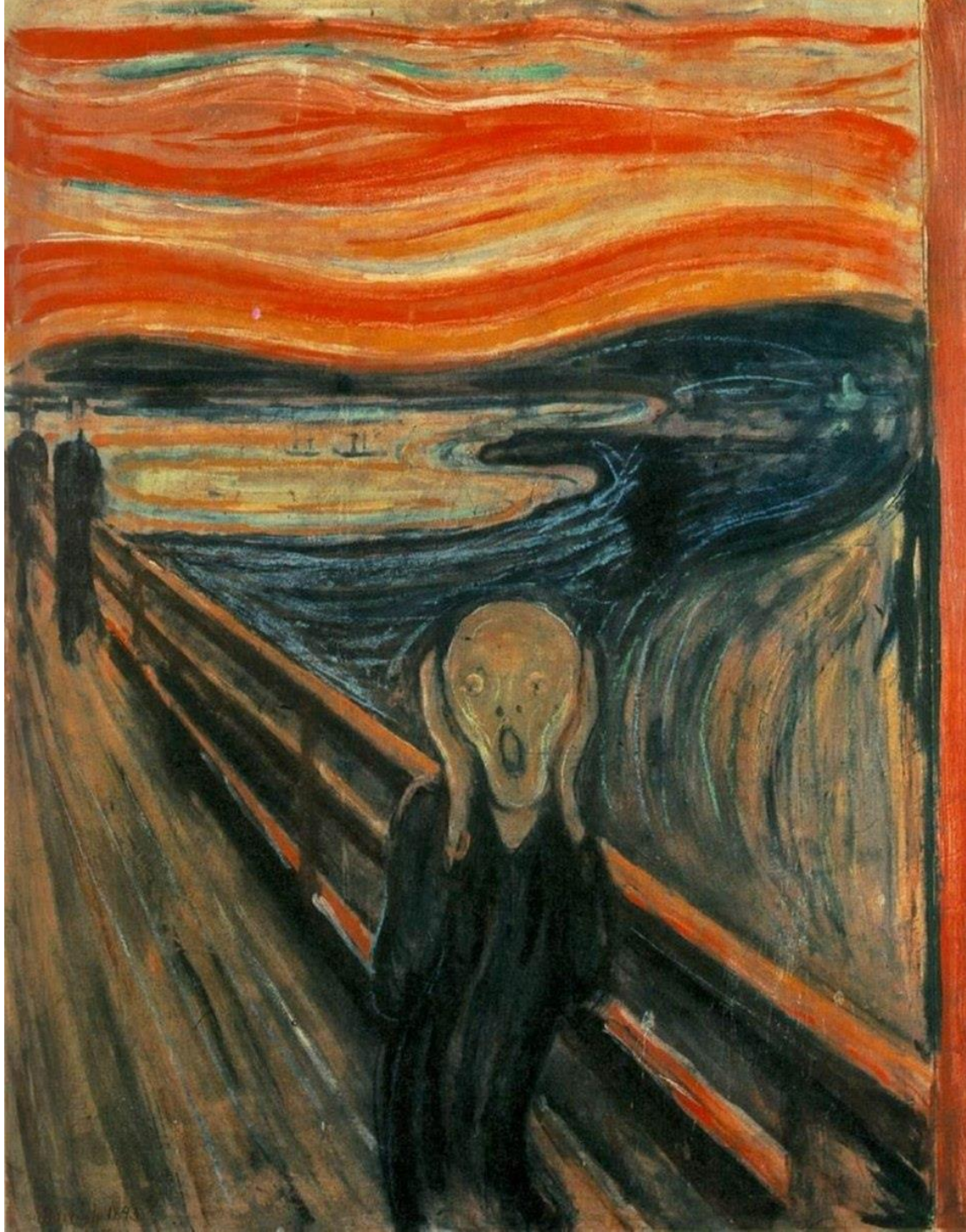
Tränarforum
Bosön
250824

Jörgen & David

Smärta

- “En obehaglig sensorisk och emotionell upplevelse kopplad till – eller liknande det man man upplever vid – vävnadsskada eller hotande vävnadsskada”

  - IASP (International Association for the Study of Pain)

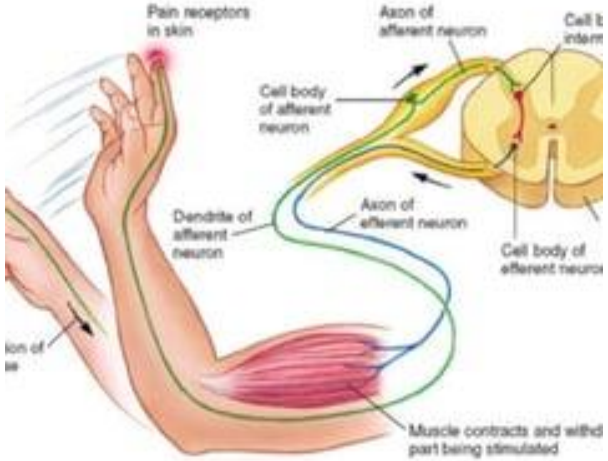


Livsnödvändigt

- Varningssystem
- Smärttröskel - smärttolerans
- Sensitisering av nervssystem vid skada
  - Begränsad tid
  - Begränsat område

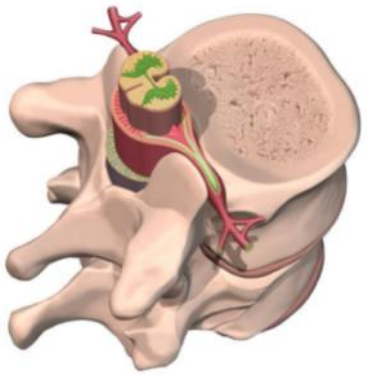
Smärtreflexen

- Omkoppling i ryggmärgen
- Sker innan smärta registreras



Förstärkning av smärta

Sensory nerve signals from the **body**



Complex analysis and interpretation by the **brain** **(ie. psychological factors)**

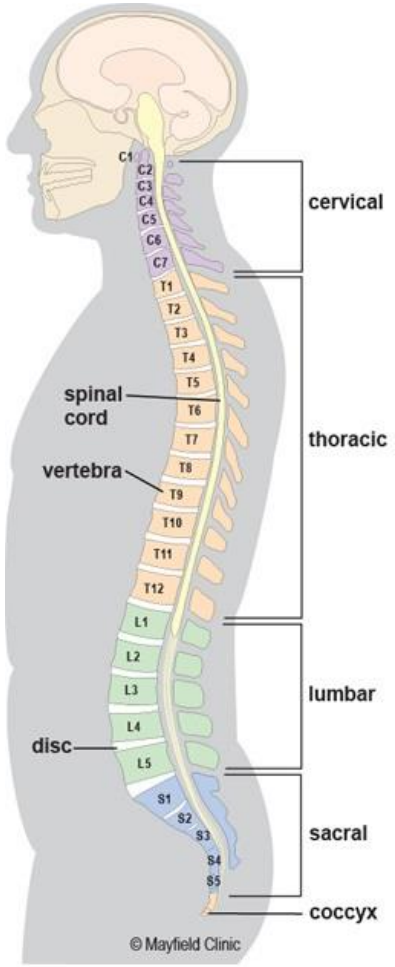
Oro, nedstämdhet, stress, arbetsbelastning,

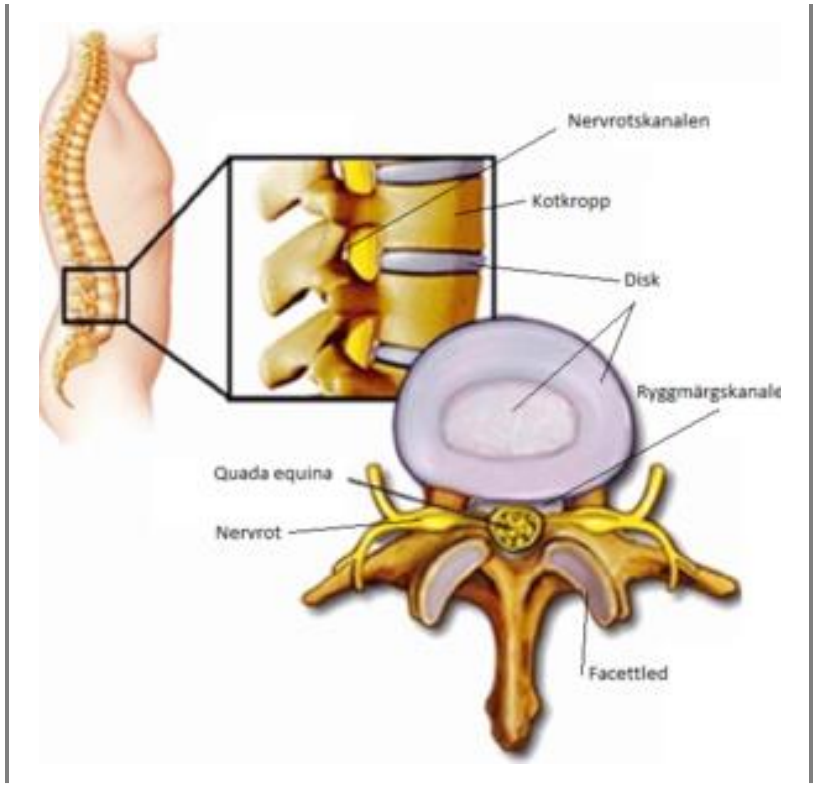
sömnstörning, mindre rörelse

Smärtutredning

- Kronisk eller akut? (>3 mån eller <6 veckor)
- Intensitet? (VAS, se bild)
- Utbredning? (hur stort område)
- Duration? (hur länge gör det ont)
- Huggande eller molande?
- I aktivitet eller vila?

Ryggen


C1
C2
C3
C4
C5
C6
C7
T1
T2
T3
T4
T5
T6
T7
T8
T9
T10
T11
T12
L1
L2
L3
L4
L5
S1
S2
S3
S4
S5
cervical
thoracic
lumbar
sacral
coccyx
spinal cord
vertebra
disc
© Mayfield Clinic


Nervrotskanalen
Kotkropp
Disk
Ryggmärgskanal
Quada equina
Nervrot
Facettled

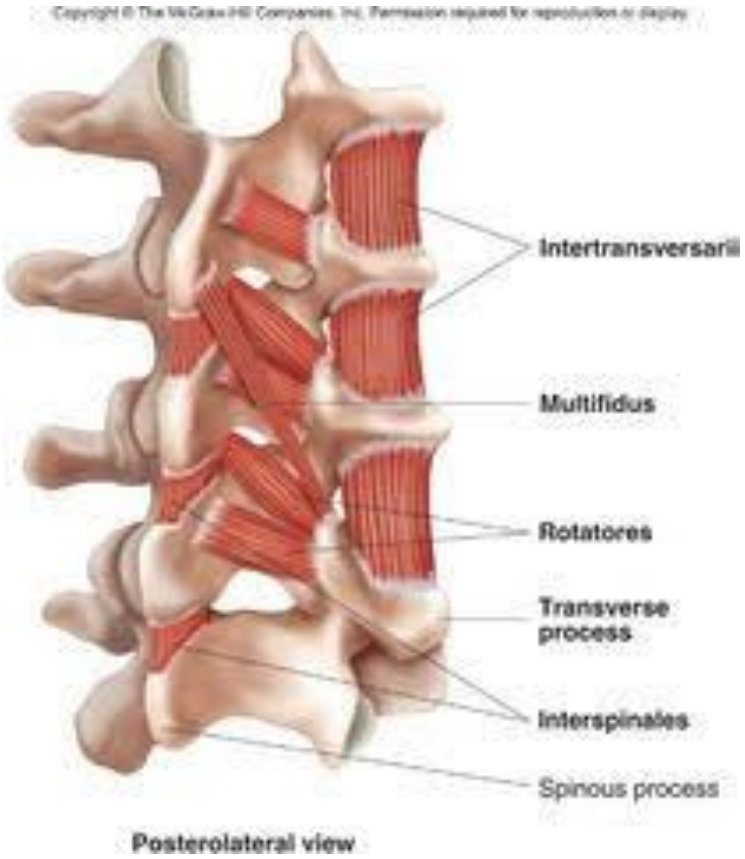
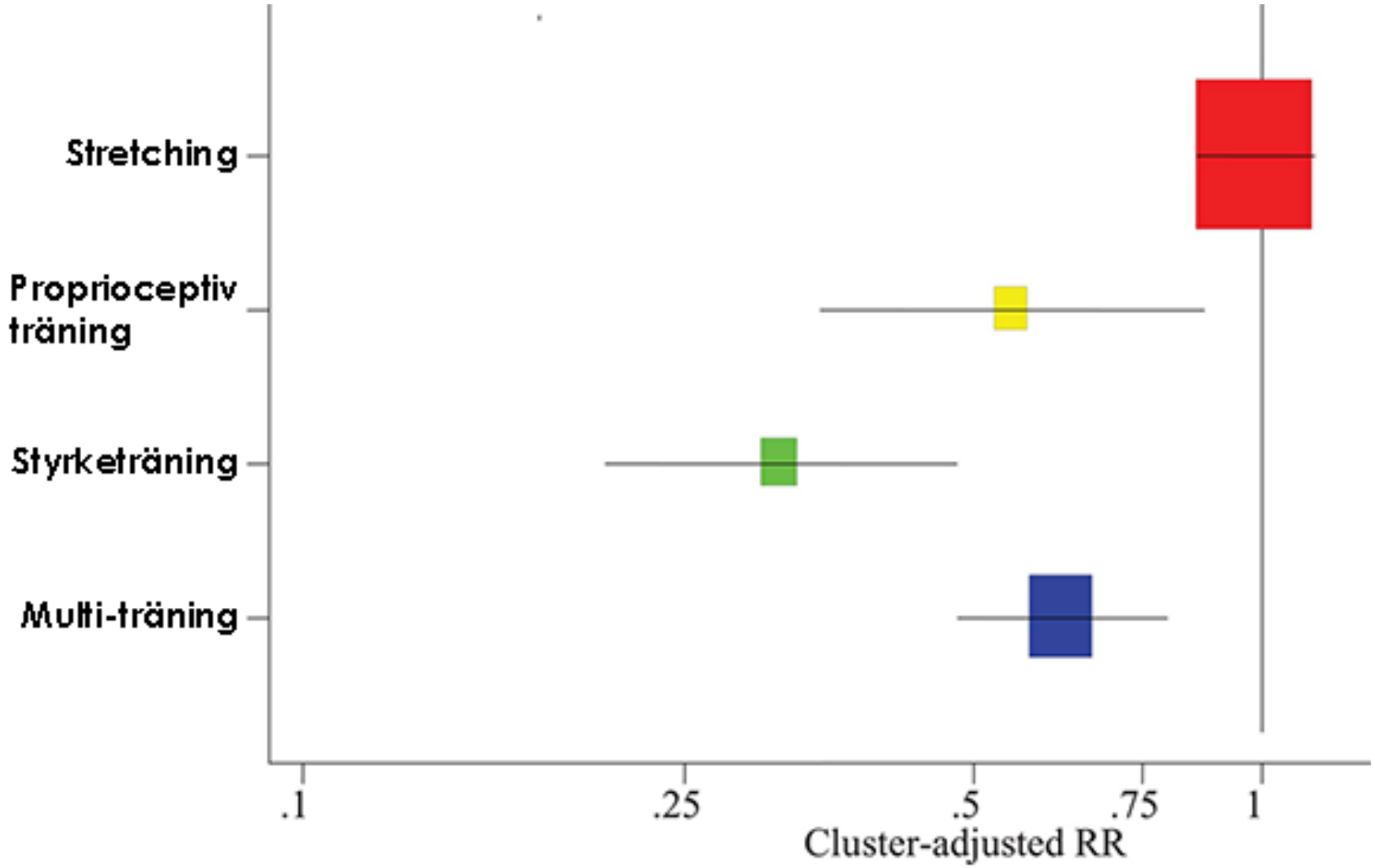

Intertransversarii
Multifidus
Rotatores
Transverse process
Interspinales
Spinous process
Posterolateral view

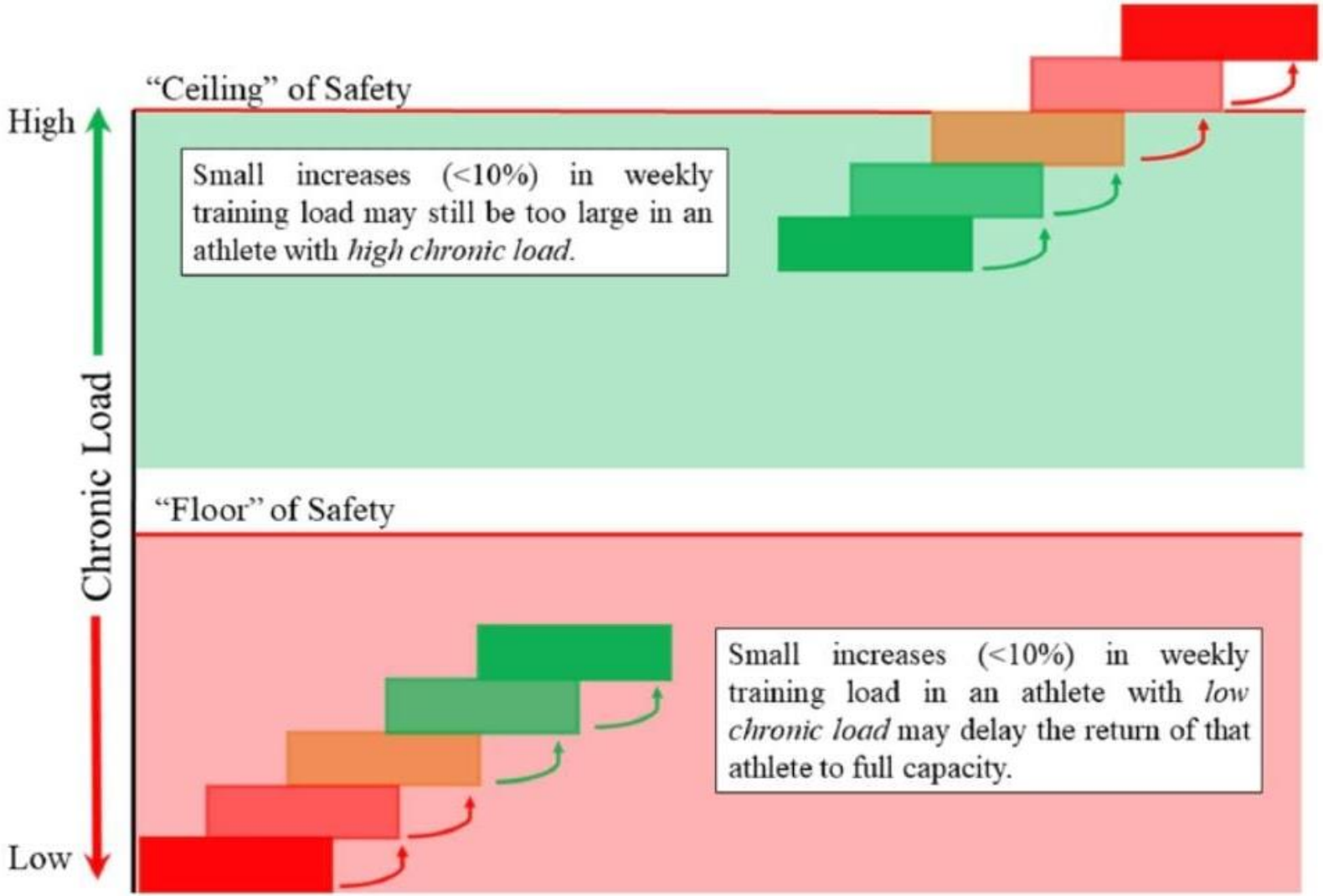
Table 2: Age-specific prevalence estimates of degenerative spine imaging findings in asymptomatic patients[a]

Imaging Finding	Age (yr)						
	20	30	40	50	60	70	80
Disk degeneration	37%	52%	68%	80%	88%	93%	96%
Disk signal loss	17%	33%	54%	73%	86%	94%	97%
Disk height loss	24%	34%	45%	56%	67%	76%	84%
Disk bulge	30%	40%	50%	60%	69%	77%	84%
Disk protrusion	29%	31%	33%	36%	38%	40%	43%
Annular fissure	19%	20%	22%	23%	25%	27%	29%
Facet degeneration	4%	9%	18%	32%	50%	69%	83%
Spondylolisthesis	3%	5%	8%	14%	23%	35%	50%

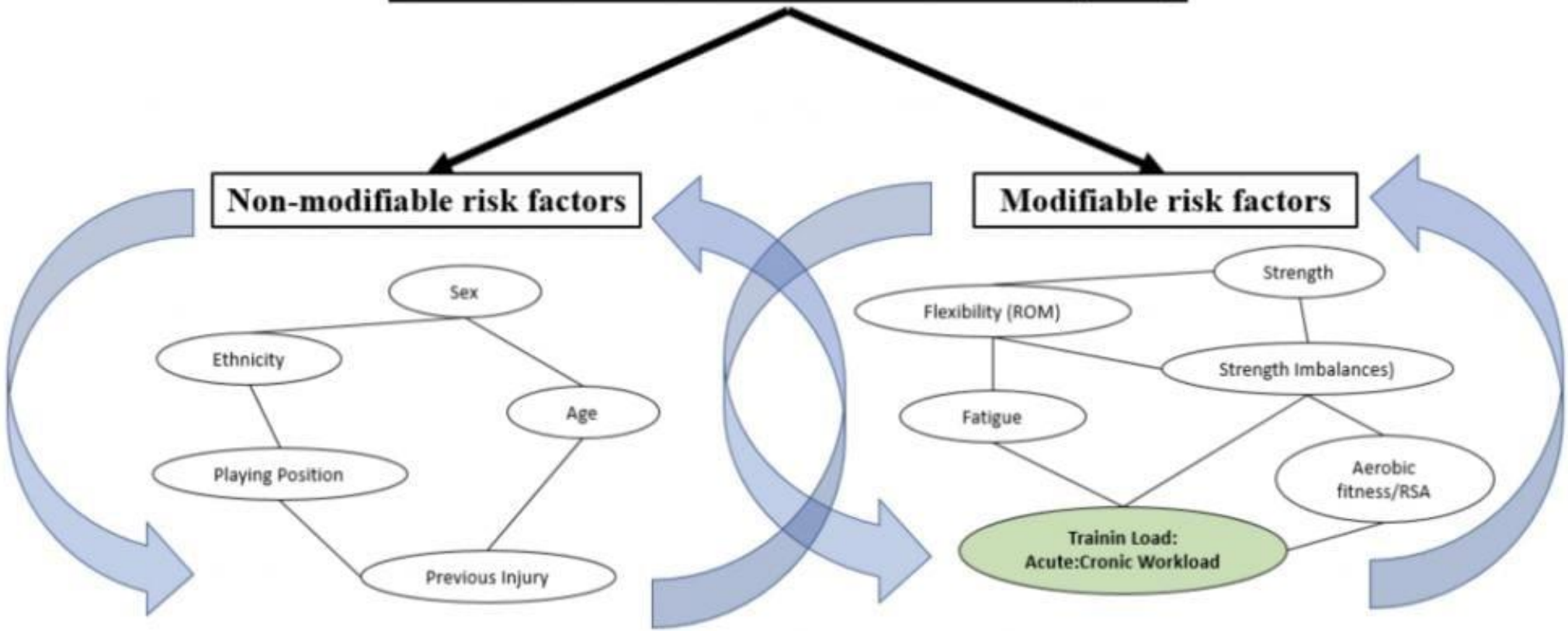
[a] Prevalence rates estimated with a generalized linear mixed-effects model for the age-specific prevalence estimate (binomial outcome) clustering on study and adjusting for the midpoint of each reported age interval of the study.


PSYCHO - SOCIAL
??
Luck
Injury Assessment and Rehab
Structured Injury Prevention Programs
Movement Efficiency
Athletic Development
Load Monitoring
Player Recrutiment / List Management
CULTURE


Stretching
Proprioceptiv träning
Styrketräning
Multi-träning
.1
.25
.5
.75
1
Cluster-adjusted RR

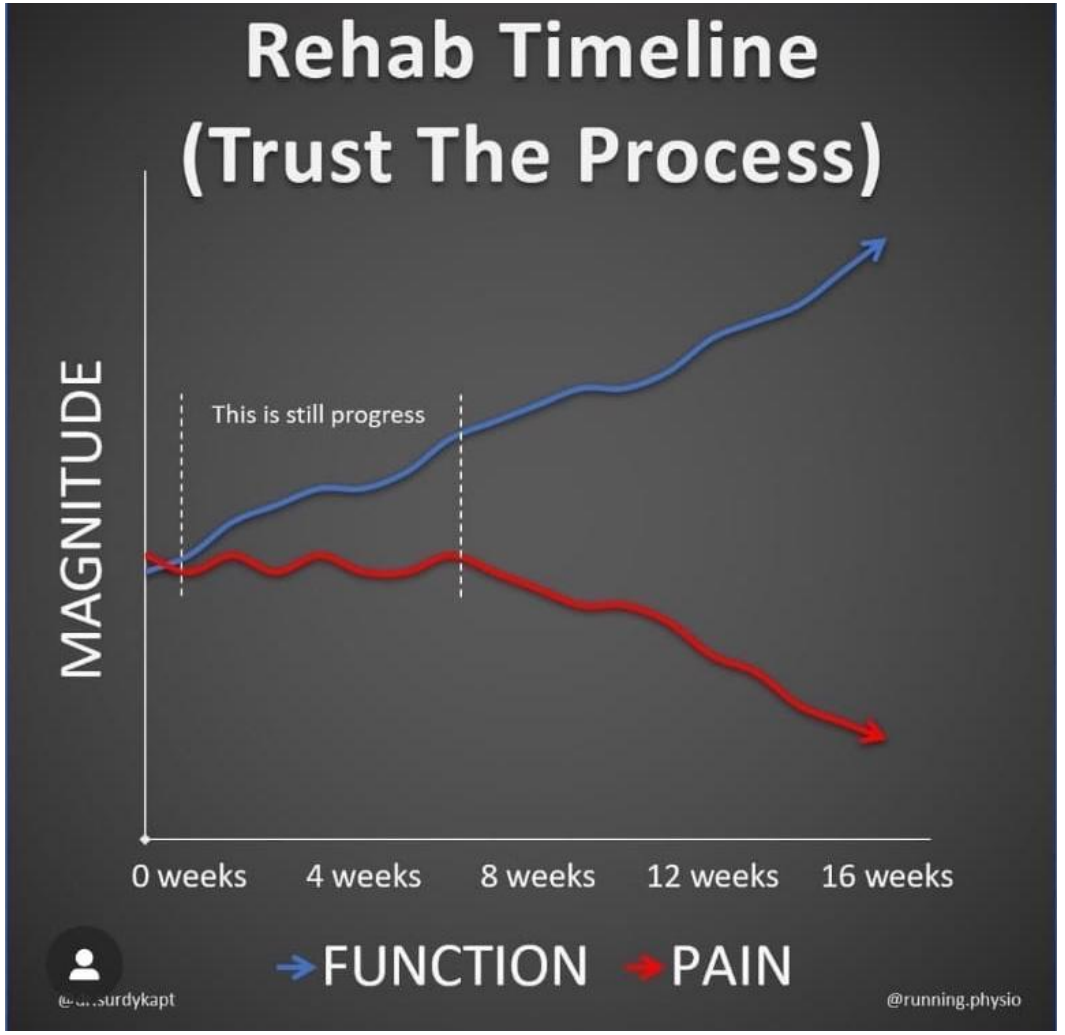

"Ceiling" of Safety
High
Small increases (<10%) in weekly training load may still be too large in an athlete with *high chronic load*.
Chronic Load
"Floor" of Safety
Small increases (<10%) in weekly training load in an athlete with *low chronic load* may delay the return of that athlete to full capacity.
Low

Multifactorial nature of injury



Belastning, Hastighet, tid, ROM

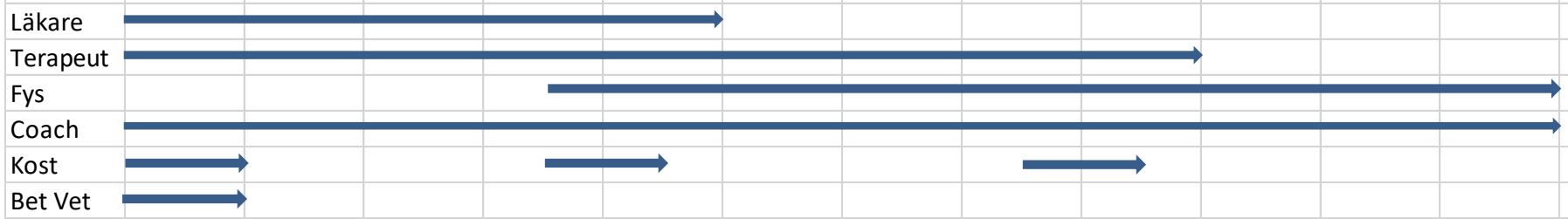
Knäböj
Marklyft (Jefferson)
Utfall
Step up
Press (Axelpress, Bänk)
Drag (Roddrag, Chins)
Springa
Hoppa
Kasta
Klättra



Rehabiliteringsplan

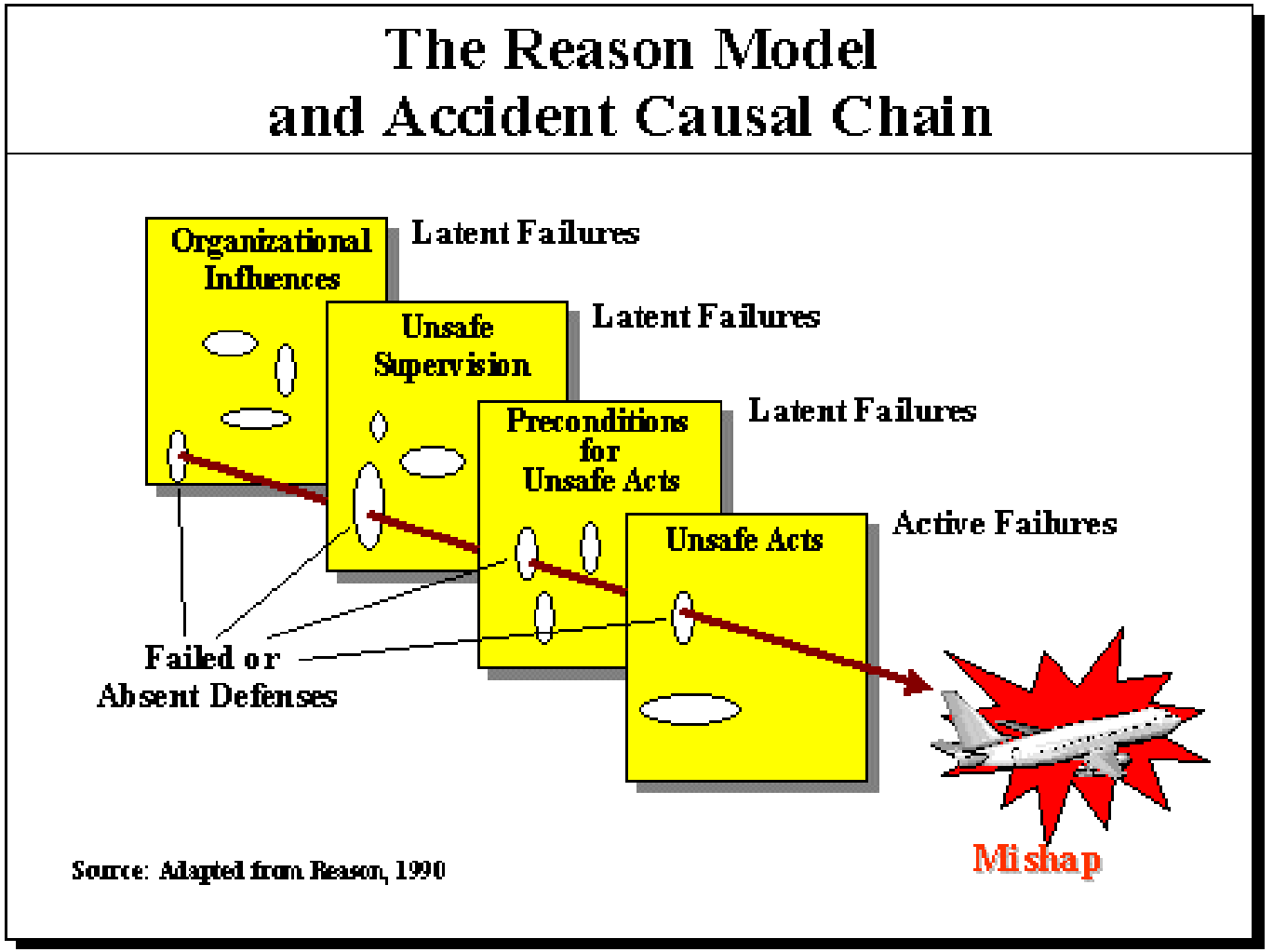
Vävnadsskada (Terapeut) → Nedsatt funktion (terapeut+fys+coach) → Återgång till full träning (coach+fys)

Rehabmöte	**Rehabmöte**	**Träningsplaneringsmöte & fystester**
Idrottare	Idrottare	Coach+fys
Coach	Coach	
Läkare+ansvarig terapeut	Ansvarig terapeut+fys	
Diagnos?	**Progressionsnyckel**	**Progressionsnyckel**
Rehabansvarig?	Läkarundersökning	Förbättrade basfysvärden
Kost: Ändrade energi- och näringskrav?	Röntgen, MR mm	Ingen smärta
	Ingen svullnad	
	Ingen funktionsbegränsande smärta	



Förberedelse	**Styrka 1**	**Styrka 2**	**Styrka 3**	**Styrka 4**	**Tävlingsförberedelse**
Proprioception ↑	Atrofi ↓	Submaximal styrka ↑	Maximal styrka ↑	Plyometrisk styrka ↑	Specifik träning
Rörlighet ↑					
Uthållighet ↑					

Haverikommision



Frågor?