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Editorial

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Welcome to the first edition of the *Australian Counselling Research Journal* for 2026.

We are pleased to present six research papers covering the breadth of therapeutic experience, from the impact of menstruation on ADHD symptoms to evidence-based approaches in the counselling room.

To open this edition, counsellor Carol Yates offers an examination of the mental health challenges for individuals living in regional and rural Australia, covering specific barriers and distinct needs across the spectrum of disparity. Her research suggests tailored interventions that are culturally appropriate and evidence-based, such as group work and mentoring (in this instance, a Christian group program), can enhance participant engagement and quality of life hand-in-hand with traditional modes of therapy.

Clinical psychotherapist and author Deirdre Rolfe has contributed a novel framework for trauma that maps the condition as a universal human process rather than a pathological state. Rolfe's work studies the adaptive and maladaptive pathways through which individuals respond to trauma, adversity, and profound life disruption, and suggests this can be overcome by moving through a series of defined stages.

Our growing understanding of ADHD and neurodivergence as a whole is often limited in the context of menstruation. Researchers and clinicians Nikki S. Strong and Sean A. Halpin have contributed a foundational study that explores how different phases of menstruation affect ADHD symptoms. Their findings posit sensitivity to hormonal fluctuation is closely linked to ADHD. This research is particularly relevant for therapists working with female clients living with ADHD, from the diagnostic stage to ongoing treatment.

A further three papers cover the integration of hypnosis within a CBT framework to enhance therapeutic efficacy, a process-based explanation of psychological well-being as grounded in contact with nature, and a literature review of alcohol and drug addiction and treatment models among Indigenous Australians. Each offers a unique perspective on therapeutic practice in 2026 and makes for worthwhile reading and discussion.

We thank our dedicated peer-reviewers for their tireless work in reading, editing and offering guidance to authors, ensuring their work meets academic and professional standards.

The next edition of the Australian Counselling Research Journal is accepting submissions now until September, and will be published in December 2026.

With thanks,

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Author Biographies



Carol Yates

Carol Yates has been a registered counsellor for more than 15 years and is a Level 4 counsellor and supervisor. She holds a Bachelor of Social Science and a Master of Counselling and has further strengthened her professional knowledge through postgraduate certificates in Positive Psychology and Domestic and Family Violence.

Carol's experience includes working with several non-profit organisations and Employee Assistance Programs, and over the past six years she has developed her private practice, using a trauma-informed practice framework. She has gained firsthand experience supporting people facing the unique challenges and mental health barriers experienced by regional Australians, and intends to continue advocating for tailored therapeutic interventions in these areas.



Deirdre Rolfe

Deirdre Rolfe is a Canadian-Australian clinical psychotherapist, author, and ACA Level 4 clinical member and supervisor with over thirty years of experience working in trauma recovery, attachment injuries, grief, relational abuse, Cluster B abuse survival, and psychological resilience. Deirdre holds a diploma in Social Counselling, together with a Bachelor

and Master of Therapeutic Counselling. Her work is informed by existential psychology, Jungian depth psychology, attachment theory, neuroscience, and trauma-informed practice. Deirdre is the author of *You Are as Sick as Your Secrets: Trauma Understands Trauma*, *Dark Contracts: Breaking the Nex of Narcissistic and Psychopathic Control*, and *The TR6 Trauma Model*, and is the creator of *TraumaCode: Symbols, Metaphors and Rituals*, a 96-card therapeutic system designed to make trauma concepts more accessible.



Nikki S. Strong

Nikki Strong is a counsellor, psychotherapist and tertiary educator based on Awabakal country in Newcastle, Australia. She holds a Master of Counselling (UNE) and a Bachelor of Arts (Gender Studies and Psychology) from USYD. In 2024 Nikki completed a Bachelor of Psychological Sciences (Honours Class I) at UON where she pursued her thesis research

on ADHD and women's health and was awarded the UON College Medal. In her private practice, Nikki's work primarily focuses on providing evidence-based, neuroaffirming support to neurodivergent individuals, especially for women and the

LGBTQIA+ community. As someone with lived experience of ADHD, Nikki is passionate about helping people create a life that works with their brain, rather than against it. As a university educator, she teaches a range of counselling and psychotherapy topics in under/postgraduate education. Her philosophy is centred in helping students meaningfully connect the theory with real world practices as well as demystifying and humanising the role of counsellor and psychotherapist.



Sean A. Halpin

Sean Halpin is an Associate Professor in Clinical Psychology at the University of Newcastle and serves as Director of the University's Psychology Clinic. His work focuses primarily on training and supervising early-career psychologists undertaking postgraduate studies. Before joining the university, he was the clinical leader for the Newcastle Child and

Adolescent Mental Health Service, where he worked extensively with adolescents and young adults experiencing the early stages of psychotic disorders, as well as their families. His current research interests include non-suicidal self-injury, the relationship between physical activity and mental health, the development and evaluation of outdoor-based therapeutic interventions, and ethical decision-making among early-career psychologists.



Sadhna Makhija

Sadhna Makhija is a Master's qualified Clinical Psychotherapist, ACA & PACFA Credentialed Member, and clinical supervisor with extensive clinical experience specialising in trauma-informed care and the integrated treatment of anxiety, panic, overwhelm, and trauma. Driven by a passion for transforming how we understand and treat these interconnected

presentations, Sadhna's work integrates evidence-based modalities including CBT, DBT, ACT, EMDR, mindfulness-based approaches, and clinical hypnotherapy, supporting clients move beyond symptom management toward genuine recovery and resilience. Her Master of Counselling, Master of Statistics, and Diploma in Clinical Hypnotherapy provide both clinical depth and research-informed practice. She is accredited to provide clinical supervision with the Australian Counselling Association and Australian Hypnotherapists Association and works with neurodivergent clients as a NDIS-approved provider. Based in Australia, Sadhna brings culturally responsive, trauma-informed practice shaped by years working across India, East Africa, and Australia. Her research and clinical interests focus on the efficacy of integrated evidence-based approaches in trauma recovery, the neurobiology of anxiety and panic, and pathways to genuine, lasting change, contributions grounded in both rigorous clinical experience and commitment to advancing the field.



Andres A. Miranda

Andres A. Miranda is a Registered Counsellor with the Australian Counselling Association (ACA), holding a Master of Counselling Practice and a Graduate Diploma in Counselling from Tabor College Adelaide, alongside a Bachelor of Arts (Theology). He brings extensive experience in pastoral ministry, encompassing relational care, crisis

support, and counselling-informed practice across integrative and community-based settings. His academic research operates at the interdisciplinary intersection of psychological theory, process philosophy, and experiential well-being. He has published peer-reviewed work in international journals, including the Scottish Bulletin of Evangelical Theology, and his article in this current issue of the Australian Counselling Research Journal outlines a process-based account of ecological contact and experiential coordination.

Dr Bernard Fan

Dr Bernard Fan graduated from the National Drug Research Institute, Curtin University, and was the last student of Emeritus Professor Steve Allsop before his retirement. Dr Fan is a professional in addiction including in alcohol and other drugs (AOD), and gambling disorders, with extensive clinical counselling experience in these areas. He has worked as an AOD counsellor, problem gambling counsellor, rural family counsellor and a facilitator in running gambling treatment programs and AOD (Pathway) programs in prison environments across the Perth metropolitan area. He also has clinical experience working with children, people of CALD backgrounds, Indigenous Australians, and prisoners.

Dr Brian Steels

Dr Brian Steels is an international expert and consultant for Restorative Justice (RJ), Penal Reform and Critical Criminology. Has been a Visiting Fellow at the UN offices in Tokyo as well as Thailand. As an academic, Brian has held various positions over the past 30 years as a Senior Research Fellow, working at Murdoch and Curtin Universities, and Guest Fellow at UWA's Crime Research Unit, as well as contributing to numerous books, academic journals and the UN Handbook on Restorative Justice. Although retired, his interests remain in Circles of Support and Accountability, Victimology, Therapeutic Jurisprudence, and offender rehabilitation at an individual, family and community level, especially among local people often marginalised, discarded and socially excluded. He remains the Patron of the Asia Pacific Forum for Restorative Justice.

Mentoring as an effective intervention for trauma, grief and loss in regional Australia

Carol Yates

Keywords: *Mentoring, Regional, Christian interventions, Trauma, Grief and Loss.*

Abstract

This paper addresses the unique mental health challenges that regional and rural Australia face, particularly in relation to trauma, grief, and loss. Although evidence-based interventions are available to families and communities, they are not yielding outcomes comparable to those in urban areas. The central discussion posits that regional disparities arise from specific barriers and distinct needs, necessitating tailored interventions. This paper makes several unique contributions: it provides a comparative analysis of urban and regional mental health outcomes, examines the specific impact of location on conditions like depression, anxiety, and suicidality, and highlights the importance of tailored interventions for individuals and families. By evaluating current interventions, the research identifies gaps in effectiveness. Newer approaches, like mentoring and group work, have the potential of text analysis for early detection of mental health issues with effective interventions. This paper will explore a Christian mentoring and strengths-based group work program that I have been involved in, that could enhance outcomes in regional settings.

Introduction

This report identifies what current research reveals about mental well-being in regional Australia and reviews therapeutic interventions targeting trauma, grief, and loss. It narrows the scope from national and state statistics to focus on support mechanisms and interventions experienced by regional and rural Australians (Australian Bureau of Statistics, 2024). By connecting these statistics to specific policy needs, the report highlights critical areas that lack adequate intervention strategies. It offers policymakers actionable insights to improve mental health outcomes in these communities.

Trauma in these regions comes from disasters or personal events, often resulting in overlooked grief and loss. This research will examine direct links between mental health and trauma, grief, and loss in these areas. Exploring systemic barriers described in recent literature, such as those by Kavanagh et al. (2023a), align with therapy challenges in rural settings. Addressing this could bridge the gap between anecdotal evidence and research, enhancing the credibility of the findings.

To further explore these issues, the data will be examined from a broader perspective, drawing on the Australian Bureau of Statistics (2024). The ongoing discussion focuses on mental health in rural areas. It leverages the State of Mental Health Report: Bundaberg & Fraser Coast (2024) to examine the current mental health status in those regions. This enables comparison of the differences cited by the ABS with those observed in regional settings.

This paper examines issues facing rural Australian families, focusing on trauma unique to rural areas, such as natural disasters and farming hardships (Campbell et al., 2006). The report addresses grief, loss, and the high suicide rate in rural areas (Johns, 2015). It argues that barriers in remote areas worsen mental health and that these barriers are unique to rural settings (Kavanagh et al., 2023a). The research focuses on underrepresented groups, including youth (Klinner et al., 2023). It argues that interventions must be directly relevant and tailored to the needs of these areas.

Current interventions used in urban environments may not meet the needs of rural Australians. Academic literature will support the presentation of a Christian worldview and highlight evidence-based interventions in both urban and rural communities. It is also worth noting at this point that there are some groups in the community who may be of different faiths or perhaps individuals dealing with incidences of religious abuse, for whom a Christian based intervention is not suitable.

The approaches address the “missing middle” (Brown, 2025), a term used to describe gaps in community mental health care. Studies indicate mentoring and group interventions improve participant engagement and quality of life without replacing traditional therapies. (Collins, 2021). Christian mentoring and group interventions, such as Empowered Faith Communities and the COACH mentoring program, can enhance clinical care (COACH network, 2025).

My experience as a counsellor in the regional Widebay community of Hervey Bay in northern Queensland, highlights distinct therapy issues. The paper will introduce a successful Christian therapeutic intervention I am involved in, recently used in some rural settings, drawing on the work of Mark Matthews and Toby Baxter, as well as programs such as Empowered Faith Communities and the COACH mentoring program (COACH Network, 2025).

Current interventions in rural areas

Many regional families experience trauma, grief and loss that can often lead to depression, anxiety and in some cases suicidality. To provide context for this study, it is important to look at broader statistics on Australian mental health. The Australian Bureau of Statistics reports: “42.9 per cent of people aged 16–85

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have had a mental disorder at some time. 21.5 per cent have a 12-month mental disorder, with anxiety being the most common (17.2 per cent of people aged 16–85). 38.8 per cent of people aged 16–24 years had a 12-month mental disorder” (Australian Bureau of Statistics, 2024). While these numbers reflect the nation as a whole, it is vital to understand the differences in rural areas. According to a report from the Hervey Bay Neighbourhood Centre *State of Mental Health Report* (2023), a significant number of Fraser Coast residents have a long-term mental health condition. This raises the question of whether similar figures are observed in other regions. Ayton notes that in health and social care, it is important to:

“Innovate, implement and evaluate programs and practices to identify an evidence base for care. We need to measure what we previously thought was not measurable. We need a way to explore and understand experience – this is qualitative research.” (2023).

As a counsellor in a community employment provider, I have seen hopelessness caused by clients feeling unsupported and uncared for. To broaden the discussion, the National Rural Health Alliance says:

“The prevalence of people experiencing mental illness is similar across the nation: around 20 per cent” (Australian Bureau of Statistics, 2024).

Comparing the rates of mental illness in rural areas and major cities may have masked a high rate of psychological distress and untreated or undiagnosed mental illness. Self-harm and suicide have also been found to increase with remoteness. The research has found that people who experience suicidality are more likely than the general population to have a mental health disorder or condition.

There is also a consideration of the comorbidity of substance use. Rates of lifetime risky drinking (more than two standard drinks per day on average) show strong regional dependence, along with illicit drug use, which is higher in remote and very remote areas compared to all other regions (National Rural Health Alliance 2021).

Once again, drawing from my hands-on experience, I have worked with clients who have found that using alcohol and drugs has been their only way of coping with more deep-seated trauma, grief and loss. In the case of the cohort I have worked with, this, in turn, leaves them unable to maintain employment. The spiral continues downwards without sufficient interventions, leaving entire families at risk.

A 2024 ABS report on mental health on the Fraser Coast and Bundaberg regions of Queensland is particularly sobering. A staggering 13 per cent of Fraser Coast residents and 12 per cent Bundaberg’s population live with a long-term mental health condition. 14 per cent of women and 11 per cent of men reported long-term mental health concerns, and nearly a fifth of First Nations people affirmed long-term mental health issues (18 per cent). This culminated in 35 per cent of the community having a core need for mental health assistance. Another notable fact is over a fifth (22 per cent) of unemployed people reported a long-term mental health diagnosis.

Based on my observations of these clients in my counselling, this figure suggests that individuals are underreporting. According to research published by McLachlan(2023) and colleagues, 31 per cent of people in rural Australian communities reported experiencing psychological distress, with the majority facing moderate distress and about a third experiencing high levels.

Past interventions that have missed the mark

Drawing on current research, several factors have been identified as potential mental health concerns when considering interventions and their effectiveness in regional areas of Australia. Kavanagh et al. (2023) developed a scoping review of the barriers and facilitators to accessing and utilising mental health services across regional, rural, and remote Australia to conduct a thorough review of the available interventions.

From my own practice experience, I was able to identify with the findings by Kavanagh (2023) that there are limited resources available to clients who are also trying to navigate complex systems. In addition other barriers such as societal attitudes, technology, geographical distances and cultural differences present ongoing difficulties for many clients.

Identifying attitudes towards social issues was one of the factors I observed while travelling to more remote areas. Often, the number of participants who engaged with the programs was much less than anticipated. Based on conversations with attendees, there was an overall sense that seeking support was pointless, accompanied by helplessness and hopelessness, and reports of not being understood culturally. Although high-quality programs were provided, uptake in the community was significantly lower than that of their urban counterparts. Furst (2021) adds to the finding by reporting disproportionate investment in services in regional areas relative to other areas. This study also identified confusion and a lack of clarity regarding who is responsible for care in these regions.

As Campbell et al. (2006) reveal in their study “Rurality and mental health: A primary care study”, the gaps and barriers identified in these areas are as varied and distinct as the regions’ demographics. They consider demographic factors such as Indigenous/First Nations status and whether the towns are mining sites, coastal tourist destinations, or small inland settlements. Each of these demographics has distinct needs, which makes narrowing solutions to mental health issues for each location more than a “one size fits all” scenario.

This same report goes on to posit that mental health disadvantage in rural areas is due to service accessibility. Not only are there greater distances to travel, but there are also fewer specialist services and general practitioners. This research also suggests that community relationships should be considered and that community size and growth should be assessed. (Campbell et al. 2006). This, in turn, feeds into the differing rates of unemployment and poverty. Kavanagh’s more recent report “A scoping review of the barriers and facilitators to accessing and utilising mental health services across regional, rural, and remote Australia” (2023), indicates that these same barriers have remained problematic in rural areas in more recent years.

A study by Dashputre et al (2023) found that a range of lifestyle factors are associated with psychological distress and depression in a rural Victorian community. These lifestyle factors play a significant role in reports of stress and depression. It was found that individuals who were smokers and obese were 3-4 times more likely to indicate that they were dealing with psychological distress and depression. Lifestyle factors, including overall health, diet and attitudes towards health, have also been identified as possible areas of concern.

With these lifestyle factors in mind, research into more specific data that speaks to suicidality (Dashputre et al., 2023; Kölves, 2012) reveals that factors such as cultural influences and appropriate treatment services contribute to the discussion around addressing specific factors leading to suicide in rural settings. These include the specific agricultural industry for each individual rural setting, Relationship conflict and breakdown, income and work problems, as well as alcohol use, also rated as a significant factor towards suicide rates in these areas (Kölves, 2012).

Interventions currently used in regional and rural areas

While this paper to date has highlighted areas of concern in assessing mental health interventions in regional Australia, it is important to note that, despite these gaps, many attempts have been made to address them. A snapshot of the types of interventions offered in communities is provided in publications such as the Rural Wellbeing Toolkit (University of Southern Queensland, 2025). This toolkit is a resource provided to rural communities and follows three streams of support. The first is provided for the general community and supports interested community members in recognising signs of mental health concerns by listening, understanding, and identifying a person's needs. Once they have connected, they can help individuals identify qualified, appropriate support, and participants in this program are encouraged to maintain connections as friends and community peers.

It has been my privilege to coordinate a Christian mentoring program, COACH (Creating Opportunities and Casting Hope) (COACH Network, 2025), for two years. I will return to this reference when I address possible Christian interventions. This successful initiative, conceived by the New Peninsula Church through Toby Baxter and Mark Matthews in 2003 (Baxter & Matthews, 2022), exemplifies such mentoring.

The other two support streams are for professional facilitators to train and develop these programs, and there is also an online stream for interested stakeholders to engage and increase their awareness and competence regarding mental well-being. Other initiatives developed to support this cohort include interventions for farmer health (The National Centre for Farmer Health, 2025) and Rural Minds workshops (Lindley, 2025).

Many online supports are available to people in remote areas, including national services such as:

- Lifeline – <https://www.lifeline.org.au/>
- Beyond Blue – <https://www.beyondblue.org.au/>
- Black Dog – <https://www.blackdoginstitute.org.au/>
- Eheadspace – <https://headspace.org.au/>
- SANE Australia – <https://saneforums.org/>
- My Age Care – <https://www.myagedcare.gov.au/>

These online options also facilitate access to psychologists and counsellors.

Given the accessibility of technology, Antoniou (2022) argues that technology and text-based interventions can also serve as predictive tools (University of Southern Queensland, 2025). The aim is to identify possible indicators of depression, anxiety and even suicidal tendencies, by analysing the words that a client is using. Overall, these services provide contemporary solutions that were not previously available. In addition to emerging digital interventions, it is worth highlighting current group interventions that have been well utilised in regional and rural areas.

Cohorts identified as 'at risk'

At this point, the research has identified specific "at-risk" cohorts in regional areas that require attention before implementing best-practice mental health interventions. There has been mention of the prevalence of women reporting depression and psychological stress (Dashputre et al., 2023). This report aims to uncover the cohorts that are possibly under-reporting their mental health status.

Identifying those who are not reaching out for treatment – who could be spiralling into chronic mental health concerns and suicide – is crucial. For instance, a recent analysis (Dashputre,

2023) suggested in some rural communities, underreporting could be as high as 25 per cent among certain groups, based on comparisons with known metrics of diagnosed cases in similar demographic groups. Further investigation would help refine such estimates and offer more precise insights. Identifying individuals who are reluctant to seek help or unaware of available resources remains a significant challenge, underscoring the need for ongoing outreach and tailored interventions.

It has been identified by Kőlves (2012) that those most at risk of suicide in remote areas are male youth, farmers and individuals identifying as Indigenous. To address these individually, it is hoped that a more detailed understanding of the target concerns for each group and of best-practice interventions to support help-seeking (Kőlves, 2012) will be developed.

When considering regional male youth, Klinner (2023) offers valuable insights from a qualitative exploration of young people's mental health needs in rural and regional Australia; the study identifies engagement, empowerment, and integration as key findings. This report concludes that young people who experience geographic isolation, which can be exacerbated by natural disasters such as drought and fire, require effective mental health education and support that they want and find useful. This report also reveals that these young people are facing stigma and negative beliefs that prevent them from seeking help, which must be addressed. For example, certain beliefs generated through community and social media exacerbate distrust of help-seeking supports and services. These include supports that are consistent and well-coordinated, engaging and empowering, and cost-free.

It was also noted that support offered should include teachers, parents, and other primary caregivers in their lives (Klinner et al., 2023). Based on this research, Klinner (2023) posits that a multi-pronged community approach is needed to provide this education and support across the following arenas: community, family, school, peers, and individuals. It is when there has been little to no help from the first four areas that a young individual will show signs of major depression and psychological distress. These signs include attention-seeking behaviours, aggression directed at peers, teachers and parents and signs of self-harm and suicide. When these signs go unchecked, such behaviours are normalised and become the accepted norm within the community (Klinner et al., 2023).

One of the programs I have personally been involved in is a strength-based, person-centred format that includes a one-hour box-fit class followed by two hours of psychoeducation, supporting clients in developing positive coping strategies and identifying common distorted thinking patterns, as well as other helpful mental health aids (Populi Solutions, 2025).

I have been greatly disappointed to find that other young people in the community were dissuaded from attending because peers and other influences distracted them from the support they could receive. Those who attend always report that they are pleased they did so and surprised by how much it improved their sense of well-being. One example of a successful outcome occurred during a "Gloves" program in a rural location.

When working with a small group in the South Burnett region in Queensland, during one of the group discussions, a participant reported that finding work had been difficult because he had no means of transport. He stated that, since his bicycle had been stolen, he had lost hope and was just sitting around watching television. When asked whether he would be able to try again if he had a bike, another participant responded promptly, stating that he had a spare bike and was happy to give it to the other participant. The young man in need accepted this kind offer immediately, and an ongoing friendship began to emerge. Through this small gesture, signs of hope and positivity began to lift the group's mood from this time on. As the facilitator moves away from the group, it is hoped that these participants will

continue working together as a community.

The next cohort identified as at greatest risk comprises those working in the primary industry of farming. It has been identified that farmers come in as the highest at-risk occupation, and statistics tell us they are 40 per cent higher risk of suicide than their urban counterparts, and in more remote areas, they are a massive 100 per cent more at risk. Some of the reasons identified as contributing to this unfortunate fact include geographic isolation and seclusion, limited employment opportunities, and industry instability caused by natural disasters such as bushfires, floods, droughts, and cyclones (Antoniou et al., 2022). The most at risk of suicide and depression for this cohort could fit a similar profile to this: young male, separated or divorced, usually living alone. These young men are usually labourers on farms, not farm owners, and have a history of mental health concerns. (Antoniou et al., 2022).

As has already been mentioned, our Indigenous communities are another cohort that are most at risk of being exposed to significant mental health barriers, suicide and grief and loss. Part of the issue for Indigenous communities who are remotely located is that they are not easy to access, and as such, they are significantly under-reporting their need for mental health care. It is also very important that, whatever the interventions are, those reaching these communities be culturally aware of the mental health nuances that inform them. An example of this would be the cultural meaning behind self-harm. To understand the cultural meaning and identity behind the acts of “sorry cuts” and “anger cuts”, it is important to examine the significance of using them to express a desire to cope with unbearable pain. It is this kind of cultural awareness that is needed to broaden the social and emotional context of these communities. (Kavanagh et al., 2023a).

A Christian worldview intervention to support longitudinal change

To clearly assess the impact of Christian interventions on mental health outcomes, we need to define ‘longitudinal change’ operationally. For this purpose, we consider longitudinal change as sustained impact over at least three years. Indicators for this assessment will include reduced frequency and severity of mental health episodes, increased engagement in community activities, and reports of improved quality of life among participants. Establishing this time frame and these indicators will guide readers’ expectations and facilitate evaluation of the intervention’s effectiveness.

To address this question, I will refer to two interventions that are each stand-alone yet closely linked. One of these programs was mentioned earlier: the COACH mentoring program; the other is an initiative gaining momentum, “Empowered Faith Communities”. One of the features of these programs is their ability to work alongside other evidence-based interventions, and, at the same time, their heart to introduce the Christian figure of Jesus into the lives of all involved, mentors and participants alike. As was quoted in “Mentoring for extra-ordinary transformation”

“Jesus was a mentor, and his life serves as a model for all mentors to follow.” (Baxter, 2022).

To support the success of this program in communities, churches, and individuals’ lives, a study was conducted (Ayton, 2012,) and subsequently endorsed by Monash University in Victoria. This study explored the impact of the COACH mentoring program on health and well-being, thereby demonstrating the effectiveness of this person-centred empowerment model of mentoring. Mark Matthews was reported to say about the study:

“One of the most powerful findings from the research was the concept of the ‘missing middle” (Brown, 2025)

This term describes individuals who need more than one intervention and find themselves “falling through the cracks”. Perhaps this is the very cohort that has been described thus far as under-reporting and sceptical about help provided by “one-off” mental health interventions. It was also reported that the aim of the COACH initiative has always been to adopt a long-term perspective on breaking generational poverty. Because the view has never been about brief intervention, the program offers a position by which longitudinal change can be observed.

COACH is an acronym for “Creating Opportunities and Casting Hope”. It is framed on the website as being “Community impact through integrated, strength-based, best practice frameworks that equip partners with effective tools to provide support, create belonging and empower people in their local communities. (Coach, 2025). Mentors are thoroughly trained and screened. Only those who can walk alongside of their participants as a “friend with a purpose” (Coach, 2025), without judgement and able to with-hold their own religious or philosophical views, are released to mentor. Once they are matched there is ongoing supervision and training.

The following scenario illustrates the positive outcomes achieved through the COACH program.

Jan is a 25-year-old mother of five children. For as long as she can remember, she has never known a day of peace in her family home. She is the daughter of migrant parents who fled the terrors of war in Afghanistan. She knew her father loved her; however, he was so often absent due to alcohol after the untimely death of her mother when she was just 13 years of age.

By the time she was 15, she fell into the arms of her 18-year-old partner, David, who was also looking for a way to escape the family violence in his home. David thought he was in love with Jan and wanted to rescue her from her unstable father. Soon thereafter, Jan became pregnant and gave birth to their first son at age 16.

For two years they lived in a caravan on David’s grandparents’ property. David found it hard to find work and soon started taking drugs to cope with the uncertainty of life. Within three years, they had three children under the age of three, and in the fourth year, Jan fell pregnant with twins. David began to use the violence he learned from his family to cope, and after a very explosive episode, he was sentenced to a jail term because he was found with drugs and also assaulted an officer.

Jan cried out for help when she learned that her third child was diagnosed with autism. After the birth of her twins, her daily struggles were compounded by her own diagnosis of chronic fatigue.

Jan had been seeking support from a mental health service to try to help her deal with her depression and anxiety when she was referred to COACH.

Sandra became her “friend with a purpose”, and together they are working towards her goals to build better relationships with her children, find order and peace in her home and establish new friendships in the community.

Progress is slow, but Jan finally feels that there is someone in her life who is willing to provide the guidance and support she was never given growing up.

Sandra enjoys her visits with her participant very much and leaves feeling that her life can be a small help to someone else.

Building on the foundational work offered through the COACH program, which is now operating Australia-wide, the “Empowered Faith Communities” have emerged. The vision of this program is to support many of the same individuals who are “doing life tough” by providing support in the community they are familiar with. These communities comprise individuals on the margins who are empowered and encouraged to grow in faith where they are. Having been a COACH coordinator, I have witnessed the depth of trauma and grief that has culminated in them living in less-than-ideal conditions. An Italian psychologist, Gianmarco Biancalani, suggests:

“Spirituality may be a key factor in reducing the negative psychological effects of traumatic events.” (Biancalani et al., 2022).

Mark Matthew shares an encouraging story about a member of an “Empowered Faith Community”:

“Rose is a regular member of the Forrest Hill Chase Empowered Faith Community, (EFC) in Victoria, Australia. Rose was in need of support from the Community Pantry at Crossway Lifecare. Life hasn’t been easy for Rose and she was seeing a psychiatrist and on medication for anxiety... ‘Rose has been living with a significant anxiety disorder. Ordinary things that perhaps many people can do were not possible for Rose. And yet, in her EFC her growth and resilience has been quite remarkable....”

“Rose is learning to smile more and to focus on positive thoughts – and now she is actively participating in her community. Rose brings soup and cakes that she cooks to her EFC gathering as this is her strength... Rose also attends other community gatherings too and now, with her doctor’s support, she has ceased taking medication and doing much better. She rarely misses her EFC gatherings and outings together... She is grateful for the life and friends she now has and loves sharing her resources with the group. She is a happy participant in the art activities and Bible reading....”

The COACH program, along with the “Empowered Faith Communities”, is well placed to deliver good, evidence-based person-centred interventions, as well as the additional advantage of providing an opportunity to discover long-term transformation through a faith-based, group intervention.

Conclusion

If we were to implement the multi-pronged community approach suggested by Klinner (2023), we might not see as many rural people fall through the cracks across the community, family, school, and peer groups. There is no quick intervention that will support and empower this “missing middle” cohort into a place of flourishing. If this small town had a community of people whom Mark Matthews and Toby Baxter classify as “People of Peace” (Baxter & Matthews, 2022), there might be a referral to a well-trained mentor willing to accompany them on the long path.

The hope that can develop through a consistent and committed relationship may well offer a more positive future for individuals. It is also heartening to find, through the research, that substantial technological efforts are being made to support people in practical, user-friendly ways (Antoniou et al., 2022).

In summary, I would like to suggest that the preponderant interventions for trauma, grief and loss that have been explored and discussed in this paper leave many more questions than answers. Although the statistics presented support the need for greater investment in mental health interventions in regional and rural settings, research also indicates that these regions have not

been completely overlooked but may have been mismanaged.

It is apparent that there remains room for development to ensure that current situations are addressed in proportion to each region’s specific needs. Perhaps interventions in the form of programs, such as the Gloves program, are a step in the right direction towards long-term change. Could faith-based programs, such as the COACH mentoring program and the introduction of more “Empowered Faith Communities”, be part of the solution to support the complex lives of individuals and their families?

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TR6 Trauma Model™: Descent into the Shadow

Deirdre Rolfe

Keywords: *Trauma, model, universal, directional, adaptive, maladaptive, shadow*

Abstract

The TR6 Trauma Model™ proposes a clinically informed, stage-based framework that maps trauma as a universal human process rather than a pathological condition. The model hypothesises that recovery is determined less by the severity of the trauma itself than by an individual's ability to navigate six identifiable stages—lack of reconciliation, re-injury, rumination, resentment, rage, and revenge—without becoming trapped in maladaptive “shadow states”.

Immersed in existential and depth-psychological theory (Frankl, 1959; Jung, 1960; May, 1977) and supported by current trauma neuroscience, the TR6 Trauma Model bridges meaning-making and regulation, offering both a conceptual map and a practical assessment tool for trauma-informed care.

The TR6 Trauma Model

The TR6 Trauma Model is a clinically informed, conscious framework that identifies six of the most universal stages of trauma. Rather than pathologising these stages, the model normalises them as shared human responses to shock, threat, grief, betrayal, abandonment, and harm. This approach offers a departure from rigid diagnostic frameworks by honouring the layered, existential nature of complex trauma. At its core, the model is simple and accessible. It recognises six universal stages—*lack of reconciliation, re-injury, rumination, resentment, rage, and revenge*—each representing a natural psychological and somatic response to adversity.

Analogous to Dr. Elisabeth Kübler-Ross's model of grief and loss, the Trauma Model framework outlines a universal emotional process. Kübler-Ross identified *denial, anger, bargaining, depression, and acceptance* as typical psychological responses observed in individuals confronting terminal illness and, more broadly, significant loss (Kübler-Ross, 1969).

Although Kubler's model is often misconstrued as a fixed sequence, its clinical utility lies in providing a recognisable structure for navigating experiences that are frequently overwhelming and nonlinear (Kübler-Ross & Kessler, 2005). Similarly, the Trauma Model can be used as a standalone tool for identifying where an individual is situated in their trauma

experience and whether their responses remain adaptive (above the line) or have become maladaptive (below the line).

This distinction between adaptive and maladaptive movement allows the Trauma Model to serve as both a preventative and a directional map. It helps individuals, clinicians, and researchers identify early warning signs of psychological and physiological overload before they consolidate into chronic suffering or illness. A person can use the model simply to track self-awareness, recognising areas of stability and areas that may benefit from attention, support, or professional care. In this way, the model bridges self-understanding and clinical practice, offering a layered direction for healing while remaining grounded in clarity and accessibility.

While the model stands independently as a clinical and educational tool, it also supports deeper exploration through existential and depth psychological lenses. These perspectives illuminate how trauma not only disrupts functioning but fractures meaning, identity, and the sense of coherence that underpins the self. Grounded in the principles of existential therapy, depth psychology, and neurobiological research, this expanded view allows practitioners and survivors to explore trauma's symbolic, relational, and bodily dimensions. However, engagement with existential theory is optional as the model retains its full utility without it.

Those who wish to work purely with the clinical and somatic dimensions can do so effectively, while others may choose to integrate the existential material to explore trauma's philosophical implications. The framework can be applied to all trauma responses, from single-incident acute trauma to prolonged experiences, although it is especially relevant to chronic and complex trauma.

Acute trauma refers to a single overwhelming event. Chronic trauma describes repeated exposure, such as domestic violence, bullying, or ongoing relational harm. Complex trauma often begins in childhood and continues across the lifespan through entrenched relational patterns, schemas, attachments and involves a layering of wounds that shape identity and meaning.

It is within these chronic and complex forms that the TR6 Trauma Model™ most clearly illuminates both the progression of trauma and the risks of becoming stuck in shadow states.

This approach is structured as a descent model, yet it is essential to distinguish between two layers of descent.

Above the line: movement through the stages is adaptive: survivors fluidly move down into *lack of reconciliation, rumination, resentment, rage, revenge* and then come back up (Flow State). This process is organic and oscillating, more like a figure-eight than a straight drop, allowing clients to work through challenges, return to stability, and revisit stages as needed. Over

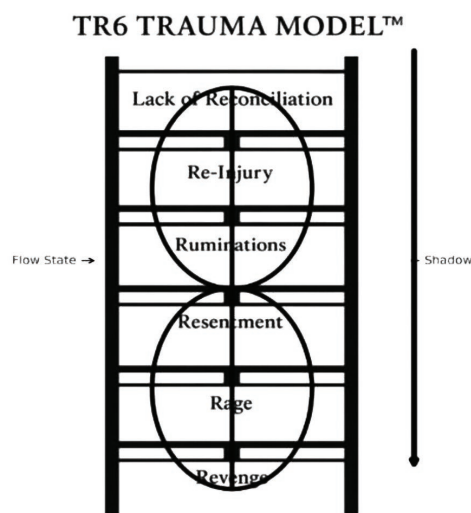
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time, a person may find that only one or two stages resurface, while others remain resolved, and it is both natural and useful to periodically check whether these areas still feel adaptive. The model also invites survivors into a meaningful descent through the shadows, normalising grief, anger, and disorientation as part of the individuation process. Individuation, as Jung (1959/1968) described, is the lifelong process of becoming whole, integrating conscious and unconscious aspects of the self while assuming full responsibility for one's life. Grounded in existential therapy and depth psychology, this model recognises that true healing often arises not from symptom eradication, but from reclaiming purpose, self-authorship, and connection to something greater.

Below the line: the descent deepens into shadow states where oscillation narrows, and entrapment occurs. Here the stages lose their adaptive function and become dominated by unconscious material as rage calcifies, betrayal becomes worldview and shame collapses identity. This is the true descent into the shadow, where the cumulative load of unprocessed trauma, particularly the progression from *resentment* into *rage* and *revenge*, carries higher risk. At this level, clients are less able to move fluidly through stages and require focused intervention to surface and work through the hidden drivers that hold them there.



The goal of the TR6 Trauma Model™ is to bring compassionate awareness to the layered interplay between the lightness of our being, our capacity for meaning, connection and vitality, whilst also holding the darkness of our grief, shadow, and survival. It encourages us to explore, existentially and energetically, how trauma fragments us across these polarities, and how healing invites a return to wholeness by embracing both the seen and the unseen, the known and the mysterious. This existential reorientation becomes the catalyst for releasing what once felt unspeakable.

Dr. Daniel Amen, (1998, 2008) psychiatrist and founder of Amen Clinics, has conducted one of the world's largest clinical databases of brain SPECT scans. His work highlights that belief in something larger than oneself, whether framed as God, transcendence, or simply a sense of purposeful design has measurable effects on brain health and resilience. Neuroimaging research has further demonstrated that individuals who orient toward meaning and purpose live longer, experience greater happiness, and show healthier brain activation patterns. These imaging studies reveal that spiritual or contemplative practices engage in key networks including the prefrontal cortex, anterior cingulate, and basal ganglia, regions tied to regulation, motivation, and reward (Newberg & Waldman, 2009). By contrast, a worldview grounded in pure randomness and nihilism ("life has

no meaning, I am here by chance") is associated with higher risk of depression and dysregulation.

These findings echo Viktor Frankl, the Austrian neurologist, psychiatrist and Holocaust survivor, who demonstrated through logotherapy that humans can endure almost any suffering if they can locate meaning within it (2006). Together, Amen's neurobiological evidence and Frankl's existential insights affirm that purpose is not merely a comforting story but a survival function, capable of rewiring neural circuits and restoring coherence after trauma.

Within the Trauma Model, this lens is critical because even when reconciliation or external closure is most often impossible, the work of re-establishing meaning from within enables survivors to move through shadow states, integrate their experiences, reclaim, restore, transcend and therefore sustain life itself. This model offers both clinicians and individuals a framework to recognise where healing is occurring and where entrapment may be blocking recovery.

Kübler-Ross's (1969) stages came to be recognised far beyond dying patients, resonating with divorce, job loss, injury, and even collective tragedies. It is my belief and hope that the TR6 Trauma Model speaks to the universal contours of trauma and offers language for experiences that cut across culture and circumstance, capturing stages of suffering and survival that many will recognise in themselves. In this way, the model holds the same potential to become a shared framework of meaning in the face of life's deepest wounds.

While the TR6 Model describes the landscape of trauma, the TR6 Assessment Tool provides a way to locate oneself within that landscape. The assessment is not diagnostic but rather reflective information, designed to illuminate areas of resilience and areas of risk. In clinical practice, the model and assessment work together: the model gives the map, and the assessment offers a compass for orientation.

The Six Stages of the TR6 Model

- **Lack of reconciliation:** The struggle to reconcile the irreconcilable; an open wound and the seeking of ambiguous closure.
- **Re-injury:** The repetition of harm through conditioned lack of boundaries, fawning, or appeasement; reinforced by cultural and family obligations, celebrations, and ongoing entanglement with what first caused the injury.
- **Rumination:** Obsessive loops of "why"; the mind circling endlessly without resolution as an attempt to regain control, a defence against the despair of accepting the starkness of what is.
- **Resentment:** Embodied embitterment: the weight of unresolved pain that could not be discharged.
- **Rage:** is the psyche's protest, against the violations that demand truth. Rage acts as the ultimate boundary. Suppressed or explosive anger is the rupture of truth, long denied expression, that masks deep pain and hurt, the anguish of powerlessness that structure the beliefs, perpetuating a victim's identity.
- **Revenge:** The drive to restore dignity, identity, control, power, retribution and at its rawest form, survival under the collapse of self/identity.

Each of the six stages includes both healthy expressions (*above the line*) and warning signs of emotional/embodied entrapment (*below the line*).

It requires:

- Naming what is stuck
- Feeling what was unfelt
- Allowing expression in a safe, supported way

- Recognising the deeper meaning beneath the pain
- Having choice in how you tell your story or respond to it
- Cultivating the capacity to rest in safety, with awareness of the body and senses, and to feel anchored in that state

When someone remains above the line, they may be in pain, but they are gaining awareness. They begin to recognise patterns, name life traps, have body awareness, sensory attunement and some level of ability to rest, observe, feel safe and tentatively seek change.

Signs include:

- Awareness of recurring patterns in relationships or family dynamics
- Attempts to set boundaries, even if inconsistently or fearfully
- Growing emotional literacy and therapy engagement
- Naming inner schemas or life traps
- Experiencing grief or anger at ongoing patterns, while maintaining a sense of agency

Below the line indicates where pain has become stuck, somatised, or internalised as maladaptive emotional responses such as suspended grieving, chronic re-traumatisation, obsessive replays, embodied embitterment, implosion & disintegration, Complexed decompensation and ontological despair. Below the line requires deeper subconscious work, attachment repair, trauma bond disentangling, somatic mapping, and shadow integration.

While regulation practices, EMDR, narrative therapy, IFS, and polyvagal approaches are useful at every stage, they become especially critical below the line, where acute interventions and comprehensive integration are most needed.

Below the line requires recognising:

- Suspended or frozen grief and pain that remains unprocessed or inaccessible
- Chronic re-traumatisation and survival bonds that fused to unsafe attachments or cycles of harm
- Obsessive mental replay and collapse into rumination that perpetuate cognition stuck in circular and corrosive loops
- Embodied embitterment and somatic distress resulting from trauma held in the body showing up as chronic pain, fatigue, or illness
- Identity disintegration or fusion with trauma causing fragmentation, implosion, or collapse of self into the wound
- Ontological despair and existential collapse creating a loss of meaning, disconnection from self, body, and future

The TR6 Model allows individuals to understand where they are in their healing journey, assessing their resilience, adaptability, and risk. When someone is below the line, emotional energy becomes stagnant, stuck, and severed from the self. It loops, implodes, or hardens as emotional energy becomes frozen, fused, or fragmented. When emotional energy remains trapped below the line, the unresolved weight begins to compromise the system itself and can progress into disintegration, the point at which the mind, body, and emotions no longer work together in a coherent, regulated way.

The Progressive Collapse of the Self

Disintegration is not merely distress. It marks a loss of adaptive functioning, where executive control (frontal lobe activity), emotional regulation (limbic system), and nervous system responses (autonomic regulation) become dysregulated or fragmented.

What is now understood as complex PTSD reflects the persistent disintegration of identity, memory, and affect regulation resulting from prolonged, repeated trauma (Herman, 1992). When the brain is overwhelmed by trauma, it can no longer integrate incoming information into a coherent narrative. People then become stuck in a state of emotional disintegration (Van der Kolk, 2014). Disintegration therefore is when the entire structure can no longer hold the *self* itself begins to collapse. It is the accumulation of what remains unprocessed. It is driven by the weight of denied, exiled, or repressed shadow material, and by the limits of an individual's capacity to carry what has not been felt, named, or integrated. This can lead to dissociation, somatic collapse, identity disturbance, or what trauma theorists refer to as "complex decompensation".

Complex decompensation refers to a profound breakdown in psychological functioning that occurs when a person is overwhelmed by accumulated, unresolved trauma, particularly chronic developmental, relational, or complex trauma. Unlike an acute crisis or transient emotional collapse, complex decompensation reflects a systemic erosion of the individual's ability to self-regulate, maintain a stable identity, or function adaptively in relationships, work, or daily life. Instead of a sudden collapse, it's the gradual breakdown of previously effective coping strategies: a person can no longer maintain work, relationships, or self-care in the ways they once did. It resembles a slow decline into instability rather than an acute crisis. Within the TR6 Trauma Model, the progression from *resentment*, *rage* to *revenge* reflects not only emotional intensification but also a corresponding structural descent of the self. What begins as disintegration can deepen into complex decompensation, and, if unresolved, culminate in ontological despair.

Ontological despair, in this context, signals the deepest collapse, a state in which meaning, coherence, and the very ground of selfhood begin to disintegrate. It is more than psychological suffering, it is an existential erosion where the individual feels cut off from purpose, belonging, and the capacity to continue as a whole self. Each stage marks a further erosion of adaptive functioning, moving from fragmentation of regulation to systemic breakdown and the existential collapse of being itself.

Within the final stage of the TR6 Model, the term *revenge* is used deliberately to disrupt its narrow colloquial meaning as retaliatory harm. The TR6 framework approaches language not as a static entity, but as a dynamic construct whose meanings are embedded in cultural context, shaped by historical conditions, and altered through use over time. TR6 investigates the etymological strata of words by tracing their earliest linguistic and cultural origins, subsequently analysing how their meanings accumulate, shift, and diverge over time and across communities. These layered meanings are then recontextualised within a psychological framework, thereby restoring the word's comprehensive spectrum of meaning.

This linguistic methodology is intentionally bidirectional, operating at the level of etymology, (linguistic ancestry and semantic evolution) and at the level of clinical phenomenology, which attends to how trauma is lived, felt, and embodied in affective, relational, and identity-level terms. By integrating historical semantics with experiential formulation, the model enhances definitional precision and reduces misinterpretation, particularly for terms whose everyday usage is moralised, reductive, or clinically ambiguous. This integrative approach, reopens interpretive pathways that mitigate shame, restore agency, and broaden choice.

Linguistic Presuppositions: A Dual-Aspect Approach

The word *revenge* derives from the Latin *vindicare*, meaning to claim, to set free, to assert a right, while *dignity* (Latin *dignitas*) refers to inherent worthiness, honor, and the right to be valued. (Merriam-Webster, n.d.-a; Merriam-Webster, n.d.-b). In common usage, revenge implies inflicting injury in return however, within this framework it is differentiated into maladaptive revenge (externalised retaliation driven by unresolved rage and loss of self-regulation) and adaptive revenge (an internal reclamation of dignity, self-worth, and personal power). The TR6 structure intentionally challenges linguistic presuppositions by holding the term within a dual-aspect framework—above-the-line (adaptive) and below-the-line (maladaptive)—thereby challenging the reflexive moral dismissal of revenge and instead examining its phenomenological layers. What is often rejected as inherently destructive is reframed as a spectrum of response. At its maladaptive pole, it may manifest as compulsive retribution; however within its adaptive pole, it becomes symbolic vindication and boundary restoration.

Colloquial expressions such as “I hope the karma bus gets them” are normalised as emotionally intelligible responses and are then metabolised through structured processes, including the psychodrama intervention termed the *Act of Unforgiving*, in which the perpetrator is consciously uninvited from psychic participation (Rolfe, 2023). In this sense, revenge does not presuppose harm but functions as an intentional act of reclamation that safeguards dignity and self-worth. In forthcoming academic publications, these distinctions will be explored in greater detail and depth.

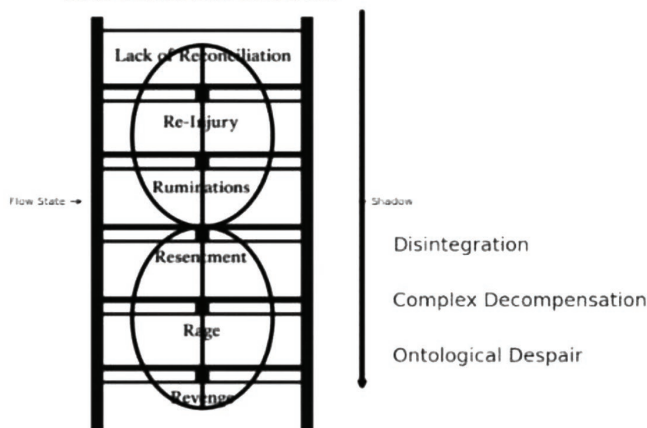
this entrapment occurs, how it intensifies over time, and where intervention is required to restore movement toward integration.

Each step down (below the line) however represents a further descent into the shadowed layers of stuckness, where initially adaptive responses to trauma can become maladaptive patterns, eventually leading to entrenched distress and deterioration.

As individuals move further down this descent, often without realising it, they become more vulnerable to internal rupture, relational disconnection, and embodied distress. This descent reflects observable changes in nervous system regulation, immune function, cognitive flexibility, and psychological identity. The deeper the descent (below the line) in each stage, carries the cumulative risk within the darker shadow stages of *rumination*, *resentment*, *rage* and *revenge*, on the descent ladder. Healing requires the capacity to recognise where one is in the descent, to assess proximity to being stuck, and to identify opportunities for re-integration. The goal is not to avoid or bypass the wound, but to engage with it consciously, to feel it, work through it, without becoming so entrenched that the wound remains open, dominant, and unresolved.

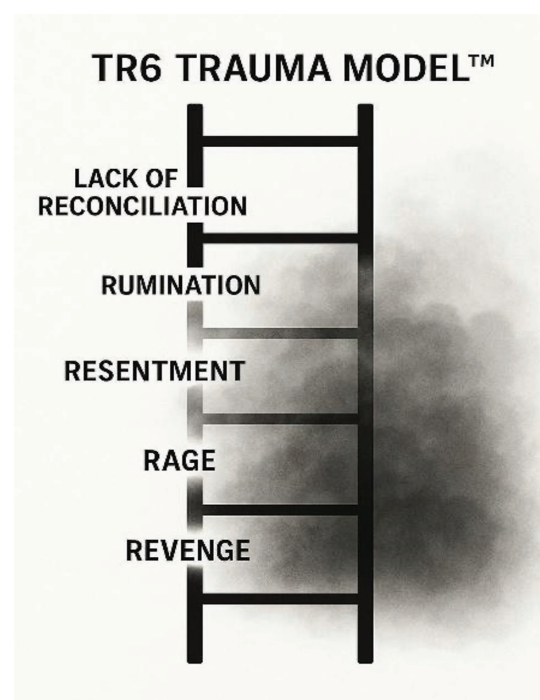
The descent into the *shadow*, refers to the process of consciously engaging with the parts of the self that are typically hidden, disowned, or defended against, what Jung (1968) called the “shadow”. These are not just negative traits, but unprocessed trauma states, unintegrated emotions, and maladaptive patterns that operate outside of awareness. In the TR6 Trauma Model framework, descent means turning toward these areas with structured awareness, rather than bypassing them with denial, fear, premature positivity or cognitive reframing. It is through this descent that we gain access to the implicit drivers of suffering and open the path toward authentic integration. In the TR6 framework, the descent into the shadow is the necessary path back to wholeness. This is the necessary initiation into shadow work, the willingness to let go of the illusion of safety, certainty, and control. What dies in this process is not the self, but the false structures that once held the psyche together. It is a symbolic death, the death of adaptation strategies that no longer serve, so that something more truthful, embodied, and whole can emerge. Trusting this descent means allowing contradiction, fear, and unknowing to coexist, while the deeper system reorganises beneath the surface.

TR6 TRAUMA MODEL™



Moving Through a Ruptured Mind: The TR6 Trauma Model: Descent into the shadows.

The TR6 Model is a descent model designed to map the progressive layers of unresolved trauma and the escalating risk of psychological and somatic collapse. Rather than viewing trauma as a single event or static response, the model conceptualises trauma as a deepening process, a downward movement through increasingly complex and embedded emotional, cognitive, and physiological states. One can move fluidly through the stages above the line, metabolising pain and returning to integration. The danger arises when the descent passes below the line into the darker strata of the psyche where unresolved trauma begins to congeal, and the natural progression hardens into psychological entrapment. The model is therefore intended to identify where



Integrating TR6 with Existing Trauma Assessments

The TR6 Trauma Model is not designed to replace existing trauma assessments but to complement and extend them. Widely respected tools such as the Adverse Childhood Experiences Questionnaire (ACE) (Felitti et al., 1998), the Connor-Davidson Resilience Scale (CD-RISC) (Connor & Davidson, 2003), the Dissociative Experiences Scale (DES-II) (Carlson & Putnam, 1993), and the Scale of Body Connection (SBC) (Price & Thompson, 2007) have provided critical insight into trauma's impact on mental health, body awareness, and adaptive capacity. These assessments are foundational within trauma-informed practice and are backed by decades of empirical validation.

This model acts as both an assessment tool and an existential navigation system, supporting deep integration, helping survivors track where they are thriving, where they are struggling, and how to move forward with clarity, compassion, and guided inquiry.

In addition to its value for personal insight, the TR6 Model functions as a comprehensive assessment and mapping tool for clinicians. It offers a structured framework to identify which stage of the trauma response a client is currently navigating, whether they are sitting in awareness, moving slowly, thriving, progressing, or potentially stuck. This mapping provides a dynamic risk assessment, helping both client and therapist pinpoint the emotional and somatic states requiring the most attention.

Therapists can use the TR6 framework as a clinical lens to fine-tune interventions with precision, whether engaging in EMDR, somatic therapies, Internal Family Systems (IFS), schema work, or narrative approaches, by identifying where dysregulation persists and where resilience remains intact, the model equips practitioners with the clarity needed to tailor therapeutic strategies that are evidence-based, trauma-informed, and client-specific. It is not just a tool for assessment, it is a method for deepening clinical attunement and enhancing therapeutic impact across modalities.

By teaching people to recognise what is still safe, even when uncomfortable and what needs healing at the subconscious level, the TR6 Model becomes a method for deep and lasting healing. While it provides a universal structure for assessment and awareness, the healing process itself is always subjective and individualised. Recovery is never one-size-fits-all. Therapeutic suggestions presented through the model are grounded in evidence-based research and intended to be co-designed or facilitated with a trained therapist, respecting the unique context of each individual's life. The model offers clarity and guidance, but it is through tailored, embodied, and relational therapeutic work that true healing unfolds. The framework supports both clients and clinicians in identifying the level of risk and tailoring interventions accordingly before the wound becomes a core identity, and before the descent leads to full collapse into embodied disintegration, complex decompensation or oncological despair. It is comparable to identifying, preventing and treating cancer in its early stages before it metastasises, spreads systemically and threatens the entire system; psychologically, relationally and physiologically.

This model is distinct from existing diagnostic frameworks such as PTSD, CPTSD, or Post-Traumatic Embitterment Disorder (PTED). While it may intersect thematically with certain constructs in trauma literature, the model is not a diagnostic tool, nor is it aligned with any single psychiatric classification system. The TR6 Model is the psychological equivalent of preventative care.

It allows clinicians to identify emotional "lesions" before they deepen, track signs of stuckness across multiple relational

domains, create individualised treatment plans based on stage-specific needs, and provide clients with insight into their patterns without labelling them as disordered. In contrast, waiting for someone to meet any of the diagnostic thresholds of PTSD, CPTSD or PTED is like waiting for Stage 4 cancer to appear before intervening.

This framework does not concern itself solely with trauma as a singular or past-bound event. Rather, it maps the emotional, psychological, embodied and existential toll of trauma that is repetitive, relational, and unresolved, sustained not just by external violations, but by internalised patterns, broken attachments, moral injury, and systemic invalidation.

When trauma is ongoing, when the relational field remains unsafe, when betrayal is repeated, when repair is absent, it becomes more difficult to distinguish what is a symptom and what is a survival strategy. This is precisely why the TR6 Model draws a clear line between above-the-line stages (natural trauma responses with movement) and below-the-line states (entrapment and collapse). Without that clarity, we risk missing the fact that for many, the trauma is not behind them, it is still unfolding in real time, often invisibly. Thus, the TR6 Trauma Model's recognition of shadow progression, especially in its final stages in the descent, aligns with Jung's belief that true healing only comes through conscious encounter with what was once repressed.

"One does not become enlightened by imagining figures of light, but by making the darkness conscious" (Jung, 1968).

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That Time of the Month: Exploring the Relationship Between the Menstrual Cycle and ADHD Symptoms

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Keywords: *ADHD, menstrual cycle, luteal, follicular, women*

Abstract

Attention-Deficit/Hyperactivity Disorder (ADHD) is a common neurodevelopmental condition more commonly diagnosed in males than females. Increased awareness of sex differences in ADHD presentation has seen a recent increase of female prevalence rates, yet female-specific ADHD research remains scarce. Preliminary research suggests a possible link between hormonal fluctuations within the menstrual cycle and changes in ADHD symptoms and medication effectiveness. Emerging theories like Multiple Hormone Sensitivity Theory (MHST) postulate that these changes could be due to females with ADHD being especially sensitive to hormonal fluctuations. A cross-sectional online survey was conducted for females with ADHD ($n=357$) and without ADHD ($n=37$) to investigate self-reported changes in ADHD symptoms in the luteal phase of the menstrual cycle compared to the follicular phase. This study also investigated changes in medication effectiveness and duration for medicated ADHD participants. Results indicated that ADHD and non-ADHD participants both experienced worse ADHD symptoms during the luteal phase compared to the follicular phase. This effect was greater for ADHD participants. Self-reported medication effectiveness and duration were significantly worse during the luteal phase. Medicated and unmedicated participants displayed no significant differences in ADHD symptoms during the luteal phase. These findings, consistent with similar research, provide preliminary supportive evidence to MHST. Impacts of the menstrual cycle on ADHD symptoms should therefore be considered during the diagnostic and treatment planning process.

Attention-Deficit/Hyperactivity Disorder (ADHD) is a neurodevelopmental disorder characterised by an ongoing pattern of inattention and/or hyperactivity-impulsivity that often persists into adulthood (American Psychiatric Association, 2022). It has three subtypes: predominately inattentive (ADHD-I); hyperactive/impulsive (ADHD-HI); or combined (ADHD-C). Most commonly diagnosed in children, ADHD has an estimated global prevalence rate of 5.3 per cent in children and 2.5 per cent in adults (Posner et al., 2020). Diagnosis rates for women and girls have risen in recent years (Davidovitch et al., 2017;

Meehan, 2022) with increased awareness of gender differences and diagnostic complexities in female ADHD presentations (Arnold 1996; Abdelnour et al., 2022; Quinn & Madhoo, 2014). The increase in prevalence rates has prompted the need for further research exploring gender and sex differences in ADHD presentation, especially with newer research highlighting the potential interplay between hormonal fluctuations and ADHD symptoms, including the impact that hormonal events such as menstruation have on women and girls' experience of their ADHD symptoms (Quinn, 2005, Quinn & Madhoo, 2014; Haimov-Kochman & Berger, 2014; Camara et al., 2021; Jong et al., 2023; Eng et al., 2024).

Gender and Sex Terminology

Psychology research has struggled to adequately distinguish between sex and gender, often categorising participants as women, girl or female without clear consideration on how participants choose to identify (Coen & Banister, 2012; Heidari et al., 2016). Sex is associated with one's biological make up; chromosomal, gonadal and anatomical characteristics (Australian Bureau of Statistics, 2021). Gender is a social and cultural construct that refers to one's personal identity, expression and experience that may or may not align with the sex recorded at their birth (Australian Bureau of Statistics, 2021).

It is important to make the distinction between the two related yet independent determinants of health and wellbeing as a lack of understanding of the underlying sex and/or gender differences can lead to a "gender gap" that has disproportionately affected females and has resulted in adverse health outcomes (Heidari et al., 2016). Consistent with Eng et al (2024), the current study uses the term "women" and "girls" when referring to public health implications or when referencing past studies, respectively. "Female" will be used when discussing biological influences such as hormonal phases of the menstrual cycle.

Gender and Sex Differences in ADHD

Historically regarded as a condition significantly more prevalent in males than females, ADHD research has mostly relied on the use of male participants (Gross-Tsur et al., 2006; Skolgi et al., 2013). ADHD in females has relatively recently become a focus of clinical attention (Haimov-Kochman & Berger, 2014; Hinshaw et al., 2018). For decades, ADHD prevalence rates for males vastly outnumbered rates for women and girls (Gaub & Carlson, 1997; Nussbaum, 2012; Quinn, 2008; Sciutto & Eisenberg, 2007). Recent increases in diagnosis for women have seen a balance in adult prevalence rates; however, the

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diagnostic rates for girls remain lower than for boys (Cortese et al., 2016; da Silva et al., 2020). Despite increased awareness of ADHD in females, women and girls still remain underdiagnosed and untreated for ADHD (Hinshaw et al., 2018; Jong et al., 2023).

Despite experiencing equivalent impairment to their male counterparts (Sciutto et al., 2004), females may be consistently underdiagnosed and unrecognised due to not meeting the stereotypical male symptoms captured in ADHD assessment measures (Skolgi et al., 2013; Quinn, 2005). Furthermore, female symptom severity is often not adequately captured in diagnostic criteria and assessments (Nussbaum, 2012; Quinn & Madhoo, 2014), with well-regarded diagnostic manuals such as the DSM-5-TR being criticised for lacking gender-neutrality in their ADHD diagnostic criteria (Lynch & Davison, 2022).

Many of the symptoms experienced in female ADHD presentations overlap with other comorbid mood conditions, increasing the risk of incorrect differential diagnosis (Robison et al., 2008) or misdiagnosis with mood disorders such as depression, anxiety and bipolar disorder (Quinn & Madhoo, 2014; Rucklidge, 2010; Grevet et al., 2006; Piñeiro-Díez et al., 2016; Waite, 2007). Misdiagnosis can result in women and girls receiving inadequate or incorrect treatment (Quinn, 2005; Kok et al., 2020). This further emphasises the need for the medical community to build awareness of sex differences in ADHD presentations.

Hormonal Fluctuations

While awareness of sex differences in ADHD has increased as female prevalence rates rise, the physiological underpinnings of these differences are not yet well established (Haimov-Kochman & Berger, 2014; Roberts et al., 2018; Camara et al., 2021). Emerging research has highlighted a potential link between hormonal fluctuations and ADHD symptoms, including the impact that hormonal events such as the menstrual cycle have on women's experiences of their ADHD symptoms (Quinn, 2005; Roberts et al., 2018; Jong et al., 2023; Eng et al., 2024). The menstrual cycle has a typical duration between 24-35 days (Lenton et al., 1984) and consists of two main phases: the follicular phase and the luteal phase. Both phases are regulated by the hormonal fluctuations of the hypothalamus-pituitary-gonadal axis. The follicular phase, which involves the production of the follicle stimulating hormone, begins on day 1 of menses and concludes with ovulation (Le et al., 2020). The sex hormones estrogen and progesterone levels are usually low during the early follicular phase but experience a sharp increase in the second week of the phase in the lead up to ovulation. A surge in the luteinising hormone occurs just prior to ovulation, marking the start of the luteal phase. During the luteal phase, progesterone levels gradually rise until they peak in the middle of the phase and then begin to steadily decline towards the end of the phase. The luteal phase also sees Estradiol (E2) levels fall sharply then temporarily rise again before steadily declining in preparation for menses.

The influence of these sex hormones on cognition, emotions, behaviour and brain structure is well documented. Hormonal fluctuations that occur throughout regular hormonal phases (e.g. the menstrual cycle) can affect key neural processes associated with emotional regulation and cognitive functioning (Le et al., 2020; Sacher et al., 2013; Barth et al., 2015). For example, E2 is the most common type of estrogen present during females' reproductive years and it influences a range of functions including mood, learning, memory, and pain perception (Luine, 2014; Boulware & Mermelstein, 2005). However, the link between progesterone on cognition and mood has yielded mixed evidence (Barros et al., 2015; Henderson, 2018; Sofuoglu et al., 2011; Standeven et al., 2020).

The Menstrual Cycle and Mental Health Symptoms

Women and girls with ADHD often experience comorbid conditions such as depression and anxiety (Bolea-Alamañac et al., 2014) as well as an increased risk of suicide and self-harm compared to males with ADHD (Hinshaw, 2018; Beauchaine et al., 2019; Garas & Balazs, 2020; Kakuszi et al., 2018). Furthermore, women and girls with ADHD experience worse life outcomes such as adverse health (Nigg, 2013), social connection and peer issues (Kok et al., 2020; Robison et al., 2008) and academic struggles (Zalecki & Hinshaw, 2004).

Research has found that the symptoms of some mental health conditions such as depression and binge eating disorder (Martel et al., 2008, 2017; Klump et al., 2013) can increase in severity during the late luteal phase, because of hormonal surges (Schmidt et al., 2017) or perimenstrual steroid withdrawals (Eisenlohr-Moul et al., 2022). Mood conditions such as Premenstrual Syndrome (PMS) and Premenstrual Dysphoric Disorder (PMDD) involve symptoms that become more severe in the luteal phase, including cognitive functioning disruptions and mild to extreme emotional dysregulation including increased risk of suicide and non-suicidal self-injury (Green et al., 2016; Gehlert et al., 2008; Halbreich et al., 2003; Hantsoo & Epperson, 2015; Rapkin & Akopians, 2012; Le et al., 2020). The underlying relationship between hormonal fluctuations and symptom presentation for conditions like PMS and PMDD is relatively newly-recognised (Le et al., 2020). This relationship highlights the importance of understanding the impact that the menstrual cycle can have on mood, cognition, and emotions in order to develop comprehensive, gender-inclusive diagnostic procedures and treatments.

ADHD and Hormonal Fluctuations

Many women with ADHD have described changes in their ADHD symptoms throughout their menstrual cycle, particularly in the luteal phase, when symptoms are reported as becoming more severe (McCarthy, 2019; Rodgers, 2023; Rodgers & Kalyn, 2023; Rodgers & Kalyn, 2024). However, due to longstanding gender-bias in ADHD research (Clayton & Tannenbaum, 2016) there has been a lack of clinical interest, leaving the relationship between hormonal fluctuations and ADHD symptoms mostly unexamined (Nassbaum, 2012; Eng et al., 2024).

Research exploring the interplay between menstrual hormonal fluctuations and cognition and emotions for healthy women is limited and mixed (Haimov-Kochman & Berger, 2014; Garcia et al., 2018; Klump et al., 2013; Sandstrom & Williams, 2001; Schiller et al., 2016). Some evidence suggests that menstrual hormonal fluctuations can impact the functioning and structural neuroplasticity (Catenaccio et al., 2016) of key brain regions associated with processing and regulating emotional information (Sacher et al., 2013; Dubol et al., 2022). Systematic reviews exploring this interplay for females with ADHD are even more limited (Kok et al., 2020; Camara et al., 2021); however, foundational research has provided some evidence to suggest a link between worsening ADHD symptoms in the luteal phase. Quinn's (2005) single case study of a female patient with ADHD described a repeated pattern of worsening ADHD symptoms (e.g. moodiness and increased inattentiveness) the week prior to menstruation; these symptoms lessened in the weeks after her period. Roberts et al (2018) examined the impact of hormonal fluctuations on daily ADHD symptoms for 32 women. It was found that hormonal fluctuations typical of the luteal phase (low E2 levels in the presence of higher-than-average progesterone or testosterone), predicted next day increases in ADHD symptoms such as inattentiveness. However, this study measured ADHD

symptoms in naturally cycling women rather than specifically examining females with ADHD.

Impact of Menstrual Cycle on ADHD and Effective Pharmacotherapy

Pharmacotherapy, primarily psychostimulants, is often the first-line treatment for ADHD symptom management (Kok et al., 2020). However, despite females being at increased risk of clinically relevant drug reactions (Franconi & Campesi, 2014; Stolarz & Rusch, 2015), sex differences in the effects of ADHD medication treatment have only recently gained clinical attention. For healthy females, decreased estrogen levels and increased progesterone levels (typical of the luteal phase) result in weakened sensitivity to amphetamines and thus reduced effectiveness (Justice & de Wit, 1999; Turner & de Wit, 2006; Vansickel et al., 2010; Franconi et al., 2007).

Emerging research has also suggested that menstrual hormonal fluctuations may impact pharmacotherapy treatments for females with ADHD (Quinn, 2005; Quinn & Madhoo, 2014; Kok et al., 2020; Jong et al., 2023). Quinn's (2005) case study reported a reduction of ADHD symptom severity during the luteal phase after adjusting for additional psychostimulants in the week before menstruation. Jong et al (2023) found similar results for nine patients who reported worsening ADHD symptoms and decreased responsiveness to psychostimulants during the luteal phase compared to the follicular phase. When psychostimulant dosage was increased during the premenstrual week, all 9 women reported positive changes in their premenstrual mood and ADHD symptoms, despite between-subject variations (e.g. age, type of psychostimulant or co-occurring conditions) (Jong et al., 2023).

Additionally, evidence suggests that lower estrogen levels can negatively impact dopamine neurotransmission which is an essential regulator of cognition-emotion integration and processing (Eng et al., 2024). Disrupted or hypofunctioning (del Campo et al., 2011) dopaminergic systems have been implicated in the aetiology and expression of ADHD symptoms (Swanson et al., 2007; Volkow et al., 2009; Quinn & Madhoo, 2014; Şahin et al., 2022). Researchers have theorised that the drop in estrogen levels typical of the luteal phase may exacerbate the already compromised dopamine transmission in females with ADHD, resulting in worse ADHD symptoms and reducing the perceived effectiveness of previously established psychostimulant dosage (Quinn & Madhoo, 2014; Jong et al., 2023). Consequently, researchers and medical practitioners have suggested adjusting dosage patterns to account for menstrual phases as a critical step in developing comprehensive treatments (Quinn, 2005; Nassbaum, 2012; Kok et al., 2020; Jong et al., 2023). Effective treatment planning and collaboration may also prevent women from making adjustments to psychostimulant dosages independently, without proper monitoring (Jong et al., 2023).

Hormone Sensitivity and ADHD

While research on the interplay between ADHD and the menstrual cycle is still relatively new, mixed evidence suggests that individual differences in neurobiological sensitivity to normal hormonal events like the menstrual cycle may play a critical role in symptom severity for several psychopathologies (Garcia et al., 2018; Klump et al., 2013; Schiller et al., 2016; Eng et al., 2024). Eng et al's (2024) Multiple Hormone Sensitivity Theory (MHST) suggests the link between ADHD and the menstrual cycle could be a result of a neurobiological sensitivity to normal hormonal fluctuations, like decreases in estrogen. During the luteal phase, these fluctuations may lead to decreased executive cognitive functioning, producing symptoms like inattentiveness, emotional

dysregulation, lower mood and negative affect (Eng et al., 2024; Peters et al, 2025). MHST postulates that estrogen withdrawal sensitivity (EWS) also impacts dopaminergic responses during the luteal phase when E2 is low, resulting in temporary impairments with executive functioning and emotion/behaviour regulation due to altered dopamine functioning in the prefrontal cortex as well as increases in anhedonia and reward responsivity due to reduced dopamine functioning in mesolimbic regions (Peters et al., 2025).

Current Theoretical and Clinical Limitations

While this emerging research is promising, more needs to be done to explore the relationship between ADHD and the menstrual cycle, especially as prevalence rates continue to rise. Updated clinical knowledge can be used to improve psychological tools and interventions to ensure they become more inclusive of sex and gender differences. Further research will also help clinicians to consider patients' symptom changes throughout their menstrual cycle and develop effective, person-centred treatments, including personalised dosage and timing adjustments to psychostimulant medication (Quinn, 2005; Jong et al., 2023). Understanding this connection is also important for duty of care as clinicians need to be aware of the elevated risk of poor mental health symptoms already associated with specific hormonal events for females with ADHD such as puberty or menopause (Chronis-Tuscano et al., 2010; Flory et al., 2006; Molina et al., 2007; Molina & Pelham, 2003; Eng et al., 2023; Hua et al., 2020; Meinzer et al., 2017). These gaps in current literature highlight the need for research that explores the connection between the menstrual cycle and ADHD to improve overall life outcomes for women and girls with ADHD.

Current Study

This study aimed to examine the relationship between ADHD symptoms and the menstrual cycle. Specifically, we aimed to explore the possible interplay between the luteal phase of the menstrual cycle, the subjective experience of ADHD symptom severity and the perceived effectiveness of ADHD medication in females with ADHD. The study addressed two key research questions:

1. During the luteal phase, do females with ADHD experience a significant change in their ADHD symptoms compared to females without ADHD when measured using the same symptom scale?
2. Do females with ADHD who do not take ADHD medication to manage their symptoms experience worse ADHD symptoms in the luteal phase compared to those who do take ADHD medication to manage their symptoms?

Based on Roberts et al's (2018) study of ADHD symptoms in healthy female participants, it was hypothesised that females in both the ADHD and non-ADHD groups would experience more severe ADHD symptoms in the luteal phase compared to the follicular phase. However, it was hypothesised that females with ADHD would report more significant changes in their ADHD symptoms during the luteal phase compared to females without ADHD during the luteal phase. Finally, as pharmacotherapy is often regarded as the first line of symptom management for ADHD (Kok et al., 2020), it was hypothesised that females with ADHD who do not take ADHD medication would report more significant changes in their ADHD symptoms during the luteal phase compared to females with ADHD who do take ADHD medication.

Method

Design

This study involved an online cross-sectional survey design. The study was part of a larger survey on the relationship between the menstrual cycle and ADHD symptoms. For the purposes of the current paper, the primary predictor variables included ADHD group (two levels: ADHD and non-ADHD) and medication use group (two levels: medicated and unmedicated). Source of Diagnosis (two levels: clinician-diagnosed and self-diagnosed) was also included as a predictor variable to examine within-subject differences for ADHD participants. The primary outcome variables included self-reported ADHD symptoms during the luteal phase and follicular phase of menstruation using two measures: WURS-25 total score (a measure of ADHD symptoms) and ASRS total score (a measure of ADHD symptoms). The total scores for WURS-25 and ASRS for ADHD symptoms during the luteal and follicular phases of the menstrual cycle, respectively, were combined to create a total score for the luteal phase and follicular phase. Additional outcome variables included changes in medication effectiveness and duration which were measured using two separate self-report scales.

Participants

Participants consisted of members of the general Australian public who were assigned female at birth, were adults aged 18 or over, and who identified as either having ADHD or not having ADHD. The study's target demographic was biological females within the reproductive hormonal phase of life (approximately 18-35 years) who were not experiencing other significant hormonal events. Participants who indicated they were pregnant, breastfeeding, less than 6 months postpartum, perimenopausal, post-menopausal, previously diagnosed with PMDD or undergoing hormone therapy were excluded from participating. Participants who answered "Male" for their assigned sex at birth were excluded from the study.

Of the 399 who completed the survey, 5 participants were removed using listwise deletion due to completing less than 50 per cent of the survey datapoints. Proration substitution was used to impute missing data deemed Missing at Random for adequately sampled participants and variables (approximately 0.25 per cent of total items). After data cleaning, 394 participants were retained. Ethical clearance was obtained through the Human Research Ethics Committee (Approval Number: H-2024-0130).

Materials

The survey collected primarily quantitative data including demographic information, standardised measures for self-reported ADHD symptoms as well as measures for changes in medication effectiveness and duration.

Demographics

Demographic variables included age, gender identity and sex, as well as items assessing for the exclusion criteria. Demographic items also included menstrual regularity and forms of contraception currently being used.

ADHD Diagnosis. ADHD diagnosis was measured using the item "Have you been diagnosed with ADHD?". Participants who answered "Yes, diagnosed by a clinician" and "Yes, self-diagnosed based on my knowledge of the condition" were categorised into the ADHD group, while those who answered "No" were categorised into the non-ADHD group. Participants in the ADHD group were divided into the "Medicated" or "Unmedicated" group based on a yes or no response to the

question: "Do you take ADHD medication on a regular basis to manage your ADHD symptoms?"

Standardised Measures for ADHD Symptoms

Wender Utah Rating Scale (WURS-25). The WURS-25 is a 25-item self-report instrument designed to retrospectively screen for the presence and severity of childhood ADHD symptoms among adults (Ward et al., 1993). It uses a 5-point Likert scale to evaluate ADHD symptoms with item scores ranging from *not at all or very slightly* (0), to *very much* (4). The WURS-25 was used to screen all participants for childhood ADHD symptoms. This assessed the baseline presence of ADHD symptoms within the ADHD and non-ADHD groups as well as any differences between clinician-diagnosed participants and self-diagnosed participants. The WURS-25 was also used to assess the presence and severity of ADHD symptoms within the context of the menstrual cycle. Participants were asked to answer a series of 25 questions, and using a side-by-side matrix design completed the WURS-25 within the context of their menstrual cycle. The original WURS-25 prompt was altered to allow the assessment to be relevant to the luteal phase ("In the week leading up to the start of your period") and the follicular phase ("In the week after your period has ended"). Due to this section of the study focusing on present day ADHD symptoms within the context of menstruation, the wording of items 6, 10, 20, 22 and 23 were modified to allow for more adult-centric language (e.g. "work" replacing "school").

The WURS-25 has excellent internal consistency ($\alpha = 0.94$) (Kouros et al., 2018), good concurrent validity with other measures of attention performance (Mackin & Horner, 2005) and has been identified as an important aid for diagnosing ADHD in adults given the diagnostic requirement for childhood onset of this condition (American Psychiatric Association, 2013). Additionally, the WURS-25 has been found to have high sensitivity and specificity (96 per cent; Ward et al., 1993).

Adult ADHD Self-Report Scale (ASRS). The ASRS (Kessler et al., 2005) is an 18-item self-report questionnaire designed to assess ADHD symptoms in adults. It uses a 5-point Likert scale to measure ADHD symptoms' presence and severity, with item ratings including *never*, *rarely*, *sometimes*, *often* and *very often*. Responses are scored as 0 or 1 depending on the item. The ASRS total score represents a measure of ADHD severity.

The ASRS was presented using a side-by-side matrix and the same prompts for the luteal and follicular phases, respectively. The ASRS has high internal consistency ($\alpha = 0.88$) and concurrent validity ($r = 0.84$) with other measures of ADHD (Adler et al., 2006). The ASRS has been found to have high sensitivity (1.0) and moderate specificity (0.71) (Hines et al., 2012), making it a useful measurement tool for assessing the presence or lack thereof of ADHD symptoms.

Procedure

The current study was advertised using pay-per-click Facebook advertising, targeted at Australian females aged between 18 and 35 years. The advertisement included a brief description of the study, the inclusion criteria and the incentive for participating in the study (the chance of winning one of two \$50 online gift cards). Potential participants clicked the "Learn more" button which redirected them to the study's Question Pro link. This presented the study's Information Statement. Participants provided implied consent by clicking "Continue to the survey". Participants then completed the demographic questions followed by the WURS-25 screener for baseline ADHD symptoms. Based on their responses to previous items, participants were not required to complete items not relevant to them based on their ADHD, Source of Diagnosis or Medication grouping.

Participants completed the ASRS and the adapted WURS-25 to measure their ADHD symptoms throughout the luteal and follicular phases of menstruation. Participants in the medicated ADHD group were presented with quantitative items for medication effectiveness and medication duration. On completion of the study, participants were directed to the exit page which included information on relevant support services, researcher contact information and a link to an additional survey to indicate whether they would like an update of the study's results as well as the chance to enter the random draw to win a \$50 gift card. Participation was voluntary and took approximately 15 – 20 minutes to complete online using a mobile phone, tablet, or computer device.

Data Analysis

The demographic variables were analysed using descriptive statistics. A repeated measure, two-way mixed ANOVA was used to analyse the main effect and interaction effect of the predictor variable (ADHD group) on the outcome variable (ADHD symptoms in the luteal phase and follicular phase, respectively). An independent samples t-test was used to explore the difference of the predictor variable (medication effectiveness and duration) between medicated and unmedicated participants. All analyses were conducted using JASP software version 0.19.1 (JASP, 2024).

Results

Participant Characteristics

Participants described themselves as either having ADHD ($n = 357$) or not having ADHD ($n = 37$) (see Table 1). This uneven split was expected given the study's recruitment advertisements targeting people with ADHD as the primary population of interest. The mean age for both groups fell within the standard age range for the reproductive hormonal phase (Holland, 2018; Bellieni, 2016). Most participants identified as women/female; however, the ADHD group also included gender diverse participants. Over 80 per cent of participants in both groups reported regular menstruation. Over 60 per cent of participants in both groups reported not using any of the listed forms of contraception.

Within the ADHD group, there was an uneven split between clinician-diagnosed ($n = 291$) and self-diagnosed ($n = 66$) participants. Almost 80 per cent of clinician-diagnosed participants reported using ADHD medication to manage their symptoms.

Table 1.
Demographic Information Categorised by ADHD Group

	ADHD Group	
	ADHD ^a <i>M (SD)</i>	Non-ADHD ^b <i>M (SD)</i>
Age	29.80 (6.16)	28.00 (0.67)
	Count (%)	Count (%)
Gender Identity		
Women/female	330 (92.44)	37 (100)
Non-binary	18 (5.04)	0 (0)
Gender-fluid	4 (1.12)	0 (0)
Other	4 (1.12)	0 (0)
Not specified	1 (0.28)	0 (0)

Menstrual Regularity		
Regular	311 (87.12)	32 (86.49)
Irregular	46 (12.89)	5 (13.51)
Forms of Contraception		
Oral contraceptive pills	53 (14.85)	8 (21.62)
Contraceptive patches	0 (0)	0 (0)
Contraceptive implant or injection in your arm	18 (5.04)	0 (0)
Contraceptive vaginal ring	1 (0.28)	0 (0)
Intrauterine device (IUD)	46 (12.86)	4 (10.81)
I don't use any of these forms of contraception	239 (66.95)	25 (67.568)

Note. ^a $n = 357$ for ADHD. ^b $n = 37$ for non-ADHD.

Group Differences in the WURS-25 ADHD Screening Assessment

ADHD group. To check the validity of the ADHD and non-ADHD group allocations, an independent samples t-test was conducted to analyse if total scores for the WURS-25 screening assessment was significantly lower for the non-ADHD group compared to the ADHD group. No significant outliers were identified in either group. All test assumptions were met. However, due to expected deviation from normal distribution, a parametric Student test and non-parametric Mann-Whitney test were both conducted (Kim, 2013; Mishra et al., 2019). Both tests showed non-ADHD participants had significantly lower baseline ADHD symptoms ($M = 22.11$, $SD = 12.71$) compared to ADHD participants ($M = 47.60$, $SD = 11.77$) on the WURS-25 screening: $t(392) = -12.44$, $p < .001$ (one-tailed). Cohen's d (-2.19) confirmed a large effect size (Cohen, 1988).

Source of Diagnosis. To assess the validity of the decision to include self-diagnosed ADHD participants in the ADHD group, an independent samples t-test was conducted to assess differences in WURS-25 screening scores between clinician-diagnosed and self-diagnosed participants. No outliers were identified and all test assumptions were met. There was no significant difference in ADHD symptom scores between clinician-diagnosed ($M = 47.80$, $SD = 11.88$) and self-diagnosed participants ($M = 46.71$, $SD = 11.34$): $t(355) = -0.68$, $p = 0.50$ (two-tailed). These results met threshold for clinical sensitivity, with scores 36 and above suggesting retrospectively rated childhood ADHD symptoms that are consistent with adults who have an ADHD diagnosis (Brevik et al., 2020). This result confirmed similar ADHD symptom severity in participants with clinician-diagnosed and self-diagnosed ADHD.

Group Differences in ADHD Symptoms Throughout the Menstrual Cycle

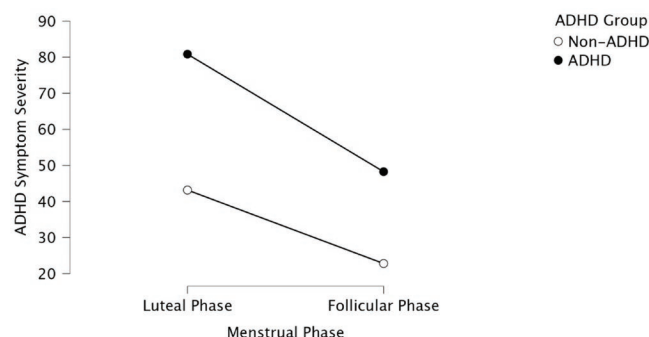
A repeated measures 2x2 mixed ANOVA was conducted to investigate the within-subjects main effect of ADHD symptoms. This test also investigated the between-subjects interaction effect of ADHD group on ADHD symptoms, to test the hypothesis that ADHD participants experience worse ADHD symptoms in the luteal phase compared to non-ADHD participants. Age was also included as a covariate. One outlier was removed for exceeding the 3.29 z-score cutoff (Tabachnick & Fidell, 2019). Pairwise deletion was used to exclude cases per dependent variable due to missing data ($n = 1$). All test assumptions were met.

Menstrual Phase. As predicted, a significant main effect was found for both groups $F(1, 389) = 14.21$, $p < .001$, $\eta^2_p =$

0.04, showing more severe ADHD symptoms in the luteal phase compared to the follicular phase. This represented a small to moderate effect size (Cohen, 1988). Age was not a statistically significant covariate for either ADHD symptoms ($p=0.08$) or ADHD group ($p=0.14$).

ADHD group. There was a significant between subjects main effect for ADHD group $F(1, 389) = 139.30, p < .001, \eta_p^2 = 0.26$, yielding a large effect size. These results indicate that ADHD participants experienced more severe ADHD symptoms than non-ADHD participants, regardless of menstrual phase (see Figure 1). Furthermore, there was an interaction between ADHD group and ADHD symptoms $F(1, 389) = 12.11, p < .001, \eta_p^2 = 0.03$, supporting the hypothesis that while all participants would experience more severe ADHD symptoms in the luteal phase, this effect would be more pronounced for those with ADHD than those without ADHD. This represented a small to moderate effect size.

Figure 1.
Comparison of ADHD Symptom Severity During the Luteal and Follicular Phases for ADHD and non-ADHD Groups



Post-hoc analyses were conducted using the Bonferroni correction. For the main effect of ADHD symptoms, ADHD symptoms were more severe in the luteal phase compared to the follicular phase ($M = 26.66, SE = 1.68, p < .001$) and that between the groups, ADHD participants reported more severe ADHD symptoms than non-ADHD participants ($M = 31.89, SE = 2.70, p < .001$). For the interaction effect, Bonferroni corrected post hoc tests showed significant between group differences for each level of ADHD symptoms (all $p < .001$) with the exception of non-ADHD participants' luteal symptoms compared to ADHD participants' follicular symptoms ($M = -5.22, SE = 3.38, p = 0.74$).

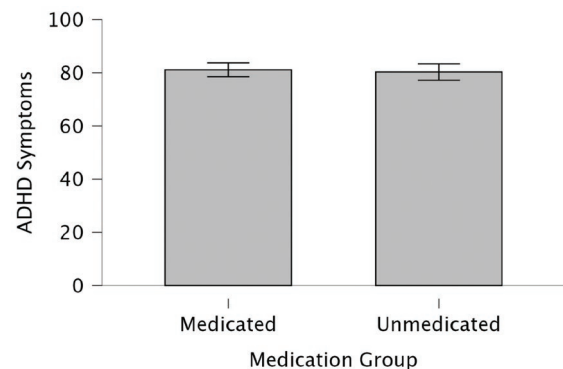
A supplementary analysis to investigate group differences between self-diagnosed and clinician-diagnosed ADHD participants showed no significant main effect or interaction effect, suggesting both groups have similar experiences of ADHD symptoms throughout both menstrual phases.

Differences in ADHD Symptoms During the Luteal Phase Between the Medication Use Groups

To test the hypothesis that unmedicated participants would have worse ADHD symptoms during the luteal phase compared to medicated participants, an independent samples t-test was conducted. Assumption checks revealed violations of normality and equal variance. Therefore, a non-parametric Mann-Whitney test was conducted alongside a parametric Student test. Both tests revealed no statistically significant differences in luteal symptoms between medicated ($Mdn = 84.0$)¹ and unmedicated participants ($Mdn = 82.0$), $W = 15041.50, p = 0.20$ (one tailed). The hypothesis was therefore not supported.

Figure 5.

Comparison of ADHD Symptoms in the Luteal Phase Between Medicated and Unmedicated Participants



Discussion

The present study aimed to investigate the relationship between self-reported ADHD symptoms and the menstrual cycle. The results largely supported the hypotheses and were consistent with previous research. All groups experienced worse ADHD symptoms in the luteal phase compared to the follicular phase, although this effect was more pronounced for ADHD participants. Contrary to our hypothesis, unmedicated participants with ADHD did not report worse ADHD symptoms in the luteal phase compared to medicated participants with ADHD.

ADHD Group Differences for ADHD Symptoms

As hypothesised, both ADHD and non-ADHD groups experienced worse ADHD symptoms in the luteal phase compared to the follicular phase. These results are consistent with past research which found worse ADHD symptoms in the luteal phase for females with ADHD (Quinn, 2005; Jong et al., 2023) and without ADHD (Roberts et al., 2018). These results align with the growing literature that has linked hormonal fluctuations in the luteal phase with detrimental impacts on mood and cognitive functioning (Haimov-Kochman & Berger, 2014; Le et al., 2020; Sacher et al., 2013; Barth et al., 2015). This provides a plausible explanation for both groups experiencing worse ADHD symptoms during the luteal phase. However, the present study relied on subjective, self-reported data for symptom changes throughout the menstrual cycle, rather than using precise biological measures of hormonal fluctuations such as saliva samples (Roberts et al., 2018). Therefore, our findings are unable to provide insight into the impact of specific hormonal fluctuations (e.g. estrogen and progesterone levels) on ADHD symptoms, although they do contribute to the literature which speaks more generally to the impact of the luteal phase on ADHD symptoms, mood and cognition.

The interaction effect of ADHD group and ADHD symptoms highlighted that negative change in ADHD symptoms during the luteal phase was significantly more pronounced for ADHD participants. These results are partially consistent with previous research which has found that females with ADHD experience worse ADHD symptoms during the luteal phase compared to the follicular phase (Quinn, 2005; Jong et al., 2023), although these studies did not have a non-ADHD comparison

¹When conducting a non-parametric Mann Whitney test the median value is reported instead of the mean (Ziegel & Wadsworth, 1999; Gibbons & Chakraborti, 2020).

group. To our knowledge, no other study has directly compared ADHD and non-ADHD groups on ADHD symptoms during the luteal phase. These novel findings provide preliminary support for MHST (Eng et al., 2024), suggesting that females with ADHD might be more neurobiologically sensitive to menstrual hormonal fluctuations compared to females without ADHD.

The estrogen withdrawal sensitivity concept may provide further explanation for our findings; ADHD participants may be more sensitive to the decline in E2 typical of the luteal phase due to their baseline difficulties in executive functioning and dopaminergic functioning (Eng et al., 2024; Peters et al., 2025). This underlying sensitivity may therefore exacerbate ADHD symptoms like executive functioning and emotional dysregulation more so than those without ADHD. Due to design limitations, the present study was limited with what conclusions could be drawn about the impact of specific hormonal fluctuations. However, using EWS as a framework for these results, it is plausible to infer that the luteal hormonal fluctuations such as the decline of E2 levels may play a key role in the premenstrual exacerbation of ADHD symptoms. These findings may also offer new insights for the research investigating the link between ADHD and prevalence rates of PMS and PMDD (Dorani et al., 2021; Jong et al., 2023).

Medication Use Group Differences for ADHD Symptoms

The results did not support our hypothesis that medicated participants would experience less severe changes in their ADHD symptoms in the luteal phase compared to non-medicated participants. To our knowledge, no pre-existing study has examined the impact of the menstrual cycle on ADHD symptoms between medicated and unmedicated participants. These novel results are surprising given that pharmacotherapy is considered the first line of ADHD symptom management (Kok et al., 2020). It would be reasonable to assume that medication would provide at least some protection against the impacts of the luteal phase on ADHD symptoms compared to those without such first line defences, however our results suggest this is not the case. This effect may be partially explained by the research regarding the reduced effectiveness of previously established psychostimulant dosages for females with ADHD during the luteal phase (Quinn & Madhoo, 2014; Jong et al., 2023). However, it does not explain why the effectiveness is reduced to the point of being on par with unmedicated participants' luteal phase symptoms.

Considering preliminary studies have found that adjusting dosage patterns to account for the luteal phase has positive and protective effect on ADHD symptoms (Quinn, 2005; Nussbaum, 2012; Kok et al., 2020; Jong et al., 2023), it can be inferred that medication is not rendered completely ineffective during the luteal phase. Perhaps the nuance of perceived medication effectiveness lies in the idea of one's previously established psychostimulant dosage. It could be theorised that with an established dosage comes a tolerance for baseline ADHD symptoms. Tolerance is the phenomenon where the effect of a drug decreases from repeated administration, thereby requiring an increased dosage to maintain the intended effect (Bespalov et al., 2016). Therefore, during the luteal phase, without additional dosages, the perceived changes in baseline ADHD symptoms exceeds one's medication tolerance levels so much so that it amounts to the same relative experience as an unmedicated person's perceived changes in baseline ADHD symptoms. However, the effect of tolerance in psychostimulant medication treatment for ADHD is limited and mixed (Handelman & Sumiya, 2022; Barnard-Brak et al., 2023). Our findings provide new insights into the interplay between the menstrual cycle, ADHD symptoms and pharmacotherapy and should be considered for future studies that compare symptom differences between medicated and unmedicated participants.

Strengths and Limitations

The current study design allowed for multiple group comparisons within the context of the luteal phase, many of which had not previously been compared (e.g. medicated and unmedicated participants with ADHD). These comparisons yielded novel findings that contribute new insights to the emerging research such as the MHST, particularly the EWS concept (Eng et al., 2024). Even partially-novel results like the findings that ADHD medication effectiveness and duration is reduced in the luteal phase, contribute supporting evidence to the limited literature base that currently exists on the relationship between pharmacotherapy, ADHD and the menstrual cycle (Quinn, 2005; Quinn & Madhoo, 2014; Kok et al., 2020; Jong et al., 2023).

A methodological strength of the present study included the large community sample of females with ADHD. As women and girls with ADHD have been historically underrepresented in clinical research, such a large sample focusing on women's experiences provides an important contribution to the literature. It also allowed within-group comparison for ADHD participants (e.g. medicated and unmedicated), providing novel contributions to comparisons not yet explored in the literature.

A methodological limitation of this study included the cross-sectional survey design which was reliant on the subjective, self-reported data of participants' perception and experiences as opposed to previous research that used objective, biological measures for hormonal fluctuations (Roberts et al., 2018). Consequently, the present study was unable to assess the specific hormonal fluctuations (e.g. E2 or progesterone levels) that may have been underlying the luteal changes in ADHD symptoms. This ultimately reduced the strength of our study's supporting evidence for MHST (Eng et al., 2024). However, our findings still contributed more broader supporting evidence for MHST, particularly the possible heightened sensitivity of ADHD participants in the luteal phase.

The study's cross-sectional design also meant that participants retrospectively reported changes in ADHD symptoms and medication effectiveness, unlike previous studies which measured daily ADHD symptoms (Quinn, 2005; Roberts et al., 2018; Jong et al., 2023). Research suggests that using retrospective self-report measures to assess premenstrual symptoms carries a significant bias of false positive reports compared to using daily-rating measures (Eisenlohr-Moul et al., 2015; Rubinow et al., 1984). This limitation should be taken into consideration when assessing the strength of our findings, due to the possibility of false positive reports of changes in ADHD symptoms during the luteal phase.

Clinical Implications and Future Research

As women experience menstruation for a significant portion of their life, it is vital that clinicians consider the ongoing impact of the menstrual cycle on their patients, especially during the luteal phase. Not doing so may result in sub-optimal treatment and worse health outcomes for women and girls. Clinicians should work collaboratively with patients to include the menstrual cycle in the diagnostic and treatment planning process, especially for patients experiencing significant hormonal transitions that are associated with negative impacts on mental health, such as puberty or menopause (Eng et al., 2024). Using daily measures of ADHD symptoms over the course of consecutive menstrual cycles may also be helpful in mapping patient's symptom changes throughout their cycle (Quinn, 2005; Quinn & Madhoo, 2014; Jong et al., 2023). This allows clinicians to develop a comprehensive understanding of their patients' unique ADHD symptom presentation throughout their menstrual cycle, including identifying at-risk periods for their patient's mental health. Ultimately this can aid the development of well-

informed treatment plans tailored to their patient's cycle.

Psychoeducation should be prioritised, as some patients may lack insight into the structure of the menstrual cycle and would benefit from learning about the associated hormonal fluctuations and the potential impacts on symptom presentation and medication effectiveness (Quinn, 2005; Jong et al., 2023). Without psychoeducation, patients may lack the awareness and sense of timing necessary to report the impact of cycle phases on their ADHD symptoms (Jong et al., 2023). Furthermore, the combination of insufficient psychoeducation and lack of patient-clinician collaboration may result in patients adjusting their own dosage to compensate for changes to their ADHD symptoms without the supervision or guidance of their clinician (Kok et al., 2020; Quinn & Madhoo, 2014; Jong et al., 2023). Therefore, clinicians should ensure that ADHD medication is titrated throughout the menstrual cycle, with dosage and timing adjusted accordingly, ensuring optimal symptom management.

Future studies involving females with ADHD should consider the menstrual cycle and hormonal fluctuations, particularly the impacts of the menstrual cycle on the effectiveness of psychostimulants. Considering the limited literature base (e.g. small sample case studies), future research should incorporate study designs that strive for higher quality of evidence such as large sample sizes, randomised and double-blind clinical trials with placebo/control arms. Longitudinal study designs should be prioritised, measuring at minimum two consecutive menstrual cycles to facilitate more consistent mapping of the participants' cycle phases and hormonal fluctuations (Schmalenberger et al., 2021; Jong et al., 2023).

In line with best practice guidelines for menstrual cycle studies, future research should measure changes in ADHD symptoms on a daily basis, rather than retrospectively or prospectively to avoid false positive bias (Schmalenberger et al., 2021). Finally, prioritising objective, biological measures for hormonal fluctuations would allow for new, more precise insights into the hormonal fluctuations within specific phases of the menstrual cycle.

Conclusions

The results from this study support existing research exploring the relationship between ADHD symptoms and the menstrual cycle, while also offering novel findings that offer new contributions to the literature base. Overall, these results substantiate the need for researchers and clinicians to consider the impact of the menstrual cycle, particularly the luteal phase when working with women and girls with ADHD. Future research should prioritise appropriate study designs in order to further explore this connection. Doing so may help establish better informed recommendations for effective and personalised treatment plans, which will ultimately improve health outcomes for women and girls with ADHD.

Statement of Contribution

The research question and study design were developed collaboratively by me and my supervisor, A/Prof Sean Halpin. I was responsible for developing and formatting all materials used in the study, including both the qualitative and quantitative aspects of the survey. I managed the data collection process, which involved recruiting participants, monitoring the progress of the study and ensuring accurate recording and storage of data. I conducted the data analyses and interpretation of results, under the guidance and supervision of A/Prof Sean Halpin. A/Prof Sean Halpin provided feedback on the Introduction, Method and Results sections of this thesis. All remaining written work, including the Abstract and Discussion sections and overall thesis editing, was completed independently by me.

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Cognitive Behavioural Hypnotherapy for Anxiety: Integrating Evidence-Based Approaches in Counselling Practice

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Keywords: *cognitive behavioural therapy, hypnotherapy, anxiety disorder, sympathetic nervous system activation, integrative therapy, emotion regulation, nervous system regulation, anxiety treatment, counselling practice, clinical integration, psychotherapy, panic disorder, state-dependent cognitive processes.*

Abstract

Anxiety disorders remain one of the most prevalent mental health presentations encountered in Australian counselling and psychotherapy practice. While Cognitive Behavioural Therapy (CBT) carries a strong evidence base, this paper advances the view that hypnosis, integrated thoughtfully within a CBT framework, offers a practical approach to address this problem. Combining these modalities, the paper presents Cognitive Behavioural Hypnotherapy (CBH) as an integrative approach in which brief hypnotic induction is used to reduce physiological arousal and enhance receptivity, creating the neurological and psychological conditions that enhance CBT effectiveness. The paper examines anxiety mechanisms, CBT evidence, hypnosis science, and their integration, drawing on contemporary neuroscience (Barrett, 2017) and on long-standing traditions in clinical hypnosis (Erickson & Rossi, 1979; Bandler & Grinder, 1975) and existential-relational therapy (Yalom, 1980). Two detailed clinical case studies, one involving generalised anxiety disorder with perfectionism and one involving panic disorder with agoraphobia, illustrate how this approach unfolds in practice, with both clients achieving meaningful symptom reduction and improved daily functioning. The framework is grounded in trauma-informed and person-centred values.

Introduction

Mental health professionals working in Australian counselling and psychotherapy have noticed that anxiety disorders dominate the caseload. Anxiety disorders are the most prevalent mental health condition in Australia, with approximately 17.2 per cent of Australians (1 in 6 people) experiencing an anxiety disorder within a 12-month period (Australian Bureau of Statistics [ABS], 2023). Across community mental health settings, private practice, and healthcare clinics alike, anxious clients are the norm rather than the exception. Globally, anxiety disorders affect hundreds of millions of people, with significant consequences for relationships, occupational functioning, physical health,

and overall quality of life (Bhattacharya et al., 2023). In the Australian context specifically, this burden is well documented, and the demand for effective, accessible psychological treatment continues to outpace the supply of appropriately skilled practitioners. It is against this backdrop that questions of treatment effectiveness, and treatment reach, become pressing concerns for clinicians, not merely for researchers.

CBT has, rightly, become the psychological treatment of first choice for anxiety disorders. Its evidence base is extensive and remarkably consistent: meta-analyses of randomised controlled trials across generalised anxiety disorder, panic disorder, social anxiety, and specific phobias demonstrate large effect sizes and clinically meaningful outcomes that hold up well at follow-up (Bhattacharya et al., 2023; Furukawa et al., 2024). The CBT model offers a coherent account of how anxiety is maintained, through distorted cognitive appraisal, sympathetic nervous system activation, and behavioural patterns of avoidance and safety-seeking, and targets each of these maintaining factors through structured intervention (Newman et al., 2022). For many clients, this is sufficient. But in clinical practice, “many” is not “all”, and the clients who do not respond fully to standard CBT deserve a different approach and serious attention.

CBT has been proven effective; however, clinicians who work with anxious individuals will observe a significant clinical phenomenon that challenges effective treatment delivery: clients have a greatly diminished capacity to engage with standard CBT strategies precisely when anxiety levels are high (Newman et al., 2022). In my own practice, this emerges as a recognisable and persistent challenge. A client arrives dysregulated, their nervous system already primed for threat. I invite them to examine a thought, to consider an alternative interpretation, to stay with a feeling rather than withdraw from it, and they simply cannot get there. The cognitive machinery that CBT relies upon, reflective thinking, mental flexibility, the capacity to hold uncertainty, is precisely what high anxiety degrades. Elevated arousal shifts neural resources away from the prefrontal cortex, the seat of rational deliberation, and toward the limbic threat-detection systems that are working exactly as evolution intended (Pappaianni et al., 2020; Grecucci et al., 2020). The result is a client who is physiologically and cognitively unavailable for the intervention that would help them most. This is not a failure of the client, nor a failure of CBT. It is a mismatch between what the therapy requires and what a highly anxious nervous system can currently offer.

This observation has been consistently noted across clinical contexts. Clinicians and researchers have long

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recognised the tension between CBT's cognitive demands and the neurobiological reality of high anxiety (Newman et al., 2022; Eysenck et al., 2007). What has been slower to develop is a structured, practitioner-focused framework for addressing it. The integration of hypnosis with CBT is not itself novel: Alladin & Alibhai (2007) and Schoenberger (2000) produced foundational work in this space, and Alladin's cognitive hypnotherapy model represents an important contribution. The broader hypnotherapy tradition, however, has much earlier roots. Milton Erickson's naturalistic and individualised approach to clinical hypnosis (Erickson & Rossi, 1979), and the linguistic modelling of his work by Bandler & Grinder (1975), continue to inform how contemporary practitioners think about indirect suggestion, utilisation of the client's own frame of reference, and the language of induction. What remains underdeveloped is a clinically detailed account of how hypnotic induction can be used strategically to address the state-dependent obstacles that undermine CBT engagement in anxiety, one that is practically grounded, referenced to current neuroscience, and applicable to the specific presentations Australian counsellors and psychotherapists commonly encounter. The growing literature on hypnosis and anxiety (Rosendahl et al., 2024; Palsen et al., 2023) increasingly supports the case for integration, yet clinical implementation guidance lags behind the research. This paper is an attempt to address that gap.

Recent meta-analytic evidence supports what many clinicians with hypnotherapy training have observed first-hand: hypnosis produces meaningful reductions in anxiety symptoms, and when combined with CBT, appears to amplify outcomes beyond what either modality achieves alone (Rosendahl et al., 2024; Palsen et al., 2023). The mechanisms are increasingly well understood. Hypnotic induction reduces sympathetic arousal, narrows attentional focus, enhances imaginative absorption, and appears to reduce the cognitive resistance that can block therapeutic progress, precisely the conditions under which CBT interventions are most likely to land. This paper draws on that evidence base, on contemporary affective neuroscience (Barrett, 2017), and on the author's own clinical experience, to articulate a coherent practitioner framework for Cognitive Behavioural Hypnotherapy (CBH). It begins with the theoretical foundations: anxiety mechanisms, CBT evidence, and the neuroscience of hypnosis, before moving to practical implementation guidance and two extended case studies that illustrate what CBH looks like in the consulting room. The goal is not to replace CBT, which remains the cornerstone of evidence-based anxiety treatment, but to extend its reach to clients whose arousal levels otherwise put its most powerful techniques beyond their grasp.

Theoretical Foundations: Understanding Anxiety, CBT, and Hypnotic Integration

The Neurobiological and Psychological Architecture of Anxiety

Understanding why CBH works requires a reasonably detailed account of what anxiety is and how it persists over time. Contemporary cognitive-behavioural models, supported by decades of psychological and neuroscientific research, describe anxiety as an interaction between cognitive, physiological, and behavioural systems that reinforce one another over time (Pappianni et al., 2020). At the cognitive level, anxious individuals tend to process ambiguous information through a threat-oriented lens, reading neutral social cues as hostile, interpreting physical sensations as dangerous, and catastrophising about uncertain outcomes. This reflects not irrationality but a highly sensitised threat-detection system doing what it was designed to do, activating more readily and frequently than is adaptive.

Recent affective neuroscience offers an additional and clinically useful layer of understanding. Lisa Feldman Barrett's theory of constructed emotion (Barrett, 2017) reframes anxiety not as a fixed reaction triggered by an external event but as an active construction of the brain, which continuously uses experience and learned concepts to predict and regulate the body's response to incoming sensory information. From this perspective, anxiety arises when the brain's predictive models repeatedly forecast threats and instruct the body to mobilise accordingly, even when the external situation does not warrant it. This view is consistent with, and enriches, the cognitive-behavioural framework: the catastrophic appraisals and physiological cascades described in CBT models can be understood as the experiential output of a brain making threat-biased predictions on the basis of accumulated learning history. The clinical implication is that lasting change requires not only modifying surface cognitions but also providing the nervous system with new predictive evidence, an objective to which both behavioural exposure and hypnotic experience are well suited.

Physiologically, this cognitive-affective construction elicits activation of the sympathetic nervous system – the fight-flight-freeze response – producing the physical signatures of anxiety that clients describe so vividly in session: racing heart, constricted breathing, muscle tension, sweating, and the surge of cortisol and adrenaline that prepares the body for action (Grecucci et al., 2020; Leo et al., 2024). In the context of an actual physical threat, this cascade is adaptive. In the context of a job interview, a social gathering, or an intrusive thought about the future, it becomes a persistent source of distress not readily alleviated by reassurance.

Avoidance and safety-seeking behaviours provide short-term relief while maintaining distress over time. By never remaining in feared situations long enough to discover that the catastrophe does not arrive, the anxious person never accumulates the disconfirming experience their nervous system needs to revise its threat estimate (Scheveneels et al., 2025). This maintenance cycle, threat appraisal driving arousal driving avoidance driving further sensitisation, is the clinical target that CBT, and CBH, must interrupt.

Evidence-Based CBT: Mechanisms of Action and Treatment Efficacy

CBT addresses all three systems of the anxiety cycle through coordinated, evidence-based intervention (Bhattacharya et al., 2023; Furukawa et al., 2024). Cognitive interventions help clients examine the accuracy and helpfulness of threat-related thinking, identifying cognitive distortions and working toward more balanced appraisals. Behavioural interventions, principally graduated exposure, systematically target avoidance by bringing the client into contact with feared situations while blocking safety behaviours, allowing new, disconfirming learning to consolidate (Craske et al., 2014; Deacon et al., 2013).

Physiological regulation techniques, including progressive muscle relaxation, diaphragmatic breathing, and interoceptive awareness training, address the somatic dimension of anxiety and support the client's capacity to tolerate distress during exposure. The research base for this integrated approach is extensive and consistent; meta-analyses confirm large, clinically meaningful effect sizes across all major anxiety presentations, with gains generally maintained at follow-up (Schaeuffele et al., 2024). CBT, in short, works. The clinical question addressed in this paper is how to proceed when the client's anxiety, in the moment, limits access to the intervention.

The Challenge: State-Dependent Limitations in CBT Engagement

The state-dependent limitation is, in this author's view, the most under-recognised challenge in CBT delivery for anxiety. The problem is neurobiological: when the threat-detection system is activated, the prefrontal cortex, which supports the reflective thinking, cognitive flexibility, and emotional regulation that CBT depends upon, becomes functionally less available (Newman et al., 2022; Pappaianni et al., 2020). Limbic reactivity increases, executive capacity decreases. The client sitting in the session, heart pounding and thoughts racing, is not being resistant or difficult. They are functioning within heightened neurophysiological arousal in which the cognitive and behavioural tools of CBT are least accessible. Asking a highly activated person to examine their thoughts from multiple perspectives, or to deliberately approach what they have been avoiding, is asking a great deal of a nervous system that is currently organised around survival rather than reflection (Grecucci et al., 2020). This is not a critique of CBT as a modality; it is an argument for creating the clinical conditions that enable its mechanisms to be effectively accessed and applied.

Hypnosis: Contemporary Scientific Understanding and Therapeutic Mechanisms

It is necessary to address explicitly the common misconceptions surrounding hypnosis, as these can interfere with therapeutic engagement. Clients frequently present with impressions shaped by stage shows or film portrayals: hypnosis as mind control, as unconsciousness, or as an externally imposed process in which the individual assumes a passive role. The scientific picture is entirely different. Contemporary neuroscience and psychology understand hypnosis as a state of focused concentration, heightened inner awareness, and increased receptiveness to therapeutic suggestion (Rosendahl et al., 2024). The person remains fully conscious, retains their values and volition, and cannot be made to act against their will (Leo et al., 2024). What changes is the quality of attention, the accessibility of imagery, and the degree of physiological calm, changes that are, from a clinical perspective, of considerable therapeutic utility.

The contemporary clinical use of hypnosis owes much to the legacy of Milton Erickson, whose naturalistic and individualised approach reshaped the field in the second half of the twentieth century. Erickson (Erickson & Rossi, 1979) demonstrated that effective hypnotic communication does not require formal, ritualised induction; rather, it works through what he termed utilisation, the therapist's responsiveness to the client's own language, imagery, beliefs, and pacing. Bandler and Grinder (1975), in their detailed linguistic modelling of Erickson's work, codified many of the indirect suggestion and pacing-and-leading techniques that continue to inform contemporary hypnotic communication. These traditions remain clinically relevant: they provide a flexible vocabulary for inductions that can be tailored to individual presentations rather than applied as fixed scripts, and they fit naturally within an integrative, person-centred frame.

Neuroimaging research has begun to map the neural correlates of hypnosis. Functional MRI studies show altered activation across networks governing attention, emotional regulation, self-referential processing, and sensory integration (Hanson et al., 2024). These changes are consistent with what clinicians observe: a person in a hypnotic state is more focused, less distracted by internal chatter, more able to engage with guided imagery, and generally less defended against new cognitive and emotional material.

The therapeutic mechanisms of hypnosis are

increasingly well supported empirically (Zimmer et al., 2025). Hypnotic induction activates parasympathetic pathways, reducing sympathetic arousal and producing the physiological calm that is so difficult to achieve through instruction alone. It narrows attentional focus in a way that reduces rumination and enhances absorption in present-moment experience. It facilitates vivid imaginative engagement, a capacity that is central to many CBT techniques, including imaginal exposure and cognitive defusion work. It also appears to reduce the critical, evaluative resistance that can prevent clients from engaging openly with therapeutic material, and emerging evidence suggests a role in memory reconsolidation that may support lasting change (Farris et al., 2025). Each of these effects corresponds to a key constraint that limits the effective delivery of CBT interventions in anxious populations.

Rationale for Integration: Creating Optimal Conditions for Therapeutic Change

The integration rationale is conceptually straightforward. Hypnotic induction addresses the state-dependent barriers that undermine CBT engagement. It temporarily shifts the client from a high-arousal, threat-oriented neurological state to one of relative calm, focused attention, and cognitive openness, a state in which CBT techniques can be received and processed more fully (Guth et al., 2025). Hypnosis, in this model, is not an alternative to CBT and not a competitor. It is a preparatory and enhancing modality that creates the internal conditions under which CBT is most likely to work. The sequencing matters: induction first, then intervention. The calm that hypnosis produces is not the end point; it is the starting point for the cognitive and behavioural work that follows (Scheveneels et al., 2025). This is a genuinely integrative model in which both components contribute meaningfully.

A Comprehensive Practitioner Framework for Cognitive Behavioural Hypnotherapy

Assessment, Formulation, and Treatment Planning

Effective CBH is predicated on thorough assessment, and in my experience the assessment phase for this kind of integrated work needs to accomplish more than a standard CBT intake to adequately inform intervention planning. Beyond mapping the usual terrain (specific anxiety triggers, maintaining cognitions, physiological symptoms, and behavioural patterns), the clinician must also develop an understanding of the client's relationship with internal experience, including thoughts, emotions, and bodily states. How readily can this person access imagery? Can they tolerate sustained inward attention, or do they become more anxious when focus turns to their own body and mind? Is there a history of trauma that warrants particular care around induction approaches? How do they respond to suggestion, to metaphor, to slowing down? These questions matter because hypnotic work is not one-size-fits-all, and the induction and imagery approaches chosen should be tailored to the individual formulation rather than applied generically (Craske et al., 2014; Deacon et al., 2013). It is also important at this stage to screen carefully for contraindications: active psychosis, certain dissociative presentations, and some trauma histories may require stabilisation before any hypnotic work is appropriate. The assessment is not merely a data-gathering exercise; it provides the conceptual and clinical foundation upon which the entire treatment rationale is developed and justified.

Psychoeducation, Informed Consent, and Building Therapeutic Alliance

Before introducing any hypnotic intervention, the clinician must engage in comprehensive psychoeducation, extending beyond a brief disclaimer to a collaborative and clinically meaningful conversation. In my practice, this phase typically occupies the majority of the second session. Clients present with a broad range of prior associations with hypnosis, including curiosity, scepticism, and, in a significant proportion of cases, anxiety-related concerns about loss of control or coercion. All these reactions are understandable and should be explored directly within the therapeutic context. Hypnosis is introduced as a state of focused and relaxed attention, comparable to naturally occurring experiences of absorption, such as deep engagement in reading or travelling a familiar route with minimal conscious awareness.

This conversation also does something important beyond information transfer: it models the collaborative, transparent therapeutic relationship that CBH depends on (Palsson et al., 2023). It reflects what Yalom (1980) described as the indispensable conditions of effective therapy, a genuine encounter, transparency about process, and the freedom of the client to engage authentically with what is offered. Informed consent should be thorough and revisited, not treated as a one-time formality. When clients feel genuinely informed and genuinely free to choose, their engagement with the hypnotic work is qualitatively different: more open, more absorbed, and more therapeutically productive.

Hypnotic Induction Techniques Adapted to Anxiety Presentations

Hypnotic induction is the process by which a person is guided from their usual waking state into a state of focused attention and absorption (Hanson et al., 2024). In CBH, inductions tend to be brief (typically 3–8 minutes), structured according to a clearly articulated protocol, and tailored to the client's specific anxiety presentation. The core features of effective induction include focused attention, progressive deepening, somatic settling, and state anchoring. Drawing on Ericksonian principles of utilisation, inductions can incorporate the client's own metaphors, sensory preferences, and natural pacing, rather than imposing a generic script (Erickson & Rossi, 1979; Bandler & Grinder, 1975). Inductions are then further adapted to the particular presentation of anxiety (Zimmer et al., 2025; Farris et al., 2025). For clients presenting with generalised anxiety disorder, inductions typically emphasise mental quietening and the experience of psychological stillness. In panic disorder, inductions are structured to reframe bodily sensations within a context of safety and non-threatening interpretation. In social anxiety, where the focus is typically external evaluation, inductions emphasise inner stability, self-confidence, and alignment with the self (Guth et al., 2025).

Integration of Hypnosis with Cognitive, Behavioural, and Imagery Interventions

Once a client is in a settled hypnotic state, the accessibility and efficacy of CBT techniques become substantially enhanced, facilitating deeper engagement with the therapeutic process. Cognitive restructuring, which can be laboured and intellectualised in standard CBT sessions, often deepens considerably under hypnosis (Schaeuffele et al., 2024). The reduction in critical resistance allows clients to approach feared thoughts with more curiosity and less defensiveness, and the enhanced imagery capacity makes defusion techniques, such

as visualising thoughts as objects, clouds, or passing events rather than facts, vivid and experientially meaningful rather than merely conceptual (Leo et al., 2024). Clients often notice that, under hypnosis, their thoughts feel less compelling and more like passing mental events. This is the same shift cognitive therapy works towards, and hypnosis can sometimes help it emerge more naturally and effortlessly. For behavioural interventions, hypnotic mental rehearsal is a particularly useful bridging technique (Craske et al., 2014; Deacon et al., 2013). Guiding a client to vividly imagine approaching a feared situation, not avoiding it, not escaping it, but staying with it and discovering that it is survivable, can substantially lower the activation threshold for real-world exposure. For highly avoidant clients where even the first step of an exposure hierarchy feels out of reach, imaginal rehearsal under hypnosis often creates an entry point. It is not a replacement for actual exposure, but a means of preparing for it.

Clinical Application: Comprehensive Case Studies Illustrating CBH in Practice

Case 1: Generalised Anxiety Disorder with Perfectionistic Traits

Sarah (a composite, de-identified presentation) was a 36-year-old professional who arrived in counselling describing 12 years of anxiety she had largely managed to conceal from the people around her. Sarah said, "I worry most of the day, especially about work and making mistakes. I am always tense, not sleeping well, and get headaches." Her concerns centred on work performance, fear of making errors, and a pervasive worry about future outcomes she could not control. She estimated spending six to eight hours of most days in active, intrusive worry. Physically, she was chronically tense; she noted that she could not remember the last time her shoulders had felt relaxed, and her sleep had deteriorated significantly over the preceding two years. Tension headaches occurred several times a week. She held high perfectionist standards, applied them relentlessly, and was harshly self-critical when she perceived herself as falling short.

The CBH formulation identified a number of interlocking maintaining factors. Catastrophic thinking was prominent; she reliably overestimated the probability and severity of negative outcomes while underestimating her own capacity to cope. Intolerance of uncertainty drove compulsive planning, list-making, and checking behaviours that provided momentary relief but kept the anxiety alive. Physiological hyperarousal was chronic rather than episodic, which further narrowed her cognitive flexibility and kept her nervous system primed for threat (Newman et al., 2022; Eysenck et al., 2007). Perhaps most importantly, worry itself functioned as a form of cognitive avoidance: staying in her head, analysing and planning, meant she never had to fully contact the underlying emotional experience she was afraid of. Viewed through Barrett's (2017) constructed-emotion lens, Sarah's nervous system had spent years building and rehearsing predictive models in which uncertainty equalled danger and effortful control equalled safety; her chronic arousal was the lawful output of those models, not a malfunction. All of this pointed toward a central CBH challenge: when her anxiety was elevated, she became cognitively rigid in precisely the ways that made standard CBT techniques (perspective-taking, hypothesis-testing, defusion) difficult to use. The hypnotic work needed to address that first.

Treatment was delivered across 10 weekly sessions. The initial sessions involved comprehensive assessment, thorough psychoeducation about the anxiety maintenance cycle, and an introduction to CBT and the rationale for combining it with hypnosis. Hypnotic induction was introduced in Session 3, using

a breathing-based relaxation and mental quietening protocol lasting approximately four minutes. The client was guided to follow her breath becoming slower and deeper, to notice her shoulders dropping away from her ears as tension released, and to allow her mind to become quieter and clearer with each breath. Following the induction, the client expressed surprise: "My mind felt silent. That is what I have wanted for so long. My brain hasn't been quiet in years." Hypnotically enhanced cognitive restructuring was conducted in Sessions 4 and 5.

Significant improvements were observed at the conclusion of treatment (Session 10). Self-reported worry, measured on a 0–10 scale, dropped to 2–3/10 from an 8/10 baseline. Time spent worrying was reduced to approximately 20–30 minutes per day from six to eight hours, accompanied by an increased capacity to notice the worry process, disengage from it, and reorient attention to the present moment, alongside greater self-compassion. Sleep initiation improved considerably. Muscle tension throughout the day reduced significantly. Cognitively, the client demonstrated an improved capacity to consider alternative perspectives on threat predictions and reported substantially reduced belief in catastrophic outcomes. Sarah particularly valued the hypnotic exercises, noting that when she visualised her thoughts at a psychological distance, they seemed less real and less true. These gains were largely maintained at three-month follow-up (Alladin & Alibhai, 2007; Schoenberger, 2000).

Case 2: Panic Disorder with Agoraphobia and Safety Avoidance

James (a composite, de-identified presentation), a 41-year-old male, presented for counselling six months after an unexpected panic attack while driving on a highway during heavy traffic. James described it as his first panic attack: severe chest tightness, breathlessness, dizziness, heart palpitations, and a wave of terror that he believed signalled he was about to die. What followed was, in retrospect, a textbook panic disorder trajectory. Catastrophic interpretation of the original sensations led to anticipatory anxiety about recurrence, which in turn drove a steadily expanding pattern of avoidance. By the time he presented for treatment, he was no longer using freeways, public transport, shopping centres, or restaurants. He had stopped attending social events. He relied on his partner to accompany him most places. The world had contracted sharply around him. He exhibited significant intolerance to internally directed attention, with an inability to sustain eyes-closed, breath-focused awareness for longer than approximately ten seconds.

The formulation was organised around the panic disorder maintenance cycle (Barrera et al., 2014). The initial spontaneous attack had seeded a catastrophic interpretation of physical sensations: his body's normal arousal responses were now read as evidence of impending catastrophe, which triggered further arousal, completing a feedback loop that could escalate to full panic within seconds. Avoidance and safety behaviours provided short-term relief but prevented the disconfirmation his nervous system needed, namely, the direct experience of physiological arousal that did not, in fact, lead to disaster (Wald & Reeve, 2005). He was also profoundly hypervigilant to bodily sensations, scanning internally at a near-constant rate. Read through Barrett's (2017) framework, James's brain had developed strong predictive models in which interoceptive signals reliably forecast catastrophe; the work of therapy was to provide enough new, embodied evidence to revise those predictions. The CBH opportunity here was clear: his relationship to his own body needed to change. Rather than treating interoceptive signals as a threat alarm, he needed to learn to observe them as neutral information. Hypnotic work, which can shift the quality and valence of bodily awareness, offered a direct route into that process (Farris et al., 2025).

Treatment ran across 12 weekly sessions. The first three sessions focused on assessment, thorough psychoeducation about the panic cycle, and breath-focused awareness with eyes open, followed by diaphragmatic breathing training, establishing both a conceptual framework and a basic physiological regulation skill before introducing hypnosis. The decision to delay induction until Session 5 was deliberate: James was already highly vigilant about his bodily sensations, and it was considered important that he first develop a sense of agency and tolerance in relation to his own physiological responses before engaging in sustained internally directed attention. The Session 5 induction was grounded in safe, neutral bodily awareness, a systematic, slow scan through the body using language designed to orient him toward physical sensation simply as sensation, without evaluation or alarm. By the end of the session, a marked shift in his physiological arousal was observed, and a simple physical cue was established to anchor this state for subsequent use. Sessions 6 and 7 introduced interoceptive exposure: deliberately inducing mild, controlled versions of the sensations he feared, within the grounded state produced by hypnotic preparation (Guth et al., 2025). The effect was striking: sensations that had previously triggered immediate panic were met, in this context, with curiosity rather than terror. Sessions 8 through 10 moved to graduated real-world exposure, progressing through a hierarchy constructed collaboratively with James (Scheveneels et al., 2025).

Positive shifts were registered by the twelfth session. By this stage of the therapeutic process, there was a clear reduction in both the frequency and intensity of panic episodes. Whereas previously panic attacks had occurred several times per week, they were now experienced as occasional surges that approached but did not fully escalate into a panic state. These episodes became more noticeable to James as events he could observe in their early formation, rather than experiences that overtook him abruptly.

This shift was accompanied by an increased sense of agency. James demonstrated an emerging capacity to recognise early physiological and cognitive cues and to respond intentionally, engaging strategies to regulate and rein in his internal state. Although anticipatory anxiety regarding the possibility of panic episodes remained present, it no longer held the same level of dominance. Instead, it functioned as a signal prompting action. In response, James would actively engage in movement and apply the techniques that had been collaboratively developed in therapy and made readily accessible within his environment. These externally anchored prompts supported the translation of therapeutic work into in-the-moment regulation, reflecting a transition from reflective coping toward embodied self-regulation.

James had also begun to use public transport gradually, re-engage in social interactions he had been avoiding, and felt much less dependent on his partner for safety and reassurance. Hypervigilance about bodily sensations had reduced significantly; he reported that bodily sensations no longer automatically triggered fear, and that he had learned to observe sensations without catastrophic interpretation. Safety behaviours had significantly diminished. These gains were maintained at three-month follow-up. The surges leading to panic attacks remained rare (Craske et al., 2014; Deacon et al., 2013).

Discussion: Understanding the Clinical Mechanisms and Significance of CBH

The two case studies outlined above illustrate several essential principles: how Cognitive Behavioural Hypnotherapy can address state-dependent barriers to effective CBT engagement, how it can facilitate therapeutic change, and how it can assist clients to achieve meaningful levels of symptom

alleviation and functional recovery (Schaeuffele et al., 2024). The underlying patterns in the two cases are similar. Both involved clients experiencing significant difficulties in adopting basic CBT approaches in moments of high arousal. In both cases, the hypnotic framework produced the regulatory states necessary for more effective therapeutic engagement (Zimmer et al., 2025; Leo et al., 2024).

The use of mental imagery within hypnosis was also clinically valuable in both cases. Hypnotic imagery facilitated the kind of emotionally engaged, durable learning that underpins lasting therapeutic change, the very kind of new predictive evidence that, in Barrett's (2017) terms, the brain requires in order to revise its threat-biased models. CBH offers practical advantages to practitioners as well. Hypnotic inductions are brief and time-efficient, typically accomplished within 3–8 minutes of a standard 50-minute session, which makes CBH applicable to real-world practice contexts. CBH does not require practitioners to abandon their existing approach; rather, it is designed to be complementary to established CBT protocols (Hanson et al., 2024). The approach is also consistent with trauma-informed and person-centred values, with its emphasis on client autonomy, genuine collaboration, and informed choice, an emphasis that resonates with the existential-relational concerns articulated by Yalom (1980) regarding the centrality of the therapeutic encounter itself.

Important Limitations, Considerations, and Research Directions

It would be misleading to characterise CBH as a universally applicable intervention, and intellectual integrity requires naming its limitations clearly. Not every client will be a candidate for hypnotic work. Some may present with strong cultural or personal reservations, while others may experience increased physiological arousal when attention is directed inwards, particularly in the early stages of treatment. In these instances, a more gradual integration supported by extended preparatory work may enhance tolerance and facilitate engagement. Where hypnotic work is not suitable, CBT alone remains a highly effective approach and the right one to prioritise (Bhattacharya et al., 2023; Furukawa et al., 2024). Hypnosis should always be offered as one option within a collaborative treatment plan, never positioned as something the client must accept. Trauma history requires particular care; some clients will need substantive stabilisation work before sustained inwardly focused attention is appropriate and safe. The randomised controlled trial literature on CBH specifically, while promising, is thinner than the literature for CBT alone, and the case studies in this paper are illustrative rather than probative (Rosendahl et al., 2024). Larger, methodologically rigorous trials with standardised outcome measures are needed. Finally, this approach cannot be implemented responsibly without proper training in both CBT and hypnotherapy. Neither modality should be attempted on the basis of superficial familiarity; each requires substantive competency, ongoing supervision, and continued professional development.

Ethical Considerations, Professional Standards, and Safe Practice

The ethical framework for CBH practice in Australia is grounded in the codes and standards of the Psychotherapy and Counselling Federation of Australia (PACFA), the Australian Counselling Association (ACA), and the Australian Hypnotherapy Association (AHA). These frameworks articulate the foundational principles that govern this work: client autonomy, informed consent, competent practice, and confidentiality. In the context of hypnotherapy specifically, these principles carry additional

weight. Informed consent must be genuinely informed, meaning clients understand what hypnosis is and is not, what the induction involves, what their rights are during the process, and how hypnotic work relates to the broader treatment goals. Psychoeducation is not merely good practice; it is an ethical prerequisite. Equally, the clinician must work within their actual competence. Offering CBH on the basis of a brief introduction to hypnosis, without proper training and supervised practice in both modalities, would be ethically untenable regardless of good intentions. The case vignettes presented in this paper are fully de-identified composite presentations drawn from patterns encountered across clinical practice; no identifying information has been retained.

Conclusion: Advancing Anxiety Treatment Through Thoughtful Integration

Anxiety is not a problem that yields easily. Many clients who present for CBT have already spent years trying to think or reason their way out of their symptoms, only to discover that insight alone does not reliably calm a sensitised nervous system. CBT addresses this more systematically than any other psychological treatment, and its evidence base deserves the respect it has earned (Schaeuffele et al., 2024). But there remains a cohort of clients for whom standard CBT delivery is not enough, not because the model is wrong, but because they arrive in a state that puts its most powerful techniques out of reach.

CBH is this author's response to that clinical reality, developed and refined across years of integrated practice and informed by long-standing traditions in clinical hypnosis (Erickson & Rossi, 1979; Bandler & Grinder, 1975), contemporary affective neuroscience (Barrett, 2017), and the relational-existential commitments articulated by Yalom (1980). It does not ask practitioners to abandon what they already know and do well. It asks them to consider adding a brief, well-evidenced, neurologically coherent preparatory process that may allow their existing CBT skills to land more deeply and durably. The investment required is real: learning hypnotic induction techniques properly, understanding how to adapt them to different anxiety presentations, and integrating them seamlessly into existing case formulations takes time and supervised practice. But the clinical return, in this author's experience, justifies that investment for practitioners who work regularly with anxious clients (Farris et al., 2025).

Anxiety disorders continue to represent a significant public mental health challenge within Australian communities and beyond, with a persistent gap between the level of need and the accessibility of effective care. Cognitive Behavioural Hypnotherapy is not a singular solution to this gap; however, it offers practitioners a meaningful and pragmatic extension of their therapeutic repertoire. Grounded in established principles and supported by emerging evidence, CBH provides a structured yet flexible approach to engaging clients whose anxiety has remained resistant to conventional interventions. In this way it represents not only an additional modality but a clinically useful pathway for reaching those who might otherwise remain underserved.

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Ecological Contact and Psychological Well-Being: A Process-Based Account of Experiential Coordination

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Keywords: *Ecological contact; Process philosophy; Ecopsychology; Enactive cognition; Organism–environment coupling; Attentional flexibility; Psychological well-being.*

Abstract

This article develops a process-based explanation of psychological well-being, grounded in ecological theories of cognition and eco-psychology. It begins with the observation that contact with nature has long been associated with psychological restoration, although contemporary explanations often frame it in terms of stress reduction or attentional recovery. The argument presented here proposes a broader interpretation in which psychological fragmentation occurs when experience becomes excessively self-referential and insufficiently coordinated with the environmental processes in which life is already embedded. At the same time, it asserts that nature is neither a collection of stable objects nor something that simply surrounds human beings. Nature signifies a continuous network of dynamic relationships in which the organism and the environment co-constitute each other.

From this perspective, psychological well-being depends on the re-establishment of experiential coordination between the person and the world. When this coordination weakens, cognition becomes increasingly introspective, attention diminishes, and continuity with the larger realm of life is reduced. Ecological contact interrupts this contraction by reintroducing sensory openness, novelty, and forms of interaction that are not organised around prediction, productivity, or self-maintenance. The article situates cognition within a processual understanding of life and suggests that brief ecological practices can cultivate attentional flexibility and attunement to the environment. Rather than treating nature as a therapeutic resource external to the individual, it proposes that human experience is already integrated into ongoing ecological processes. Psychological health is thus understood as the capacity of experience to remain in dynamic coordination with these processes, rather than separating from them.

Introduction: An Idea We Keep Returning To

This article begins with an ancient idea: ecological contact improves psychological well-being. This concept runs

through Eastern philosophical and contemplative traditions, especially within Buddhist and Daoist thought, where contact with nature is linked to interior balance, attentional clarity and psychological renewal (Kabat-Zinn, 2005; Kohn, 2009; Tucker, 2003). The Romantic tradition also offers a parallel development. Although it is not contemplative in the Eastern sense, thinkers such as Goethe and Schelling (Beiser, 2002; Richards, 2002; Schelling, 1988, 2004), writing in the late 18th and early 19th centuries, resist the reduction of nature to a merely mechanistic order, instead understanding it as a living, self-organising process. Nature, in this view, is not something placed outside human beings as a detached object of observation, rather it is a reality in which human life is already implicated and from which it cannot finally be separated without distortion. This fits with the present account as it challenges a sharp division between subject and world, and instead emphasises a continuity between human experience and the natural order. However, this idea of continuity should not be seen as completely positive or peaceful. Romantic and Gothic writing often portrays nature as having a double character. At times, nature is beautiful, calming, and restorative, but at other times it is overwhelming, strange, and unsettling, challenging idealised picturesque and sublime views of nature (Braid, 2016). Nature is not always experienced consistently. It is often shaped by psychological and situational conditions. It may be a source of comfort, but it can also be a setting that intensifies both connection and alienation. This tension is well articulated by José Ortega y Gasset's idea that human life is always bound up with its circumstances (Ortega y Gasset, 1914/2000). His claim that "I am myself and my circumstances" means that life is always lived within conditions that we do not fully choose and cannot fully control or fully understand. Circumstances are not just a neutral background. They are the real conditions—both enabling and limiting—within which life takes place. From this point of view, we never experience nature on its own. We always experience it as part of a lived situation (Ortega & Gasset, 1914/2000). Together, these ideas support a clearer ecological view. Being part of an environment is not simply about harmony with nature, or separation from it through fear or alienation. It is a more basic condition of life: we always exist within structured environments that both support us and limit us at the same time. Ecological contact, then, is not only something that improves well-being. It shows that human life and environment are always connected and formed together through ongoing interaction (Ortega & Gasset, 1914/2000).

Ecological contact, within this understanding, is not merely a therapeutic intervention. It points to the embeddedness of human life within the wider natural world. The aim here is

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not to introduce something new, but to make explicit a feature of experience that is often overlooked in everyday life due to distraction and cognitive overload. is an intuitive quality to the idea that being in nature helps. This is why a walk outdoors can quickly reorganise experience—attention becomes less constrained, thoughts settle, and a quiet sense of relief is often felt. Of course, it would be a mistake to generalise this. The reverse may occur in cases where natural settings and stimuli produce an aversive response, such as bio-phobia (Soga et al., 2023). Human beings, as living organisms, are not uniform in the ways they respond in this respect. This phenomenon was already recognised in nineteenth-century psychology, which suggested that experiences of nature are not shaped only by the external environment but are also influenced by internal psychological states. In psychoanalytic terms, experiences of nature are shaped by unconscious feelings and emotions. As a result, the same natural place may feel calming at one time and strange or unsettling at another, depending on the person's psychological state (Freud, 1919).

More generally, one might say that human beings are biological creatures, and as such cannot be meaningfully separated from nature. Nature is not something external to human existence; rather, it is the very circumstance within which life is lived—the environmental condition that makes existence possible at all. To become too distant from this is, in a sense, to lose contact with the ground that already sustains us. If nature is the space where human life takes place, then it makes sense why psychological research has repeatedly found that contact with natural environments with natural environments is associated with improvements in mood, attention, and overall psychological well-being (Kaplan & Kaplan, 1989; Berman et al., 2008; Bratman et al., 2015; Garza-Terán et al., 2022; Rhee et al., 2023). It is important to note that, as people move away from natural living environments, they increasingly live in more urbanised forms of existence. Human intelligence has created new “landscapes of activity”, both virtual (for example, video games and social media) and technical, which expand the range of possible experiences. This creative dimension is clearly changing human psychology, as it requires adaptation to environments that can limit or reduce access to natural reality, which still remains, in many cases, at the heart of urbanised life, despite technological development. This work, however, focuses on the restorative effects of the natural environment on health, and with it stress reduction.

Now, a different approach can be taken. This paper argues that polarity – the unhealthy psychological fragmentation between self and environment in which the experience of “I” takes shape in a more self-enclosed form – arises when experience is not harmoniously situated in an organised correlation, or coordinated relation, between the individual and environmental processes. While all other living beings tend to coincide with their environment, the human being often does not fit seamlessly within this medium, as they become preoccupied with meeting the demands imposed by society. From this follows the strenuous effort to reconnect with the natural environment, as well as the difficulty of stepping outside a conceptual repertoire that draws the individual inward into themselves. This forms part of the tendency towards the construction of an artificial “second nature” that is layered over natural nature—a kind of “over-nature.” By “over-nature”, I mean the conceptual and social layer we place over lived, ecological reality, which can partially replace or distort direct engagement with the natural environment. Ecological contact can help counteract this tendency toward an “over-nature,” restoring a more immediate and grounded relation with the natural environment beneath our conceptual constructions. This can also be understood as a form of attunement: a dynamic balance with what nature is already doing. Rather than organising everything internally, the individual becomes more responsive to what is *currently occurring*. This line of thought is consistent

with Edward O. Wilson's biophilia hypothesis, according to which the human organism exhibits an evolved affinity for life and natural environments, shaped through its long evolutionary immersion in ecological conditions (Wilson, 1984). However, while biophilia frames this affinity primarily in terms of preference or evolutionary adaptation, the present argument extends the claim further. It is not only that human beings are drawn to nature because they evolved within it, but that psychological coherence depends upon the ongoing coordination between experiential life and environmental processes from which it cannot be cleanly separated. In order to clarify what is at stake, it is necessary to specify what is meant here by nature.

What Do We Mean by Nature?

Nature is often understood within ecological science as a complex system of interdependent organisms and environments (Gibson, 1979; Pickett et al., 1992). According to this view, the natural world is generally seen as relatively stable and continuous in its overall structure, even though it is always changing in particular ways. Counselling and ecopsychological approaches, although different in orientation, also tend to assume some degree of environmental stability. What differs is not so much the idea that nature endures, but the meaning given to this endurance. Rather than treating nature mainly as an external object to be analysed, these approaches understand it as a lived environment in which human experience is already situated and shaped through participation (Roszak et al., 1995; Jordan & Hinds, 2016). The difference, then, is not so much between stability and change, but between different ways of understanding the relation between human life and the natural world: one emphasising structure and organisation, the other lived involvement within a relatively stable environment. Yet this assumption of relative stability becomes more difficult to maintain under closer examination. What are ordinarily taken to be stable things are always in flux. A forest continually changes through cycles of growth, decay, and regeneration. An organism constantly regulates and adapts through metabolic exchange. These examples show an ecosystem persists only through ongoing interaction and transformation. What appears stable is, in fact, sustained through movement and change. It is therefore more accurate to understand nature not simply as a system of fixed things, but as a process. Here, “process” does not simply mean that things change over time. Rather, it suggests that what we call stable entities are sustained, moment by moment, through continuing patterns of activity, exchange, and transformation, rather than existing as wholly self-contained and unchanging substances (Dupré & Nicholson, 2018; Rescher, 1996). While stable forms do exist, these are temporary patterns that persist within a constantly changing environment. This matters because it transforms the meaning of “contact with nature”. Connectedness is not simply about being exposed to an environment, but about interacting with a living process. It is participation in a process that is already active at every moment of the human experience.

Experience as a Single Field

Human experience is part of this process. Within a single stream of experience, two distinct modes can be identified: the physical (body, biology, environment) and the psychological (thought, feeling, meaning). These are not separate realities, but different descriptions of the same life in constant evolution. The difficulty does not start here. It occurs when these aspects are no longer felt in relation to each other. When the connection between them weakens, experience begins to feel fragmented (Laing, 1960; Zahavi, 2005). But fragmentation is not the consequence of different aspects of experience; rather, it becomes an issue

when they are uncoordinated. At that point: for the subject of experience, thought becomes more self-contained, the body feels less integrated, the world feels more distant. Life is re-imaged from something that sustains organic populations to something that must be controlled. Gregory Bateson described this as a breakdown in the “patterns that connect” (Bateson, 1979, p. 11).

When relationships between parts are no longer maintained within a living organisation, coherence declines—not because anything disappears, but because the relations themselves are no longer sustained. This is intensified when nature is treated as something external—a container one can enter or leave. In such a relation, the continuity between experience and environment fades, and fragmentation becomes more likely. If fragmentation is understood as a loss of coordination, then effective cognition can be described as the capacity for different aspects of experience to remain in relation. The physical and the psychological do not require reduction to a single explanation; they need to evolve together. When this happens—that is, when the physical and psychological are developing in relation to one another—experience can become more continuous, less demanding, and less marked by conceptual and cognitive division (Laing, 1960; Zahavi, 2005).

In ecopsychological terms, this same sense of fragmentation can also be taken to point to a wider sense of separation between human experience and the ecological systems it belongs to.

The Fragmented Self in Experience

Cognition, as typically approached in psychology and neuroscience, is something that goes on within the organism, with explanatory weight placed upon internal mechanisms and operations. By contrast, ecological and enactive approaches question whether such an inward location is sufficient, suggesting instead that cognition cannot be cleanly contained within the organism at all. Rather, it emerges in the ongoing coupling between organism and environment, where each is continually defined in relation to the other (Gibson, 1979; Varela, Thompson & Rosch, 1991). When this organism—environment is disrupted, experience can become increasingly self-referential. The self is then experienced as a separate organising centre, around which active life is structured. Attention turns inward, thought loops reinforce themselves, and the larger field fades. Life closes in on itself, turning away from the particularity of the world. Ecopsychologists describe this as a contraction of the self away from its broader ecological relations (Roszak et al., 1995). However, it is not selfhood that is in question, but the way it can become isolated from the rest of experience—what I call the environmental disconnection.

When the “self” is no longer situated amid the ongoing flow of life in the environment, fragmentation becomes more noticeable, and continuity begins to fade.

This is a bit like what happens in biological systems when a cell behaves as if it were independent of the organism and seen experimentally in cell culture preparations. Instead of functioning in a coordinated way, its activity becomes locally self-amplifying and less regulated by the organising dynamics of the surrounding tissue system, and it starts to prioritise its own activity without regard for the whole for it has lost contact with its native environment. This illustration is not intended as a literal equivalence between psychological and biological processes, but as a structural analogy through different levels of organisation. A similar pattern can be observed *in situ* when a cell’s regulatory coupling within a tissue system is disrupted. Rather than participating in coordinated biochemical signalling, its activity becomes locally self-amplifying and less constrained by the organising dynamics of the surrounding tissue. As Levin argues in his bioelectrical account of cancer, such cases can be

understood in terms of alterations in the scaling of the cellular self, rather than as failures of an inherently purposeful system (Levin, 2021).

From this perspective, self-fragmentation seems to ease when experience is no longer organised around itself, and when we begin to reconnect with the earth that sustains us, through direct and simple forms of contact such as breathing fresh air, or sitting quietly in natural surroundings. Psychological well-being, therefore, is not limited to increased vigilance against mind wandering or the development of clearer thinking but, from the author’s perspective, must also include the organisation of experience and thus engagement with the natural world. This includes the capacity to remain receptive and open, the ability to move between different aspects of experience without losing connection, and the capacity to stay engaged with what is happening, rather than retreating into internal loops. This notion has been and continues to be explored specifically in the work of Steven C. Hayes who emphasised psychological flexibility, openness, and values-based action over experiential avoidance and excessive control (Hayes, Strosahl, & Wilson, 2012).

Everyday Pressure and the Turn Toward Nature

When the pressures of daily life accumulate, experience begins to narrow. Thoughts become focused on managing tasks; we frantically anticipate what’s coming next, worrying about how to keep up with constant demands. Even moments of rest can become filled with mental rehearsals. At a certain point, this narrowing is felt directly. We feel tired, detached, mentally exhausted. In this situation, self-reflective people recognise the need for space, the need to step back, to escape. This is clearly a sign that the current field of experience is overloaded. However, this should not be taken as a rejection of technology or technological development. Human beings transform their environments in order to survive, adapt, and reduce vulnerability to environmental conditions. The construction of shelter, the controlled use of fire, and the development of tools all came from this adaptive relation with nature.

However, contemporary technologies increasingly mediate forms of engagement that were once more directly embodied and environmentally situated. Using a remote-controlled heater is not equivalent to gathering around a fire, just as travelling by car is not equivalent to walking through an environment. These technologies are often indispensable and beneficial, yet they may also suspend aspects of the organism’s inherited repertoire of sensory and ecological relations with the surrounding world. Heidegger voiced this concern in the last century as well, pointing out that modern technological life increasingly positions the world as something to be ordered, managed, and rendered available for use, thereby altering the manner in which human beings relate to their environment (Heidegger, 1977). There is little doubt that many contemporary environments—digital, institutional, and commercial—place sustained demands on attention, potentially intensifying experiences of fragmentation and perceptual disconnection.

By contrast, the natural environment offers something different. It is a space not disturbed by persistent thought, without competing egos, a place not organised around human expectation. Natural things unfold without being structured around tasks, deadlines, evaluations, or simple utility. In this alternative experiential context people forget themselves; attention is no longer constantly pulled in by demands; it returns to a simple awareness of the present. What opens up is not an abstract escape, but a real change in the organisation of experience, involving a reduction in reflective self-focus and a more immediate mode of awareness (James, 1904; Gale, 2004).

There is, after all is said and done, harmony and rest.

It should be noted that what is said here about harmony and rest does not presuppose a perfected or fully equilibrated state, nor forms of natural engagement associated with sporting or intensive physical activity. More precisely, these terms indicate a reduction of internal pressure, in which experience is no longer repeatedly dominated by anticipatory control and task-oriented focus, that is, a way of life that does not excessively prioritise productivity, speed, and being busy in institutional contexts. It is not at all surprising then, that under these ecological conditions, a reconnection with the wonders unfolding around us begins to develop. The cycle between thought and self-attention relaxes. Attention begins to move freely with the sensory information available in the moment. Research in this area indicates that contact with natural environments supports attentional recovery and reduces cognitive fatigue (Kaplan & Kaplan, 1989; Berman et al., 2008), and is also associated with improvements in emotional regulation and subjective well-being (Zeng et al., 2025). From a clinical perspective, these effects are especially pertinent in conditions characterised by attentional rigidity, rumination, and heightened self-referential processing, where the capacity for release from repetitive cognitive organisation is often compromised.

Environmental psychology, taking a less dogmatic approach, describes a range of positive effects associated with contact with natural environments, although these effects are neither uniform nor guaranteed. More modestly, it may be said that some natural environments, and particular kinds of experience within them, can at times support a more balanced way of relating to experience. In such moments, nature may reintroduce a field of experience that is not primarily organised around the self. Experience can then become less governed by internal narratives and more responsive to what is present. (Bowler et al., 2010; Twohig-Bennett & Jones, 2018). A form of environmental attunement may begin to be felt in experience, although this is typically contingent upon a degree of comfort within natural settings, as well as a readiness to engage them with openness, attentiveness, and something like existential friendliness or awe (Wilson, 1984). Self-awareness does not disappear in these moments, just as it does not disappear when one is absorbed in a film, a book, or a physical activity; rather, it recedes from its usual dominance. In natural environments, the boundary between psychological life and environment may become more coordinated, and experience responds with a certain fluidity to what is happening (Csikszentmihalyi, 1990). This does not imply a state of complete equilibrium with the environment, nor is such a state necessary or desirable. If experience were perfectly balanced, experience would lose its vitality. Life depends on a degree of tension, contrasts, and continuous adjustment. From a regulatory perspective, this involves maintaining individual organism–environment dynamics within limits that preserve integrative capacity, avoiding states in which variability exceeds the ability to coordinate experience. Life is then a process, and it is present where there is a difference in levels of activation and organisation. This is what can be understood as attunement—a continuous process of adjustment. The organism and the environment remain distinct, yet coordinated, allowing psychological processes to remain stable without becoming rigid, and open without losing coherence.

Implications for Therapeutic Practice and Everyday Experience

Taking into account what has been discussed in this article, psychological well-being encompasses not only the work of changing the relationship with self-defeating thoughts, improving emotion regulation, and increasing awareness of interoceptive

content, but also reducing rigid self-referential closure, and moving from fragmentation towards meaningful coordination with the environment. That being the case, ecological contact may therefore be seen as a natural context in which experiential processes continue to be reorganised. This approach is not intended to be limited to specific diagnostic categories or clinical criteria. Rather, it may be understood as broadly relevant to individuals who experience sustained cognitive and emotional strain associated with contemporary technological, institutional, and commercial environments. In this sense, it is offered as a general orientation for those who find value in reducing attentional overload and re-engaging, in simple and accessible ways, with periods of time spent in natural settings. Therefore, the following exercises are not presented as techniques in a strictly clinical sense, but as simple ways to support a renewed attentional openness to ecological contexts in which such reorganisation of experience may, under appropriate conditions, become possible.

Exercise 1: When Experience is Not Immediately Labelled

When we resist the impulse to immediately label what we perceive, attention remains closer to movement itself. This quality is often obscured once objects are stabilised in thought as fixed things. At times, this openness arises spontaneously—for instance, when an engaging topic at the dinner table draws everyone into a shared unfolding of thought. Yet such moments are contingent and cannot be relied upon. To cultivate this kind of flow more consistently in relation to nature, intentionality must be introduced into the stream of consciousness. The question then becomes: how can this be done? One approach is to allow perception to remain as undifferentiated as possible for as long as is practicable. Instead of defaulting to familiar classifications such as “tree,” “wind,” or “bird,” attention can linger with more immediate qualities: vertical patterns of growth and shifting light across bark, air currents felt on the skin, or bird song unfolding in space. Language is not excluded, but its organising function is temporarily delayed. In this interval, experience remains closer to ongoing processes before it settles into stabilised conceptual form.

This practice is also found in contemplative writers of the Christian and Buddhist traditions, where disciplined forms of attention are developed to reduce immediate conceptual interpretation and allow experience to be encountered in a more direct and sustained way. In Buddhist thought, early teachings such as the *Satipatthāna Sutta* emphasise sustained mindfulness of bodily sensations, feelings, and perceptions without immediate conceptual elaboration (Bodhi, 1995). Zen and Vipassanā meditative traditions often describe this practice as a form of non-discursive awareness in which experience is observed prior to naming and interpretation (Analayo, 2003). In the Hindu yogic tradition, the Yoga Sūtras of Patañjali understand meditative practice as the cessation of mental fluctuations (*citta-vṛtti-nirodha*), allowing consciousness to rest in a more stable and less distorted form. In this context, the aim is to reduce the dominance of conceptual proliferation and representational thought, interrupting habitual cognitive processes in order to allow experience to appear in a more immediate and less mediated way (Guenther, 2005). In the Christian contemplative tradition, authors such as the Desert Fathers and later figures like Teresa of Ávila and John of the Cross similarly describe forms of concentration and prayer in which sensory distraction and discursive thought are gradually quietened, facilitating a more direct awareness of divine presence. While these traditions differ significantly in their metaphysical frameworks—ranging from non-theistic attentional disciplines to explicitly theistic accounts of divine encounter—they converge in their emphasis on practices that loosen habitual conceptual structuring to open experience to

what is immediately given.

Exercise 2: When Movement is Not Entirely Task-Directed

Another exercise for appreciating flow in nature involves walking without a specific goal or structure. One can slow down, stop, or change direction without reference to a predefined plan. Movement begins to follow environmental conditions and bodily cues rather than an externally imposed structure. Experience takes on a different quality: less organised by anticipation and more open to the present. This reduces the dominance of top-down predictive control and increases sensitivity to environmental flow. The aim is to experience the ease and subtle joy of movement itself. Here one can point to exercises of embodied attention in practices such as Kendo (Japanese martial art) and Tai Chi (Chinese internal martial art), where movement is cultivated as continuous, responsive, and non-rigid, rather than directed by fixed pre-planned action.

Exercise 3: When Thought is Present without Dominating Experience

Even in natural environments, thought does not disappear completely. The human mind provides a continuous background in which mental imagery and self-referential processes unfold over time and retain the capacity to shape ongoing experience. Thoughts are not intruders; they are part of consciousness. They are transient formations among others alongside sensory experience such as the sight of trees, the movement of wind, and bodily posture. However, thoughts can become persistent and begin to dominate the field of experience, creating an imbalance in its ongoing dynamics. This need not be the case. Thoughts do not need to be treated as enemies that must be expelled. Instead, they can be observed without elaboration or resistance, while attention remains partially engaged with the surrounding environment. In this way, cognition becomes one process among others, rather than the primary structure through which experience is organised. So when sitting in nature, there is no need to empty the mind. Instead, thoughts may arise and pass without being followed or resisted. They can be regarded as part of a wider field of changing conditions—like weather systems moving through a landscape. Some thoughts appear briefly and dissolve like passing clouds; others form more stable patterns, like steady winds moving through the countryside. This exercise is really about redirecting attention from objects of thought towards the perceptual environment in which one is located. It allows thoughts to emerge as part of the flux of experience, while perception of the natural environment actively shapes the present moment. This is not a form of suppression, but a rebalancing of experiential emphasis within a continuous and dynamic field of awareness. While there are superficial similarities with Buddhist and Zen practices, such traditions typically aim at reducing attachment to conceptual elaboration, rather than eliminating perception or achieving a fully pre-conceptual state.

Exercise 4: When We Notice What Interrupts

The third exercise involved focusing attention on moments when nature interrupts expectation—for example, sudden changes in wind, uneven terrain, unexpected sounds, or subtle shifts in light within the environment. This fourth exercise is not a direct continuation of the previous one; rather, it introduces a complementary dimension of attentional openness. Both exercises clarify two pathways through which experience can become more open. The first involves an internal de-centring of thought, where cognition loses its organising dominance

and thoughts no longer develop into extended elaborations. Attention is no longer captured by conceptual activity, and perception regains a more immediate and embodied character. The second involves an external interruption of anticipation, where environmental events introduce novelty into experience and disrupt habitual predictive structures. We are dealing here with change, variation, and the emergence of the unexpected—conditions that give rise to surprise. The capacity for wonder is fundamental to life, as it opens experience beyond the narrow structuring of everyday anticipatory patterns, particularly within technologically saturated environments (Monroy & Keltner, 2023). In this sense, nature continually presents itself as unfamiliar and revealing to an attentive and receptive gaze. Taken together, these processes describe different pathways by which psychological life becomes more open: either through the relaxation of internal cognitive control or through the disruption of external expectation. In both cases, experience is no longer totally controlled by prediction or conceptual closure. Instead, it becomes receptive to what emerges anew, allowing novelty, variation, and surprise to participate in the ongoing shaping of experience.

It should also be made clear that the aim of these exercises is not to replace existing contemplative or cognitive approaches. We simply want to articulate a different therapeutic mode in which environmental dynamics are understood as co-constitutive of attentional organisation. In clinical application, these exercises may be integrated as a movement between two poles of experience: on the one hand, the internal de-centring of thought, in which conceptual elaboration loosens its organising grip; and on the other, an openness to environmental variability, in which perception becomes responsive to the subtle interruptions and modulations of natural processes. In mutual relation, these movements allow experience to be re-situated within a wider field of activity, where natural variation does not merely accompany cognition but participates in its ongoing reorganisation. Undifferentiated perception, flow in movement, and a relative suspension of habitual mental content can, in moments of attentional openness, give rise to a sense of wonder that extends a person's relation to the natural world. In such experiences, the field of attention is less dominated by conceptual categorisation and becomes more responsive to environmental variation. This can simultaneously expand the horizon of personal activity, fostering a more creative and less habitual way of engaging with what is ordinarily familiar yet overlooked. Rather than involving a loss of cognitive agency, this mode of experience depends upon a refined form of attentional openness, in which agency and receptivity are held in dynamic balance. In their mutual relation, these exercises support a greater coordination between cognitive activity, bodily awareness, and environmental responsiveness, allowing experience to become more closely attuned to the surrounding world.

Conclusion

As physical beings, humans are not separate from the planet. Psychological well-being has often across contexts, cultures and time been associated with contact with the environment. This article takes these insights seriously, proposing instead a more fundamental claim: that fragmentation or disharmony in one's experience of self and world arises when experience is not situated within a coordinated flow of life. Nature can support recovery from this fragmentation, not by imposing further demands, but by reintroducing a field of restorative processes within which experience may be re-situated.

Understood in this way, well-being is not exclusively an internal psychological construction, but is grounded in the continuous relationship between an organism and the processes in which life is already immersed. The organism cannot be fully

understood in isolation, but only as something that unfolds through its relations with the environment. Life and being therefore belong together. In this respect, the idea put forward here shares some common ground with Martin Heidegger's concept of Dasein as "being-in-the-world," where human life is understood as always existing within a world of relationships and situations rather than separate from them. Rather than a fixed state, the optimal condition is an ongoing process of coordination in which experience remains dynamically integrated, without internal contradiction or fragmentation. This may be understood as a form of ecological cognition.

From this perspective, it becomes possible to consider how contemporary conditions reshape this organism–environment relation in novel ways. We thus observe that the tensions present in society today are paradoxically born from the abundance of our own efficiency, an abundance that has progressively distanced us from natural life. Alongside this, it may be suggested that many of the needs currently recognised as absolutely necessary are in fact subjective, and perhaps largely conditioned. Human beings have long lived by imposing changes upon nature; perhaps now it is time to consider how nature, in turn, may begin to impose positive changes upon human life.

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Alcohol and other drugs (AOD) addiction among Indigenous Australians: a literature review

Dr Bernard W S Fan and Dr Brian Steels

Keywords: *Indigenous Australians, Alcohol, Substance Use, culture, value*

Abstract

This literature review aims to explore the development of treatment models for alcohol and other drugs (AOD) addiction for Indigenous Australians. A main finding of this study is that there is a lack of treatment models for Indigenous/First Nations Australians suffering with AOD issues. Most Indigenous models are, in fact, research or service models. This paper suggests switching focus from enhancing engagement of Indigenous clients to working on an effective therapeutic model to help Indigenous clients recover from their AOD problems.

Introduction

In 2024, accidental drug-induced fatalities were the second-highest cause of death according to the Australian Bureau of Statistics (ABS), with Aboriginal and Torres Strait Islander people recording a rate almost four times higher than that of non-Indigenous people (ABS, 2024). The National Aboriginal and Torres Strait Islander (ATSI) Health Survey reported that between 2022 and 2023, around 34 per cent of Aboriginal people aged 15 years and above exceeded recommended safe guidelines by consuming more than 10 standard drinks per week and/or consuming 5 or more standard drinks on at least 12 days in the last 12 months. The proportion of Aboriginal people who exceeded the guideline was nearly concurrent for those living in non-remote areas (34 per cent) and remote areas (35 per cent) (ABS, 2024). The figure is also double the rate reported in 2015 (ABS, 2015). Among the substances used, alcohol ranked the highest (93 per cent) in contributing to community problems such as mental health and domestic violence, followed by cannabis (77 per cent), inhalants (47 per cent), petrol (31 per cent), and amphetamines (29 per cent). There was a concern about the widespread use of cannabis and amphetamines by young Indigenous Australians (Putt & Delahunty, 2021). The National ATSI Health Survey indicated that Indigenous Australians were overwhelmed by the high levels of substance abuse and related issues. It is also reported that alcohol and other drug (AOD) problems are higher in rural areas compared to metropolitan areas, and rural communities have a higher need for AOD health services (Wallace et al., 2025).

Indigenous researchers have conclusively shown that colonisation, the forced removal of children from families, assimilation and acculturation to Australian mainstream values, oppression, dispossession, and exclusion contribute to feelings of anger, self-hatred, despair, hopelessness, and powerlessness (Hewlett et al., 2023). These feelings and narratives often lead to negative cycles affecting the self, family, community, and culture of many Indigenous people, who may then further resort to substance abuse to numb their feelings and to escape their painful memories (Hewlett et al., 2023). In turn, AOD dependencies exacerbate the problems that bring domestic violence to the surface, thus leading to the vicious cycle, which once more leads to feelings of anger, hopelessness, helplessness, and attributes to the intergenerational trauma. Moreover, alcohol use may contribute to disconnection from their local and deeply held culture (Amanda et al., 2023).

Most of the models explaining the development of the AOD problem among Indigenous Australians focus on the historical impact of colonisation and oppression (Hewlett et al., 2023). Research into interventions for substance use among Indigenous youths in the United States showed integration of cultural components in treatment was important for recovery (Liddell & Burnette 2017). However, the US review also noted a knowledge gap pertaining to culturally-informed substance abuse interventions for Indigenous people. Not surprisingly, knowledge and evidence about the development of addiction and its treatment for Indigenous Australians are also lacking. To explore and begin to close this knowledge gap, a literature review was conducted.

To direct the scope of the literature review, four questions were posed:

1. What historical and cultural context is relevant to AOD issues among Indigenous Australians today?
2. What therapeutic models of alcohol and other drugs (AOD) among Indigenous Australians are available in Australia to date?
3. What is the developmental pathway of AOD problems among Indigenous Australians?
4. What cultural elements or concepts are available for the treatment of AOD problems in Indigenous Australians?

Method

This literature review aims to explore the development of AOD issues and the vulnerability of Indigenous Australians. The review included published papers on the development and maintenance of addiction, theoretical models of addiction, and empirical studies to test those hypothetical models. The

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systematic review followed the guidelines of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) (Moher et al., 2009). A systematic search using the OVID database (PsycINFO) was conducted for the period 2000-2025. Three additional online databases, including Google Scholar and ResearchGate, were also used. The following search terms were used: “Alcohol and Other Drugs” OR “AOD” OR “substance addiction” AND “healing” OR “treatment” OR “recovery” OR “quit” OR “abstinence” OR “lapse” OR “relapse” AND “Indigenous Australians” OR “Aboriginal”. Further searches were undertaken using Indigenous-specific journals such as the *Journal of Australian Indigenous HealthInfoNet*. Additional references were retrieved after searching the reference lists of the retrieved papers.

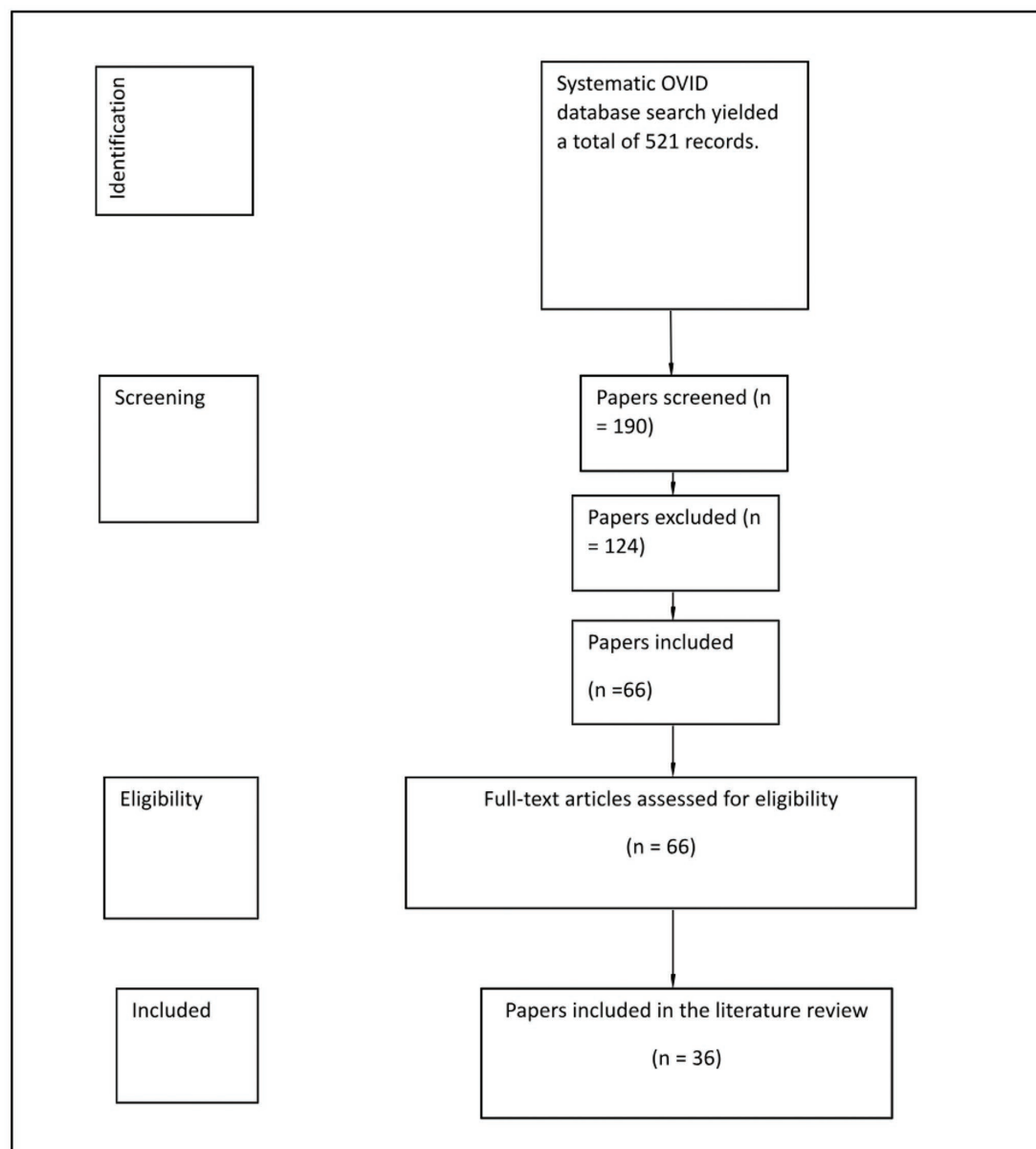
Studies in this review met the following criteria: (a) written in English; (b) published in a peer-reviewed journal; (c) study of human subjects. There is no restriction on the geography of the study published. Papers were excluded for the following criteria: (a) not published in English; (b) opinion papers; (c) they were neither journal articles nor dissertations; (d) they reported

subjects of mental illness and addiction were not the primary focus. The search process commenced with the title of the articles to first scan the relevant papers, followed by reading the abstract to select the relevant studies, before reading the full text.

Results

The search using the OVID database strategy yielded 521 records for initial screening. Titles and abstracts were assessed for eligibility and relevance by the author. The number of articles was reduced to 190 after the initial screening. After inclusion/exclusion criteria were applied, a total of 66 articles were found relevant to the current literature review. Additional articles were found from a manual search. A total of 36 articles were reported in this literature review. The search process is shown in Figure 1. The result of the literature review is reported below.

Figure 1. Summary of literature search.



In this literature review, the author has reviewed papers relating to working with Indigenous Australians. Multiple terms encompass Indigenous peoples in Australia, including Aboriginal people, Indigenous Australians, and the most recent term, “First Nations” people in Australia. The term “First Nations” people was first used to describe Indigenous Americans. In this paper, the word “Indigenous Australians” is used.

Indigenous Australian Culture

Only in the last 25 years have more Indigenous scholars and psychologists, such as Dudgeon et al. (2014), Dudgeon & Bray (2019), and Westerman (2021), begun to present Indigenous Australian (also known as Aboriginal Australian) culture systematically. Their work has helped both Indigenous and non-Indigenous Australians to understand Indigenous culture as well as Indigenous clients' ways of thinking.

Many Indigenous scholars, psychologists, and other practitioners have emphasised the importance of cultural appropriateness in providing services for Indigenous Australians in a culturally sensitive and respectful way. Cultural appropriateness can improve substance abuse prevention and treatment intervention through adapting language, culture and context that is compatible with the client's cultural patterns and values (Burlew et al., 2013).

Kinship structure and collective value

For Indigenous Australians, governance of a country is based on complex laws which regulate relationships to country, family, community, culture and spirituality. These laws are passed down through generations and kinship systems (Dudgeon & Bray, 2019). The concept of “Self” is surrounded by family, community, non-Indigenous society and ecological system (Dudgeon et al., 2014). Indigenous kinship is founded on a connection to the land (Dudgeon & Bray, 2019). For this reason, the issues and difficulties of Indigenous clients are not just confined to their self-experience and condition.

There are approximately 500 different tribal groups and 123 Indigenous languages in use in Australia (NILR 2020). Despite a range of diversity in tribal groups and languages, Indigenous people present a broad perspective and interpret their experience from a collective, kin, and language group point of view instead of an individual perspective. This is generally not understood from a Western cultural context or ideology focused on individualism. At the very core of Aboriginal social structure is kinship: the basic principles for organising individuals into social groups, categories, and genealogies. The general kinship structure consists of three classifications: biological kin or consanguineal kin (blood kin), affinal kin (related through marriage), and classified kin (one has earned a particular role and stature within the family) (Dudgeon et al., 2014). This kinship structure defines each role and status in their family and clan structure. Indigenous Australians' role and status in kinship provide a guide for approved behaviour. Maintaining family relationships and community connections is vital for Indigenous Australians (Dudgeon et al., 2014). Indigenous women have also maintained strong leadership roles and have kept families and communities intact (Dudgeon & Bray 2018). Since there are diverse tribal groups, not all Indigenous communities are alike and practitioners should be mindful of local and regional differences in language, culture and views.

Environmental value

For Indigenous Australians, western societies hold egoistic values and materialism. Unlike western values,

Indigenous Australians hold “biospheric values” and eco-centric values to achieve sustainability which are holistic and non-materialistic. They view environmental values as human values that guide communities' understanding of how the natural world should be viewed and treated by humans (Gratani, et al., 2016). Indigenous environmental values are part of their culture which influence their beliefs and norms of their behaviour. Behaviours will be more likely to be undertaken by individuals if they hold values that support them. Within these holistic values, all components of the ecological and human system are interconnected. While stories vary across the country, a period known as the “Dreamtime” or “Dreaming” represents many of the foundational aspects of Aboriginal knowledge, when animals, places and humans were created and named. Language names were traditionally given to children by the elders. Names are associated with a personal totem, which promotes a specific connection of the individual with the environment and therefore a sense of identity (Gratani, et al., 2016).

Connection

Connection is an important concept in Indigenous Australian culture, where the world is interconnected and operates in a web of life with all nature (Ringland, 2019). Indigenous Australians believe there is an Indigenous system of “law” connecting every aspect of life across time, space, and place (Langton & Corn, 2023) that enables them to survive and thrive in Australia. For this reason, connection to Country is an important determinant of mental health and well-being, and can be seen by referring to the land as “my mother's” or “my father's country” or as “our country” (Dudgeon et al., 2014). Those who are away from their birth country for an extended period may experience grief, loss, and depression due to their weakened spiritual link with the country. Returning home enables Indigenous families to gather, yarn, and reconnect with their spirit and, for many, their totem. Moreover, this multifaceted connection also includes a person's traditional role, significant storylines, and sacred art. For Indigenous Australians, connection with the environment is a source of mental health and well-being. Frequent visits to Country, and living on or close to Country represent the opportunities to reconnect and to affirm their identity (Gratani, et al., 2016). A study reported that Indigenous Australians living in remote areas had a higher mean for the cultural attachment variable (Dockery 2010). This suggests that Indigenous Australians living in remote countryside have a stronger cultural attachment and a stronger connection with their country.

Spirit

Traditionally, most Indigenous authors emphasised the negative impact of long-term oppression brought about by forced colonisation and institutional racism, which caused enormous loss of spirit among Indigenous Australians (Dudgeon et al., 2014). This loss of “spirit” and associated grief is also linked to the disconnection of the country and the underlying issues of substance abuse and domestic violence.

It is, however, important for mental health professionals to understand the definition of spirit. People may believe in “the Great Spirit”, or a more localised name for a significant being, a creative totem, or the beings of “the Dreaming”. This spirit has a connection with the universe (Pattel-Gray, 2014). Besides this perspective of a Greater Being, the Spirit can also be understood from a psychological and physiological approach. It can be seen as a loss of volitional control in their substance use and abusive behaviours. On the other hand, long-term substance abuse can lead to poor physical and mental health, such as memory loss and drug-induced psychosis, which also represent the loss of

spirit for many Indigenous people. Therefore, loss of spirit can be understood from religious, psychological, and physiological perspectives, and helps us to understand the AOD problem.

AOD Research and Treatment Models

Given the knowledge gap in the understanding of the development of AOD problems among Indigenous Australians, this review also explored those model types that are presently being used as a springboard to future development of a better module, which will hopefully optimise outcomes for Indigenous Australians.

Indigenous Research Models

Several research models have been designed to explore and understand Indigenous cultures in the context of AOD (Sharmil et al., 2021). Indigenous researchers also felt the tension and antagonism in their experience of doing Indigenous research within academia (Absolon, 2022). Firstly, Indigenous research which prioritises culturally safe protocols can clash with objective paradigms of Western methodologies. Secondly, Indigenous scholars may also face barriers in mainstream publishing. This mistrust resulted in Indigenous Australians' antagonism to Western research paradigms. Gradually, Indigenous researchers pursued their stance to re-theorise and to enact their Indigenous research agendas (Absolon, 2022). Consequently, they wanted to develop their own culturally safe and culturally respectful Indigenous research methods, which incorporated notions of connectivity, trust, integrity, and treating people fairly.

From this standpoint, Indigenous Australian researchers began to hypothesise what Indigenous research methods looked like. For example, Martin and Mirrabopa (2003) developed an Indigenous research methodology called *Ways of Knowing, Being, and Doing*. This methodology is an Indigenous framework of knowledge transmission and research. It emphasises the interconnectedness of individuals with the world. In this methodology, there are three main constructs. Ways of Knowing refers to the process of acquiring knowledge. Ways of Being involves an understanding of one's identity, values, and sense of self related to their culture. Ways of Doing are a synthesis of both Ways of Knowing and Ways of Being, and refers to the practical application of knowledge and engaging with the world through actions and practices to express individuals' identities and roles (Martin & Mirrabopa, 2003). This research model emphasised the importance of learning Indigenous culture, such as working with and listening to Indigenous people, particularly elders. This pedagogical framework in cultural learning and research via storytelling and cultural activities also inspired Indigenous Americans and New Zealanders in their research (Siekman & Webster, 2023; Danyluk et al., 2023; Taani, 2022).

This research model influenced Indigenous researchers and Aboriginal controlled organisations to conduct qualitative research to interview Indigenous clients, families, elders, and workers to design their own Indigenous cultural AOD treatment model thereafter. For instance, one of the Ways of Knowing, Being, and Doing research conducted in AOD was a study on Fetal Alcohol Spectrum Disorder (FASD) by Hewlett and her colleagues (2023). This study integrated both Indigenous strengths-based and healing-informed approaches, and a Western biomedicine therapeutic approach in supporting Indigenous families with a lived experience of FASD (Hewlett et al., 2023).

Another research method taken from Participatory Action Research (PAR) is the *Dadirri-Ganma Model*, as designed by Sharmil et al. (2021). This research model emphasized the importance of consultation through yarning, deep listening

(*Dadirri*), and two-way sharing (*Ganma*) with senior elders and the Indigenous community (Sharmil et al., 2021).

Indigenous pedagogical methodology provided an important research approach for Indigenous Australian researchers to conduct qualitative studies, via interviews and yarning, with Indigenous Australians to explore their perspective to design a culturally appropriate service and to generate culturally responsive policy (Dale et al., 2021; Purcell-Khodr et al., 2022; Cox et al., 2023; Fono et al., 2025). On the other hand, there was also a limitation of this Indigenous pedagogical research in so much as it lacked large-scale quantitative data sets to yield an evidence base to support meaningful policy and treatment models for Indigenous Australians (Craven et al., 2016).

Service Models

Beyond research, the lack of engagement by Indigenous people in mental health services is still the main challenge faced by most services and practitioners, including both Aboriginal community-controlled (ACC) organisations and mainstream services. Many non-Indigenous services remain confronted by the lack of practical information on therapeutic interventions among Indigenous Australians. To improve services for Indigenous Australians, Fono et al. (2025) emphasised consulting Indigenous communities and building a strong relationship with them in service design.

Two significant AOD service models for Indigenous Australians are the residential model and the community-based model. For example, Shakeshaft et al. (2018) studied six Indigenous residential rehabilitation services to evaluate their assessment tools, to define their core treatment and organisational components to build a standardised assessment tool, to develop a standardised logic model, and to design an evaluation framework to evaluate the costs and benefits of Indigenous residential rehabilitation services in NSW (Shakeshaft et al., 2018). The main purpose of Shakeshaft's study was to evaluate residential rehabilitation services and articulate a standardised residential rehabilitation program/service model for Indigenous Australians. Their study indicated that there was no standardised assessment, standardised treatment components, standardised service framework, or evaluation in residential rehabilitation. This lack of standardisation was interpreted to indicate a lack of understanding of the pathways of AOD development among Indigenous Australians.

By contrast, Krakouer et al. (2022) conducted a systematic literature review on the community-based model of AOD support for Indigenous Australians over the past two decades. The review reported that important components of AOD support for Indigenous Australians included cultural safety, Indigenous Australian workers, inclusion of family and kin, outreach, and group support. It also suggested focusing on holistic psychosocial support, increased local community participation and engagement, the need for increased funding, and having Indigenous Australians in the management/governance of Aboriginal-controlled organisations (ACO, Krakouer et al. 2022).

However, the Aboriginal-mainstream partnership service model in running AOD services for Indigenous Australians has also found challenges; centrally, the difference in how stakeholders view the origin of addiction. The ACO staff focused more on the history of Australian colonisation, while mainstream service staff emphasised the present addiction behaviour of clients. The mainstream staff felt uncomfortable with the ACO staff being stuck in the negative experience of colonisation history and used the history of the Stolen Generation to explain the clients' addiction behaviour. While ACO staff held the perspective that the trauma of being stolen from families contributed to the continued use of substances among Indigenous Australians (Krakouer et al., 2022). The mainstream staff worried the Indigenous Australians

clients lacking motivation to change their addiction behaviour, while the ACO staff mainly concerned Indigenous clients with a crisis, homelessness, or financial distress (Krakouer et al., 2022). Their different views on the service model, including the referral process and focus of service, has led to mutual distrust between Indigenous staff and non-Indigenous staff.

The above studies reported on service models and how to improve cultural appropriateness to enhance the engagement of Indigenous Australians in AOD services. Those service models mainly describe the process and focus of services, such as building relationships with Indigenous communities, being non-judgmental, identifying barriers, and increasing Indigenous people's governance in the service.

As a hybrid approach, Farnbach et al. (2021) introduced the five-step process to improve the culturally responsive practice in AOD services, to evaluate the fidelity of implementation for the five-step process, to identify barriers and enablers to implementation, to assess the feasibility and acceptability of this approach, and to describe iterative adaptation of implementation processes based on participant feedback. The study reported that the project was rated highly acceptable and achieved the planned changes. The operationalisation of the five-step process also improved the cultural responsiveness and the interest of staff (Farnbach et al. 2021).

Amanda et al. (2023) conducted a study to review the usability, content, readability, and cultural appropriateness of AOD resources. They reported that many resources met at least half of the cultural appropriateness elements of interest. Many AOD resources are developed specifically for Indigenous Australians, but their usability, content, and readability differ, and they are not culturally appropriate for all communities (Amanda et al. 2023). Similar but different cultures can exist within a country. This final remark is telling, as many practitioners/scholars have failed to learn that each community has uniqueness as well as commonality. Not all Indigenous communities are alike, and services need to be adapted accordingly.

Indigenous scholars and practitioners have emphasised the importance of cultural appropriateness and responsiveness in facilitating the relationship between local services, local Indigenous communities, and kinship groups. Indigenous practitioners emphasised the "localness" in any responsiveness where individual choice is paramount. Cultural appropriateness and responsiveness is an ongoing process of adapting systems, services, and practices to fit user preferences (Farnbach et al., 2021).

In bridging the gap of cultural appropriateness, some authors have suggested that practitioners are more effective in treating and assessing Indigenous clients when they have compatible racial backgrounds (Westerman, 2021). Westerman (2021) also emphasised that the primary skill of cultural empathy can be improved by increasing the cultural compatibility of beliefs and values in order to improve counselling outcomes, such as understanding the worldview of Aboriginal clients. Dr. Ungunmerr-Baumann, an Elder of Daly River, is quoted by Sharmil et al. (2021) that "listening and learning must go both ways; Aboriginal and Western knowledge must come together without one ruling the other". Hewlett et al. (2023) also addressed that "societal-level change requires a pathway where Aboriginal and Western wisdom can come together in a meaningful and equitable collaboration and knowledge". This "learning together" is experienced by members of Bidi Warkoolin (Right way forward) Aboriginal Corporation, Collie, WA, who have shared their cultural ways with Restorative Practitioners to better inform the practice, families, facilitators, and community as they all learn new skills and practices (Anderson, 2023). This hybrid model was somewhat different from Indigenous antagonism to the Western paradigm, but encouraged the benefit of applying both Western and Indigenous knowledge together. But it still

emphasised the importance of learning and understanding Indigenous local culture to enhance the cultural compatibility and cultural appropriateness.

In reviewing Indigenous research models, service models, healing models and hybrid models, there still remains a knowledge gap in explaining the pathway of the development and maintenance of addictive behaviours among Indigenous Australians. Without this understanding, healing and effective treatment in AOD issues will remain limited.

Causes and development of the addiction pathway in Indigenous Australians

Causes of addiction

Colonisation and intergenerational trauma are regarded as underlying causes of AOD issues among Indigenous Australians (Amanda et al., 2023), but other factors may also contribute to ongoing intergenerational addiction.

Instead, Hewlett et al. (2023) suggested that colonisation has given rise to a number of narratives that blame, shame, and stigmatise Indigenous people, their culture, and their way of life. For years, Indigenous people have heard these negative messages and deficit narratives in generational cycles, which subsequently re-traumatise them. Hewlett et al. (2023) refer to this as internalised colonisation or internalised oppression, where too often the impact on Indigenous people is a build-up of blame, jealousy, hurt, and anger in themselves and their families. This is continually stated and reinforced in the narrative, and because of this internalised oppression, further harmful behaviours are generated. Some people resort to substances, including alcohol, tobacco, and other drugs, at harmful levels to cope with their negative feelings of anger, hurt, and loss. In turn, these Indigenous Australians become consistently traumatised and further oppressed by AOD problems and associated family and community violence.

This process indicates that the importance of some core cultural values has reduced among Indigenous communities and kin groups, and has caused a vacuum in cultural values among later generations of Indigenous families. This loss remains a significant cause of the loss of spirit and disconnection among Indigenous people today. A study reported that Indigenous Australians with weak or moderate cultural attachment are more likely to have been arrested and have consumed alcohol at riskier levels than those with strong cultural attachment (Dockery, 2010). And in the main cities, upholding of traditional cultural attachment is associated with a lower level of criminal behaviour among the Indigenous Australians (Dockery 2010). Dockery's study provides empirical evidence to support the destruction of cultural values in association with the AOD problem and criminal behaviour. As a counter to such narratives, the Peer Lead, Aboriginal Community Controlled Organisation's Restorative Justice Programs both in prison and in local communities, have their yarning circles and encounters, support for positive narratives of self and sites, totems, and plans for their collective future (Anderson & Steels, 2023). Dockery (2010) also reported that 17 percent of members of Stolen Generation or direct descendents of the Stolen Generation who took compensatory steps to re-engage their culture reported higher measured cultural attachment. This study evidences how rebuilding cultural values and connection can create positive impacts and narratives.

Westerman (2021) has proposed seven important culture-bound syndromes in the Indigenous Australian population. One of the Indigenous Australians' culture-bound syndromes is "Sorry-cutting" for grief during the sorry business/funeral time. Many people are known to commit self-harm, called "Sorry-cutting" as a means to disconnect from pain, as dissociation is a

practiced cultural phenomenon to release pain. Westerman (ibid) also reported that sorry-cutting is still practiced in significant parts of the Pilbara region in Western Australia, as one of the authors can attest. However, there is a difference between urban and rural Indigenous people. Sorry-cutting occurs less in urban Indigenous people compared to rural Indigenous people (Westerman, ibid), but the former may instead resort to substance abuse, including alcohol, and illicit drugs such as cannabis and methamphetamine as a means to disconnect or dissociate from pain and grief during sorry business (Westerman, 2021). Peer pressure to engage in AOD use as a means of dissociation is also strong.

It is also suggested that stress is one of the factors contributing to alcohol use among Indigenous peoples. The study also reported that frequent loss of close family members was due to overdose from substance use. An observation in Central Australia reported that almost 30 per cent of Warlpiri people were grieving for loss of family members, and their grief was attributed to their excessive use of substances and sometimes violent death (Gray et al., 2018).

Discussion

This literature review provides a summary of Indigenous Australians culture; which encompasses the importance of kinship structure, collective values, as well as the deep value of the environment via a connection with the Country and spirit. It also summarises Indigenous research models, and AOD service models. Existing models and elements are used to analyse Indigenous AOD issues.

In reviewing the treatment models of AOD problems in Indigenous Australians, there is little literature suggesting a therapeutic model. All existing literature was consistent in emphasising the impact of colonisation and oppression in the development of AOD problem among Indigenous Australians without proposing a therapeutic approach. This knowledge gap makes the progress of AOD treatment for Indigenous Australians slow, and dependent on individual treatment options.

Limitations of this study

In researching the literature on Indigenous Australians models, some important concepts are over two decades old, with more recent research sparse. The last Indigenous Australian model of the "Strong Spirit Strong Mind Model" was published two decades ago. In Australia, values among Indigenous people are under-researched and hindered by the current approach (Gratani et al. 2016). Although some Aboriginal-controlled organisations (ACOs) have started to develop models recently to meet their funding requirements, publications are yet to come. The scarcity of recent papers has put a limit on this present literature review. Moreover, some Indigenous concepts and values are abstract and cannot be measured. In addition, even though there are studies conducted by Indigenous researchers, most of those studies are restricted to qualitative methods. Focusing on a qualitative study also shows the difference in the research paradigm among Indigenous researchers who dislike the Western approach of collecting a large amount of data from Indigenous clients, as they feel being treated as subjects of research 'terra nullius research' (Martin & Mirraoopa, 2003). This puts a limitation on providing data to support those models.

Implications for future study

As Westerman (2021) suggested, future studies on Indigenous Australians' AOD issues will benefit from both Indigenous pedagogical methodology to develop a new ground theory and a Western quantitative approach to provide evidence-

based data to support their theory. Dockery's (2010) study provides support for applying a quantitative method to examine the association between culture, AOD and degree of arrest. This study also indicates the importance of cultural attachment for Indigenous Australians. However, there is another knowledge gap in examining the elements of Indigenous values. Gratani et al. (2016) also suggested using Schwartz's theory of universal human values to understand Indigenous Australians values.

Finally, the existing literature mainly focuses on attributing the development of AOD issues to colonisation. Those existing approaches do not provide a therapeutic direction for Indigenous Australians, and thus this paper supports the development of a model specifically designed for AOD problems for this group.

Conclusion

The main finding of this study is that most of the work in Indigenous AOD pertains to Indigenous Research models or Service models. Those models are not therapeutic models or healing models and so cannot be considered optimal for use by mental health professionals. Developing a therapeutic model will help practitioners to support Indigenous clients recover from their AOD problem.

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