek help from a mental health professional if I were experiencing a persistent personal problem in my life. Most of my friends would think that I should seek help. My doctor would think that I should seek help.	One scale for each: likely-unlikely	
Motivations to comply Generally speaking I want to do what most members of my family think I should do.	One scale for each: likely-unlikely	
my friends my doctor		
Assessment of external variables		
Attitude toward mental illness Being mentally ill is	Three scales: good-bad/harmful-beneficial/ wise-foolish	
Attitude toward mental health professionals Mental health professionals are	Three scales: good-bad/harmful- beneficial/wise-foolish	
Gender I am : (please tick) male female		
Age My age is		
Socioeconomic status My occupation is My spouse's occupation is		

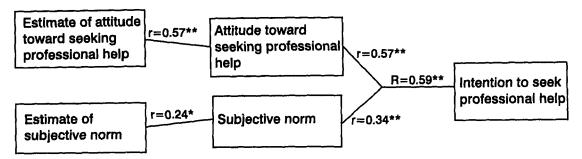


Figure 1. Correlations between the major components of the model. *p<0.01; **p<0.001.

harmful). For variables measured with only one scale (intention, behavioural beliefs, outcome evaluations, normative beliefs and motivations to comply) the subject's score was simply his or her rating on that scale. For attitude toward seeking help from a mental health professional, as well as for two external variables, attitude toward mental health professionals and attitude toward mental illness, a composite score was obtained by summing scores over three component attitude scales. In accordance with the theory's full mathematical equation, belief-based 'estimates' of attitude toward seeking help from a mental health professional were computed by summing the products of each behavioural belief and its associated outcome evaluation for each subject. Likewise, belief-based 'estimates' of subjective norm were computed by summing the product of each normative belief and its associated motivation to comply for each subject [2].

Results

Characteristics of the sample

Of 173 persons invited to participate in the present research, 31 refused (23 females and 8 males), leaving a total of 142 subjects (response rate of 82%). Of the 137 subjects who indicated their gender, 99 (72%) were female and 38 (28%) male. The proportion of males and females who refused to participate did not differ significantly from that of the participants. Age of the participants ranged from 18 to 76 years, with a mean of 39 (SD = 13.7, n = 136). Of the 117 participants who indicated that they and/or their spouse were gainfully employed, 55 participants were classified as high socioeconomic status, 31 as middle socioeconomic status and 31 as low socioeconomic status [59]. Classification was made on the basis of the higher status occupation of the subject or his or her spouse.

Intention

Seventy-seven percent of the 142 subjects indicated that they were likely to seek help from a mental health professional if they were to experience a persistent personal problem in their lives (responses scoring 1–3), 14% were unlikely to seek such help (responses scoring –3 to –1) and 9% were undecided (responses scoring 0).

Direct predictors of intention

Most subjects (90%) had a positive attitude toward seeking help from a mental health professional (scores of +1 to +9 on this composite measure) and most (77%) believed that important others would approve of their seeking such help (scores of +1 to +3). Figure 1 displays correlations between the theory's major components. As predicted, both 'attitude toward the behaviour' and 'subjective norm' were significantly related to intention $(r_{132} = 0.57, p < 0.001 \text{ and } r_{139} = 0.34, p < 0.001,$ respectively). A standard multiple regression illustrated the relative importance of the two independent variables. Taken together, 'attitude toward the behaviour' and 'subjective norm' accounted for 34% of the variance in intention (R = 0.59, $F_{2,127} = 33.13$, p < 0.001). 'Attitude toward the behaviour' was the more important predictor of intention, uniquely contributing 23% $(t_{127} = 6.69, p < 0.001)$ of the 34% accounted for by the two independent variables, while 'subjective norm' offered a unique contribution of only 3% ($t_{127} = 2.25$, p < 0.05). The two independent variables shared 8% of the explained variance in intention.

Belief-based 'estimates' of 'attitude toward the behaviour' and of 'subjective norm'

As predicted, 'attitude toward the behaviour' was significantly related to its estimate based on behavioural beliefs and outcome evaluations ($r_{126} = 0.57$,

p < 0.001), as was intention ($r_{133} = 0.55$, p < 0.001). Similarly, 'subjective norm' was significantly related to its estimate based on normative beliefs and motivations to comply ($r_{137} = 0.24$, p < 0.01). No significant relationship was found between intention and the estimate of 'subjective norm'.

Factors differentiating likely help-seekers and unlikely help-seekers

Differences between likely help-seekers and unlikely help-seekers on individual belief components were examined using a one-way, between-subjects MANOVA.

Table 2. Mean belief ratings and confidence intervals for subjects likely and unlikely to seek professional help

Behavioural beliefs	Likely (n = 102)	Unlikely (n = 18)
Dutcomes		
Receiving help	1.9	-0.3*
· ·	(1.7–2.1)	(-1.2-0.5)
Experiencing acceptance, understanding and confidentiality	2.0	0.5*
	(1.8-2.2)	(-0.4-1.4)
Feeling inadequate	-0.8	0.5
	(-1.10.4)	(-0.3-1.3)
Using up a lot of time and money	1.0	1.1
,	(0.6-1.3)	(0.3–1.9)
Dealing with a person who is difficult to relate to	-1.1	-0.4
	-1.1 (-1.50.8)	(-1.5-0.8)
Evaluation of outcomes		
Receiving help	2.6	1.6*
	(2.4-2.7)	(0.8-2.4)
Experiencing acceptance, understanding and confidentiality	2.8	2.4
Enteriorism general promise of	(2.7-2.9)	(1.9-2.8)
Feeling inadequate		
r comig massquate	(-2.31.8)	(-2.71.6)
Using up a lot of time and money	-0.6	-2.2 (-2.71.6) -1.3
Cally up a lot of time and money	(-0.90.3)	(-2.00.7)
Dealing with a person who is difficult to relate to	_O 8	–1 4
Dealing Will a porson who is almost to rotate to	(-1.10.4)	(-2.00.8)
lormative beliefs		
Approval/disapproval of referents		
Family	1.7	0.4*
•	(1.4-2.0)	(- 0.6-1.5)
Friends	1.5	-0.3*
	(1.2–1.7)	(-1.2-0.6)
Doctor	2.5	1.6*
	(2.3–2.6)	(0.7–2.4)
Motivation to comply with referents		
Family	0.8	0.7
•	(0.4–1.1)	
Friends	0.2	-0.3
	(-0.1-0.5)	(-1.4-0.9)
Doctor	2.0	1.1
	(1.8–2.2)	(0.2–2.0)

Belief ratings ranged from - 3 to + 3. Positive scores indicate likely outcomes, positive evaluation of outcomes, approval of referents and motivation to comply with referents.

^{*}Mean differences are significant at p < 0.005 (Bonferroni type adjustment for inflated Type I error [60]).

Statistically, intention was the independent variable and each of the behavioural beliefs, outcome evaluations, normative beliefs and motivations to comply were dependent variables [60]. Combined, the dependent variables were significantly related to intention as expected ($T^2 = 0.93$, $F_{20.91} = 4.21$, p < 0.001). Table 2 presents the means for likely and unlikely help-seekers on each behavioural belief, outcome evaluation, normative belief and motivation to comply. Univariate ANOVA showed that only two of the five behavioural beliefs significantly differentiated likely from unlikely help-seekers. Likely help-seekers more often believed that they would receive help from a mental health professional and that they would experience acceptance, understanding and confidentiality from mental health professionals than did unlikely help-seekers $(F_{1.110} = 50.38, p < 0.001 \text{ and } F_{1.110} = 22.64, p < 0.001,$ respectively). One outcome evaluation out of five significantly differentiated the likely from the unlikely help-seekers: likely help-seekers rated receiving help more positively than unlikely help-seekers $(F_{1.110} = 17.32, p < 0.001)$. All three normative beliefs significantly differentiated likely from unlikely help-seekers, with likely help-seekers more often believing that family members, friends and their doctor would approve of their seeking help from a mental health professional than did unlikely help seekers $(F_{1,110} = 10.79, p < 0.005, F_{1,110} = 20.89,$ p < 0.001 and $F_{1,110} = 12.36$, p < 0.005, respectively). None of the three motivations to comply significantly differentiated likely from unlikely help-seekers.

External variables and the model

Results indicated that females were more likely than males to intend to seek help from a mental health professional ($\bar{x}_{females} = 1.7$, $\bar{x}_{males} = 0.7$, t = -3.2, df = 135, p < 0.002) as were people with more positive attitudes toward mental health professionals ($r_{127} = 0.19$, p < 0.05). As predicted, when the variance due to 'attitude toward the behaviour' and 'subjective norm' was statistically partialled out, the relationship between each of these external variables and intention was no longer significant. Neither age, socioeconomic status or attitude toward mental illness were related to intention.

Discussion

Overall, the results of this study supported the prediction of intention to seek help from a mental health professional from the variables 'attitude toward the behaviour' and 'subjective norm'. However, attitude was the more important predictor of help-seeking intentions. Subjects in the present study generally had a positive attitude toward seeking help from mental health professionals and believed that most important others would approve of their seeking help. The present results also support previous Australian findings that females are more likely to seek help from a mental health professional than males. Regarding practical constraints, geographical barriers were not mentioned as a salient disadvantage of help-seeking by the initial independent sample, and likely and unlikely help-seekers in the main sample did not differ in their belief that seeking help from a mental health professional would involve using up a lot of time and money, nor in their evaluation of this outcome. Although the present research suggests that financial and travel factors may not be major barriers to the use of professional mental health services in Australia, the results of previous Australian literature on the effects of financial cost on help-seeking are mixed [4,6,7,34,38]. In addition, the present finding that likely and unlikely help-seekers did not differ in their belief that consulting a mental health professional would involve 'dealing with a person who is difficult to relate to' would appear to be inconsistent with Australian literature suggesting cultural barriers to help-seeking [46,47]. Further research targetting a broader range of subjects (e.g. from more geographically remote regions and from various cultural groups) is necessary to clarify these points.

Importantly, the present study found that helpseeking intentions were related to specific positive beliefs about the value of such help. Likely helpseekers believed they would actually be helped by mental health professionals while unlikely helpseekers were uncertain, and likely help-seekers evaluated the receipt of such help more positively than did unlikely help-seekers. Likely help-seekers also believed that they would experience acceptance, understanding and confidentiality from mental health professionals more than did unlikely help-seekers. More generally, intention to seek help from a mental health professional was related to positive attitudes toward mental health professionals themselves. These results are consistent with previous Australian findings that many people who failed to seek professional help when in need believed that a mental health professional could not do anything to help and was inappropriate for their problems, and that people should deal with their own problems or consult friends, family or their general practitioner [4,7,38].

The present study found relatively high intention rates for seeking help from a mental health professional when in need, while previously cited Australian research indicates that relatively few Australians do seek professional help for their psychosocial difficulties. Although it was beyond the scope of this project to assess actual help-seeking behaviour, it appears that there could be a significant discrepancy between people's intentions and actual help-seeking behaviour. Future research should directly investigate this potential intention-behaviour discrepancy and explore possible explanations. For example, people may be reluctant to define themselves as having a problem that warrants professional attention [4,7,13,32,33,35,38,39,41] or may first choose to consult their general practitioner, who may decide to treat the client themselves rather than referring on to psychiatrists, psychologists, etc. [4,7,34,38]. Furthermore, practical constraints of distance, time and money may only be fully appreciated when one is actually faced with a help-seeking deci-

In conclusion, the findings of the present study provide useful information about potentially critical determinants of public help-seeking from professional mental health services in Australia, as well as some insight into factors that may be contributing to the underutilisation of these services. It appears that personal attitudes toward seeking help may be more important than normative social influence in determining people's intentions to seek help from mental health professionals. More specifically, a main factor contributing to Australian intentions may be the belief that mental health professionals are not actually able to provide a great deal of help or support in dealing with one's personal problems. In contrast, financial, time and geographical considerations, which have been seen as important factors in some previous studies, were not found to be significant determinants of intentions to seek help in the present research. These findings indicate that dissemination of clear information on the nature and established benefits of the different types of service provided by mental health professionals may be a most effective means of promoting appropriate use of these services. Channelling limited government and private resources for improving public mental health into easy access, low cost, professional community facilities may not increase appropriate service use, particularly for those with inadequate information about these services. It is important that the limited available resources are directed toward eliminating empirically identified barriers to seeking help from mental health professionals rather than toward hypothesised barriers which may not, in fact, be immediate deterrents to Australians' decisions to seek help.

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References

- Ajzen I, Fishbein M, eds. Understanding attitudes and predicting social behavior. New Jersey: Prentice-Hall, 1980.
- Fishbein M, Ajzen I. Beliefs, attitudes, intentions and behavior: an introduction to theory and research. Reading, MA: Addison-Wesley, 1975.
- Andrews G. The Tolkien report: a description of a model mental health service. Darlinghurst, NSW: Health Services Research Group, 1991.
- Krupinski J, MacKenzie A. The health and social survey of the north west region of Melbourne. Melbourne: Institute of Mental Health Research and Postgraduate Training, 1979.
- Krupinski J, Stoller A, eds. The health of a metropolis: the findings of the Melbourne Metropolitan Health and Social Survey. Melbourne: Heinemann Educational Australia, 1971.
- Krupinski J, Stoller A, Baikie AG, Graves J E. A community health survey of the rural town of Heyfield, Victoria, Australia. Melbourne: Mental Health Authority, 1970.
- Lippman L. Melville evaluated: an experiment in community mental health care. Melbourne: Mental Health Research Institute, Health Commission of Victoria, 1982.
- Sawyer MG, Sarris A, Baghurst PA, Cornish CA, Kalucy RS. The prevalence of emotional and behavioural disorders and patterns of service utilisation in children and adolescents. Australian and New Zealand Journal of Psychiatry 1990; 24:323-330.
- Shiraev N, Armstrong M, eds. Health care survey of Gosford-Wyong and Illawarra 1975. Sydney: Health Commission of New South Wales, Division of Health Services Research, 1978.
- Ingham JG, Rawnsley K, Hughes D. Psychiatric disorder in contrasting areas of South Wales. Psychological Medicine 1972: 2:281-292.
- Kendell RE. The future of Britain's mental hospitals. British Medical Journal 1989; 299:1237-1238.
- Dworkin RJ, Adams GL. Retention of Hispanics in public sector mental health services. Community Mental Health Journal 1987; 23:204-216.
- Garfield SL. Research on client variables in psychotherapy.
 In: Bergin AE, Garfield SL, eds. Handbook of psychotherapy and behavior change. New York: Wiley, 1971:271-295.
- Greenley JR, Mechanic D, Cleary PD. Seeking help for psychological problems: a replication and extension. *Medical* Care 1987: 25:1113-1128.
- Karno M, Edgerton RB. Perception of mental illness in a Mexican-American community. Archives of General Psychiatry 1969; 20:233-238.

- Lorion RP. Patient and therapist variables in the treatment of low income patients. Psychological Bulletin 1974; 81:344-354.
- Rogler LH, Cortes DE. Help-seeking pathways: a unifying concept in mental health care. American Journal of Psychiatry 1993; 150:554-561.
- Rubinstein EA, Lorr M. A comparison of terminators and remainers in outpatient psychotherapy. *Journal of Clinical Psychology* 1956; 12:345-349.
- Sue S, McKinney HL, Allen DB. Predictors of the duration of therapy for clients in the community mental health system. Community Mental Health Journal 1976; 12:365-375.
- Vega WA, Kolody B, Warheit G. Psychoneuroses among Mexican Americans and other Whites: prevalence and caseness. American Journal of Public Health 1985; 75:523-527.
- Vernon CL, D'Augelli AR. Community involvement in prevention programs: the use of a telephone survey for program development. *Journal of Community Psychology* 1987; 15:23-28.
- Vernon SW, Roberts RE. Prevalence of treated and untreated psychiatric disorders in three ethnic groups. Social Science and Medicine 1982; 16:1575-1582.
- Veroff J, Kulka R, Douvan E. Mental health in America. New York: Basic Books, 1981.
- Eisen P. A National mental health services policy: report of the consultancy to advise commonwealth, state and territory health ministers. Canberra: Department of Health and Community Services, 1988.
- Henderson AS. The mental health of Australians: can informative data be found? Australian and New Zealand Journal of Psychiatry 1995; 29:6-13.
- Andrews G, Schonell M, Tennant C. The relation between physical, psychological, and social morbidity in a suburban community. American Journal of Epidemiology 1977; 105:324-329
- Andrews G, Stewart G, Morris-Yates A, Holt P, Henderson S. Evidence for a General Neurotic Syndrome. *British Journal of Psychiatry* 1990; 157:6-12.
- Clayer JR, McFarlane AC, Wright G. Epidemiology by computer. Social Psychiatry and Psychiatric Epidemiology 1992; 27:258-262.
- Henderson S, Duncan-Jones P, Byrne DG, Scott R, Adcock S. Psychiatric disorder in Canberra: a standardised study of prevalence. Acta Psychiatrica Scandinavica 1979; 60:355-374.
- Gary LE. Attitudes of black adults toward community mental health centers. Hospital and Community Psychiatry 1987; 38:1100-1105.
- Gove WR, Howell P. Individual resources and mental hospitalization: a comparison and evaluation of the societal reaction and psychiatric perspectives. American Sociological Review 1974; 39:86-100.
- Hollingshead AB, Redlich FC. Social-class and mental illness. New York: Wiley, 1958.
- Horowitz A. The pathways into psychiatric treatment: some differences between men and women. *Journal of Health and Social Behavior* 1977; 18:169–178.
- Jorm AF, Rosenman SJ, Jacomb PA. Imequalities in the regional distribution of private psychiatric services provided under Medicare. Australian and New Zealand Journal of Psychiatry 1993; 27:630-637.
- Kessler RC, Brown RL, Broman CL. Sex differences in psychiatric help-seeking: evidence from four large-scale surveys. *Journal of Health and Social Behavior* 1981; 22:49-64.
- 36. Leaf PJ, Livingston Bruce M, Tischler GT. The differential

- effect of attitudes on the use of mental health services. Social Psychiatry 1986; 21:187-192.
- McMahon JT. The working class psychiatric patient: a clinical view. In: Riessman F, Cohen J, Pearl A, eds. Mental health of the poor. New York: Free Press, 1964:283-302.
- Parker G, Tracy M, Hadzi-Pavlovic D. Preparedness to accept psychiatric referral. Australian and New Zealand Journal of Psychiatry 1985; 19:299–304.
- Townsend JM. Stereotypes of mental illness: a comparison with ethnic stereotypes. Culture, Medicine and Psychiatry: An International Journal of Comparative Cross-cultural Research 1979; 3:205-229.
- Valdez R. Location of community mental health centers in Texas: some descriptions and comparisons. San Antonio, TX: Intercultural Development Research Association, 1980.
- Anthony WA, Buell GJ. Psychiatric patient demographic characteristics. *Journal of Consulting and Clinical* Psychology 1973; 41:116–119.
- Jaco EG. The social epidemiology of mental disorders: a psychiatric survey of Texas. New York: Russell Sage Foundation, 1960.
- Minas IH, Stuart GW, Klimidis S. Language, culture and psychiatric services: a survey of Victorian clinical staff. Australian and New Zealand Journal of Psychiatry 1994; 28:250-258.
- Rosse RB, Ciolino CP, Gurel L. Utilisation of psychiatric consultation with an elderly medically ill inpatient population in a VA hospital. *Military Medicine* 1986; 151:583-586.
- 45. Saenz J. The value of a humanistic model in serving Hispanic families: critical issues for policy and programs in human services. Washington DC: National Coalition of Hispanic Mental Health and Human Services Organizations, 1978
- Trauer T. Ethnic differences in the utilisation of public psychiatric services in an area of suburban Melbourne.
 Australian and New Zealand Journal of Psychiatry 1995; 29:615-623.
- 47. Wells JE, Robins LN, Bushnell JA, Jarosz D, Oakley-Browne MA. Perceived barriers to care in St. Louis (USA) and Christchurch (NZ): reasons for not seeking professional help for psychological distress. Social Psychiatry and Psychiatric Epidemiology 1994; 29:155-164.
- 48. Gove WR, Tudor JF. Adult sex roles and mental illness. American Journal of Sociology 1973; 78:812-835.
- Davidson AB, Jaccard JJ. Population psychology: a new look at an old problem. *Journal of Personality and Social* Psychology 1975; 31:1073-1082.
- Fishbein M, Ajzen I, McArdle J. Changing the behavior of alcoholics: effects of persuasive communication. In: Ajzen I, Fishbein M, eds. *Understanding attitudes and predicting* social behavior. New Jersey: Prentice-Hall, 1980:217-242.
- Pomazal RJ, Brown JD. Understanding drug use motivation: a new look at a current problem. *Journal of Health and Social Behaviour* 1977; 18:212-222.
- Pomazal RJ, Jaccard JJ. An informational approach to altruistic behaviour. *Journal of Personality and Social Psychology* 1976; 33:317–326.
- Sejwacz D, Ajzen I, Fishbein M. Predicting and understanding weight loss: intentions, behaviors, and outcomes. In:
 Ajzen I, Fishbein M, eds. Understanding attitudes and predicting social behavior. New Jersey: Prentice-Hall, 1980:101-112.
- Vinokur-Kaplan D. To have—or not to have—another child: family planning attitudes, intentions and behavior. *Journal* of Applied Social Psychology 1978; 8:29-46.

- 55. Ajzen I. The theory of planned behavior. Organizational Behavior and Human Decision Processes 1991; 50:179-211.
- 56. Whiteford H. Future directions for mental health services in Australia. Australian Journal of Public Health 1992; 16:350-353.
- 57. Whiteford H, Macleod B, Leitch E. The National Mental Health Policy: implications for public psychiatric services in Australia. Australian and New Zealand Journal of Psychiatry 1993; 27:186-191.
- 58. American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 3rd ed., revised. Washington, DC: Author, 1987.
- 59. Stimson RJ, Cleland EA. A socioeconomic atlas of Adelaide: an analysis of the 1971 census. Adelaide: Flinders University of South Australia, School of Social Sciences and South Australian Department for Community Welfare, 1975.

 60. Tabachnick BG, Fidell LS. Using multivariate statistics. 2nd
- ed. New York: Harper and Row, 1989.