

# Aktiv hele livet i et individperspektiv

Solfrid Bratland-Sanda

Professor idrett, fysisk aktivitet og helse

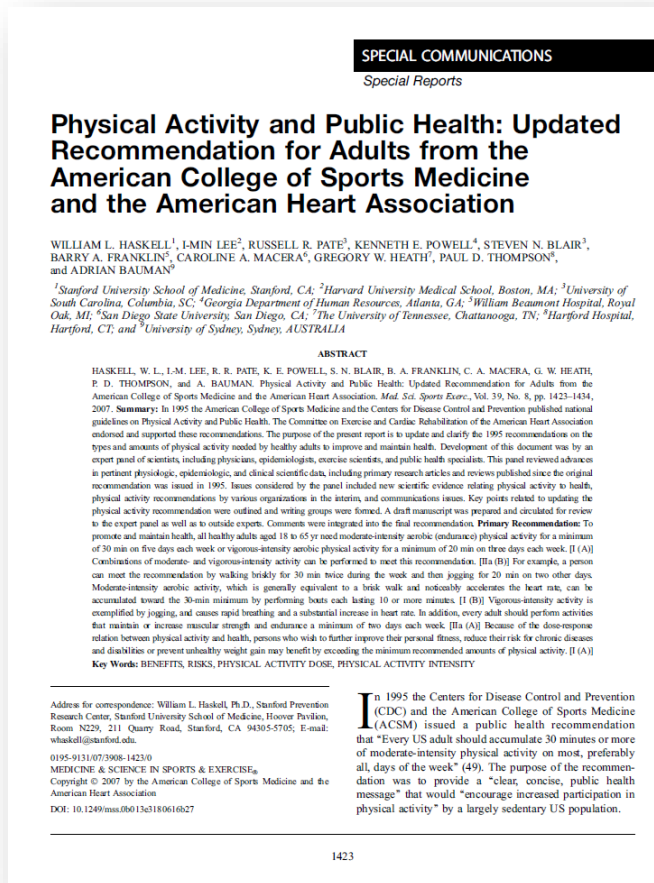
# Disclaimer

- Professor i idrettsvitenskap, fysisk aktivitet og helse.
- Trebarnsmor
- Frivillig trener i barneidretten
- Frivillig for kulturskulen:
  - Sminkør for Midt-Telemark barne- og ungdomsteater
  - Innpisker på juleshow



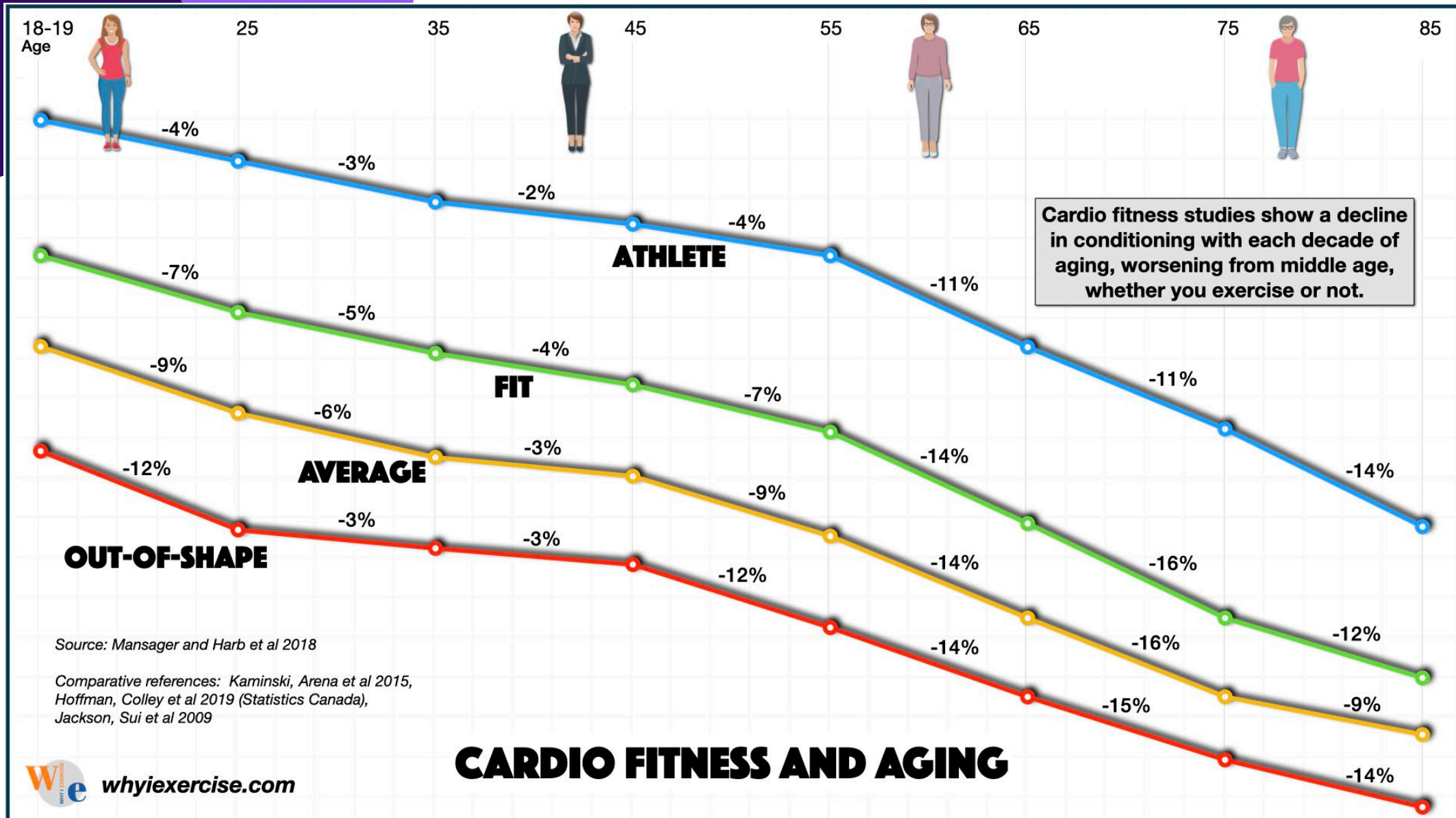
# Fra akkumulert aktivitet til #everymovecounts

- 10 min bolker
- Utholdenhet



- All bevegelse
- Utholdenhet og styrke
- Stillesittende tid

# Aldersrelatert endring i fysisk form



# Trenbarhet gjennom livet

## APPLIED SCIENCES

### The Effect of Age on the $\dot{V}O_{2\max}$ Response to High-Intensity Interval Training

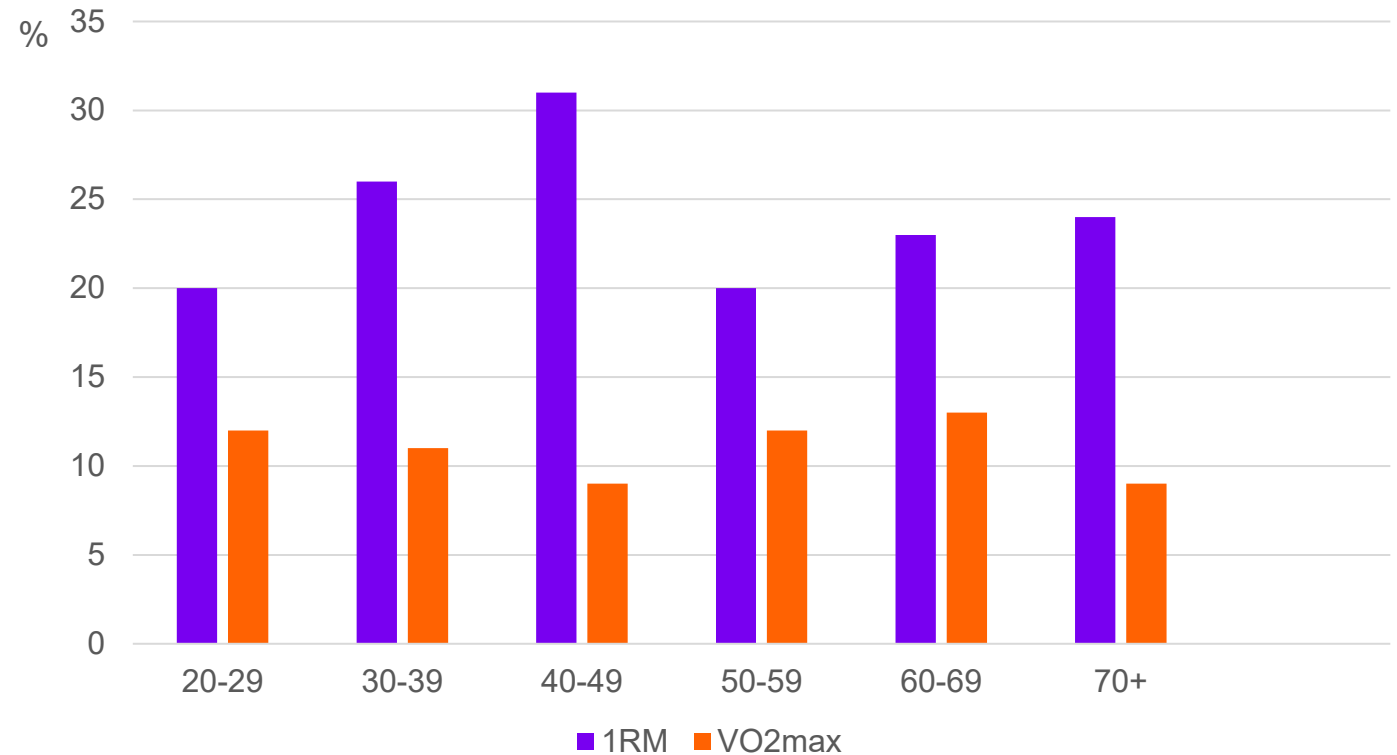
ØYVIND STØREN<sup>1</sup>, JAN HELGERUD<sup>1,2,3</sup>, MONA SÆBØ<sup>1</sup>, EVA MARIA STØA<sup>1</sup>, SOLFRID BRATLAND-SANDA<sup>1</sup>, RUNAR J. UNHJEM<sup>2,4</sup>, JAN HOFF<sup>2,4</sup>, and EIVIND WANG<sup>2,3,6</sup>

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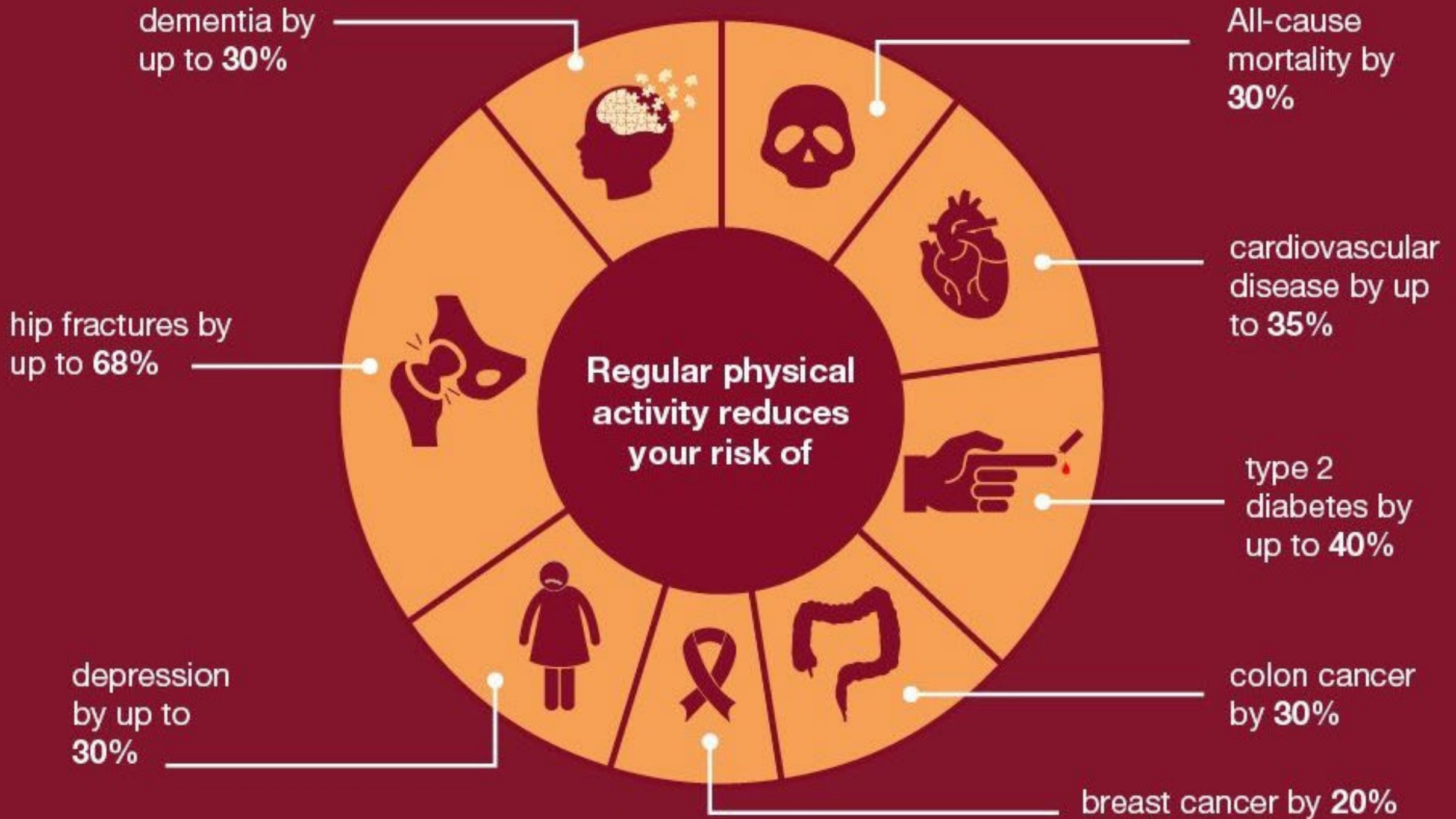
### Responses to Maximal Strength Training in Different Age and Gender Groups

Hans Torvild Kittilsen<sup>1\*</sup>, Sannija Goleva-Fjellet<sup>2\*</sup>, Baard Ingegerdsson Freberg<sup>1,3,4</sup>, Iver Nicolaisen<sup>1</sup>, Eva Maria Stoa<sup>1</sup>, Solfrid Bratland-Sanda<sup>1</sup>, Jan Helgerud<sup>5,6</sup>, Eivind Wang<sup>5,7,8</sup>, Mona Sæbo<sup>2</sup> and Øyvind Støren<sup>1</sup>

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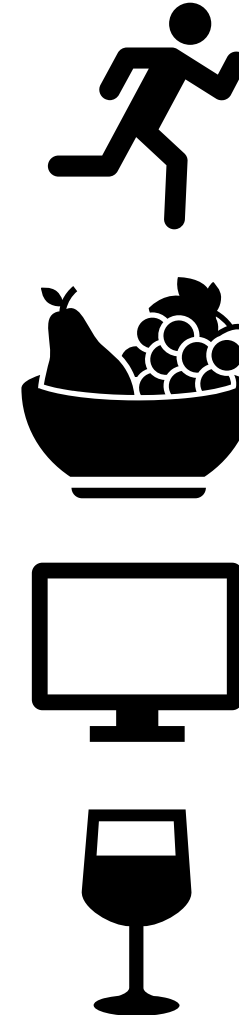






# Barn og unge

# Status: Generasjon sunn?

- Trender:
  - ↑ sunn livsstil over tid
  - ↓ sunn livsstil med alder
  - Lave verdier!!
- Gutter sliter med:
  - Skjermtid
  - Frukt og grønnsaker
- Jenter sliter med:
  - Fysisk aktivitet



 ORIGINAL RESEARCH  
published: 25 May 2021  
doi: 10.3389/fped.2021.645074



## Trends of Healthy Lifestyles Among Adolescents: An Analysis of More Than Half a Million Participants From 32 Countries Between 2006 and 2014

Priscila Marconcin<sup>1\*</sup>, Margarida G. Matos<sup>1,2</sup>, Andreas Ihle<sup>3,4,5</sup>, Gerson Ferrari<sup>6</sup>, Elvio R. Gouveia<sup>1,8</sup>, Marcos López-Flores<sup>9</sup>, Miguel Peralta<sup>2,10</sup> and Adilson Marques<sup>2,10</sup>

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The purpose of this study was to provide data regarding the prevalence and trends of adolescents' healthy lifestyles from 32 countries between 2006 and 2014 by sex and age interval. The data used in the present study were derived from the Health Behavior in School-aged Children (HBSC) 2006, 2010, and 2014 international database. Healthy lifestyle was assessed using the combination of daily physical activity, daily fruit and vegetable consumption, <2h daily on screen-based behaviors, abstinence from alcohol, and abstinence from tobacco products. Healthy lifestyle measures were based on self-report. The final sample comprised 519,371 adolescents (aged between 10 and 16 years old). The prevalence of healthy lifestyle behaviors increased between 2006 and 2014. The healthy lifestyle score worsened with advancing age for boys and girls. Comparing countries, for boys, the highest values were observed in adolescents from Ireland (5.2%, 95% CI: 3.9, 6.4), and for girls, the highest values were observed in adolescents from Iceland (4.2%, 95% CI: 3.6, 4.7). The present study showed a slight trend to an improved healthy lifestyle among adolescents, although much more has to be done. A joint effort from multiple areas of knowledge must be made to improve adolescent health policies, since lifestyles in adolescence play an important role for the development of vulnerability and health in later life.

**Keywords:** epidemiologic research design, health lifestyle, adolescents, vulnerability, health policies

### INTRODUCTION

Adolescence corresponds to the period between the ages of 10 and 19 years (1). This is a critical period for individuals to establish enduring healthy behaviors (2). Important health-related behaviors initiate at this period and track into adult life, thereby playing an important role for vulnerability in later life (3). For example, higher amounts of alcohol consumption in adolescence increased the odds of being a heavy drinker in the early years of adulthood (4). The World Health

Frontiers in Pediatrics | www.frontiersin.org 1 May 2021 | Volume 9 | Article 645074



# Status: generasjon prestasjon

- Fysisk aktivitet↓
- Stillesittende aktivitet↑
- Perfeksjonisme↑
- Psykiske helseplager ↑





# Fysisk aktivitet i skole





# Trender: deltakelse i idrett (og andre fritidsaktiviteter)

*Færre til  
små fotball*



Oslo 20201124. Barn får fortsatt lov  
Jil Yngland / NTB Foto: Jil Yngland

Av Bjarne Kalleli, regionbanksjef Oslo  
Østlandet

I know I'm just a volunteer little league coach but I feel if I yell at the kids and umpires a pro scout might see me and give me a REAL coaching job!

your  cards  
someecards.com



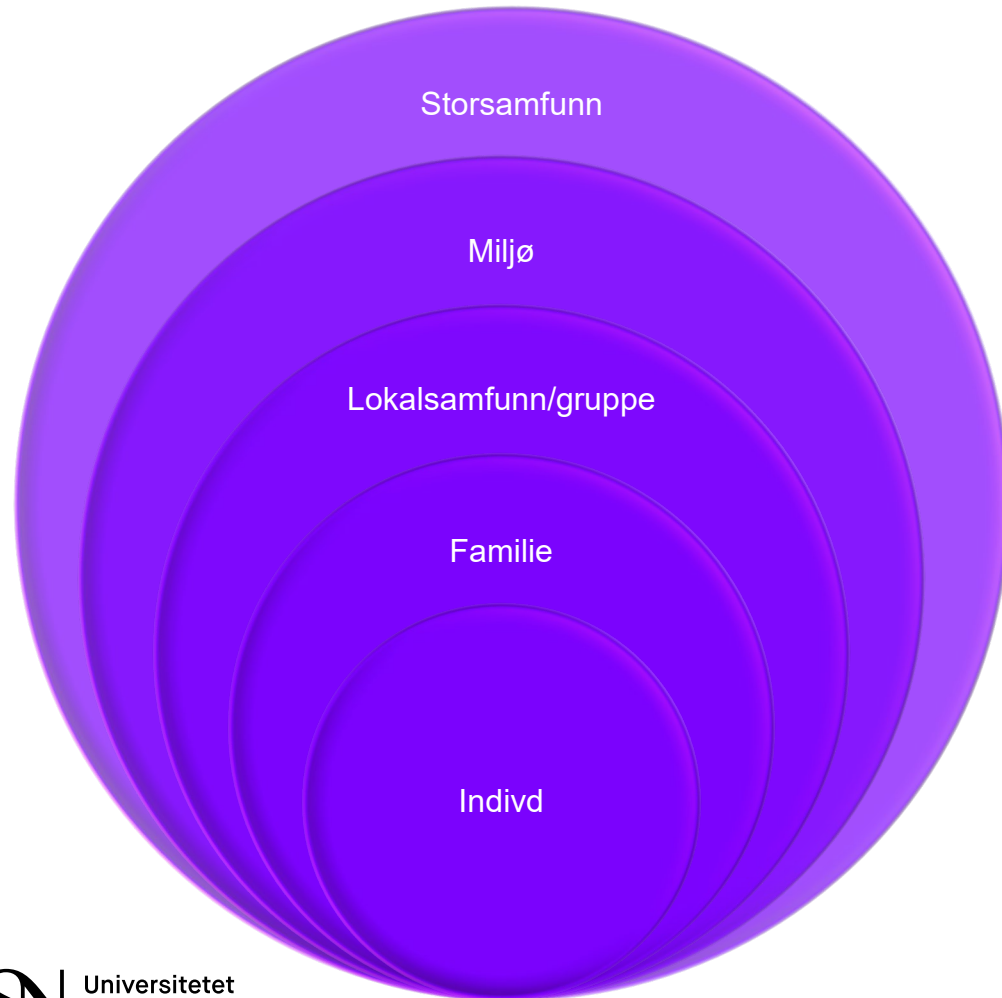
**de**

er ble



spilletid tilsier at de  
ikke laget som er

# Hvorfor har det blitt slik?



*«Barn som ikke får leke har økt risiko for å utvikle mentale helseutfordringer»*

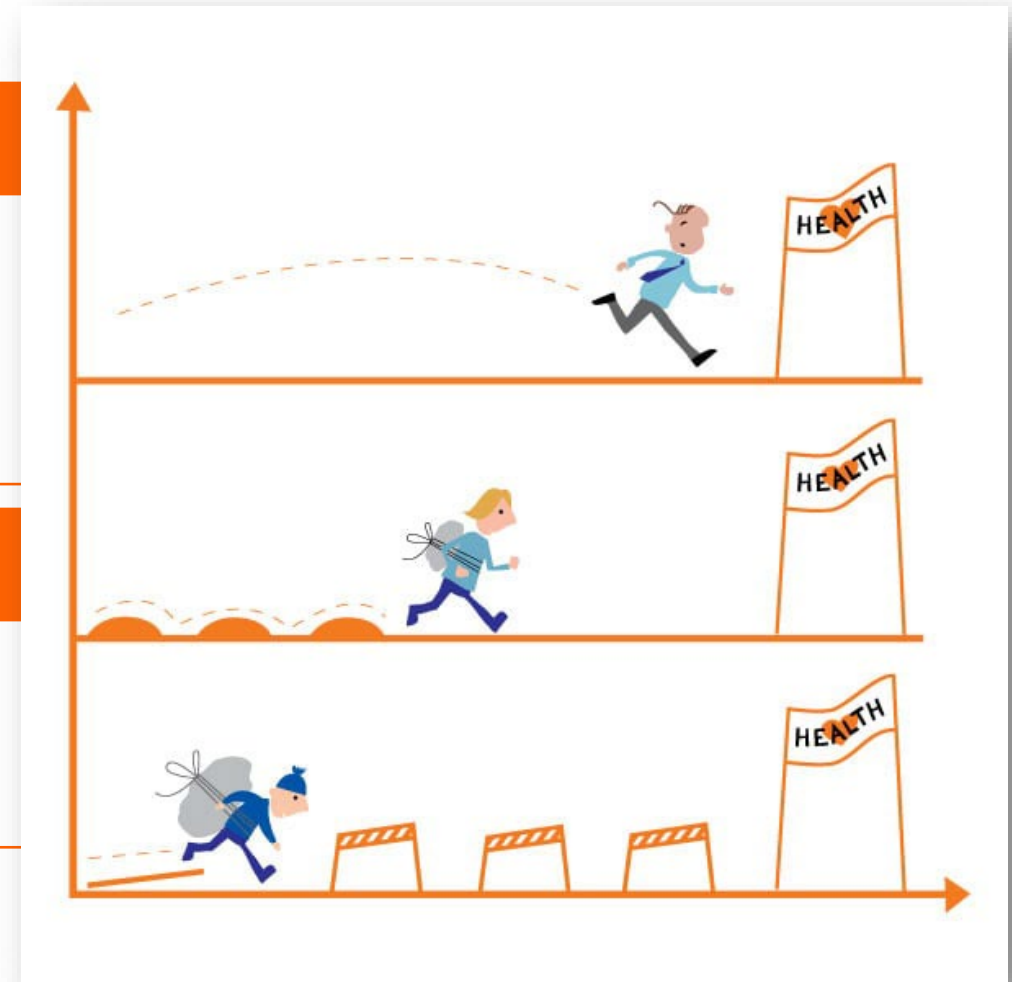
# Sosial ulikhet i helse og livsstil

## Høy sosioøkonomisk status

- Mer fysisk aktive
- Mindre stillesittende
- Spiser sunnere
- Deltar oftere i frivillig arbeid

## Minoriteter

- Færre deltar i organiserte fritidsaktiviteter
- Mindre fysisk aktive
- Oversett med tanke på psykisk helse





# «Ingen ser ut som oss på pengene ennå»



SiD | Si,D

## Minoritetsungdom blir oversett i debatten om mental helse | Tayiba Haji Hassan

Tayiba Haji Hassan (19)

27. sep. 2018 19:00 | Sist oppdatert 27. september 2018



**HVA VET VI OM MANGFOLD OG INKLUDERING I IDRETTEEN?**

EN KUNNSKAPSSAMMENSTILLING OM DELTAKELSE, BARRIERER OG TILTAK

# Fritidsaktivitet og samhold: «Jeg har fått venner»



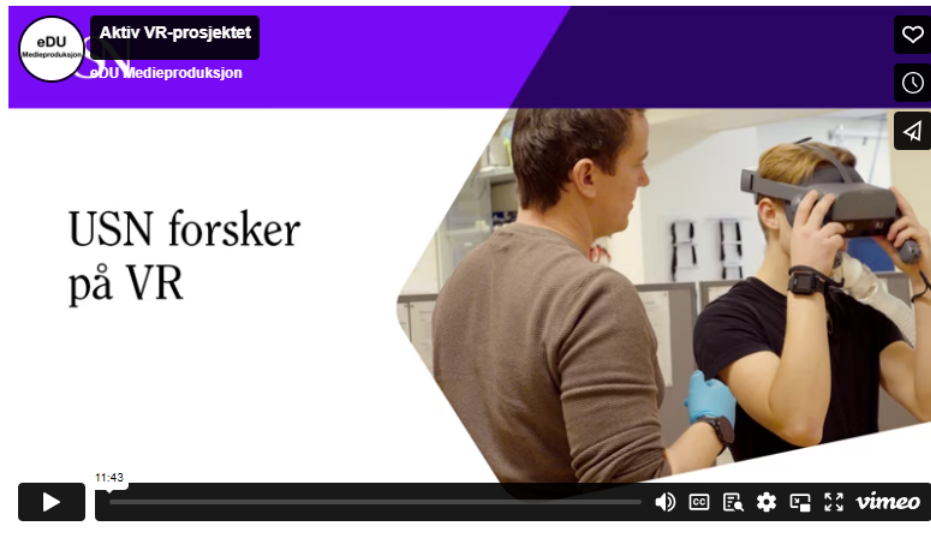


# Reality vs Virtual Reality og e-sport

Men kan du regne dette som fysisk aktivitet på linje med en gå- eller løpetur?

Det har forskere ved Universitetet i Sørøst-Norge (USN) undersøkt. Prosjektet ser også på hvordan VR-bruken påvirker synet og balansen vår.

Her kan du se en film om prosjektet:



## Kan VR-spill øke ditt fysiske aktivitetsnivå?



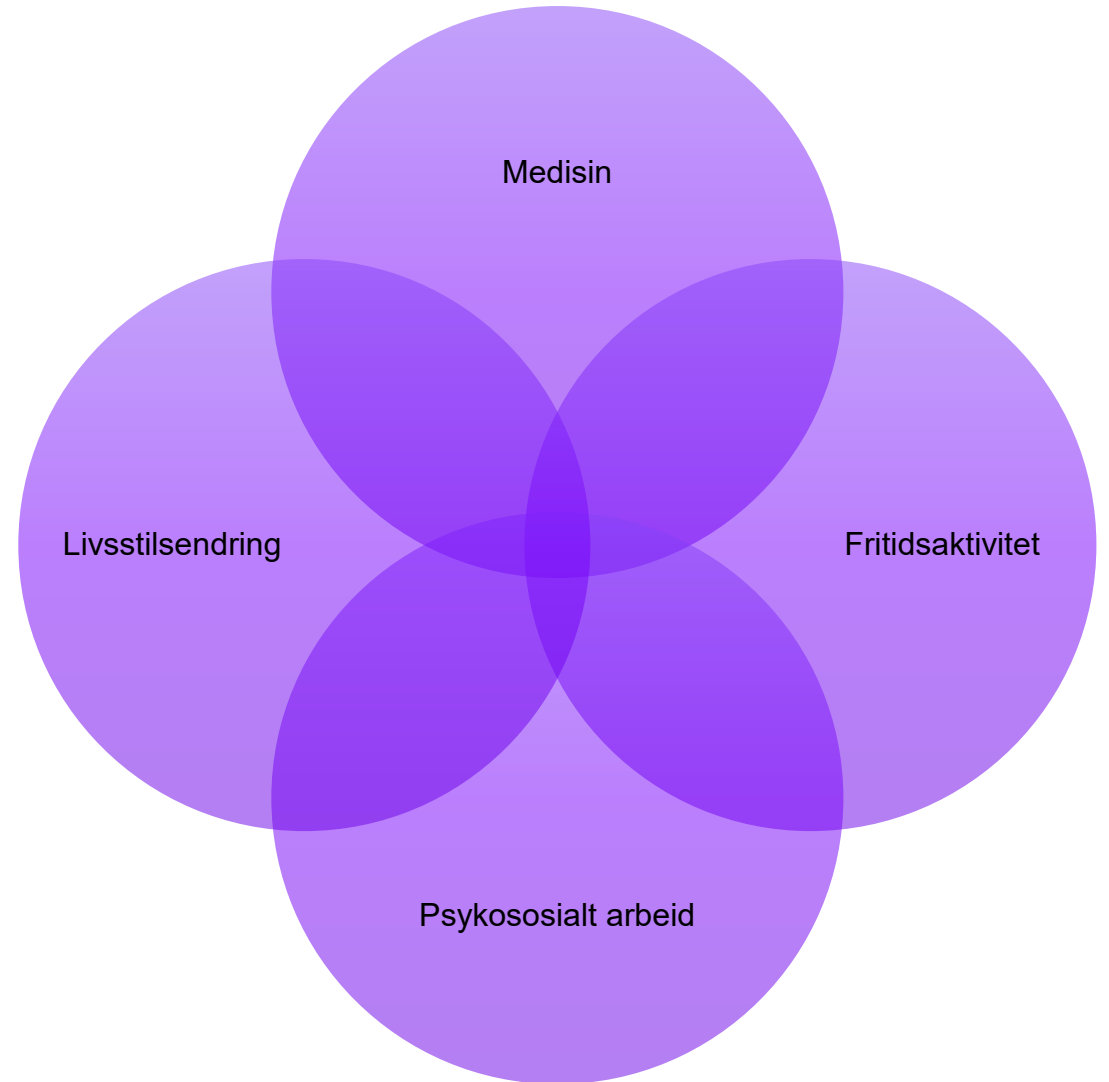
HODET FULLT: Forsker Jan-Michael Johansen fester VR-headset og oksygenopptaksmåler på testperson i USNs lab på campus Bo. Foto: eDU Medieproduksjon.

Howdan påvirker spilling i en virtuell virkelighet vår fysiske form? Og hva med synet? Et nytt forskningsprosjekt dokumenterer effekten.



# Kliniske grupper

# Kliniske grupper





# Fysisk aktivitet, trening og idrett for personer med helseutfordringer



Klubb Spiller

Norges Golfforbund

Søk  Meny 

Klubb / Aktivitet

## Golf Grønn Glede

Golf Grønn Glede er aktivitet for personer som av ulike årsaker har behov for tilrettelegging for å finne sin vei inn i golfen. Målet er å gi deltagerne mulighet til å være aktiv etter egne forutsetninger og ønsker, samtidig som det sosiale aspektet ivaretas.



# Voksne og eldre

# Arbeidsliv

ESSAY | PUBLISERT 10.08.2021

## Hvem tar ansvaret for sykepleieres helse og fysiske form?



SKJEVT FORDELT: Kontorarbeidere har det beste treningstilbudet i arbeidstiden. Sykepleiere må være tilgjengelige for sine pasienter mesteparten av arbeidsdagen. Det kan gjøre det vanskelig å gi dem et treningstilbud. Illustrasjon: Ruslan Nesterenko / Mostphotos / Sissel Vetter



Dille, T., Kristiansen, E. & Boe, O. (red.) (2023).  
Eventer i en beredskapskontekst.  
Universitetsforlaget.  
DOI: <https://doi.org/10.18261/9788215054599-23-09>

## 9. Fit for beredskap? En litteraturstudie om helse og livsstil blant innsatsledere i politiet

Solfrid Bratland-Sanda, Eva Maria Støa, Åsmund Sanda, Michael S. Reinboth  
og Espen S. Gjevestad

**Sammendrag** Politiets innsatsledere er en mannsdominert ansattgruppe utsatt for mange stressfaktorer som kan påvirke både helse og sikkerhet i yrkesrollen. Dette kapitlet fokuserer på hvordan innsatsledernes helse og livsstil er av betydning for beredskap og tjenesteutførelse i daglig beredskap og i beredskap på planlagte eventer. Vår kunnskapsoppsummering identifiserer behov for empiri og for at tjenstepersoner og forskere sammen fremskaffer kunnskap på feltet.

**Nøkkelord** fysisk aktivitet | sikkerhet | arbeidshelse | helsefremmende arbeid | psykologi





# Taktisk utøver

## The Tactical Athlete Definitions, Cardiovascular Assessment, and Management, and “Fit for Duty” Standards

Jennifer Xu, MD<sup>a</sup>, Mark C. Haigney, MD<sup>b</sup>, Benjamin D. Levine, MD<sup>c</sup>,  
Elizabeth H. Dineen, DO<sup>a,\*</sup>

### KEYWORDS

• Tactical athlete • Military • Firefighter • Law enforcement • Cardiovascular screening

### KEY POINTS

- Military, law enforcement, firefighters, and emergency response providers, referred to as tactical athletes, have a high demand for physical fitness and must endure mentally and physically demanding occupational tasks, often in extreme conditions.
- There is an increased risk for cardiovascular events when on duty rather than off duty.
- The tactical athlete is exposed to unique forms of cardiovascular stress and should be approached differently than a competitive athlete by the treating physician.
- In stress testing, efforts should be taken to simulate conditions encountered by the tactical athlete when assessing for “fit for duty” standards after a cardiac event.
- Medical decision-making regarding testing, treatment, and return to duty should be made in concert with the tactical athlete and a multidisciplinary team including key representatives understanding their discipline’s governing policies.

### INTRODUCTION

Understanding the physiologic demands and cardiac remodeling of competitive athletes has been a focus of clinical and research efforts to enable better cardiovascular care of this specialized population. Although some principles can translate to other athletic cohorts, it is important to differentiate the tactical athlete from the typical competitive athlete. Tactical athletes include the military, law enforcement, firefighters, and others whose physical training and responsibilities are centered not around competition but around service.

Although the absolute number of cardiovascular events is low in this population, there is an increased risk of cardiovascular events occurring on versus off the job, raising concerns about the cardiac risks of this line of work.

This article aims to (1) define tactical athletes and understand the cardiovascular demands of their specific jobs, (2) discuss what is known about cardiovascular disease management in this population, (3) outline cardiovascular testing protocols, and (4) highlight gaps in knowledge and suggest next steps to improve cardiovascular care for this population.

Disclosure Statement: The authors have nothing to disclose.

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Uforutsigbar prestasjonsarena:

- Når starter og stopper «konkurransen»?
- Hvem og hvor mange «konkurrerer» du mot?
- Hvor mange og hvilke «konkurranser» har du i løpet av en vakt?

# God fysisk form gir bedre overskudd i hektiske situasjoner



## Physical Fitness and Psychological Hardiness as Predictors of Parasympathetic Control in Response to Stress: a Norwegian Police Simulator Training Study

Asle M. Sandvik<sup>1,2</sup> · Espen Gjevestad<sup>1,3</sup> · Einar Aabrekk<sup>1</sup> · Peter Øhman<sup>1</sup> · Per-Ludvik Kjendlie<sup>1,4</sup> · Sigurd William Hystad<sup>5</sup> · Paul T. Barton<sup>6</sup> · Anita L. Hansen<sup>2,7</sup> · Bjørn Helge Johnsen<sup>5,8</sup>

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© Society for Police and Criminal Psychology 2019

### Abstract

The individual biopsychological response to a specific stressor is the result of a complex interplay between many different factors including physiology, behavior, and personality. The goal of the present study was to explore the potential link between physical fitness, hardiness (Kobasa 1979), and the individual autonomic stress arousal experienced during a stressful police training situation (active shooter). Eighty-four police students participated in the study and were randomly assigned to either a high-stress or a low-stress testing condition. Hardiness was measured with the Dispositional Resilience Scale (Hystad et al. 2010). Physical fitness was assessed with  $VO_{2max}$ . Parasympathetic control was measured using heart rate variability (HRV), i.e., the root mean square successive difference (RMSSD). Regression analysis showed that psychological hardiness had a negative main effect on change in parasympathetic activity from baseline to the testing phase ( $B = -1.43, t = -2.81, p = 0.007$ ). Larger withdrawal of parasympathetic activation for high-hardy individuals in this phase of the study can be interpreted as an adaptive adjustment to the task set in front of them. A second regression analysis showed that both psychological hardiness ( $B = -1.47, t = 3.68, p < 0.001$ ) and physical fitness ( $B = 0.89, t = 2.85, p = 0.006$ ) had significant main effects on change of parasympathetic activity entering the recovery phase of the study. Both regression coefficients were positive, with higher scores on hardiness and physical fitness predicting greater parasympathetic activation at stress offset. Overall, the results suggest that psychological hardiness and physical fitness may be important factors in how operational stress affects the individual in a police setting. Those high in hardiness and good physical form seem to be better able to recuperate and reset after a stressful incident, something that can be vital in an operational context. These results will be discussed in relation to the existing literature in the field.

**Keywords** Stress · Hardiness · Physical fitness · Police · Parasympathetic control

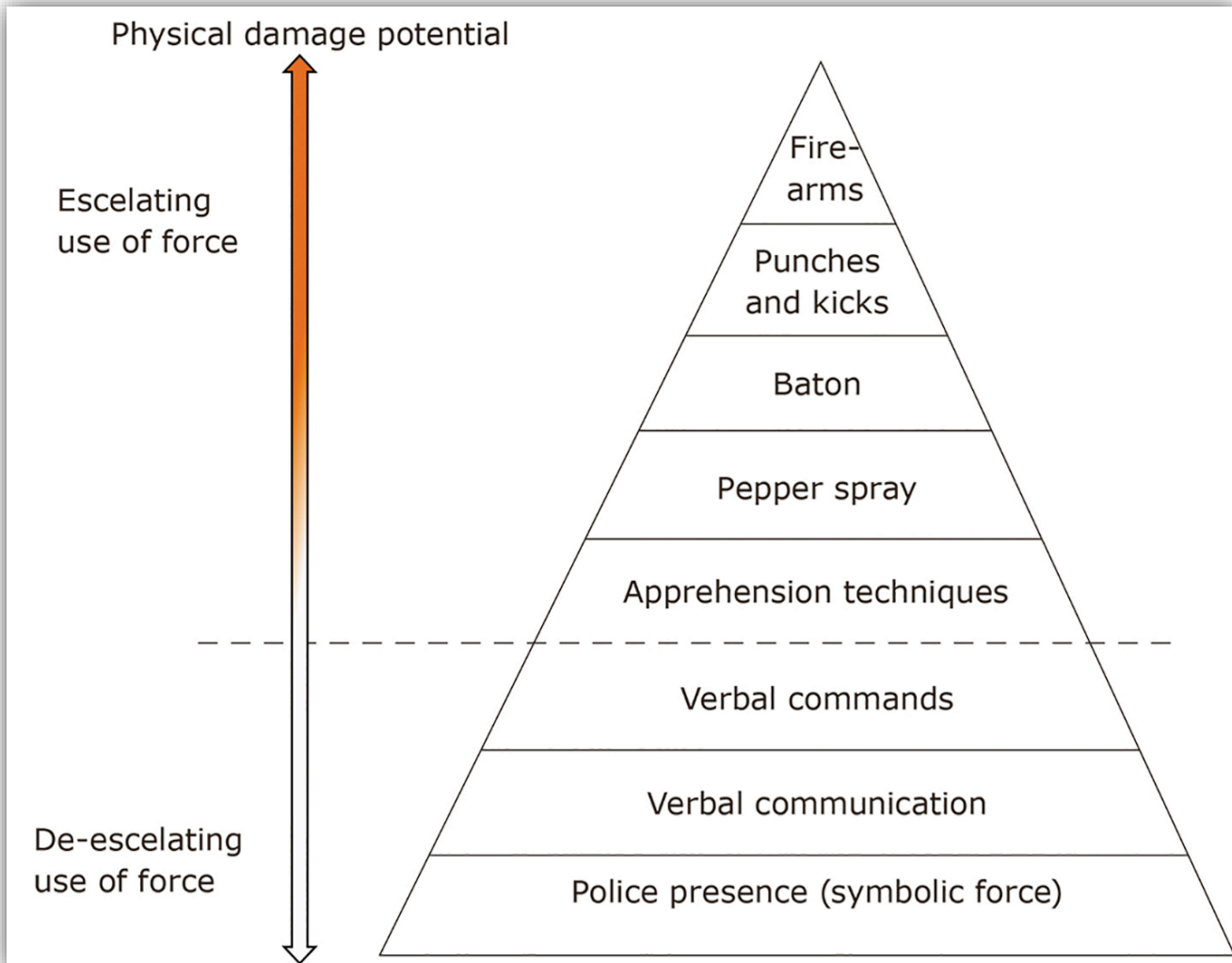
### Introduction

There is no universal consensus on the definition of stress, and numerous definitions of stress have been proposed (Cohen et al. 1995; Segerstrom and Miller 2004). What most researchers on the topic seem to share is “an interest in a process in which environmental demands tax or exceed the adaptive capacity of an organism, resulting in psychological and biological changes that may place persons at risk for disease” (Cohen et al. 1995, p. 3).

While most, or all, people experience stress from time to time, stress is a part of the daily experience in operational police work (Van Hasselt et al. 2008). Many operational police situations involve uncertainty and potential for danger, not only for oneself but also for others. Uncertain conditions are indeed an essential part of the job description for police

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# Eldre

## Gir sykdommen en på tygga

GRAN (NRK): Gudbrand (58), Sten (73) og Hans Erik (70) trener boksing hver mandag. Kampsporten hjelper dem med å bremse sykdommen.



INNBITT: Det spares ikke på krefter når gutta møtes til trening hos Gran bokseklubb. FOTO: HANS ANDREAS SOLBAKKEN / NRK

BIRKEN LANGRENN SPORT

## - Idrettsmyter om eldre for fall



BRYTER GRENSER: Forfatter Thor Gotaas er ikke overrasket over om Gunnar Tronsmoen bryter nok en grense. Foto: Rune Hagen

Av Rune Hagen

Publisert: 26.01.16 17:09 Del

Artikkelen er over 8 år gammel

- Jeg tror Gunnar kan lykkes, men det blir en utfordrende tur, sier skiforfatter Thor Gotaas.

# Fikk demenspris for gåfotball

Kjell Einar Hamnes ble i går tildelt årets demenspris i Vestfold for sitt arbeid med gåfotball for mennesker med demens.

Prisen deles ut av Nasjonalforeningen for folkehelsen.

Sist endret: 20.06.2024 15.09



- lldsjeler som lar seg inspirere og som bare setter i gang kan aldri verdsettes nok. Kjell Einar har på fantastisk vis løftet demenssaken hos nye grupper, og han ser bare muligheter og ikke hindringer.



Elise Solheim i gang med ringspel, mens Ingeborg Vesla Botnen Eriksen ventar på tur. FOTO: Gro B. Røiland

## Furuheim og USN inviterte til OL for seniorar


Med tenning av OL-eld, øvingar for kropp og sinn og premieutdeling på OL, blei seniorleikane avvikla på Furuheim.

Birgitte Røiland | Publisert 6. mai 21 kl. 17:00

Del

ANENEMENT





Idrett = lek med  
avanserte regler.  
Du er aldri for  
gammel til å leke!



# Oppsummering:



for a  
av  
ilsta

Tusen takk for oppmerksomheten!

Kontaktinfo:

[solfrid.bratland-sanda@usn.no](mailto:solfrid.bratland-sanda@usn.no)



***ADVARSEL!***  
***Fysisk inaktivitet kan være  
ødeleggende for helsa di.  
For å unngå  
skadevirkningene av  
stillesitting, anbefaler vi at  
du nå reiser deg opp og  
beveger deg 😊***





Universitetet  
i Sørøst-Norge