

# Adolescents' participation in wildlife activities and its mental health implications

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# Adolescent mental health

- Adolescent mental health challenges are on the rise globally as well as in Norway
- Evidence indicates a rise in mental health challenges among children and adolescents aged 4-18 years over the past five decades
- In Norway, there has been a consistent increase in the percentage of adolescents experiencing mental health issues, such as depression and anxiety, in recent years



# Why might wildlife benefit mental health?

- The Biophilia hypothesis: humans need a connection to nature
- Attention Restoration Theory: nature experiences may draw our attention back to the here and now
- Stress Reduction Theory: nature experiences may reduce stress and negative feelings



## Aims of the study

- to explore adolescents' participation in wildlife activities
- to examine the association between such participation and adolescents' mental distress



# Methods

- Cross-sectional survey data from the Young-HUNT study in Norway (2017-2019)
- 6361 participants grouped according to their level of participation in wildlife activities
- Adjusted regression analyses were used to assess
  - factors associated with the participants' level of wildlife activity
  - associations between wildlife activity and mental distress

**ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
SCL5	Between Groups	4,425	2	2,212	4,831	,008
	Within Groups	2833,048	6187	,458		
	Total	2837,473	6189			
age	Between Groups	65,846	2	32,923	10,664	<,001
	Within Groups	19100,168	6187	3,087		
	Total	19166,014	6189			

**ANOVA Effect Sizes<sup>a,b</sup>**

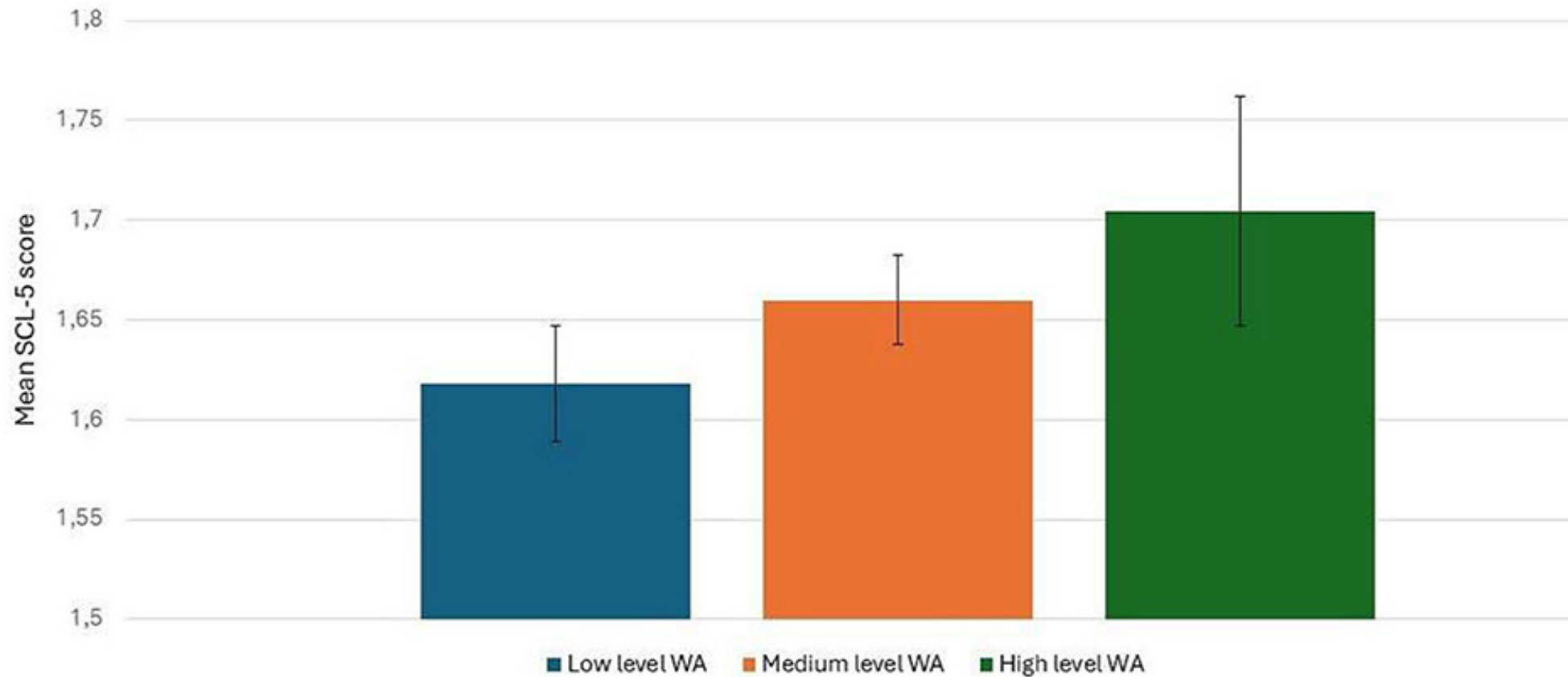
		Point Estimate	95% Confidence Interval	
			Lower	Upper
SCL5	Eta-squared	,002	,000	,004
	Epsilon-squared	,001	,000	,004
	Omega-squared Fixed-effect	,001	,000	,004
	Omega-squared Random-effect	,001	,000	,002
age	Eta-squared	,003	,001	,007
	Epsilon-squared	,003	,001	,006
	Omega-squared Fixed-effect	,003	,001	,006
	Omega-squared Random-effect	,002	,000	,003

# Results

- Most participants reported a low level (34.6%) or a medium level (53.2%) of wildlife activity participation
- Higher levels of participation in wildlife activity were associated with a range of factors, most notably female gender, having both parents born in Norway, and a medium or high level of physical activity
- A weak but statistically significant relationship was found between higher levels of wildlife activity and higher levels of mental distress (see Table)

Independent variables	Single analysis		Multivariate analysis	
	Std. $\beta$	$p$	Std. $\beta$	$p$
Age	0.16	<0.001	0.08	<0.001
Gender	-0.36	<0.001	-0.27	<0.001
Perceived family SES	-0.12	<0.001	-0.03	<0.01
Divorced parents	0.09	<0.001	0.03	<0.01
Born in Norway	-0.00	0.95	-	-
Parents born in Norway	-0.03	0.02	-0.02	0.09
Gaming	-0.07	<0.001	-0.02	0.16
SoMe and online chatting	0.24	<0.001	0.10	<0.001
TV/screen entertainment	0.10	<0.001	0.03	0.03
School performance motivation	0.01	0.35	-	-
Ability to tackle school demands	-0.42	<0.001	-0.32	<0.001
Support from adults	-0.17	<0.001	-0.11	<0.001
Illicit drug use	0.12	<0.001	0.06	<0.001
Physical activity	-0.16	<0.001	-0.07	<0.001
Wildlife activity	0.04	<0.01	0.05	<0.001
Explained variance			32.0%	<0.001

# Differences in mental distress (mean SCL-5 scores) by levels of wildlife activity



# Conclusion

- Various sociodemographic, lifestyle, and social factors influence wildlife activity involvement
- The weak but significant association between higher participation and higher mental distress raises questions about the assumption that wildlife activities are universally beneficial for adolescent mental health
- Occupational therapists are advised to consider for whom, and under which circumstances, wildlife activities may be helpful



# Reference

Redzovic, S.E., Johansen, I. J. H., & Bonsaksen, T. (2025). Profiling adolescent participation in wildlife activities and its mental health implications: evidence from Young-HUNT in Norway. *Frontiers in Public Health*, 13. DOI: 10.3389/fpubh.2025.1517089



The logo for the University of Inland Norway, featuring the lowercase letter 'i' followed by two uppercase 'N's in a stylized, dark green font. The 'i' has a dot, and the 'N's are composed of thick, blocky strokes.

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