

**Psychological and physical demands in work environment for
leaders in private and public sector stratified by gender.**

**The results from a large Norwegian cross-sectional study
(HUNT 3).**

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HURDALSJØEN HOTELL

Welcome to The Winter Wonderland!



Hurdalsjøen Hotel is located in beautiful surroundings only one hour north of Oslo and 25 minutes from Oslo Airport. It is one of the best conference and resort hotels in Norway and is well known for its great range of outdoor activities for groups, families and individuals.

We are renowned for our hospitality, friendly atmosphere, picturesque location, and for our homemade food based on tasty, local products.

We can offer cross-country skiing in beautiful surroundings right outside the hotel as well as ice fishing in the lake, and it is only 8 kilometers to SkiHurdal for the downhill skiing. Hurdal is known to be the most snow-sure region in eastern Norway.

After a nice day outside we can tempt with our swimming pool, sauna, gym and outdoor Jacuzzi. We also have an outdoor sauna down by the lake. **The hotel offers a great range of activities, even for the well-travelled globetrotter:**

- > Dog sledding
- > Horse-drawn sleigh ride
- > Sledding
- > Kicksledding (did you know that Hurdal is famous for hosting the annual downhill kicksledd World Championship?)
- > Randonnée

For further information go to:

Hotel – www.hurdalsjoen.no

Downhill skiing - skihurdal.com

Cross country skiing - www.hurdalha.no

Organized activities - www.romerikevent.no



Hurdalsjøen Hotell

- 80 employees
- 15 different nationalities
- 8 leaders
- Using the "Scandinavian model"
- Low turnover
- Low sick absence
- High productivity
- Happy employees
- Happy customers

The aim of the project

- In recent years, health promotion leadership has received increasing attention, especially in the Nordic countries.
- However, little is known about the working environment for leaders.
- Extensive data available using Swedish Demand-Control-Support Questionnaire (SDCQ) .

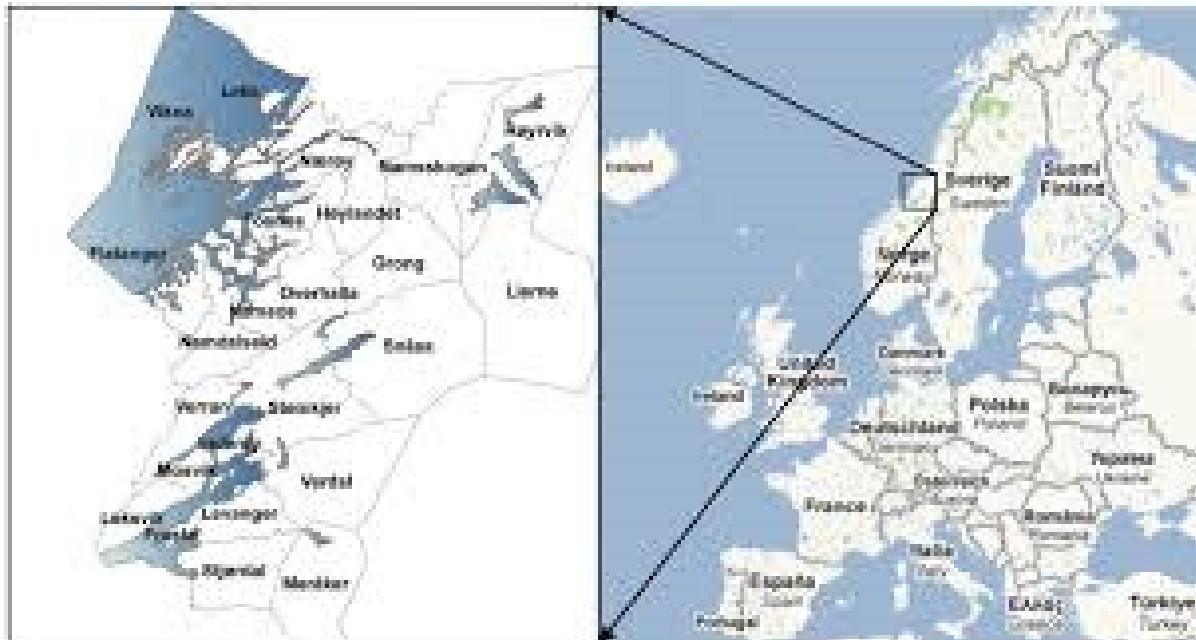
The aim of the project

- The aim - to assess possible differences related to leaders in private vs public sector and gender concerning
 - psychological demands,
 - control and
 - social support



Some background: what is the HUNT study?

- Health Survey in Nord Trøndelag, Norway (HUNT),
- This county (Nord Trøndelag) is a representative county of Norway (Krokstad et al. 2013).
- The HUNT study is one of the largest health surveys not only in Norway, but also worldwide.



Some background (cont) : what is the HUNT study?

- The HUNT surveys are prospective, population-based longitudinal studies from the 1980s to 2008, covering more than 250,000 participants. (HUNT 1 (1984-1986), HUNT 2 (1995-1997) and HUNT 3 (2006-2008).
- Every adult citizen of Nord-Trøndelag County (Norway) 20 years or older was invited to participate in all the surveys (Krokstad et al. 2013).
- The HUNT database comprises information on demographics, selected questionnaires and medical data



Some background: Swedish Demand-Control-Support Questionnaire (SDCQ)

Swedish Demand-Control-Support Questionnaire	
Item	Psychological demands
1	Does your job require you to work very fast?
2	Does your job require you to work very hard?
3	Does your job require a too great work effort?
	Control
4	Does your job require creativity?
5	Do you have the possibility to decide for yourself how to carry out your work?
6	Do you have the possibility to decide for yourself what should be done in your work?
	Social support
7	There is good collegiality at work.
8	My co-workers (colleagues) are there for me (support me).
9	I get along well with my co-workers.



The method

- Data were analysed using ordinal logistic regression
- The results are expressed as OR (odds ratios) – which is easy to interpret for non-statisticians and more intuitive compared to linear regression.
- All models were adjusted for age and gender
- Some analyses were stratified by gender

The data

- We have identified 46843 individuals where information on occupation was available.
- In total we identified 2629 (5.6%) leaders: private (611) and public (760) sector.
- Of identified leaders, there were 836 (61%) males and 535 (39%) females
- median age at inclusion to Hunt 3 was 55.5, range 20.0-93 years.

The data: type of leader classification

Work Title (SSB code)	Private sector N(%)	Public sector N (%)
Topleaders in public administration 1120		32 (4.2)
Administrative directors 1210	113 (18.5)	
Production directors in public administration 1227		377 (49.6)
Production directors in sector for education, health and social services 1228		351 (46.2)
Finance, economy and administration directors 1231	127 (20.8)	
Leaders working in trade sector 1314	371 (60.7)	
Total	611 (100)	760 (100)

The results: Psychological demand

There were no statistically significant differences between

- leaders in private and public sector
- genders.



The results: Psychological demand

	Item 1		Item 2		Item 3	
	OR	95%CI	OR	95%CI	OR	95%CI
Type of leader (ref=public)	0.98	0.77-1.26	1.17	0.92-1.48	0.95	0.75-1.20
Age at inclusion	1.01	1.00-1.03	1.00	0.99-1.02	1.02	1.00-1.03
Gender (ref=males)	1.01	0.78-1.30	1.20	0.94-1.54	1.04	0.82-1.34

The results : Control

- For both sectors, **female** leaders compared to males were 1.3 times more likely to report that they were able to decide for themselves often or sometimes (OR=1.32, p=0.032).
- **Male** leaders in private sector reported significantly more often having a greater possibility to decide for themselves concerning their work than male leaders in public sector.



The results : Control

	Item 4		Item 5		Item 6	
	OR	95%CI	OR	95%CI	OR	95%CI
Type of leader (ref=public)	1.10	0.86-1.40	1.08	0.83-1.41	1.43	1.12-1.83
Age at inclusion	1.01	0.97-1.62	1.01	1.00-1.03	1.00	0.99-1.02
Gender (ref=males)	1.25	0.97-1.62	1.29	0.98-1.70	1.32	1.02-1.71

The results : social support

	Item 7		Item 8		Item 9	
	OR	95%CI	OR	95%CI	OR	95%CI
Type of leader (ref=public)	1.09	0.85-1.39	0.87	0.68-1.12	0.84	0.65-1.08
Age at inclusion	1.01	1.00-1.03	1.00	0.99-1.02	1.01	0.99-1.03
Gender (ref=males)	0.69	0.54-0.89	0.52	0.40-0.68	0.67	0.52-0.88

Conclusions

- Our data did not revealed any differences between leaders in private and public sector concerning psychological demands.
- **Male leaders** in private sector reported a greater possibility to make decisions
- **Male leaders** in both sectors reporter a greater level of social support compared to female leaders.
- Surprisingly, **female leaders** in both sector reported a greater possibility to make decisions compared to males.

Big thanks to

- My supervisors:
 - Siw Tone Innstrand - Geir Arild Espnes
- My colleagues:
 - Frode Lysberg - Milada Cvancarova Småstuen
- The HUNT administration



Enjoy summer adventures!

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We are renowned for our hospitality, friendly atmosphere, and for our homemade food based on tasty, local products. At Hurdalsjøen Hotel you can relax and take in the scenery.

Here are some of the activities you can enjoy during a stay with us:

- › Swimming in the lake or in the hotel swimming pool
- › Hiking in the forest or to the top of the highest hill nearby
- › Outdoor sauna by the lake
- › Jacuzzi
- › Kickbikes. The wheels provide a good grip and riding comfort on dirt roads – even on gravel.
- › Canoeing on the river north of the lake
- › Kayaking on the lake
- › Sailing

Welcome to a memorable stay with us!



Thank you for your attention

and

you are welcome to stay with us next time you are in Oslo.