

The associations between psychiatric label use and young people's help-seeking preferences: results from an Australian national survey

M. B. H. Yap*, N. J. Reavley and A. F. Jorm

Orygen Youth Health Research Centre, Centre for Youth Mental Health, University of Melbourne, Melbourne School of Population Health, University of Melbourne, Melbourne, Australia

Aims. Emerging evidence suggests that psychiatric labels may facilitate help seeking in young people. This study examined whether young people's use of accurate labels for five disorders would predict their help-seeking preferences.

Methods. Young people's help-seeking intentions were assessed by a national telephone survey of 3021 Australian youths aged 15–25. Respondents were presented with a vignette of a young person portraying depression, depression with suicidal thoughts, psychosis, social phobia or post-traumatic stress disorder (PTSD). They were then asked what they thought was wrong with the person, and where they would go for help if they had a similar problem.

Results. Accurate psychiatric label use was associated with a preference to seek help from a general practitioner or mental health specialist. Accurately labelling the psychosis vignette was also associated with a preference to not seek help from family or friends.

Conclusions. Findings add to the emerging evidence that accurate psychiatric labelling may facilitate help seeking for various mental disorders in young people, and support the promise of community awareness campaigns designed to improve young people's ability to accurately identify mental disorders.

Received 8 November 2012; Revised 11 January 2013; Accepted 16 January 2013; First published online 25 February 2013

Key words: Anxiety, depression, psychosis, recognition, treatment.

Introduction

Half of all lifetime case-level mental disorders have their first onset by age 14 and three-quarters by age 24 (Kessler *et al.* 2005). Moreover, mental disorders have been found to be the largest contributors to disability in young people (Mathews *et al.* 2011). In particular, the long-term sequelae of mental disorders are often exacerbated by delayed help seeking or the lack thereof (Harris *et al.* 2005; de Girolamo *et al.* 2012; Thornicroft, 2012). Strategies to promote appropriate and earlier help seeking by young people are clearly and urgently needed.

The ability to label or identify a mental disorder accurately is one factor that has been found to influence help seeking by young people. Indeed, labelling a mental disorder as it emerges is believed to be an important part of the process of help seeking (Vogel *et al.* 2006; Biddle *et al.* 2007). Labelling is defined

here as 'the lay use of unprompted terms or descriptors to characterize the symptoms of a mental disorder being experienced by a hypothetical or actual person' (Wright *et al.* 2012, p. 917). The use of psychiatric terms by the public to label mental disorders has been the subject of continuing debate (Read *et al.* 2006, 2009; Jorm & Griffiths, 2008), mainly due to concerns that labelling may fuel stigma (Scheff, 1966; Gove, 1975; Link *et al.* 1989; Jorm & Griffiths, 2008). For instance, evidence indicates that the use of psychiatric labels by the public (Penn & Nowlin-Drummond, 2001; Angermeyer & Matschinger, 2005; Rose & Thornicroft, 2010), including young people (Rose *et al.* 2007), can have a stigmatizing impact.

Nonetheless, the importance of labelling has been highlighted in an emerging body of evidence. For instance, a study of an Australian clinical sample revealed that the time taken to recognize the problem as being related to anxiety or depression accounted for the majority of the total delay in seeking treatment (Thompson *et al.* 2008). In addition, findings from a study of young people presenting to general practitioners (GPs) revealed that young people's ability to accurately identify their problems as a mental health

* Address for correspondence: Dr M. Yap, Population Mental Health Group, Melbourne School of Population Health, Level 3, 207 Bouverie Street, Victoria 3010, Australia.
(Email: m.yap@unimelb.edu.au)

problem of some kind was associated with their GP's accurate identification of their problem (Haller *et al.* 2009). While preliminary, these findings suggest the promise of improving accurate psychiatric labelling to decrease the delay in treatment seeking by young people, and increase the chances of accurate diagnosis and appropriate treatment when young people do present to health services.

Relatedly, two vignette-based studies of young people have directly examined the association between labelling and help-seeking preferences. The first study found that accurate labelling of depression and psychosis predicted the choice of various forms of appropriate help or treatment for the person described in a vignette (Wright *et al.* 2007). Building on these findings, the second study (Wright *et al.* 2012) examined the association between labelling and unprompted help-seeking preferences for oneself, as opposed to a fictional character in a vignette. It also examined whether the accurate label is more effective in facilitating help seeking than other more common lay terms; e.g. 'depression' *v.* 'stress'. Examining these associations in three vignettes: depression, psychosis and social phobia; this study found that the use of the accurate label predicted a preference for recommended sources of help more consistently than other common lay terms. These findings are largely consistent with those of studies with adults (Angermeyer *et al.* 2009; Rüsche *et al.* 2012).

The current study sought to replicate and extend the recent study by Wright *et al.* (2012), using data from a 2011 national survey of Australian young people aged 15–25 years. In particular, it included five different vignettes, namely depression, depression with suicidal thoughts, psychosis, social phobia and post-traumatic stress disorder (PTSD). This is the first study of its kind to examine these associations for depression with suicidal thoughts and PTSD in young people. Including the former is of particular interest given its crisis nature and the urgency of appropriate treatment, especially because suicide is such a major public health concern in young people (Hawton *et al.* 2012; Varnik, 2012). Including the latter builds the scarce literature on the community's knowledge and actions with regard to anxiety disorders in general and to PTSD specifically, given that it has the highest prevalence among the anxiety disorders across all age groups in Australia (Slade *et al.* 2009).

Hence, the aim of this study was to examine whether accurate psychiatric labelling of disorders in the five abovementioned vignettes is associated with intentions or preferences to seek help from various sources, after controlling for socio-demographic variables known to be associated with help seeking in young people, including age (Rickwood *et al.* 2005;

Jorm *et al.* 2007), sex (Rickwood *et al.* 2005) and ethnicity (Zwaanswijk *et al.* 2003; Hsu & Alden, 2008). In particular, in order to capture a more realistic snapshot of young people's real-life experience, we focused on the sources of help most commonly and spontaneously nominated by young people, as opposed to expert-recommended forms of treatment or prompted beliefs about treatment. In addition, like Wright *et al.* (2012), we focused on young people's unprompted labels of the vignettes described, but given that their study found accurate labels to be the most consistent predictors of help-seeking, we examined only accurate labels in this study.

Methods

Participants

The survey involved computer-assisted telephone interviews with 3021 young people aged 15–25 years. The survey was carried out by the survey company Social Research Centre using random-digit dialling of both landlines and mobile phones covering the whole of Australia from January to May 2011. Up to six calls were made to establish contact. The response rate was 47.9%, defined as completed interviews (3021) out of sample members who could be contacted and were confirmed as in scope (6306). Interviewers ascertained whether there were residents in the household within the age range and, if there were multiple, selected one for interview using the nearest-birthday method.

Survey questions

The interview was based on a case vignette of a young person (John or Jenny) with a mental disorder. On a random basis, respondents were read one of six vignettes – depression, depression with suicidal thoughts, depression with alcohol abuse, social phobia, PTSD or psychosis (early schizophrenia) – portraying a person aged 15 years (for participants aged 15–17 years) or 21 years (for participants aged 18–25 years) of the same sex as the respondent (Reavley & Jorm, 2011).

All respondents were then asked a series of questions that assessed socio-demographic characteristics, mental health literacy, stigma, exposure to mental disorders, beliefs about interventions and prevention for the mental disorder in the vignette, psychological distress (using the K6 screening scale; Kessler *et al.* 2002) and exposure to mental health organizations and media campaigns.

The present paper focuses on labelling of the disorder in the vignette and help-seeking preferences if the respondent had a similar problem to the vignette

character, so these are described in detail here. The depression with alcohol abuse vignette was not included in this paper because it comprises two comorbid disorders, whereas each of the other five vignettes of interest in this paper represents a single diagnostic group.

Recognition of the disorder portrayed in the vignette

Young people were asked: 'What, if anything, do you think is wrong with John/Jenny?' Interviewers recorded verbatim responses according to pre-coded response categories (depression, schizophrenia, psychosis, mental illness, stress, nervous breakdown, psychological/mental/emotional problem, has a problem, cancer, nothing, don't know) derived from a content analysis of responses to the same questions in earlier surveys (Jorm *et al.* 1997; Wright *et al.* 2005). A content analysis of responses that did not fit these pre-coded categories led to post-coding of 53 other categories, which have been detailed elsewhere (Reavley & Jorm, 2011; Yap *et al.* 2012). The content analysis involved a systematic analysis of the content of the responses to determine the respondents' intended meaning with regards to the type of problem identified. For example, a response such as 'anxiety disorder, self esteem problem' would have been coded '1' for the two categories 'anxiety disorder' and 'self-esteem'. Of interest for this paper, the post-coded categories included the most accurate responses for the anxiety disorder vignettes: anxiety/anxious, social anxiety/social phobia/anxiety disorder, post-traumatic stress/stress disorder/syndrome and trauma/traumatized/adverse life event. Accurate labelling was defined as those labels that approximated the DSM-IV diagnostic label (American Psychiatric Association, 1994) upon which the vignettes were based and validated (Jorm *et al.* 1997; Wright *et al.* 2005). However, given the low rates of using the exact DSM-IV labels 'social phobia' and 'post-traumatic stress disorder', we expanded our definition of 'accurate' label for social phobia to include any mention of anxiety, anxious, social anxiety/phobia and anxiety disorder; and for PTSD, any mention of post-traumatic stress/stress disorder/syndrome, trauma, traumatized and adverse life event. 'Depression' or 'depressed' were the only accurate labels accepted for both depression vignettes. Mentions of psychosis/psychotic, schizophrenia/schizophrenic were accepted as accurate labels for the psychosis vignette.

Help-seeking preferences

Young people were asked: 'If you had a problem right now like (John/Jenny), where would you go?'

Verbatim-recorded responses were coded based on categories identified from the 2006 survey (Jorm *et al.* 2007), with additional categories formed that were relevant to the different mental disorders studied. Responses were coded with a 'yes' or 'no' in each category, so that multiple categories were possible. Categories included family, such as parents, spouse or relative, general practitioner (GP)/doctor, mental health specialist/service (including psychologist, psychiatrist, other mental health professionals and local mental health service), counsellor, helpline, teacher/lecturer and friend.

Statistical analysis

The data were first analysed using per cent frequencies and 95% confidence intervals (CI). We then conducted binary logistic regressions to explore whether accurate psychiatric labelling of the disorder predicted preferences to seek help from various sources, separately for each vignette. All regressions controlled for age in years, sex and language spoken at home. In each regression, the source of help was the dichotomous dependent variable, and all predictor variables (the three covariates and the accurate label) were entered simultaneously. Age in years was a continuous variable; whereas sex (reference: males), language spoken at home (reference: speaks a language other than English) and use of the accurate psychiatric label (reference: did not use accurate label) were dichotomous.

All analyses used sample weights that took account of number of in-scope persons in the household, phone type, age group, sex and geographic location, and were conducted using Intercooled Stata 12 (StataCorp, 2011). The $p < 0.05$ significance level was used.

Ethics

Oral consent was obtained from all respondents before commencing the interview. Respondents aged below 18 could only commence their interviews after their parents provided oral consent. This study was approved by the University of Melbourne Human Research Ethics Committee.

Results

The 3021 respondents were randomly assigned to one of six vignettes as follows: 506 to depression, 502 to depression with suicidal thoughts, 499 to depression with alcohol abuse, 507 to social phobia, 506 to PTSD and 501 to psychosis.

Figure 1 shows the per cent frequencies and standard errors of young people who reported that they

would seek help from the five most frequently mentioned sources: GP, counsellor, mental health specialist/service, family and friend, separately for each vignette and divided by age group (15–17 v. 18–25 years). Family was the most commonly mentioned source of help especially for younger respondents. GP was the most frequently mentioned source of professional help especially by older respondents. Differences between age groups were largest for the preference to seek from family (more younger respondents) and GPs (more older respondents). Table 1 shows the descriptive statistics for all covariates and predictor variables. Accurate labelling of depression had the highest rates, especially when suicidal thoughts were present, followed by PTSD, psychosis and social phobia.

To limit the number of logistic regressions conducted, help-seeking preferences were examined only for the five most commonly mentioned sources. This resulted in a total of 25 regressions (five vignettes by five sources). Table 2 summarizes findings from these regressions, adjusted for age in years, sex and language spoken at home. The use of the accurate psychiatric label for depression with suicidal thoughts, social phobia and PTSD predicted a preference to seek help from a GP. Accurate psychiatric labelling of psychosis and PTSD predicted a preference to seek help from a mental health specialist, while for psychosis it also predicted a preference for not seeking help from family or friends.

Discussion

This study contributes to the emerging evidence base that accurate psychiatric labelling of mental disorders may facilitate professional help seeking in young people. Findings largely replicate those reported by Wright *et al.* (2012), but provide an important extension by examining two new vignettes, PTSD and depression with suicidal thoughts.

Accuracy of labelling

The accuracy of labelling by young people in the current study varied greatly between disorders. In particular, when suicidality was evident, most young people were able to accurately label the problem described in the vignette as depression. Even when suicidality is not mentioned, almost three in four young people could accurately identify the problem as depression. In contrast, the accuracy of labelling social phobia was much lower, despite it being one of the most common disorders in this age group (Australian Bureau of Statistics, 2007), and the broadening of the definition of an accurate label for this disorder to include any mention of ‘anxiety’ or ‘anxious’. Likewise, despite it being the most common anxiety disorder (Slade *et al.* 2009) and its broadened definition to include any mention of trauma or adverse life event, only half of the sample could identify PTSD. The accuracy of labelling psychosis was also low, comparable with an earlier survey of Australian youth (Wright &

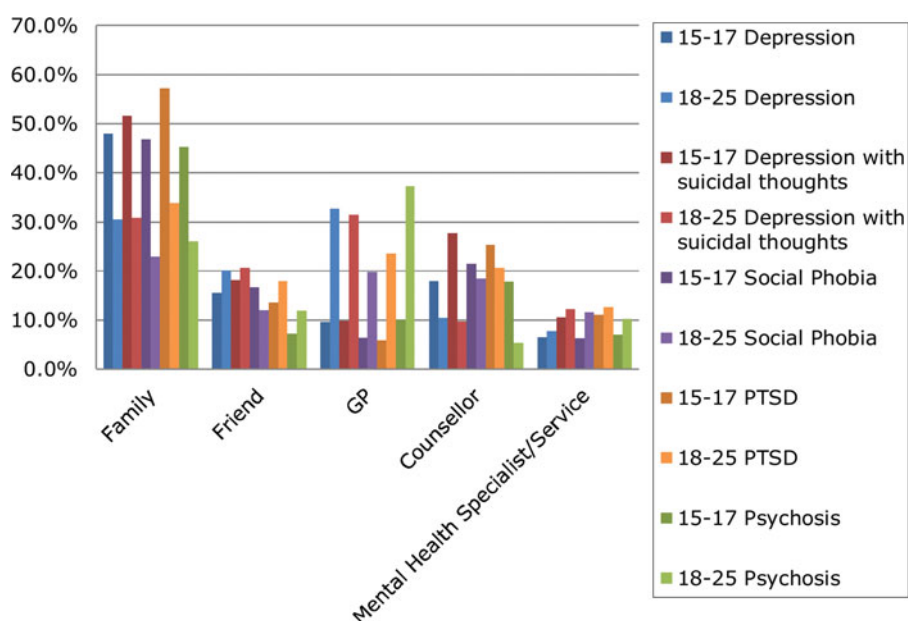


Fig. 1. Per cent frequencies of young people who reported the intention to seek help from various sources for each vignette and age group (15–17 v. 18–25 years). GP = general practitioner or local doctor; PTSD = post-traumatic stress disorder. (A colour version of this figure is available online at <http://journals.cambridge.org/eps>)

Table 1. Descriptive statistics for all covariates and predictor variables

Covariates (N = 3021)	% 95%	
	Freq	CI
Female	50.31	48.38 52.24
Adolescents aged 15–17 years*	25.19	23.51 26.87
Young adults aged 18–25 years*	74.81	73.13 76.49
Speaks English at home	77.11	75.47 78.74
Use of accurate psychiatric labels		
Depression vignette (n = 506)	73.68	69.41 77.95
Depression with suicidal thoughts vignette (n = 502)	83.56	79.91 87.20
Social phobia vignette (n = 507)	29.35	25.02 33.69
Post-traumatic stress disorder vignette (n = 506)	50.54	45.84 55.24
Psychosis vignette (n = 501)	37.00	32.39 41.61

*In regression analyses, age in years is used as a continuous variable; but for simplicity age is presented here as two groups. % Freq = per cent frequency; CI = confidence interval.

Jorm, 2009). It is noteworthy that *beyondblue*: Australia's national depression initiative, which was established in 2000 to address issues associated with depression, anxiety and related disorders across Australia (*Beyondblue*), had initially focused on promoting awareness and an effective response to depression in the community. It was only in more recent years that it has increased its efforts targeting anxiety disorders. Given evidence to-date suggesting that *beyondblue* may have promising effects on improving the mental health literacy of young people (Wright & Jorm, 2009; Yap *et al.* 2012; Yap *et al.* in press), it is possible that there may be some improvement in the recognition of anxiety disorders in the near future.

Labelling and help seeking for depression

In contrast to Wright *et al.*'s (2012) finding that accurate labelling of depression predicted a preference to seek help from a counsellor, the current study found that accurate labelling was not associated with the intentions of young people to seek help from any of the five most common sources. Nonetheless, the association between accurate labelling and preference to seek help from a counsellor approached significance. The proportion of respondents who accurately labelled depression in the current study was larger compared with that in Wright *et al.*'s (2012) study (74 *v.* 69%). This may be because the current study did not include younger respondents aged 12–14 years, who tend to have lower rates of accurate labelling of mental disorders (Wright & Jorm, 2009). Hence the

higher recognition rate in the current study may have reduced power to detect significant associations.

Labelling and help seeking for depression with suicidal thoughts

Respondents who accurately labelled the problem described in the depression with suicidal thoughts vignette as 'depression' were more likely to report a preference for seeking help from a GP if they had a similar problem. Given its crisis nature, it is promising to note that improving young people's ability to correctly identify the problem may facilitate appropriate help seeking, especially since Australia's system of primary care for mental disorders is based around GPs as the first point of contact, with referrals to mental health specialists as required. For the same reason, it is crucial that GPs are provided with adequate training and support to identify such problems in their patients so as to facilitate prompt and appropriate treatment. For example, the action of assessing for suicide risk has been endorsed as helpful by professionals (Jorm *et al.* 2008) and recommended in existing training programs like Mental Health First Aid (Kitchener & Jorm, 2006) and Applied Suicide Intervention Skills Training (ASIST; Ramsay *et al.* 1999).

Labelling and help seeking for psychosis

Our findings involving the psychosis vignette concurred with those of Wright *et al.* (2012). Respondents who used the labels 'psychosis', 'psychotic', 'schizophrenia' or 'schizophrenic' were more likely to report an intention to seek help from a mental health specialist. This is again promising given the severity of this disorder and the devastating consequences of a longer duration of untreated psychosis (Marshall *et al.* 2005; Perkins *et al.* 2005), suggesting that improving young people's ability to correctly identify early psychosis may facilitate earlier professional help seeking. Conversely, respondents who used the accurate label for this vignette were less likely to report the intention to seek help from their family or friends. This may reflect young people's recognition of the severity of the illness and hence their perception that family and friends might be unable to help or might react negatively to their symptoms (Jorm *et al.* 2007; Yap *et al.*, in press).

Labelling and help seeking for social phobia

Respondents who correctly identified the vignette character as having some form of anxiety problems were more likely to report an intention to seek help from a GP if they had a similar problem, consistent with earlier findings (Wright *et al.* 2012). However, unlike the earlier study, we did not find an association between accurate

Table 2. Summary of logistic regressions predicting intentions to seek help from various sources with the use of accurate psychiatric labels, separately for each vignette

	Odds ratio	95% CI		<i>p</i>
<i>Depression</i>				
Family	1.07	0.65	1.75	0.801
Friend	0.87	0.47	1.60	0.654
General practitioner/doctor	1.33	0.74	2.38	0.340
Counsellor	2.02	0.93	4.42	0.078
Mental health specialist/service	2.08	0.80	5.42	0.136
<i>Depression with suicidal thoughts</i>				
Family	1.00	0.55	1.81	0.990
Friend	0.84	0.42	1.65	0.607
General practitioner/doctor	2.64	1.08	6.43	0.032
Counsellor	0.81	0.35	1.89	0.625
Mental health specialist/service	1.97	0.84	4.60	0.119
<i>Psychosis</i>				
Family	0.55	0.35	0.86	0.009
Friend	0.43	0.20	0.91	0.028
General practitioner/doctor	1.42	0.90	2.24	0.128
Counsellor	0.78	0.38	1.60	0.491
Mental health specialist/service	2.78	1.41	5.50	0.003
<i>Social Phobia</i>				
Family	0.69	0.42	1.13	0.144
Friend	1.27	0.71	2.28	0.422
General practitioner/doctor	2.26	1.28	3.99	0.005
Counsellor	1.13	0.66	1.91	0.659
Mental health specialist/service	1.17	0.59	2.35	0.653
<i>Post-traumatic stress disorder</i>				
Family	0.86	0.58	1.27	0.438
Friend	1.01	0.61	1.67	0.972
General practitioner/doctor	2.16	1.29	3.64	0.004
Counsellor	0.87	0.54	1.40	0.567
Mental health specialist/service	2.21	1.21	4.03	0.009

Note. All regression models were adjusted for age in years, sex and language spoken at home. Findings significant at the $p < 0.05$ level are shown in bold and italics.

CI = confidence interval.

labelling and preference to seek help from a mental health specialist. The finding that accurate labelling may facilitate professional help-seeking is important given that social phobia has one of the lowest rates of professional help-seeking intentions in young people compared to other disorders (Jorm *et al.* 2007), despite its high prevalence (Slade *et al.* 2009).

Labelling and help seeking for PTSD

Accurate labelling of PTSD was associated with a preference to seek help from GPs as well as mental health specialists. This is the first study to examine this association in PTSD, and suggests that accurate identification of this disorder may indeed facilitate professional help seeking by young people. Given the high prevalence of PTSD (Slade *et al.* 2009) and high rates of exposure

to potentially traumatic events in young people (Mills *et al.* 2010), the current findings underscore the importance and potential of improving young people's ability to accurately identify PTSD as a mental disorder.

Strengths and limitations

This national survey is the first of its kind to examine the mental health literacy of young people with regard to depression with suicidal thoughts and PTSD. Findings contribute to our limited knowledge about the associations between young people's ability to accurately label mental disorders and their help-seeking preferences.

Nonetheless, its findings should be interpreted in light of the study limitations. Firstly, we only assessed help-seeking intentions with reference to a vignette character; hence, it is unclear how closely these reflect

actual experience or behaviours. Relatedly, it was not possible to assess whether the self-reported intentions accurately reflect the respondents' actual behaviours if they do develop mental health problems. Nonetheless, a recent report found that young people's help-seeking intentions did prospectively predict some of their actual help-seeking behaviours two years later (Reavley *et al.* 2011). In particular, the intention to seek help from a GP prospectively predicted such help-seeking behaviours in the subsequent two years for mental health problems. These findings are consistent with the theory of planned behaviour (Ajzen, 1991) which has garnered much supporting evidence indicating that changing behavioural intentions has the potential to engender behavioural change (Armitage & Conner, 2001; Webb & Sheeran, 2006).

Implications and conclusions

Findings from this study add to emerging evidence that the use of accurate psychiatric labels to describe mental disorders is associated with young people's professional help-seeking preferences. This body of evidence provides support for the potential of community awareness campaigns, designed to improve young people's ability to accurately label mental disorders, to enhance professional help seeking for such problems. In particular, this evidence is complemented by related evidence to-date indicating the promising effects of community awareness campaigns such as those conducted by *beyondblue* to improve the community's general literacy about mental health, including the ability to accurately label mental disorders (Wright & Jorm, 2009; Yap *et al.* 2012). Such campaigns have involved multiple channels, including promotional efforts through schools, the Internet, television advertisements and billboards (*Beyondblue: The National Depression Initiative*). Nonetheless, such community education efforts need to take into consideration findings of associations between accurate labelling and some stigmatizing attitudes (e.g. psychosis and beliefs about dangerousness or unpredictability; Wright *et al.* 2011), and address them accordingly.

Financial Support

This research received no specific grant from any funding agency, commercial or not-for-profit sectors.

Conflict of Interest

Funding for this study was provided by the Department of Health and Ageing and the National Health and Medical Research Council. The authors declare no conflict of interests related to the present paper.

Ethical Standard

The authors assert that all procedures contributing to this work comply with the ethical standards of the relevant national and institutional committees on human experimentation and with the Helsinki Declaration of 1975, as revised in 2008.

References

- Ajzen I (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes* 50, 179–211.
- American Psychiatric Association (1994). *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*, 4th edn. American Psychiatric Association: Washington, DC.
- Angermeyer M, Matschinger H (2005). Labeling – stereotype – discrimination – an investigation of the stigma process. *Social Psychiatry and Psychiatric Epidemiology* 40, 391–395.
- Angermeyer MC, Holzinger A, Matschinger H (2009). Mental health literacy and attitude towards people with mental illness: a trend analysis based on population surveys in the eastern part of Germany. *European Psychiatry* 24, 225–232.
- Armitage CJ, Conner M (2001). Efficacy of the theory of planned behaviour: a meta-analytic review. *British Journal of Social Psychology* 40, 471–499.
- Australian Bureau of Statistics (2007). National survey of mental health and wellbeing: summary of results. Catalogue no. 4326.0. Australian Bureau of Statistics: Canberra. Retrieved 16 January 2013 from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/mf/4326.0>.
- Beyondblue: The National Depression Initiative. Retrieved 16 January 2013 from <http://www.beyondblue.org.au>.
- Biddle L, Donovan J, Sharp D, Gunnell D (2007). Explaining non-help-seeking amongst young adults with mental distress: a dynamic interpretive model of illness behaviour. *Sociology of Health Illness* 29, 983–1002.
- De Girolamo G, Dagani J, Purcell R, Cocchi A, Mcgorry PD (2012). Age of onset of mental disorders and use of mental health services: needs, opportunities and obstacles. *Epidemiology and Psychiatric Sciences* 21, 47–57.
- Gove WR (1975). The labeling theory of mental illness: a reply to Scheff. *American Sociological Review* 40, 242–248.
- Haller DM, Sancil LA, Sawyer SM, Patton GC (2009). The identification of young people's emotional distress: a study in primary care. *British Journal of General Practice* 59, 159–165.
- Harris MG, Henry LP, Harrigan SM, Purcell R, Schwartz OS, Farrelly SE, Prosser AL, Jackson HJ, Mcgorry PD (2005). The relationship between duration of untreated psychosis and outcome: an eight-year prospective study. *Schizophrenia Research* 79, 85–93.
- Hawton K, Saunders KEA, O'connor RC (2012). Self-harm and suicide in adolescents. *Lancet* 379, 2373–2382.
- Hsu L, Alden LE (2008). Cultural influences on willingness to seek treatment for social anxiety in Chinese and European heritage students. *Cultural Diversity and Ethnic Minority Psychology* 14, 215–223.

- Jorm AF, Griffiths KM** (2008). The public's stigmatizing attitudes towards people with mental disorders: how important are biomedical conceptualizations? *Acta Psychiatrica Scandinavica* **118**, 315–321.
- Jorm AF, Korten AE, Jacomb PA, Christensen H, Rodgers B, Pollitt P** (1997). Public beliefs about causes and risk factors for depression and schizophrenia. *Social Psychiatry and Psychiatric Epidemiology* **32**, 143–148.
- Jorm AF, Wright A, Morgan AJ** (2007). Where to seek help for a mental disorder? National survey of the beliefs of Australian youth and their parents. *Medical Journal of Australia* **187**, 556–560.
- Jorm AF, Morgan AJ, Wright A** (2008). First aid strategies that are helpful to young people developing a mental disorder: beliefs of health professionals compared to young people and parents. *BMC Psychiatry* **8**, 42.
- Kessler RC, Andrews G, Colpe LJ, Hiripi E, Mroczek DK, Normand LT, Walters EE, Zaslavsky AM** (2002). Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicine* **32**, 959–976.
- Kessler RC, Berglund P, Demler O, Jin R, Merikangas KR, Walters EE** (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry* **62**, 593–602.
- Kitchener B, Jorm A** (2006). Mental health first aid training: review of evaluation studies. *Australian & New Zealand Journal of Psychiatry* **40**, 6–8.
- Link B, Cullen F, Struening E, Shrout P, Dohrenwend B** (1989). A modified labeling theory approach to mental disorders: an empirical assessment. *American Sociological Review* **54**, 400–423.
- Marshall M, Lewis S, Lockwood A, Drake R, Jones P, Croudace T** (2005). Association between duration of untreated psychosis and outcome in cohorts of first-episode patients: a systematic review. *Archives of General Psychiatry* **62**, 975–983.
- Mathews RR, Hall WD, Vos T, Patton GC, Degenhardt L** (2011). What are the major drivers of prevalent disability burden in young Australians? *Medical Journal of Australia* **194**, 232–235.
- Mills KL, Mcfarlane AC, Slade T, Creamer M, Silove D, Teesson M, Bryant R** (2010). Assessing the prevalence of trauma exposure in epidemiological surveys. *Australian & New Zealand Journal of Psychiatry* **45**, 407–415.
- Penn DL, Nowlin-Drummond A** (2001). Politically correct labels and schizophrenia: a rose by any other name? *Schizophrenia Bulletin* **27**, 197–203.
- Perkins DO, Gu H, Boteva K, Lieberman JA** (2005). Relationship between duration of untreated psychosis and outcome in first-episode schizophrenia: a critical review and meta-analysis. *American Journal of Psychiatry* **162**, 1785–1804.
- Ramsay R, Tanney B, Tierney R, Lang W** (1999). *ASIST (Applied Suicide Intervention Skills Training) Trainers' Manual*. LivingWorks Education: Calgary.
- Read J, Haslam N, Sayce L, Davies E** (2006). Prejudice and schizophrenia: a review of the 'mental illness is an illness like any other' approach. *Acta Psychiatrica Scandinavica* **114**, 303–318.
- Read J, Haslam N, Davies E** (2009). The need to rely on evidence not ideology in stigma research. *Acta Psychiatrica Scandinavica* **119**, 412–413.
- Reavley NJ, Jorm AF** (2011). Young people's recognition of mental disorders and beliefs about treatment and outcome: findings from an Australian national survey. *Australian and New Zealand Journal of Psychiatry* **45**, 890–898.
- Reavley NJ, Yap MBH, Wright A, Jorm AF** (2011). Actions taken by young people to deal with mental disorders: findings from an Australian national survey of youth. *Early Intervention in Psychiatry* **5**, 335–342.
- Rickwood D, Deane FP, Wilson CJ, Ciarrochi J** (2005). Young people's help-seeking for mental health problems. *Australian e-Journal for the Advancement of Mental Health* **4**, (Suppl.), 218–251.
- Rose D, Thornicroft G** (2010). Service user perspectives on the impact of a mental illness diagnosis. *Epidemiologia e Psichiatria Sociale* **19**, 140–147.
- Rose D, Thornicroft G, Pinfold V, Kassam A** (2007). 250 labels used to stigmatise people with mental illness. *BMC Health Services Research* **7**, 97.
- Rüsch N, Evans-Lacko S, Thornicroft G** (2012). What is a mental illness? Public views and their effects on attitudes and disclosure. *Australian and New Zealand Journal of Psychiatry* **46**, 641–650.
- Scheff TJ** (1966). *Being Mentally Ill*. Aldine Publishing Company: Chicago.
- Slade T, Johnston A, Oakley Browne MA, Andrews G, Whiteford H** (2009). 2007 National survey of mental health and wellbeing: methods and key findings. *Australian & New Zealand Journal of Psychiatry* **43**, 594–605.
- Statacorp** (2011). *Stata Statistical Software: Release 12*. StataCorp LP: College Station, TX.
- Thompson A, Issakidis C, Hunt C** (2008). Delay to seek treatment for anxiety and mood disorders in an Australian clinical sample. *Behavior Change* **25**, 71–84.
- Thornicroft G** (2012). No time to lose: onset and treatment delay for mental disorders. *Epidemiology and Psychiatric Sciences* **21**, 59–61.
- Varnik P** (2012). Suicide in the world. *International Journal of Environmental Research and Public Health* **9**, 760–771.
- Vogel DL, Wester SR, Larson LM, Wade NG** (2006). An information-processing model of the decision to seek professional help. *Professional Psychology – Research and Practice* **37**, 398–406.
- Webb TL, Sheeran P** (2006). Does changing behavioral intentions engender behavior change? A meta-analysis of the experimental evidence. *Psychological Bulletin* **132**, 249–268.
- Wright A, Jorm AF** (2009). Labels used by young people to describe mental disorders: factors associated with their development. *Australian and New Zealand Journal of Psychiatry* **43**, 946–955.
- Wright A, Harris MG, Wiggers JH, Jorm AF, Cotton SM, Harrigan SM, Hurworth RE, McGorry PD** (2005). Recognition of depression and psychosis by young

- Australians and their beliefs about treatment. *Medical Journal of Australia* **183**, 143–143.
- Wright A, Jorm AF, Harris MG, McGorry PD** (2007). What's in a name? Is accurate recognition and labeling of mental disorders by young people associated with better help-seeking and treatment preferences? *Social Psychiatry and Psychiatric Epidemiology* **42**, 244–250.
- Wright A, Jorm AF, Mackinnon AJ** (2011). Labeling of mental disorders and stigma in young people. *Social Science and Medicine* **73**, 498–506.
- Wright A, Jorm A, Mackinnon A** (2012). Labels used by young people to describe mental disorders: which ones predict effective help-seeking choices? *Social Psychiatry and Psychiatric Epidemiology* **47**, 917–926.
- Yap MB, Reavley NJ, Jorm AF** (2012). Associations between awareness of beyondblue and mental health literacy in Australian youth: results from a national survey. *Australian and New Zealand Journal of Psychiatry* **46**, 541–552.
- Yap MBH, Reavley N, Jorm AF** (in press). Where would young people seek help for mental disorders and what stops them? Findings from an Australian national survey. *Journal of Affective Disorders*. DOI: <http://dx.doi.org/10.1016/j.jad.2012.11.014>.
- Zwaanswijk M, Verhaak PFM, Bensing JM, Van Der Ende J, Verhulst FC** (2003). Help seeking for emotional and behavioural problems in children and adolescents—a review of recent literature. *European Child & Adolescent Psychiatry* **12**, 153–161.