



The link between physical activity, mental health, and substance use



Evidence ratings:



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Year: Foundation Year, Year 1–2, Year 3–4, Year 5–6, Year 7–8, Year 9–10, Year 11–12

Targeted Drugs: Alcohol, Drugs (General)

Tags: physical activity, mental health

Origin: Australian

Cost:

Free

What is the link between physical activity, mental health, and alcohol and other drug use?

School staff and parents play an important role in supporting and facilitating physical activity for young people. Regular exercise and participating in sport have a range of physical and mental health benefits for young people. These include a range of protective factors that can reduce alcohol and other drug use, and related harms.

Some of the benefits of regular physical activity are:

- A decreased risk of sadness, low self-esteem, and depressive and anxiety symptoms among teenagers.
- A decreased risk of psychological distress.
- Being more likely to have good quality sleep, and feel less tired.
- Being more likely to have a healthy diet and less likely to smoke.
- Positive impacts on academic results.
- Taking part in team sport is linked to improved self-esteem and social skills, and reduced social anxiety and isolation.

Research has also found that the mental health benefits of taking part in school sport continue into early adulthood. Mental illness and alcohol and other drug use can often occur together. Learn more about the link between mental illness and alcohol/drug use [here](#).

To learn more about the benefits of physical activity, visit the Australian Sports Commission's Clearinghouse for Sport.

Did you know?

Exercise is an effective treatment for depression and has benefits for many other conditions. It is so effective that the Royal Australian College of General Practitioners (RACGP) recommends that GPs prescribe exercise along with other treatments.

How much physical activity should young people be doing?

Australian physical activity guidelines recommend that children and young people (aged 5-17) do at least 60 minutes of moderate to vigorous physical activity each day. Physical activity can include school-based physical education (PE) classes, organised out-of-school sports (e.g. football, dancing, basketball), informal social games, or solo exercise. The guidelines also advise that children and young people do muscle strengthening activities a few times a week. Examples of muscle strengthening activities include running, climbing, or lifting weights. Physical activity can take many forms, and finding an enjoyable activity can help with motivation and participation.

Many young people do not meet these physical activity guidelines. In fact, a 2021 study found that 78% of Australian students aged 11-14 years were not meeting the recommended 60 minutes of physical activity a day.

In 2024 less than half of young people took part in organised sport outside of school. For children aged 0-14 years, 36% participated in organised sport at least once a week. For 15-17 year olds, 48% participated in organised sport at least once a week.

Declines in physical activity during late adolescence

Teenagers between the ages of 15 and 19 years old tend to cut back the amount of physical activity they do. This can be because they stop doing PE classes at school and have competing demands outside of school hours, such as study and employment. Sleep and diet quality also tends to decline in this age group. However, this age can also be when mental health disorders emerge. Given the benefits exercise can have on mental health, it is important to try and continue supporting physical activity among later adolescents.

What can schools and school staff do to encourage physical activity?

There are many reasons why young people may not meet the physical activity guidelines. These include a lack of confidence, competing demands, and a lack of enjoyment. Below are some tips for schools and school staff to encourage physical activity among young people. Increasing engagement and enjoyment of school sports can help young people to feel more confident and motivated to exercise outside of school.

- The Australian Sports Commission have a range of resources for school staff available through the Sporting Schools' initiative.
- There is also information about modified sports to help make sure physical activity is inclusive.
- Within physical education class or school sports adopting a strengths-based approach can be helpful to promote confidence and capacity to be physically active. This can include emphasising the strengths and resources of young people rather than focusing on their problems.
- The Physical Literacy Toolkit for Schools includes templates and resources to help implement physical literacy within a school.
 - Research shows that building skills in different activities can be an important motivator for young people participating in physical activity.
- People are more likely to continue physical activity if they find it meaningful and enjoyable.
- Including a range of activities and sports can help young people find one that works for them.
- Read our factsheet on the link between lifestyle risk factors such as exercise, alcohol use and poor diet.

Physical activity and potential alcohol and other drug harms

While there are many benefits from physical activity, there are also some possible harms to be aware of.

Normalisation of alcohol use

Alcohol use is common at community sports clubs' social events. For young people, this can normalise alcohol use and promote a harmful drinking culture (read more about the unintended normalisation of alcohol). The Alcohol and Drug Foundation (ADF) run the Good Sports program to help address these harms. Good Sports is a free program that helps community sports clubs develop policies and increase knowledge to help prevent alcohol and other drug related harms. The program also aims to limit children's exposure to alcohol use in sport. Visit the Good Sports website to learn more.

Performance and image enhancing drugs (PIEDs)

PIEDs are substances that are used to try to enhance a person's appearance or physical abilities, such as steroids. There are a range of physical and psychological effects of PIEDs, including heart problems, sleeplessness, and increased aggression. Young people who participate in more sport are more likely to use PIEDs. However, rates of use remain low. According to the 2022-2023 Australian secondary schools' survey, 1 in 50 young people (2%) aged 12-17 used performance or image-enhancing drugs in the past year. The 2022-2023 National Drug Strategy Household survey reported that less than 0.2% of people aged 14 and older used steroids in the past year. Positive Choices has a range of resources on PIEDs available here.

Evidence Base

This factsheet was developed following expert review by researchers at the Matilda Centre for Research in Mental Health and Substance Use at the University of Sydney. A full list of sources that informed this factsheet can be seen below.

Sources

1. Australian Government Department of Health, Disability and Ageing. (2021). *For children and young people (5 to 17 years)*. Australian Government Department of Health, Disability and Ageing. Retrieved October 28 from <https://www.health.gov.au/topics/physical-activity-and-exercise/physical-activity-and-exercise-guidelines-for-all-australians/for-children-and-young-people-5-to-17-years>
2. Australian Institute of Health and Welfare. (2024). *National Drug Strategy Household Survey 2022-2023*. <https://www.aihw.gov.au/reports/illicit-use-of-drugs/national-drug-strategy-household-survey>
3. Beauchamp, M. R., Puterman, E., & Lubans, D. R. (2018). Physical Inactivity and Mental Health in Late Adolescence. *JAMA Psychiatry*, 75(6), 543-544. <https://doi.org/10.1001/jamapsychiatry.2018.0385>
4. Champion, K. E., Chapman, C., Gardner, L. A., Sunderland, M., Newton, N. C., Smout, S., Thornton, L. K., Hides, L., McBride, N., Allsop, S. J., Mills, K., Kay-Lambkin, F., Teesson, M., Slade, T., & team, t. H. L. (2022). Lifestyle risks for chronic disease among Australian adolescents: a cross-sectional survey. *Medical Journal of Australia*, 216(3), 156-157. <https://doi.org/https://doi.org/10.5694/mja2.51333>
5. Clearinghouse for Sport. (2025). *Children and Youth in Sport*. Australian Sports Commission. Retrieved November 6 from <https://www.ausport.gov.au/clearinghouse/evidence/children-and-youth-in-sport>
6. Doré, I., Sabiston, C. M., Sylvestre, M. P., Brunet, J., O'Loughlin, J., Nader, P. A., Gallant, F., & Bélanger, M. (2019). Years Participating in Sports During Childhood Predicts Mental Health in Adolescence: A 5-Year Longitudinal Study. *J Adolesc Health*, 64(6), 790-796. <https://doi.org/10.1016/j.jadohealth.2018.11.024>
7. Eime, R. M., Young, J. A., Harvey, J. T., Charity, M. J., & Payne, W. R. (2013). A systematic review of the psychological and social benefits of participation in sport for children and adolescents: informing development of a conceptual model of health through sport. *International Journal of Behavioral Nutrition and Physical Activity*, 10(1), 98. <https://doi.org/10.1186/1479-5868-10-98>

8. Ennis, C. D. (2017). Educating Students for a Lifetime of Physical Activity: Enhancing Mindfulness, Motivation, and Meaning. *Research Quarterly for Exercise and Sport*, 88(3), 241-250. <https://doi.org/10.1080/02701367.2017.1342495>
9. Jewett, R., Sabiston, C. M., Brunet, J., O'Loughlin, E. K., Scarapicchia, T., & O'Loughlin, J. (2014). School Sport Participation During Adolescence and Mental Health in Early Adulthood. *Journal of Adolescent Health*, 55(5), 640-644. <https://doi.org/https://doi.org/10.1016/j.jadohealth.2014.04.018>
10. Loprinzi, P. D., & Cardinal, B. J. (2011). Association between objectively-measured physical activity and sleep, NHANES 2005–2006. *Mental Health and Physical Activity*, 4(2), 65-69. <https://doi.org/https://doi.org/10.1016/j.mhpa.2011.08.001>
11. Lubans, D., Richards, J., Hillman, C., Faulkner, G., Beauchamp, M., Nilsson, M., Kelly, P., Smith, J., Raine, L., & Biddle, S. (2016). Physical Activity for Cognitive and Mental Health in Youth: A Systematic Review of Mechanisms. *Pediatrics*, 138(3). <https://doi.org/10.1542/peds.2016-1642>
12. Martins, J., Marques, A., Sarmento, H., & Carreiro da Costa, F. (2015). Adolescents' perspectives on the barriers and facilitators of physical activity: a systematic review of qualitative studies. *Health Education Research*, 30(5), 742-755. <https://doi.org/10.1093/her/cyv042>
13. Noetel, M., Sanders, T., Gallardo-Gómez, D., Taylor, P., del Pozo Cruz, B., van den Hoek, D., Smith, J. J., Mahoney, J., Spathis, J., Moresi, M., Pagano, R., Pagano, L., Vasconcellos, R., Arnott, H., Varley, B., Parker, P., Biddle, S., & Lonsdale, C. (2024). Effect of exercise for depression: systematic review and network meta-analysis of randomised controlled trials. *BMJ*, 384, e075847. <https://doi.org/10.1136/bmj-2023-075847>
14. Owen, K. B., Foley, B. C., Smith, B. J., Manera, K. E., Corbett, L., Lim, M., Phongsavan, P., Qualter, P., Ding, D., & Clare, P. J. (2024). Sport Participation for Academic Success: Evidence From the Longitudinal Study of Australian Children. *Journal of Physical Activity and Health*, 21(3), 238-246. <https://doi.org/10.1123/jpah.2023-0506>
15. Owen, K. B., Foley, B. C., Wilhite, K., Booker, B., Lonsdale, C., & Reece, L. J. (2022). Sport Participation and Academic Performance in Children and Adolescents: A Systematic Review and Meta-analysis. *Medicine & Science in Sports & Exercise*, 54(2), 299-306. <https://doi.org/10.1249/mss.0000000000002786>
16. Pate, R. R., Heath, G. W., Dowda, M., & Trost, S. G. (1996). Associations between physical activity and other health behaviors in a representative sample of US adolescents. *Am J Public Health*, 86(11), 1577-1581. <https://doi.org/10.2105/ajph.86.11.1577>
17. Piplios, O., Yager, Z., McLean, S. A., Griffiths, S., & Doley, J. R. (2023). Appearance and performance factors associated with muscle building supplement use and favourable attitudes towards anabolic steroids in adolescent boys [Original Research]. *Frontiers in Psychology*, Volume 14 - 2023. <https://doi.org/10.3389/fpsyg.2023.1241024>
18. Rowland, B. C., Wolfenden, L., Gillham, K., Kingsland, M., Richardson, B., & Wiggers, J. (2015). Is alcohol and community sport a good mix? Alcohol management, consumption and social capital in community sports clubs. *Aust N Z J Public Health*, 39(3), 210-215. <https://doi.org/10.1111/1753-6405.12280>
19. Scully, M., Koh, I., Bain, E., Wakefield, M., & Durkin, S. (2023). *ASSAD 2022–2023: Australian secondary school students' use of alcohol and other substances* Cancer Council Victoria.
20. Smout, S., Champion, K. E., O'Dean, S., Halladay, J., Gardner, L. A., & Newton, N. C. (2024). Adolescent Lifestyle Behaviour Modification and Mental Health: Longitudinal Changes in Diet, Physical Activity, Sleep, Screen Time, Smoking, and Alcohol Use and Associations with Psychological Distress. *International Journal of Mental Health and Addiction*. <https://doi.org/10.1007/s11469-024-01350-9>
21. Tian, Y. E., Cole, J. H., Bullmore, E. T., & Zalesky, A. (2024). Brain, lifestyle and environmental pathways linking physical and mental health. *Nature Mental Health*, 2(10), 1250-1261. <https://doi.org/10.1038/s44220-024-00303-4>
22. Tobin, C. L., Fitzgerald, J. L., Livingstone, C., Thomson, L., & Harper, T. A. (2012). Support for breaking the nexus between alcohol and community sports settings: Findings from the VicHealth Community Attitudes Survey in Australia. *Drug and alcohol review*, 31(4), 413-421. <https://doi.org/10.1111/j.1465-3362.2011.00388.x>
23. Vella, S. A., Aidman, E., Teychenne, M., Smith, J. J., Swann, C., Rosenbaum, S., White, R. L., & Lubans, D. R. (2023). Optimising the effects of physical activity on mental health and wellbeing: A joint consensus statement from Sports Medicine Australia and the Australian Psychological Society. *J Sci Med Sport*, 26(2), 132-139. <https://doi.org/10.1016/j.jsams.2023.01.001>
24. Wisbey, M. (2024). *Exercise must be 'core treatment' for depression: Study*. Retrieved 09/12/2025 from <https://www1.racgp.org.au/news/gp/clinical/exercise-must-be-core-treatment-for-depression-stu>