Preventative Therapeutics: A Study of Risk and Prevention in Australian Mental Health

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Abstract

This study investigates the preventative therapeutics of two major Australian mental health organisations – beyondblue and The Black Dog Institute. The aim of this study is to examine how the resilience-based programs of both organisations reconfigure clinical and preventative expertise into new forms of 'anticipatory action' (Anderson 2010). First, this article situates beyondblue and the Black Dog Institute within their historical contexts to consider how issues of risk and protection have become essential to mental health care today. Second, it examines the institutional practices of beyondblue and the Black Dog Institute and the role of clinical and preventative expertise as enacted forms of authority. Finally, this study investigates the intellectual and biokeeping technologies promoted through both organisations' resilience-based pedagogies. The view taken in this study is that such technologies actively participate in the making of new therapeutic cultures and practices. Moreover, as biomarkers continue to act as indicators of future states of 'unhealth' (Dumit 2012: 112), biokeeping technologies will continue to act as essential elements in the governmentality of mental health and wellbeing.

Keywords: Risk, prevention, mental health, pedagogy, governmentality, beyondblue, the Black Dog Institute

Introduction

Preventative therapeutics is a common feature today of mental health policy and practice.¹ Whether through campaigns that promote depression literacy, or resilience-building programs that target the at-risk, these initiatives are all informed by concerns diversely related to the prevention of illness. What sets these programs apart is that they all take action against different kinds of mental health risk. To borrow an idea from Ben Anderson, these programs are 'anticipatory' – they problematise the future in particular ways, transforming potential threats into present concerns and action (2010: 777).

This study considers how notions of risk and protection have become essential to mental health therapeutics today. To focus the study, two leading Australian mental health organisations – beyondblue and the Black Dog Institute – are examined to illustrate the ways in which clinical and preventative expertise have been taken up and redeployed in new modes of risk pre-emption, risk mitigation, and risk management.

Such practices can all be considered anticipatory, because they each anticipate potential futures and mobilise certain measures to address them. The term preventative therapeutics is used here to indicate the emergence of new forms of anticipatory action whereby future health threats are anticipated and acted upon through measures typically considered therapeutic. It thus denotes a new kind of rationalisation of risk – one in which risks are treated as signs of illness themselves (Dumit 2012). Crucially, the ways in which risks are problematised impacts the design of the interventions themselves—from those that seek to pre-empt a disorder before its onset, to those that address complications during and after its eventuation.

As this article will show, discerning which activities are strictly therapeutic and which are preventative is no longer a straightforward task. This is because therapeutics today has been increasingly operationalized through education practices, literacy campaigns and various public awareness initiatives. Moreover, these initiatives have been framed by a politics of risk – and more accurately risk prevention. The school-based pedagogies of beyondblue and the Black Dog Institute illustrate this emerging trend, as teachers transition between the exigencies of teaching and pedagogy, and the imperative to deliver new forms of preventative therapeutics in the face of changing risk dynamics. The purpose of this study is to explore the relationship between risk and therapeutics in more detail. It thus asks the following question: in what ways has therapeutic expertise been authorised and deployed in the prevention of mental illness?

This study takes a topological approach to explore this question – one that prioritises the relations between heterogeneous elements over the designs or consequences of any one single event or actor. Simply defined, topology concerns itself with how spaces are organised and assembled (Collier 2009). In the context of this study, mental health care is treated as a constellation of elements – comprised of policies, governments, institutes, expert knowledges and technologies. Such an approach heightens our appreciation of complex events and processes. In part, this is because it makes it harder to conflate heterogeneous elements under allinclusive theories and narratives, urging us to attend instead to the processes through which therapeutic spaces undergo continual reconfiguration.

This paper is divided into three parts. The first section takes up many of the ideas animated in recent governmentality analyses to examine how expert knowledges and techniques are authorised in the prevention of mental illness. This section also offers some historical context around the incidents and events that led to the innovation of key concepts, policies and technologies instrumental to this problematisation.

The next section then considers the role of expertise in determining mental health policy and practice. In the case of beyondblue and the Black Dog Institute, clinical expertise performs a legitimising role as an enacted form of authority. It is also used to implement certain kinds of therapeutic and preventative interventions, including diagnostic tools, clinical guidelines and resilience-based school programs like SenseAbility and HeadStrong.²

In the final section, this study analyses the ways in which expert knowledges have been operationalized in the preventative therapeutics of beyondblue and the Black Dog Institute. Crucially, it is through the resilience-building technologies of programs like beyondblue's SenseAbility and the Black Dog Institute's Head-Strong programs that the risk of depression is treated as a target of therapeutic intervention itself. Such programs thus entail protecting the community by installing, at the level of the individual, particular forms of anticipatory action. Notable here are the cognitive techniques adapted from cognitive-behavioural therapy (CBT), as well as the biokeeping technologies prevalent in general medicine. This study will thus illustrate how techniques normally applied in medical settings, have become disseminated through the education system as preventative 'technologies of the self' (Foucault 1988).

Problematising Risk and Prevention

As mentioned in the introduction, the term preventative therapeutics is used to indicate how preventative initiatives retain certain therapeutic capacities depending on the circumstances in which they are deployed. In the case of this study, therapeutic capacities are actualised when preventative initiatives like public health campaigns, or online self-help services, or school-based resilience programs, attempt to pre-emptively treat a disorder before its onset.

Due to the ambiguity of the word 'prevention', many researchers have advocated the need for a clearer delineation of terms. Patricia Mrazek and Robert Haggerty (1994) for instance, argue that interventions which seek to pre-empt the incidence of a disorder should be strictly defined as preventative. Interventions directed after onset should consequently be classed as treatment.

This study adopts a slightly less categorical approach to view preventative measures as comprising an ensemble of promotion, pre-emptive, therapeutic and maintenance strategies. This is not to conflate the different forms of preventative intervention, nor to confuse educational and health promotion initiatives with therapeutic ones. The point, rather, is to illustrate the potential for fluidity between practices, especially when expertise and technical aspects translate across fields.

This mutuality is even more pronounced in policies and practices of public health, because it typically operates through a spectrum of measures – from primary prevention aimed at reducing the incidence of a disorder before onset, to early intervention aimed at preventing the development of established cases, to rehabilitative strategies aimed at reducing the duration and severity of a disorder after onset. All three forms of intervention are claimed to reduce the 'disease burden' of disorders like depression,³ and often work collaboratively. Importantly, such measures also involve co-opting and reworking methods outside conventional fields of medicine from fields as diverse as marketing, public relations and pedagogy.

Where governmentality becomes a useful concept is in speculating how public health policies and initiatives attain a certain logical coherence and regularity. According to Nikolas Rose and Peter Miller, government is essentially 'a problematizing activity' – it refers to a process of rationalisation that renders aleatory issues in the population amenable to intervention, often by adapting them to specific logics and styles of thought (2010: 279). It is important to stress, however, that while the concept of governmentality provides a useful insight to the kind of rationalising that occurs in government, it does not denote a clear transfer between the articulation of an idea and its eventuation.

If we think of these issues topologically, political strategies are always enacted through certain situated practices – practices that are themselves the product of specific relations (Collier 2009). As will be shown, therapeutic concepts emerge out of a composition of forces, attracting and binding together heteromorphic elements that include the routines of medical practitioners, procedures of diagnosis and treatment, use of mundane items, and the production of biomedical knowledge. Importantly, regulative technologies like national policies, clinical guidelines and health gap metrics are not the exclusive product of authorities like the state (Rose & Miller 2010). Rather, technologies of government become authoritative through prior transactions and affiliations – in this case the prioritisation of evidence-based rationalities in public health, and the increasing reliance on epidemiological data in policy formulation.

According to Nikolas Rose, Pat O'Malley and Mariana Valverde, it is through processes of expertise and rationalisation that new elements and concerns are recombined in ways that render them 'internally consistent' (2006: 98). Crucially, as these concerns are taken up and redeployed by governments and institutions, they are also subtly modified in the process – a point illustrated in the next discussion of Australian mental health reform.

The Australian Mental Health Policy Context

Australia's first attempts at preventative health reform were driven initially by the need to address a spate of human rights abuses than anything expressly concerned with health promotion and prevention. Meg Smith & Heather Gridley (2006) outline a number of critical events that led to these transformations. Prior to the reforms of the 1990s, doctors and mental health practitioners were empowered to certify and institutionalise the 'insane'. While the innovation of psychotropic drugs in the 1960s allowed more people to be discharged from psychiatric hospitals, it was the exposure of a number of institutional scandals and abuses that incited major reforms around mental health legislation and treatment.

By the time the Mental Health Act 1990 was passed in New South Wales, a major reconceptualization of mental illness and its treatment was underway. According to Smith and Gridley, the act enshrined the rights of the mentally ill, reduced the discretionary powers of doctors and mental health practitioners, narrowed the definition of mental illness, and crucially, specified what was not mental illness (political views, sexual orientation, antisocial behaviour). This legislation also provided a mandate for 'least restrictive care' that opened the way for alternate forms of community-based management and treatment (Smith & Gridley 2006: 132). Yet while the Mental Health Act enshrined a number of essential human rights provisions, it was not the sole political catalyst for reform. Indeed, the legislation was introduced amidst a context of heightened volatility, marked by persistent criticisms of psychiatric malpractice, mounting pressures to reduce the cost of institutional care, a vociferous antipsychiatry movement, and better advocacy of minority groups (Smith & Gridley 2006).

By the mid-1980s and early 1990s, a number of factors influenced key policy reforms in mental health in Australia. First, the pace of deinstitutionalisation in Australia occasioned the rapid expansion of community based mental health services as delivery of care shifted to various service providers including social workers, occupational therapists, general practitioners and psychiatrists (McDermott & Meadows 2007). At the same time, the 'new' public health movement was gaining momentum in countries like the United Kingdom, Canada and the United States. This movement aimed to promote health across the population through policy measures directed around issues of planning, coordination, consultation and outcomes-based assessment (Lupton 1995: 51). In 1986, the World Health Organisation's Ottawa Charter of Health Promotion further legitimised the principles of public health promotion and prevention. As Fran Baum writes, it laid

out a single 'blueprint' of public heath, reorienting discourses of healthcare from traditional hospitalised treatment to community-based approaches viewed to be more supportive of patients re-entry back into the workforce and community life (2002: 34).

While the political rhetoric of this period was translated into a spate of reports, commissions and recommendations that each in their own way advanced health promotion in Australia, it was not until Australia's first nation-wide epidemiological surveys in the late 1990s that the scope of mental health policy was expanded (Whiteford 2008). These studies collated data on the impact of mental illness across the population, and were key drivers in shifting mental health policy away from its focus on individual outpatient care to prevention and early intervention of more common mood disorders (Whiteford & Groves 2009).

The Australian Burden of Disease (ABD) study in 1998 was instrumental in raising awareness of the social and economic costs of common conditions like depression. According to Mathers et al. (2001), it was the first study to measure the national burden of disease in a developed country using the Disability-Adjusted Life Year (DALY) – a new health gap metric developed in 1990 for the Global Burden of Disease (GBD) study. Traditionally, health liabilities were measured only through years of life lost through premature mortality. They thus ignored the epidemiological impact of chronic conditions like depression, which while hugely debilitating, tended to result in relatively few deaths. The DALY was seen to address this shortcoming, combining years of 'healthy' life lost due to disability, with years of life lost due to premature mortality. It thus accorded chronic conditions like depression a new economic status and political urgency.⁴

beyondblue and the Black Dog Institute

Within the political lexicon of public health, the DALY became the new orthodoxy for measuring disease burden. Developed countries, in turn, responded accordingly, adopting a spectrum of measures designed to mitigate the impact of conditions like depression – first by reducing its incidence through health promotion and prevention, second by reducing its duration and severity through early intervention. *beyondblue: the national depression initiative*, was part of Australia's own policy response to the rising concern of depression.

Launched in 2000 as part of the federal government's five-year National Mental Health Strategy (NMHS), the not-for-profit organisation set out to make common disorders like depression and anxiety a policy priority area for the first time. beyondblue and the NMHS thus marked a decisive moment in Australia where epidemiology, clinical practice and public health were made integrative concerns, incorporating nationwide planning and priority setting within an outcomes-based policy framework (Whiteford, Buckingham & Manderscheid 2002). It also functioned as a catalyst for other health sectors, advocacy groups and mental health organisations like the Black Dog Institute.

beyondblue was thus conceived as part of a coordinated strategy to reduce the disease burden of common disorders like depression. Its stated mission was to create 'a society that understands and responds to the personal and social impact of depression' (Pirkis et al. 2005: 37). To achieve this aim, five key priority areas were outlined. They included initiatives to: a) raise awareness and reduce the stigma of depression, b) support consumer and carer advocacy, c) promote prevention and early intervention of depression, d) facilitate primary-care training and service reform, and e) fund strategic and applied research related to mood disorders (Hickie 2004). Today, beyondblue is considered an international leader in the promotion of mental health, with a number of key policy reforms attributed to its lobbying and campaigning efforts – notably the *Better Outcomes in Mental Health Care* in 2001.⁵

In contrast, the Black Dog Institute evolved out of the Mood Disorder Unit (MDU) of Sydney's Prince of Wales Hospital – a clinical outpatient facility for individual patients established in 1985. According to the Institute's website, the MDU was the 'sole research, treatment and referral service' in New South Wales for severe and treatment-resistant depressive disorders (Parker 2002). Following the MDU's clinical and research pursuits, the Black Dog Institute was officially launched in 2002 and is considered a world leader today in the diagnosis and treatment of depression. Its stated mission is to 'improve the lives of people affected by mood disorders through translational research, clinical expertise and education programs' (Black Dog Institute 2012: 4).

While parallels clearly exist between beyondblue and the Black Dog Institute, important differences nonetheless remain, notably in their respective classification of depression. beyondblue currently adopts a dimensional approach consistent with the World Health Organisation's International Classification of Diseases (ICD), and the American Psychiatric Association's Diagnostic and Statistical Manual (DSM). The Black Dog Institute, on the other hand, delineates three principle subtypes of depression – psychotic, melancholic and non-melancholic. According to the Institute, while psychotic and melancholic depression are characterised by biological perturbations, non-melancholic depression comprises a heterogonous set of depressive states, triggered by stressors that act either 'alone or in conjunction with predisposing personality styles' (Parker & Orman 2012: 50).

Importantly, beyondblue makes no mention of the Black Dog Institute's nonmelancholic category, preferring to endorse instead the broad dimensional constructs of major depression, major depressive disorder, melancholic depression, and dysthymia. More to the point, debates around the categorisation of depression have occurred in the past between both organisations' chief advisors – former executive director of the Black Dog Institute, Professor Gordon Parker, and former chief clinical advisor to beyondblue, Professor Ian Hickie. As the next section illustrates, the disparities between the two organisations reveal more than a point of procedural or epistemological difference. They reveal the multiplicity and inherent variability of diseases like depression that refuse ready containment within static frameworks and taxonomies.

Disease Ontologies

According to Parker (2007), dimensional models like those endorsed by beyondblue, homogenise multiple depressive conditions under a single rubric. In his words, reliance on such broad symptomatology undermines the credibility in psychiatric diagnosis, rendering it susceptible to confusion and contradiction. It also 'risks medicalising normal human distress' (328). The view the Black Dog Institute takes is that dimensional modelling is largely atheoretical, eschewing causal explanations in favour of severity markers like those endorsed by the ICD and DSM (Parker 2005). With no viable aetiological basis to work from, tailoring treatment to specific causes becomes an impossible task, with side-effect profiles in most cases acting as the deciding factor in treatments for depression.

Countering these claims, Hickie argues that there is no biochemical evidence to support the inclusion of melancholia in depression diagnosis, nor is there consistent evidence that 'people with varying forms of depression' respond better to specific treatments (Hickie; cited in Benson 2010: 1). In other words, there is no basis to direct salient therapies towards discrete depressive subtypes. Moreover, research indicates that classification systems used alone are insufficient to deal with the variability of mental illness. We should thus be wary of strict adherence to any diagnostic system and focus instead on integration between diagnostic models, as well as the adoption of alternative methods not currently used in psychiatry like clinical staging (Hickie *et al.* 2013).

The point to make here is that the controversies between beyondblue and the Black Dog Institute do not entail minor disputes on the periphery of psychology. They urge us to consider basic questions of disease ontology. Crucially, the diagnostic models used by beyondblue and the Black Dog Institute do more than interpret a disorder; they enact it. This is especially the case given that the purpose of diagnosis is to inform treatment and treatment necessarily entails interfering with a disease or condition in such a way so as to produce a therapeutic effect (Mol 2002).

As Annemarie Mol illustrates in her study of lower limb arteriosclerosis, diseases do not represent *a priori* natural conditions – they are ontological effects 'brought into being' through a convergence of socio-material factors (2002: 6). Mol uses the word 'enact' to indicate how diseases are done in practice, but more to the point, how they are contingent on the collective involvement of multiple actors, including patients, doctors, clinical guidelines and procedures, inventories, and classification systems (32). These networks not only produce multiple versions of a disease, they confer a coherence and stability between the sites and practices through which such diseases are enacted.

Within such networks, it is not possible to insist on the primacy of any individual actor, because it is not possible to assign causal or proportional value to any single entity or element. It is possible, however, to speculate how different assemblages of actors produce different versions of the same disease. For this reason, Mol opts for the term 'multiplicity' as a way to indicate how different versions of a disease 'hang together' – that is, how they are coordinated and rendered intelligible between the sites and practices through which various disease entities are enacted (71).

Following from Mol's work, any study of depression would thus need to include classification systems, risk-factors, and therapeutic techniques, as much as an investigation of neurotransmitters, synapses, and the chemical milieu of the brain. Scientific knowledge, in particular, serves a coordinating role between different mental health actors and settings, framing and translating various concerns, and rendering them amenable to different kinds of intervention. Controversies like those between beyondblue and the Black Dog Institute work to reveal the contingency of such truth claims. They also reveal the role expertise has in the enactment of medical authority, a process that profoundly impacts how therapeutics is practiced, which health concerns are prioritised, how research funding is allocated, which groups and individuals are problematised, and how clinical guidelines are formulated.

Simply put, how a disease is classified and measured in the population, profoundly impacts the kind of preventative and therapeutic interventions directed towards it. What we observe in the case of beyondblue and the Black Dog Institute are the effects of a series of intricate encounters and transitions, occurring between multiple heterogeneous entities, in settings as diverse as the conference room, the laboratory, the clinic. Indeed, what we observe is the production of scientific truth – a process that entails both the production of facts, as well as their tactical deployment within shifting economies of power (Foucault 1980). The next section explores beyondblue and the Black Dog Institute's deployment of clinical expertise in more detail, examining the political conditions required for certain forms of expertise to be authorised as formalised discourse, then operationalised as mainstream therapeutics.

Risk, Authority and Expertise

Rose writes that the heterogeneity of risk rationalities makes us question 'where risk thinking has emerged, how it has emerged, and with what consequences' (1998: 180). This section takes a particular interest in the risk rationalities deployed through beyondblue and the Black Dog Institute's use of clinical expertise. It follows in part from the work of Simone Fullagar (2008) and her investigation

of how beyondblue discursively constitutes depression through its online mental health promotion. According to Fullagar, beyondblue uses clinical expertise to 'mobilise particular truths about the aetiology of depression, treatment pathways and...the depressed self' (327). This, in turn, functions to construct mental illness as a neurochemical problem requiring a neurochemical solution.

This section draws on many of the keen insights of Fullagar's work, but with less emphasis on the discursive construction of therapeutic realities. Instead, it seeks to understand how particular forms of expertise are put to work – that is, how expertise is operationalised within existing practices of mental health policy, research and clinical treatment, to then authenticate and authorise various preventative and therapeutic activities.

When mobilised through particular forms of expertise, risk functions as a 'technology of government', conferring an authenticity to certain health claims and projects by enabling political centres to carry out probabilistic assessments of the future (Rose & Miller 2010: 284). This typically entails targeting specific atrisk groups, as well as the factors themselves deemed to pre-dispose individuals to mental health risk. By locating beyondblue and the Black Dog Institute within their proper historical context, we begin to see how they are informed less by uniform categories of risk, than they are by the complex intersection of certain felicitous situations and events.

Expertise performs an important function within these shifting political assemblages, in part, because it mediates processes of transaction and affiliation. According to Rose and Miller, expertise allows institutions to establish 'enclosures' of authority, serving to both legitimise certain programs, as well as enhance an organisation's capacity to determine policy (2010: 286). In the case of beyondblue and the Black Dog Institute, both organisations seek to attract and enrol other participants through the authority of their expertise, forging alliances, co-opting resources, and entreating governments to legitimise their authority through funding arrangements and strategic partnerships.

The point Rose and Miller make is an important one, because it urges us to consider the role of expertise in both concentrating authority within certain political and professional centres, as well as granting government the necessary distance to effectively administer policy. Expertise thus functions as a tool of political legitimisation—conferring authority to the claims of organisations like beyondblue and the Black Dog Institute, while authorising government to implement policy without compromising political ideals of autonomy. According to Rose and Miller, it is in this interrelation between authority and expertise that a dilemma emerges. While the political and therapeutic assemblages that make up a given health sector are in part composed of disparate entities seeking to influence each other, the affiliations cannot be viewed as too closely allied.

From an institutional perspective there are two main reasons for this. First, independent organisations have to convince governments of the uniqueness of their contributions. Second, the closeness of relations between governments and organisations may be seen to compromise scientific impartiality. In the case of beyondblue and the Black Dog Institute, clinical expertise functions as a mode of political authority in order to fund and expedite certain public health initiatives. Public health campaigns are thus overtly affiliative, composed of governments, community health organisations, consumer and carer groups, professional bodies, corporations, and other vested stakeholders. In order for these political assemblages to be viable, the values and ambitions of each member organisation must be rendered translatable to the collective interests of the group.

The beyondblue (2010) Clinical Practice Guidelines illustrates this process of translation and affiliation. Developed through an expert working committee, the guidelines were endorsed by the National Health and Medical Research Council (NHMRC) as the principle resource for the diagnosis and treatment of youth depression. The NHMRC in many respects acts as an arbiter of knowledge and research, establishing norms of clinical and administrative practice through the regulation of evidence. This point deserves further attention. In order to gain NHMRC approval, the guidelines needed to meet strict evidence-based criteria according to the type of evidence (e.g. randomised-control trials, cohort studies, case-series), consistency of findings, clinical impact, generalizability, and applicability. As is the case with similar governing bodies around the world, the NHMRC functions to impute a medical and economic value to research, with systematic reviews of randomised-control trials positioned at the apex of quality based on their perceived generalisability and low susceptibility to bias.

The NHMRC's endorsement of the beyondblue guidelines, not only serve to confer clinical credibility to certain therapeutic interventions like cognitive behavioural and interpersonal therapies. They also indirectly authorise beyondblue in the dissemination of such interventions – a point demonstrated with their schoolbased SenseAbility program. More to the point, the NHMRC endorsement of the guidelines works to position beyondblue as a leading clinical authority in Australia for the diagnosis and treatment of depression, above and beyond their existing public health record.

Given that the original aims of beyondblue were promotional and educational rather than clinical, the impact of the NHMRC's endorsement of beyondblue is quite remarkable. By endorsing a dimensional framework consistent with recognised international classification systems (ICD-10, DSM-V), the NHMRC has also inadvertently subverted the efforts of the Black Dog Institute in advocating a subtyping model of depression. The broader political consequence of this is that organisations must either compete for support and approval from centres like the NHMRC, or find ways to co-opt the participation of rival centres towards mutually beneficial ends. Such activities reveal the heteromorphic nature of political topologies, characterised by shifting modes of divergence, coordination, alignment and translation. In the case of beyondblue and the NHMRC, clinical expertise thus

performs a function beyond its usual procedural and rationalising role to inadvertently undermine competing expert claims and authorities.

As has been demonstrated, the circumstances through which clinical and scientific expertise is deployed is often as decisive as the forms of expertise itself. Statistical expertise, for instance, has had the unintended effect of deprofessionalising fields of medicine, with clinical decisions becoming increasingly determined 'by algorithms of safety, effectiveness, efficiency, and cost-effectiveness' (Wahlberg & McGoey 2007: 4). Similarly, education finds itself undergoing a similar process of transition as teachers are enjoined to equip themselves with new psychotherapeutic skills as part of a broader project of mental health literacy. The final section considers this dilemma in more detail by examining how psychotherapeutic expertise is reconfigured through the preventative pedagogies of beyondblue and the Black Dog Institute SenseAbility and HeadStrong programs.

Preventative Pedagogies

beyondblue and the Black Dog Institute primarily use two evidence-based psychological therapies in their programs – cognitive behavioural therapy (CBT) and interpersonal psychotherapy (IPT). In contrast to psychoanalytic psychotherapy, cognitive behavioural and interpersonal interventions tend to have shorter therapeutic durations, with courses ranging from 10 to 20 sessions. They are also more readily adaptable to manualised formats – a feature that makes them particularly suitable to school-based pedagogies like SenseAbility and HeadStrong. Finally, their brief and manualised nature allows them to be 'applied in a reliable way, such that their efficacy can be examined in research trials' (Casey, Perera & Clarke 2012: 53).

These traits combined make CBT and IPT particularly appealing to evidencebased interventions like SenseAbility and HeadStrong. This section, however, focuses only on specific cognitive techniques used by beyondblue and the Black Dog Institute. This is partly due to issues of scope, but mostly due to the rich theoretical framework CBT provides in assisting practitioners in understanding and intervening upon internal states and processes. Moreover, CBT provides a useful basis to consider modes of reflexivity and self-conduct promoted in public health more broadly.

As the name suggests, CBT seeks to change cognitive and behavioural dysfunctions viewed as mediators in psychopathology. According to John Tiller, principles of CBT include 'educating the patient, teaching basic relaxation skills, and developing the patient's skills to identify, challenge and change maladaptive thoughts, feelings, perceptions and behaviour' (2012: 30). Crucially, while CBT shares many techniques with other modalities, it distinguishes itself through its cognitive model of psychopathology. This model assumes that cognitive variables like thoughts and beliefs are important mediating factors in feelings and behaviour. They therefore act as effective targets of therapeutic change. Furthermore, the model posits that 'every psychological disorder has a distinctive cognitive profile' (Clark & Steer 1996: 78). In cases of depression, this often takes the form of maladaptive beliefs of personal loss and failure, as well as cognitive processing styles that tend to be global, absolute and past-oriented (Clark & Steer 1996).

Therapeutic change, thus tends to focus on changing the specific cognitions held as mediators or concomitants of depressive illness. There are two primary reasons why cognition in CBT acts as the fulcrum of therapeutic change. First, it is postulated as an important mediator of affect, motivation and action. Second, it is considered 'the most flexible and adaptable of the personality systems and functions' (Beck 1996: 21). In other words, cognition is considered more accessible and responsive to therapeutic intervention than affect and behaviour, and thus 'central to the human change process' (Clark & Steer 1996: 77).

The following provides an analysis of how cognitive techniques are used in beyondblue's SenseAbility and the Black Dog Institute's HeadStrong programs to promote various protective capacities. The purpose here is not to provide a systematic analysis of these programs, but to empirically interrogate them as examples of the kind of risk and protection logics that underpin public health more broadly. As will be shown, resilience emerges as a key rationality of both programs, because resilience is imputed as one of the most powerful protectors against psychopathology. To structure the analysis, SenseAbility and HeadStrong are dealt with each in turn, in order to then provide a more general analysis of the two program's role within broader assemblages of preventative therapeutics.

Cognitive Techniques in SenseAbility

In beyondblue's SenseAbility program, lessons are modelled on a student-centred style of learning that target individual protective factors of problem-solving, coping skills, interpersonal competence, and optimistic thinking (Spence et al. 2005: 161). The program is designed for high school students aged 12–18. There are a total of six modules which comprise the SenseAbility Suite, with each module focusing on individual features of resilience and positive psycho-social adaptation.

In the Essential Skills module, students learn that 'while we often can't change events, we do have the power to change the way we think about those events' (Irwin, Sheffield & Holland-Thompson 2010: 6). The capacity to adapt and alter thoughts amidst difficult to change circumstances is promoted in SenseAbility as the hallmark of psychological resilience. In the activity titled 'Our Special Guest', students role play 'helpful' and 'unhelpful' panellists in a fictional talk show. As helpful panellists attempt to counter unhelpful commentary, students discuss how negative commentary might be similar to their own self-talk. Basic principles of self-talk are then explicitly taught, with students guided through the following common thinking errors: a) all-or-nothing thinking, b) over-generalising, c) mindreading, d) fortune-telling, e) magnification, f) minimisation, and g) catastrophising (2010: 26).

In all or nothing thinking, the belief is held that anything short of perfection is inadequate, which often leads to feelings of discontent. In over-generalisation, isolated events are construed as part of a consistent pattern of failure and disappointment. In magnification, minor errors are judged as catastrophes, making it impossible to form realistic appraisals. And in minimisation, positive experiences and events are downplayed, effectively negating attendant feelings of joy. Importantly, students are taught how to adapt and counter such thinking errors through a technique known as 'cognitive restructuring'. This involves employing self-directed strategies like evidence-checking, reframing, reality-testing, and finding alternatives. The statement 'nobody likes me', for instance, is offered to students as an example of a negatively biased cognition that can be reframed and adapted to the more constructive 'it doesn't matter if I'm not liked by everyone' (Irwin, Sheffield & Holland-Thompson 2010: 20).

Thinking errors like all-or-nothing thinking, over-generalisation, magnification, and minimisation are of particular interest in this study, because they are all theorised as depressogenic. In other words, they are viewed as predisposing to depressive illness. According to Aaron Beck and David Clark (1988), cognition in depressed patients tends to be global in nature, as well as oriented towards past losses and failures – a feature typical of the thinking errors above. Furthermore, students are warned how thinking errors 'can increase the risk of emotional and mental problems' (Irwin, Sheffield & Holland-Thompson 2010: 20). While biased processing might be theorised to increase an individual's vulnerability to depression, the cognitive restructuring techniques taught to students are assumed to protect against such vulnerabilities. In other words, cognitive strategies act as neuroprotective agents, pre-emptively targeting key cognitive precursors. They also function as forms of 'anticipatory action', a term Anderson uses to describe the 'coherent' attempt to guide and enact certain predictive and anticipatory actions (2010: 788).

According to Anderson, anticipatory action becomes a reality in any situation where contingency of the future is deemed a potential threat but also a potential opportunity (2010: 777). Specifically, he focused on three kinds of future-oriented logics that guide anticipatory action – precaution, preparedness, and pre-emption. In this study, cognitive restructuring is maintained as an unusual form of anticipatory action, because it works through all three ontological modes. First, cognitive restructuring works as a precaution against the likely attendant effects of negative cognition. By counteracting an internalised thought like 'no body likes me', with 'it doesn't matter if I'm not liked by everyone', feelings of anxiety and selfloathing are kept at adaptable levels. This acts as a preventative measure against future depressive moods and feelings. Second, cognitive restructuring attempts to pre-empt depressive illness, by preventing the depressogenic factors that lead to depression in the first place. As Jeffrey Young, Arthur Weinberger, and Aaron Beck observe, automatic thoughts usually 'go unnoticed because they are part of a repetitive pattern of thinking' (2001: 278). Reflexive techniques like cognitive restructuring not only allows one to establish patterns between certain thoughts, feelings and behaviours, but enables one to intervene upon them through specific cognitive techniques like reframing. The hope is that with repeated interventions, the automatic thoughts themselves will become more functional, in effect, pre-empting the cognitive conditions of depressive illness.

Finally, cognitive restructuring prepares individuals for the aftermath of a depressive mood or state. Rather than preventing or pre-empting a future event from happening, interventions in this case aim to reduce the severity of present symptoms. Depressive moods often impact the ways in which people relate with the world, in turn, influencing cognition. Cognitive restructuring acts as a circuit breaker in this cycle, with the hope that by adapting thoughts, depressive feelings will be alleviated, and thoughts and motivation will begin to improve.

Cognitive Techniques in HeadStrong

In the Black Dog Institute's HeadStrong program, cognitive behavioural techniques are integrated with interpersonal psychotherapy and positive psychology. The program's primary aims are to destigmatise mental illness and equip students with coping skills that promote better mental health (Black Dog Institute 2013a). Teaching and learning activities are divided into five modules that link directly to individual state and territory health curriculums, as well as the new Health and Physical Education National Curriculum.

In contrast to beyondblue's SenseAbility, the program emphasises personality profiles over cognitive vulnerabilities like biased cognition. This is not surprising, given the classificatory differences between beyondblue and the Black Dog Institute. Within the dimensional framework adopted by beyondblue, categories like major depression and dysthymia offer no aetiological rationale to differentiate vulnerability factors. It is therefore not possible to postulate likely pathways to depression on the basis of predisposing factors such as cognitive bias.

The Black Dog Institute, on the other hand, delineates depressive typology on the basis of self-rated and clinician rated measures, clinical observation, and importantly, the likely aetiology of depression. While psychotic and melancholic depression are maintained as biological disorders, non-melancholic depression is argued to be caused by personality features that act in combination with a stressful trigger or event. Such a framework provides the Black Dog Institute with the theoretical scope to postulate specific pre-onset correlates for non-melancholic depression. These include two categories related to stress exposure, and eight categories related to personality. The eight personality styles are: a) anxious worrier, b) irritable, c) self-critical, d) rejection-sensitive, e) self-focused, f) perfectionistic, g) socially avoidant, and h) personally reserved (Black Dog Institute 2014).

In the module titled 'The Low Down on Mood Disorders', students are guided through the various personality styles associated with non-melancholic depression. They are then split into 'expert teams' to conduct further research on predisposing personality styles using the Black Dog Institute's website (Black Dog Institute 2013a: 30). Students thus discuss characteristic features of the eight personality types. The anxious worrier, for instance, is described as someone who 'tends to be highly strung, tense, nervy and prone to stewing over things' (Black Dog Institute 2014).

It is within this context that students are given a plausible rationale to apply specific interventions. Most activities in HeadStrong adopt traditional formats of instruction, discussion, and writing. Unlike SenseAbility, there is less focus on explicit instruction of cognitive techniques. Further, practical tasks that allow students to generalise cognitive principles (e.g. role-play, modelling, empathetic responding, visualisation) are used intermittently, with most lessons driven by student-led discussion. The self-reflexive activities in HeadStrong are the primary means through which students are actively engaged in applying techniques. In most cases, these activities involve reflective tasks where students think about their moods, and think about their thinking.

Given that the purpose of cognitive therapy is to change dysfunctional thinking, reflection is a crucial ability because it enables one to elicit underlying autonomic thoughts that influence subsequent feelings and behaviour. In the context of HeadStrong, it also enables students to monitor and intervene upon processes of self-talk.

In the module 'Helping Yourself', students are guided through the links between self-talk and resilience, together with the strategies that can help them 'become the "Gate Keeper" of [their] thoughts' (Black Dog Institute 2013b, Slide 109). Self-talk is promoted throughout HeadStrong as a key mediator in how people perceive themselves and the world around them. More to the point, students are taught how positive self-talk can aid in building resilience, enabling students to 'bounce back' from setbacks and difficulties (Black Dog Institute 2013a: 41).

As Vijaya Manicavasagar and Gordon Parker write, resilience 'usually reflects the culmination of a number of adaptive strategies' that prevent future problems (2005: 92). Positive self-talk is thus considered crucial in protecting individuals against depressive illness because it is primarily through our internal monologue that we form perceptions of ourselves, foster hope and confidence, find solutions and alternatives to problems, and manage anxiety.

Gaining access to this internal monologue, often involves skills of selfreflection. To help initiate this process, Headstrong encourages students to use a 'Mood Tracker Journal', which provides students with a framework to engage in various self-reflexive modes of conduct, such as observation, monitoring, reflection, and analysis. Moreover, students are taught how to record and monitor feelings, contextualise fluctuations in mood, and reflect on instances of negative thinking or 'put-downs' (Black Dog Institute 2013a: 41). Data is then used to establish patterns between thoughts, feelings and the various externalities that might have triggered changes to internal states. This provides both a relevant context and plausible motive for students to discuss and apply certain resilience-building strategies in their own lives.

In the context of this study, the Mood Tracker Journal also works to codify and operationalise certain expert knowledges and techniques of cognitive theory. Not only do the self-reflexive technologies function to engender certain relations of self-conduct, they actively recalibrate and transform the self through processes of cognitive restructuring. The process thus entails more than the solicitation of students into modes of self-surveillance. While monitoring is a key prerequisite in rendering automatic processes visible, it comprises only one part in an ensemble of self-driven interventions that seek to transform and maintain the self. Indeed, maintenance is the primary objective of technologies like the Mood Tracker Journal – whether it be maintaining anxiety to adaptable levels, or maintaining perspective in situations of adversity, or maintaining a positive self-image and sense of efficacy.

In this sense, such devices act as crucial intermediaries in the continual upkeep of the body. For this reason, devices like the Mood Tracker Journal should be considered forms of biokeeping technology, a term used here to describe any instrument or technique used to detect and measure specific biological processes. In the case of the Mood Tracker Journal, biomarkers like depressed mood, loss of pleasure, sleep disturbance, and impaired concentration serve to indicate possible mental health risk.⁶ This is not to conflate differences between biological and psychological processes, but rather to foreground their mutability and illustrate how biomarkers that might strictly be defined as biological, act in some cases as potential indicators of psychological distress. More to the point, the use of such monitoring techniques incites people to employ certain preventative measures that work to uphold and maintain the body. By analysing the effects of biokeeping technologies like the Mood Tracker Journal, we can begin to discern how individuals are implicated into self-reflexive practices, and more importantly, how certain technologies work to reconfigure and transform the self.

Given the influence of Foucault's (1988) work on 'technologies of the self', it might be useful to recall his observations here. According to Foucault, procedures of diary writing, self-disclosure and various other verbalisation techniques, were employed by individuals in the past to transform themselves towards a given ethical ideal, be it an ideal to care for oneself, master oneself, or know oneself. In contemporary times, the techniques of verbalisation adopted in the Christian confessional have been 'reinserted in a different context' by the human sciences 'to constitute, positively, a new self' (1988: 49).

What makes Foucault's work particularly relevant in this study is in thinking more broadly about how individuals are produced through a spectrum of technologies. While governmental technologies are instrumental in the dissemination of school-based programs like SenseAbility and HeadStrong, they form only one part of an assemblage of technologies that in combination work to produce certain ontological effects.

Throughout this study we have witnessed how different versions of depression emerge through different socio-material contexts. Similarly, we can observe how different versions of the self emerge as technological artefacts, replete with a psychological interior and 'unique biography' (Rose 1996: 3). Within the spectrum of technologies that work to produce new selves, intellectual and biokeeping technologies like the Black Dog Institute's Mood Tracker Journal comprise a crucial part of the reflexive component that enables individuals to actively participate in their own transformation. Indeed, the defining feature of these technologies is their reflexiveness – a mode of action that once initiated, reverts back on the user. It is through the initiation of certain self-directed processes that tasks like observation, monitoring, calculation and reflection are then performed on the self, to constitute the self in new ways.

Conclusion

Much of this study has attended to the ways in which expert knowledges and techniques are recombined into new technologies of power. If there is one question, however, that draws these themes together it is the question of authority. Authority in this study has taken a number of forms. First, governmental processes were examined as modes of authorisation, redeploying existing resources and technologies in response to new situations (Collier 2009). Second, institutions like beyondblue and the Black Dog Institute were studied as 'enclosures of authority' (Rose & Miller 2010: 286), legitimising practices of diagnosis and treatment, disseminating certain truths on the aetiology of mental illness. Third, expertise itself was maintained as an enacted form of authority, whereby teachers and school administrators became authorised as public health professionals, assuming new responsibilities as part of an ongoing management of mental health risk.

While political and professional authority is not concentrated within any single entity or actor, authority is nonetheless enacted, in ways that often have lasting impacts on people's lives. One way to think of authority is as a process of emergence. The affiliations and events that led to the coordination of mental health programs in Australia did not happen by design or the straightforward implantation of policy, but often through a series of felicitous accidents and unintended events. As shown throughout the study, the development of these technologies required two things: a viable model of risk, together with the know-how and competency to put risk logics into action. In other words, they all require literacy, and more accurately, the production of a risk literate public.

As a final word, this study has shown that it is possible to think of mental disorders as more than naturalised entities, even if they are, in part, biologically composed. If depression is enacted in multiple ways, it therefore requires at the very least, a cross-disciplinary approach to examine the different ways depression is produced in the practicing of it. It is fitting to conclude then with the words of Mol (2002), who urges us to determine not which intervention is most effective, but to consider the effects of different interventions. This is the question that should guide any therapeutic program, policy initiative, or empirical study.

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Notes

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- ² SenseAbility is a strengths-based emotional and psychological resilience program for students aged 12-18 years, first trialled in selected Australian schools in 2003. HeadStrong is a mental health awareness and resilience building program for students aged 13-16 years, rolled out nationally in 2012.
- ³ According to the Australian Institute of Health and Welfare (AIHW), the burden of disease 'is a measure used to assess and compare the relative impact of different diseases and injuries on populations' (Australian Institute of Health and Welfare 2014).
- ⁴ Several criticisms have been levelled against the DALY, none more significant than that it privileges loss of healthy life in the years deemed to be the most productive (i.e. the middle age group). See Anand and Hanson (1997) for further commentary.
- ⁵ The *Better Outcomes in Mental Health Care* enabled better access to psychological treatments, as well as improved collaboration between general and mental health practitioners. It also represented 'the largest single allocation' of primary mental healthcare funding by an Australian government (Hickie and Groom 2002).
- ⁶ The term biomarker is a common medical term used to describe a measurable indicator of some form of illness or condition.

References

- Anand, Sudhir & Kara Hanson (1997): 'Disability-adjusted life years: a critical review', Journal of Health Economics, 16:6, 685-702.
- Anderson, Ben (2010): 'Preemption, precaution, preparedness: anticipatory action and future geographies', *Progress in Human Geography*, 34:6, 777-798.
- Australian Institute of Health and Welfare (2014): *Burden of disease*: <u>https://http://www.aihw.gov.au/burden-of-disease/</u> (accessed 15 February 2014).

Baum, Fran (2002): The New Public Health, South Melbourne: Oxford University Press.

- Beck, Aaron T. (1996): 'Beyond Belief: A Theory of Modes, Personality, and Psychopathology', Paul M. Salkovskis (ed.): *Frontiers of Cognitive Therapy*, New York: Guilford Press.
- Beck, Aaron T. & David A. Clark (1988): 'Anxiety and Depression: An Information Processing Perspective', *Anxiety Research*, 1:1, 23-36.
- Benson, Kate (2010): 'Push for Melancholia to be Listed Illness', *Sydney Morning Herald*, Sydney, NSW: Fairfax Digital.
- beyondblue: the National Depression Initiative (2010): *Clinical Practice Guidelines: Depression in Adolescents and Young Adults*, Melbourne: beyondblue.
- Black Dog Institute (2012): Black Dog Institute Annual Report: Translating Research Into Real Patient Outcomes, Randwick, NSW: The Black Dog Institute.
- ----- (2013a): *HeadStrong: Understanding Mood Disorders and Resilience*, Randwick NSW: The Black Dog Institute.
- ----- (2013b): *HeadStrong Powerpoint Slides for Teacher Use*, Randwick NSW: The Black Dog Institute.
- Black Dog Institute (2014): *Causes of Depression: Personality*: <u>http://www.blackdoginstitute.org.au/public/depression/causesofdepression/personality.cfm</u> (accessed 15 February 2014).
- Casey, Melissa F., Dinali N. Perera & David M. Clarke (2012): 'Psychosocial Treatment Approaches to Difficult-to-Treat Depression', *The Medical Journal of Australia*, 1:4, 52-55.
- Clark, David A. & Robert A. Steer (1996): 'Empirical Status of the Cognitive Model of Anxiety and Depression', Paul M. Salkovskis (ed.): *Frontiers of Cognitive Therapy*, New York: Guilford Press.
- Collier, Stephen J. (2009): 'Topologies of Power: Foucault's Analysis of Political Government Beyond "Governmentality", *Theory, Culture & Society*, 26:6, 78-108.
- Dumit, Joseph (2012): *Drugs for Life: How Pharmaceutical Companies Define our Health*, Durham, N.C: Duke University Press.
- Foucault, Michel (1980): Power/Knowledge: Selected Interviews and Other Writings, 1972-1977, Brighton, Sussex: Harvester Press.
- ----- (1988): 'Technologies of the Self', Luther H.Martin, Huck Gutman and Patrick H. Hutton (eds.): *Technologies of the Self: A Seminar with Michel Foucault,* Amherst, MA: University of Massachusetts Press.
- Fullagar, Simone (2008): 'Sites of Somatic Subjectivity: E-Scaped Mental Health Promotion and the Biopolitics of Depression', *Social Theory & Health*, 6:4, 323-341.
- Hickie, Ian (2004): 'Can We Reduce the Burden of Depression? The Australian Experience with beyondblue: The National Depression Initiative', *Australasian Psychiatry*, Vol. 12 Suppl.S: 38-46.
- Hickie, Ian B., Jan Scott, Daniel F. Hermens, Elizabeth M. Scott, Sharon L. Naismith, Adam, J. Guastella, Nick Glozier and Patrick D. McGorry (2013): 'Clinical Classification in Mental Health at the Cross-Roads: Which Direction Next?' *BMC Medicine*, 11:1, 125-125.
- Hickie, Ian & Grace Groom (2002): 'Primary Care-Led Mental Health Service Reform: an outline of the Better Outcomes in Mental Health Care initiative', *Australasian Psychiatry*, 10:4, 376-382.
- Irwin, Stephen, Jeanie Sheffield and Kristina Holland-Thompson (2010): *Essential Skills*, Melbourne: beyondblue.

- Lupton, Deborah (1995): The Imperative of Health: Public Health and the Regulated Body, London: Sage.
- Manicavasagar, Vijaya & Gordon Parker (2005): Modelling and Managing the Depressive Disorders: A Clinical Guide, Cambridge, UK: Cambridge University Press.
- Mathers, Colin D., E. Theo. Vos, Christopher E. Stevenson and Stephen. J. Begg (2001): 'The Burden of Disease and Injury in Australia', *Bulletin of the World Health Organization*, 79:11, 1076-1084.
- McDermott, Fiona & Graham Meadows (2007): 'Responding to mental disorder', Graham Meadows, Bruce Singh & Margaret Grigg (eds): Mental Health in Australia: Collaborative Community Practice, South Melbourne: Oxford University Press.
- Mol, Annemarie (2002): *The Body Multiple: Ontology in Medical Practice*, Durham: Duke University Press.
- Mrazek, Patricia J. & Robert J. Haggerty (eds) (1994): Reducing Risks for Mental Disorders: Frontiers for Preventive Intervention Research, Institute of Medicine Committee on Prevention of Mental Disorders. Washington, D.C: National Academy Press.
- Parker, Gordon (2002): *The Launch of the Black Dog Institute*, Sydney: The Black Dog Institute: <u>http://www.blackdoginstitute.org.au/docs/GordonParkerBDILaunch12feb02.pdf</u> (accessed 26 August 2014).
- ----- (2005): 'Beyond Major Depression', *Psychological Medicine*, 35:4, 467-474.
- ----- (2007): 'Is Depression Overdiagnosed?', British Medical Journal, 335:7615, 328-329.
- Parker, Gordon & Jan Orman (2012): 'Examining the Utility of the Black Dog Institute's Online Mood Assessment Program in Clinical Practice', Australasian Psychiatry: Bulletin of Royal Australian and New Zealand College of Psychiatrists, 20:1. 49-52.
- Pirkis, Jane, Ian Hickie, Leonie Young, Jane Burns, Nicole Highet & Tracey Davenport (2005): 'An Evaluation of beyondblue, Australia's National Depression Initiative', International Journal of Mental Health Promotion, 7:2, 35-53.
- Rose, Nikolas (1996): *Inventing Our Selves: Psychology, Power, and Personhood*, Cambridge, UK: Cambridge University Press.
- ----- (1998): 'Governing Risky Individuals: The Role of Psychiatry in New Regimes of Control', *Psychiatry, Psychology and Law*, 5:2, 177-195.
- Rose, Nikolas & Peter Miller (2010): 'Political Power Beyond the State: Problematics of Government', *British Journal of Sociology*, 61:1, 271-303.
- Rose, Nikolas, Pat O'Malley & Mariana Valverde (2006): 'Governmentality', *Annual Review of Law and Social Science*, 2:1, 83-104.
- Smith, Meg & Heather Gridley (2006): 'Living with Mental Illness in Australia: Changes in Policy and Practice Affecting Mental Health Service Consumers', *Australian Psychologist*, 41:2, 130-139.
- Spence, Susan, Jane Burns, Susan Boucher, Sara Glover, Brian Graetz, Debra Kay, George Patton & Michael Sawyer (2005): 'The beyondblue Schools Research Initiative: Conceptual Framework and Intervention', *Australasian Psychiatry*, 13:2, 159-164.
- Tiller, John W. G. (2012): 'Depression and Anxiety', *The Medical Journal of Australia*, 1:4, 28-31.
- Wahlberg, Ayo & Linsey McGoey (2007): 'An Elusive evidence Base: The Construction and Governance of Randomized Controlled Trials', *BioSocieties*, 2:1, 1-10.
- Whiteford, Harvey A. (2008): 'Depression in Primary Care: Expanding the Evidence Base for Diagnosis and Treatment', *The Medical Journal of Australia*, 188:12, Suppl. S101.
- Whiteford, Harvey A., Bill Buckingham & Ronald Manderscheid (2002): 'Australia's National Mental Health Strategy', *The British Journal of Psychiatry*, 180:3, 210-215.
- Whiteford, Harvey A. & Aaron Groves (2009): 'Policy Implications of the 2007 Australian National Survey of Mental Health and Wellbeing', *The Australian and New Zealand Journal of Psychiatry*, 43:7, 644-651.
- Young, Jeffrey E., Arthur D. Weinberger & Aaron T. Beck (2001): 'Cogntive Therapy for Depression', David H. Barlow (ed.): *Clinical Handbook of Psychological Disorders: A Step-by-Step Treatment Manual*, New York: Guilford Press.