

## Evidence Summary: Understanding and assessing anger-related difficulties in young people – a guide for clinicians



# Evidence Summary:

## Understanding and assessing anger-related difficulties in young people – a guide for clinicians

### Detecting anger issues in young people:

#### Why is it important?

Recent data from over 24,000 young people indicates that anger-related problems are one of the main presenting issues among young people attending **headspace** centres [1]. Only depression and anxiety ranked higher than anger. This trend is also apparent both in international [2-4] and Australian tertiary mental health services, with an audit of a Child and Adolescent Mental Health Service (CAMHS) indicating that nearly one third of referrals (31%) were for anger and/or aggression [5]. The prevalence of anger problems among young people is likely to be underestimated as we know that the majority of people experiencing problematic anger do not seek support from health services [4]. Even when they do, they are unlikely to receive an effective intervention [4].

Despite the frequency with which mental health clinicians encounter clients seeking support for anger-related problems, clinicians may lack confidence in their ability to assess [6] and provide interventions for [4] this client group. General practitioners may also struggle to provide onward referrals for clients presenting with anger problems. Even when they feel a referral is indicated, clients presenting with anger-related problems may not fit referral criteria for mental health services [4]. This is concerning as a majority of clinicians seem to agree that individuals presenting with problematic anger often experience significant psychopathology that warrants intervention [6].

#### What are the barriers to early intervention?

Several factors contribute to this situation. First, there is much less research on anger treatments than for other emotional difficulties such as anxiety and depression [e.g. 7, 8]. Second, while anger-related difficulties are a feature of a number of psychiatric disorders (e.g., Oppositional Defiant Disorder (ODD), Post-Traumatic Stress Disorder (PTSD), Borderline Personality Disorder (BPD), Conduct Disorder (CD), etc. [9]), they are not indicative of any one diagnosis. Anger related difficulties are also commonly part of a more complex clinical presentation and may not be indicative of the presence of any of these disorders. Third, structural barriers such as complex referral pathways and intake criteria may lead to difficulty in accessing services. Finally, anger is a highly stigmatised emotion and myths about anger can make it harder for people to seek an effective and helpful response for anger-related problems (see the **headspace** 'MythBuster' on anger for more information). We know that problematic anger can be extremely destructive to a young person's life. We also know that young people presenting with anger problems can be effectively treated using psychological approaches [10-13].

#### Is anger the most misunderstood of basic emotions?

Common myths and stereotypes exist about the function of anger as an emotion, who gets angry, and how anger presents, which may lead to misunderstanding its adaptive functions [14]. There is often a misperception that problematic anger always results in overt aggressive behaviour, with the terms anger and aggression often used interchangeably [15]. Assumptions that problematic anger is easy to detect, that individuals experiencing problematic anger are dangerous or that they are less deserving of help than people presenting with other issues also exist. Young people and clinicians alike can also be affected by common stereotypes about problematic anger.

### What is anger?

Anger is an emotion that includes cognitive, affective and behavioural components [15]. It can be experienced on a continuum of intensity from mild irritation to rage. It is important to distinguish between the experience and expression of anger [15-17]. When an individual experiences or 'feels' angry, they can express this anger in different ways: outwardly through verbal or non-verbal behaviour, or it can be suppressed and internalised. When internalised and not shown, anger may not be obvious to other people, even if it is intense or chronic.

Anger is a healthy emotion. Expressing anger can be adaptive in facilitating the development of assertiveness skills, self-efficacy and persistence [14]. Of all emotions, young adolescents may particularly struggle to recognise and respond to anger [18]. Learning to be aware of our emotions and express them appropriately is critical to both healthy development and good mental health [14]. Practising how to express our anger in a healthy way gives us a chance to build our confidence in dealing with anger and to learn that it is an emotion that we can manage, just like any other emotion. Far from being harmful, research suggests that developing skills to manage anger, such as assertiveness and problem solving, may actually be protective against anxiety and depression [14].

### What is 'problematic' or 'clinical' anger?

Anger may become problematic when it occurs frequently, at high intensity, and leads to secondary problems [15]. These may include: aggressive behaviour, risk-taking, self-harm, health problems, high levels of stress and/or psychological distress. How much a person experiences anger and how intensely is considered to be a dimensional personality characteristic or 'trait', whereby at one extreme a person is likely to feel angry a lot and/or very intensely, while at the other end of the spectrum, a person will rarely feel angry and/or experience only mild anger. Individuals would be described as having high trait anger if they are much more likely to respond with anger to a range of situations, and to feel angry a lot of the time [15].

In certain situations, it may be a more adaptive response to internalise anger, for example, to avoid escalating a potentially harmful and threatening situation. However, when anger is suppressed frequently, or in situations where it is not helpful, this can be problematic. For example, a longitudinal study found frequent suppression of emotions predicted young people having less social support, feeling less close to others and less satisfied in their relationships than their peers in their first year of university [19]. Suppression of intense emotions can also result in other psychological problems such as depression or low self-esteem [20-22]. Suppression of anger can be associated with unexplained physical health complaints [23] and can sometimes lead to a person turning anger 'inwards' against themselves. When this happens, intense anger can result in self-harm [24; see the **headspace** MythBuster 'Sorting fact from fiction on self-harm' for more information].

### Why intervene early with young people experiencing anger problems?

Individuals who experience chronic and/or intense anger, or who have difficulty regulating their expression of anger, can experience significant psychological distress and functional impairment. Anger causes more destruction to individuals' interpersonal relationships than any other emotion [15].

Individuals who experience problematic anger are at increased risk of engaging in a wide-range of maladaptive behaviours including self-harm [24-26], problematic gambling [27], and substance abuse [e.g., 28-30]. Furthermore, a longitudinal study of over 4,000 adolescents found that both boys and girls who experienced problematic anger in school were at increased risk of perpetrating dating violence and peer violence [31]. Anger also has a significant positive association with suicidal ideation, independent of the impact of depression and low self-esteem [32]. Individuals who present with chronic anger are at increased risk of developing physical health problems, such as coronary heart disease and type II diabetes [33] and are more likely to die younger than individuals without a history of anger problems [34]. Effective early intervention is indicated not only to address current symptoms and functioning, but also to prevent the long-term negative consequences of problematic anger.

### Why is it important to conduct a thorough clinical assessment with clients presenting with problematic anger as a primary concern?

While problematic anger is not a psychiatric diagnosis, it is commonly part of a more complex clinical presentation. Individuals who present to services with problematic anger should undergo a comprehensive clinical assessment. Anger can serve a function in regulating other negative feelings that are experienced as threatening or unacceptable by a person [35]. For example, if a person identifies sadness as a sign of weakness, strong feelings of sadness may be perceived to be intolerable. As a result, when a person feels or anticipates feeling sad, this may trigger them to feel angry. Anger can also stem from other negative feelings that a person has trouble understanding. When anger functions in this way, it may 'mask' other negative emotions that are very distressing to the person. For example, mood disturbance in children and adolescents experiencing a depressive disorder may present as irritable mood rather than sadness [9], which may lead to parents and teachers describing depressed young people as 'angry' rather than depressed. It has also been proposed that anger problems 'mask' depression among young men (for more information see below).

It is important to remember that a person's anger may be a normal reaction to stressful or difficult circumstances. Therefore, it is important to be cautious in providing any diagnosis and always consider whether the symptoms are excessive in relation to the young person's situation, age and stage of development [9].

### Why is it important to assess for anger among all young people presenting to mental health services?

It is important to screen for anger problems with all young people presenting to clinical services, regardless of their gender or whether anger problems are self-reported at intake [29]. While it has been proposed that males' depressive symptoms are more likely to be 'masked' by anger and aggressive behaviour [36, 37] research evidence for this is inconclusive. Some research has found that men receiving inpatient treatment for unipolar depression reported higher rates of 'anger attacks' (i.e., sudden intense spells of anger) compared to women [38, 39]. However, other large studies of both inpatient and outpatient adults have found no significant gender differences in the prevalence of anger attacks, irritability, aggressiveness or antisocial

behaviour [40-42]. Other studies in adolescents have also failed to find support for a gender-specific 'masking' of depression symptoms [43] and another study in young adults found that symptoms of 'male depression' (measured by stress, aggressiveness, irritability, feelings of displeasure, substance use and a greater tendency to self-pity) were actually significantly higher among females [44]. Similarly, a large multi-national study of adolescents found that the relationship between depressive symptoms and anger was stronger among young women than young men [15]. Furthermore, despite the lack of evidence to support the gender-specific presentation of anger, this belief is widespread [45]. Perhaps due to this stigma and the representation of anger as a 'male problem', young women are less likely to seek help for anger problems [e.g., 1], and when they do present, clinicians may be less likely to screen for these problems. Clinicians need to be mindful that a young person presenting with anger-problems may have an underlying depressive syndrome, regardless of their gender.

Problematic anger is highly prevalent in clinical samples [46]. As previously discussed, it is a diagnostic feature in a number of psychiatric disorders including certain low prevalence disorders (e.g. CD and ODD) that are more typically diagnosed in adolescents and young people [9]. Research with adults (both clinical samples and in the general population) demonstrates that problematic anger is also associated with depressive [29, 46, 47] and anxiety disorders [17, 29, 48]. There is an association between substance use and problematic anger in the general population [29] but evidence with clinical samples has been mixed [e.g. 46, 49]. Overall, this research suggests that many clients would benefit from support in understanding and managing their anger.

Moreover, it is important to assess for anger problems among all young people presenting for treatment as unidentified and untreated anger may jeopardise treatment outcomes. For example, the presence of problematic anger may be an indicator of poor response to treatment and increased risk of violent behaviour among adults receiving treatment for substance use disorders [50-52] and among partner-abusing men [53]. Therefore, if problematic anger is detected, clinicians may consider more intensive treatments and be alerted to the critical role of risk assessment in monitoring for the potential risk of violence. Problematic anger has also been associated with poor treatment response among veterans with PTSD [54, 55]. However, research with non-veteran samples has been inconsistent [56-60]. Problematic anger may also predict poor outcomes, and increased risk of treatment drop-out among individuals presenting with Social Anxiety Disorder [61].

In addition to providing an opportunity to tailor treatments to maximise the chances of retaining clients in treatment and obtaining optimal outcomes, assessing for anger problems may also alert clinicians to other underlying emotional difficulties that may go undetected. For example, one study found that adolescents with Obsessive Compulsive Disorder who experience frequent temper outbursts (as reported by either the adolescent or the parent) were more likely to experience depressive symptoms than those who did not display this behaviour [62].

Finally, emerging research with adult outpatients suggests that treating problematic anger may reduce suicide risk [63]. Problematic anger was associated with an increased sense of being a burden on others, which in turn was associated with increased risk for suicidal ideation and behaviours. These preliminary findings indicate the importance of monitoring perceptions of burden and interventions that encourage adaptive expressions of anger and build interpersonal skills [63].

## The risk of misdiagnosis for clients presenting to services with problematic anger

Although limited, research suggests that clients presenting to psychiatric services with problematic anger as a primary concern are at risk of being misdiagnosed [6]. This is concerning as an inaccurate diagnosis may result in an inappropriate and ineffective treatment in addition to delaying appropriate treatment. Poor assessment of clients presenting with anger-related difficulties may also lead to a diagnosis of a psychiatric disorder when this is not warranted or helpful.

Clients presenting with problematic anger may be at risk of being misdiagnosed with a Personality Disorder (PD) [6]. While a significant number of individuals presenting with problematic anger may meet criteria for a PD [64], it is not uncommon for individuals to have a diagnosis of a PD in the absence of problematic anger [64]. Similarly, many individuals who experience problematic anger do not meet criteria for a PD. For example, in one study, less than a third of psychiatric patients presenting with problematic anger (as rated by a clinician) met criteria for a PD [64].

There is also some research to suggest that elevated anger detected among individuals with a PD diagnosis may be attributable to comorbid Axis I disorders [29].

Females presenting with problematic anger may be particularly at risk of being misdiagnosed with Borderline Personality Disorder (BPD) while males may be at risk of being misdiagnosed with Antisocial Personality Disorder (APD); 6]. 'Inappropriate anger' is one of nine BPD features and to meet criteria for a diagnosis five BPD features need to be present [9]. Therefore the diagnosis of BPD on the basis of anger alone is not sufficient. Some individuals presenting with anger problems may meet criteria for BPD, however, they are likely to be in the minority [64]. A personality disorder should never be diagnosed solely on the basis of anger problems (see the **headspace** Evidence Summary on Diagnosing BPD in Adolescents). Clinicians should also be cautious in diagnosing Intermittent Explosive Disorder (IED) on the basis of anger problems [6].

## A framework for assessing young people presenting to clinical services: keeping anger in mind

### When assessing any young person:

- Don't assume they will report their anger problems.
- Do ask about their experiences of feeling angry, and how they manage their anger (even if anger is not an indicated problem at referral).
- Remember, anger problems are prevalent in young men and young women.
- Be mindful that young people (particularly younger adolescents) often struggle to recognise and understand anger. Try to support them to find a way to describe their emotions, perhaps asking where and how they 'feel' anger in their body.
- Young people may be ashamed to talk about their anger – validate their emotional experience and maintain a non-judgemental approach.

### When assessing a young person who is experiencing difficulties related to anger:

- Be mindful that they may be experiencing other symptoms of psychological distress. Always complete a thorough clinical assessment.
- Never assume they meet a certain diagnosis because anger is a predominant symptom of their presentation.
- Don't pathologise their anger or make assumptions about whether it is maladaptive. Explore what situations, emotions, thoughts and beliefs trigger their anger. Explore how they manage their anger in different situations (e.g. do they engage in certain behaviour in an attempt to regulate their anger, such as aggression, self-harm, exercise, risk-taking behaviours)?
- Ask about what helps them to manage their anger currently and explore areas of personal strength.
- Be mindful that anger may be related to experiencing abusive relationships (e.g. domestic violence, dating violence, bullying) or trauma-related symptoms. Sensitive enquire about past or current experiences of violence, abusive relationships and trauma and know what local services you can refer to if a young person needs additional support. It may also be helpful to refer to the **headspace** Evidence Summary – Working with adolescents: Keeping romantic relationships in mind.
- Enquire about substance use, and what role (if any) substances may have as a coping mechanism for anger, and/or in exacerbating anger or aggressive behavior.
- If a young person is experiencing problematic anger, assess their readiness to change and match interventions appropriately. If they are ambivalent about trying to change the way they manage their anger, interventions should focus on increasing motivation to change and addressing any risk issues.

### Risk assessment (of risk to self and others) and management is extremely important:

- As with any young person presenting to clinical services, ensure you screen for self-harm and suicidal ideation or behavior. Anger problems may present in the context of a violent social context (e.g. with peers, in the home), therefore always ask whether the young person has any concerns for their safety.
- Assess whether they have a history of violent behavior, and if they are at risk of hurting others (e.g. preoccupation with revenge). This should include an assessment of risk of violence toward parents, siblings and intimate partners. With training, there are a number of assessment tools that can be used to aid structured professional judgement of risk of violence, such as, the Structured Assessment of Violence Risk (SAVRY) for adolescents (aged 12-18 years; see (<http://www4.parinc.com/Products/Product.aspx?ProductID=SAVRY>); and the Historical Clinical Risk Management-20, Version 3; (HCR-20, Version; Historical Clinical Risk Management-20, Version 3 see <http://hcr-20.com/about/>). Assessing and managing risk of violence is complex, therefore it is recommended that clinicians seek out training in this area if they feel the need to further develop their skills. Tools that support structured professional judgment in the assessment of risk of violence can assess the probability of someone engaging in violent behavior and identify risk factors [65]. By identifying risk factors for violence in their clients that can be managed (e.g., substance use, poor impulse control, stress and poor coping mechanisms) clinicians are much better placed to manage risk appropriately.
- If there are any immediate risks to the safety of the young person or others, take immediate action within your organisation's risk management policies and your profession's guidelines regarding duty of care. In cases where there is a risk of harm to others, follow your professional and organisation guidelines regarding your duty to warn and protect individuals who may be at risk of harm.

### Reflect on your own practice

- Reflect on assumptions that you may hold about anger and how these may influence your ability to detect and work with clients who have anger problems (e.g. Do you associate anger with a particular diagnosis or client group? Do you feel comfortable working with clients presenting with anger problems? How do you manage anger?). Use supervision to work through any relevant issues and seek extra support and training as required.

## Helpful Resources

The **headspace** MythBuster on anger dispels prevalent myths that affect young people, their parents/carers and clinicians alike (available at [headspace.org.au](http://headspace.org.au), along with other resources). The Centre for Clinical Interventions (Western Australia) also provides a series of factsheets and self-help resources available online that may be helpful .

The National Health Service in the UK has produced a more detailed self-help resource for anger problems called Moodjuice based on Cognitive Behavioural Therapy, also available online.

## References

1. Rickwood, D.J., et al., Changes in psychological distress and psychosocial functioning in young people visiting headspace centres for mental health problems. *The Medical Journal of Australia*, 2015. 202(10): p. 537-542.
2. Jackson, C., et al., Users of secondary school-based counselling services and specialist CAMHS in Wales: A comparison study. *Counselling and Psychotherapy Research*, 2014. 14(4): p. 315-325.
3. Cooper, M., Counselling in UK secondary schools: A comprehensive review of audit and evaluation data. *Counselling & Psychotherapy Research*, 2009. 9(3): p. 137-150.
4. Richardson, C.H., E., *Boiling point: anger and what can we do about it*. 2008: London.
5. Edwards, P.C., An action research project examining anger and aggression with rural adolescent males participating in the Rock and Water Program. 2013.
6. Lachmund, E., R. DiGiuseppe, and J.R. Fuller, Clinicians' diagnosis of a case with anger problems. *Journal of Psychiatric Research*, 2005. 39(4): p. 439-447.
7. Glancy, G. and M.A. Saini, An evidenced-based review of psychological treatments of anger and aggression. *Brief Treatment and Crisis Intervention*, 2005. 5(2): p. 229.
8. Kassirnov, H. and D.G. Sukhodolsky, Anger disorders: Basic science and practice issues. *Issues in comprehensive pediatric nursing*, 1995. 18(3): p. 173-205.
9. American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition*. 2013, Arlington, VA: American Psychiatric Association.
10. Blake, C.S. and V. Hamrin, Current approaches to the assessment and management of anger and aggression in youth: a review. *Journal of Child & Adolescent Psychiatric Nursing*, 2007. 20(4): p. 209-21.
11. Cole, R., A systematic review of cognitive-behavioural interventions for adolescents with anger-related difficulties. *Educational and Child Psychology*, 2008. 25(1): p. 27-47.
12. Eyberg, S.M., M.M. Nelson, and S.R. Boggs, Evidence-based psychosocial treatments for children and adolescents with disruptive behavior. *Journal of Clinical Child & Adolescent Psychology*, 2008. 37(1): p. 215-237.
13. Sukhodolsky, D.G., H. Kassirnov, and B.S. Gorman, Cognitive-behavioral therapy for anger in children and adolescents: A meta-analysis. *Aggression and Violent Behavior*, 2004. 9(3): p. 247-269.
14. Chaplin, T.M. and A. Aldao, Gender differences in emotion expression in children: a meta-analytic review. *Psychological Bulletin*, 2013. 139(4): p. 735.
15. DiGiuseppe, R. and R.C. Tafra, *Understanding anger disorders*. 2007, New York: Oxford University Press.
16. Kerr, M.A. and B.H. Schneider, Anger expression in children and adolescents: A review of the empirical literature. *Clinical Psychology Review*, 2008. 28(4): p. 559-577.
17. Hawkins, K.A. and J.R. Cogle, Anger problems across the anxiety disorders: findings from a population-based study. *Depression and anxiety*, 2011. 28(2): p. 145-152.
18. Piko, B.F., N. Keresztes, and Z.F. Pluhar, Aggressive behavior and psychosocial health among children. *Personality and Individual Differences*, 2006. 40(5): p. 885-895.
19. Srivastava, S., et al., The social costs of emotional suppression: a prospective study of the transition to college. *Journal of personality and social psychology*, 2009. 96(4): p. 883.
20. Aldao, A., S. Nolen-Hoeksema, and S. Schweizer, Emotion-regulation strategies across psychopathology: A meta-analytic review. *Clinical psychology review*, 2010. 30(2): p. 217-237.
21. Clay, D.L., et al., Sex differences in anger expression, depressed mood, and aggression in children and adolescents. *Journal of Clinical Psychology in Medical Settings*, 1996. 3(1): p. 79-92.
22. Cole, P.M., et al., Individual differences in emotion regulation and behavior problems in preschool children. *Journal of Abnormal Psychology*, 1996. 105(4): p. 518.
23. Liu, L., et al., Sources of somatization: Exploring the roles of insecurity in relationships and styles of anger experience and expression. *Social Science & Medicine*, 2011. 73(9): p. 1436-1443.
24. Rodham, K., K. Hawton, and E. Evans, Reasons for deliberate self-harm: comparison of self-poisoners and self-cutters in a community sample of adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry*, 2004. 43(1): p. 80-87.
25. Laye-Gindhu, A. and K.A. Schonert-Reichl, Nonsuicidal self-harm among community adolescents: Understanding the "whats" and "whys" of self-harm. *Journal of Youth and Adolescence*, 2005. 34(5): p. 447-457.
26. Hawton, K., et al., Repetition of deliberate self-harm by adolescents: the role of psychological factors. *Journal of adolescence*, 1999. 22(3): p. 369-378.
27. Collins, J., W. Skinner, and T. Toneatto, Beyond assessment: The impact of comorbidity of pathological gambling, psychiatric disorders and substance use disorders on treatment course and outcomes. Ontario Problem Gambling Research Center, 2005.
28. Bácskai, E., P. Czobor, and J. Gerevich, Gender differences in trait aggression in young adults with drug and alcohol dependence compared to the general population. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 2011. 35(5): p. 1333-1340.
29. Barrett, E.L., K.L. Mills, and M. Teesson, Mental health correlates of anger in the general population: Findings from the 2007 National Survey of Mental Health and Wellbeing. *Australian and New Zealand Journal of Psychiatry*, 2013. p. 0004867413476752.
30. Eftekhari, A., A.P. Turner, and M.E. Larimer, Anger expression, coping, and substance use in adolescent offenders. *Addictive Behaviors*, 2004. 29(5): p. 1001-1008.
31. Foshee, V.A., et al., Shared longitudinal predictors of physical peer and dating violence. *Journal of Adolescent Health*, 2015. 56(1): p. 106-112.
32. Jang, J.-M., et al., Predictors of suicidal ideation in a community sample: Roles of anger, self-esteem, and depression. *Psychiatry research*, 2014. 216(1): p. 74-81.
33. Staicu, M.-L. and M. Cu-ov, Anger and health risk behaviors. *Journal of medicine and life*, 2010. 3(4): p. 372.
34. Harburg, E., et al., Expressive/Suppressive Anger/Coping Responses, Gender, and Types of Mortality: a 17-Year Follow-Up (Tecumseh, Michigan, 1971-1988). *Psychosomatic medicine*, 2003. 65(4): p. 588-597.
35. Gardner, F.L. and Z.E. Moore, Understanding clinical anger and violence: The anger avoidance model. *Behavior modification*, 2008.
36. Rutz, W., et al., Prevention of male suicides: lessons from Gotland study. *The Lancet*, 1995. 345(8948): p. 524.
37. Rutz, W., Improvement of care for people suffering from depression: the need for comprehensive education. *International clinical psychopharmacology*, 1999. 14: p. S27-S33.

38. Winkler, D., E. Pjrek, and S. Kasper, Anger attacks in depression—evidence for a male depressive syndrome. *Psychotherapy and psychosomatics*, 2005. 74(5): p. 303-307.
39. Martin, L.A., H.W. Neighbors, and D.M. Griffith, The experience of symptoms of depression in men vs women: analysis of the National Comorbidity Survey Replication. *JAMA psychiatry*, 2013. 70(10): p. 1100-1106.
40. Möller-Leimkühler, A.M., et al., Is there evidence for a male depressive syndrome in inpatients with major depression? *Journal of Affective Disorders*, 2004. 80(1): p. 87-93.
41. Fava, M., et al., Anger attacks in unipolar depression, Part 1: Clinical correlates and response to fluoxetine treatment. *American journal of psychiatry*, 1993. 150: p. 1158-1158.
42. Fava, M., et al., Fluoxetine treatment of anger attacks: a replication study. *Annals of clinical psychiatry*, 1996. 8(1): p. 7-10.
43. Möller-Leimkühler, A.M., J. Heller, and N.-C. Paulus, Subjective well-being and 'male depression' in male adolescents. *Journal of affective disorders*, 2007. 98(1): p. 65-72.
44. Möller-Leimkühler, A.M. and M. Yücel, Male depression in females? *Journal of affective disorders*, 2010. 121(1): p. 22-29.
45. Burt, I., Identifying gender differences in male and female anger among an adolescent population. *The Professional Counselor*, 2014. 4(5): p. 531.
46. Lawrence, D., et al., *The Mental Health of Children and Adolescents: Report on the Second Australian Child and Adolescent Survey of Mental Health and Wellbeing*. 2015, Department of Health: Canberra.
47. Benazzi, F., Major depressive disorder with anger: a bipolar spectrum disorder? *Psychotherapy and psychosomatics*, 2003. 72(6): p. 300-306.
48. Olatunji, B.O., B.G. Ciesielski, and D.F. Tolin, Fear and loathing: A meta-analytic review of the specificity of anger in PTSD. *Behavior Therapy*, 2010. 41(1): p. 93-105.
49. Aharonovich, E., H.T. Nguyen, and E.V. Nunes, Anger and depressive states among treatment seeking drug abusers: Testing the psychopharmacological specificity hypothesis. *The American Journal on Addictions*, 2001. 10(4): p. 327-334.
50. Oberleitner, L.M., D.L. Mandel, and C.J. Easton, Treatment of co-occurring alcohol dependence and perpetration of intimate partner violence: The role of anger expression. *Journal of substance abuse treatment*, 2013. 45(3): p. 313-318.
51. Pekala, R.J., et al., Self-esteem and its relationship to serenity and anger/impulsivity in an alcohol and other drug-dependent population: Implications for treatment. *Alcoholism Treatment Quarterly*, 2009. 27(1): p. 94-112.
52. Witkiewitz, K. and N.A. Villarreal, Dynamic association between negative affect and alcohol lapses following alcohol treatment. *Journal of consulting and clinical psychology*, 2009. 77(4): p. 633.
53. Murphy, C.M., C.T. Taft, and C.I. Eckhardt, Anger problem profiles among partner violent men: Differences in clinical presentation and treatment outcome. *Journal of Counseling Psychology*, 2007. 54(2): p. 189.
54. Forbes, D., et al., Mechanisms of anger and treatment outcome in combat veterans with posttraumatic stress disorder. *Journal of Traumatic Stress*, 2008. 21(2): p. 142-149.
55. Forbes, D., et al., Comorbidity as a predictor of symptom change after treatment in combat-related posttraumatic stress disorder. *The Journal of nervous and mental disease*, 2003. 191(2): p. 93-99.
56. Cahill, S.P., et al., Effect of cognitive-behavioral treatments for PTSD on anger. *Journal of Cognitive Psychotherapy*, 2003. 17(2): p. 113-131.
57. Rizvi, S.L., D.S. Vogt, and P.A. Resick, Cognitive and affective predictors of treatment outcome in cognitive processing therapy and prolonged exposure for posttraumatic stress disorder. *Behaviour Research and Therapy*, 2009. 47(9): p. 737-743.
58. Van Minnen, A., A. Arntz, and G. Keijsers, Prolonged exposure in patients with chronic PTSD: Predictors of treatment outcome and dropout. *Behaviour research and therapy*, 2002. 40(4): p. 439-457.
59. Speckens, A.E., et al., Changes in intrusive memories associated with imaginal reliving in posttraumatic stress disorder. *Journal of Anxiety Disorders*, 2006. 20(3): p. 328-341.
60. Taylor, S., et al., Posttraumatic stress disorder arising after road traffic collisions: Patterns of response to cognitive-behavior therapy. *Journal of consulting and clinical psychology*, 2001. 69(3): p. 541.
61. Erwin, B.A., et al., Anger experience and expression in social anxiety disorder: Pretreatment profile and predictors of attrition and response to cognitive-behavioral treatment. *Behavior Therapy*, 2003. 34(3): p. 331-350.
62. Krebs, G., et al., Temper outbursts in paediatric obsessive compulsive disorder and their association with depressed mood and treatment outcome. *Journal of Child Psychology and Psychiatry*, 2013. 54(3): p. 313-322.
63. Hawkins, K.A., et al., An examination of the relationship between anger and suicide risk through the lens of the interpersonal theory of suicide. *Journal of psychiatric research*, 2014. 50: p. 59-65.
64. DiGiuseppe, R., et al., The comorbidity of anger symptoms with personality disorders in psychiatric outpatients. *Journal of clinical psychology*, 2012. 68(1): p. 67-77.
65. Guy, L.S., K.S. Douglas, and S.D. Hart, *Risk assessment and communication*. 2015.

## Acknowledgements

**headspace** Evidence Summaries are prepared by the Centre of Excellence in Youth Mental Health. The series aims to highlight for service providers the research evidence and best practices for the care of young people with mental health and substance abuse problems. The content is based on the best available evidence that has been appraised for quality. Experts on the topic have reviewed the summary before publication, including members of the **headspace** Youth National Reference Group (hYNRG). The authors would like to thank the members of hYNRG for their input on this MythBuster.

### Authors

Dr Faye Scanlan

Dr Alexandra Parker

Ms Alice Montague

Orygen, The National Centre of Excellence in Youth Mental Health

### Clinical Consultants

Dr Louise McCutcheon

Orygen, The National Centre of Excellence in Youth Mental Health

Mr Steve Halperin

Orygen Youth Health Clinical Program

**headspace** National Youth Mental Health Foundation Ltd. is funded by the Australian Government Department of Health and Ageing under the Youth Mental Health Initiative Program

For more details about **headspace** visit [headspace.org.au](http://headspace.org.au)

Copyright © 2016 Orygen, The National Centre of Excellence in Youth Mental Health

This work is copyrighted. Apart from any use permitted under the Copyright Act 1968, no part may be reproduced without prior written permission from Orygen, The National Centre of Excellence in Youth Mental Health  
Print: 978-1-925157-07-9, Online: 978-1-925157-06-2

**headspace National Office**

**p** +61 3 9027 0100 **f** +61 3 9027 0199

[info@headspace.org.au](mailto:info@headspace.org.au)

[headspace.org.au](http://headspace.org.au)