



Senter for helsefremmende
forskning HiST/NTNU

Fra forskning til praksis

ARK Erfarings- og læringskonferanse
Hell 15. og 16.06.2015

Siw Tone Innstrand, PhD



Status ARK

- 18 organisasjoner
- 12.000 respondenter
- Oversatt til Nederlands (Wageningen University & Research Centre)
- NTNU andre kartlegging (2014) – longitudinelle data
- Positiv respons – stort engasjement



Eks. Promosjon stunts

- Medisinske fakultet, NTNU
- <https://www.youtube.com/watch?v=ilcJ4o0ohQA>
- En slags informasjonsfilm om arbeidsmiljø- og klimaundersøkelsen ved Naturhistorisk museum våren 2015, laget av personal/HR- og HMS-gruppa ved museet
<https://www.youtube.com/watch?v=p84Pt4IkIRQ&feature=youtu.be>



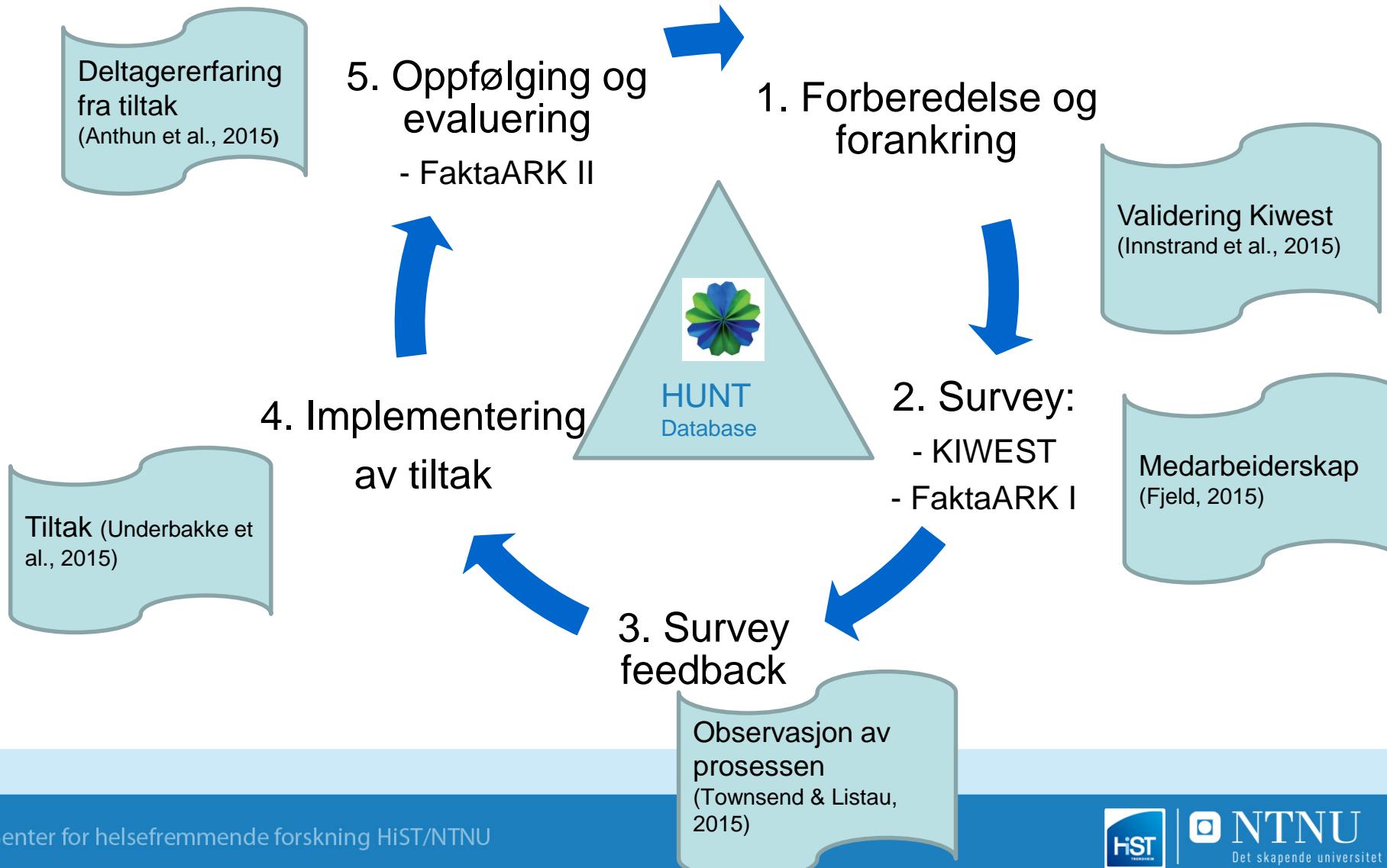
Aktiviteter

- To praksis studenter (Martine & Katrine) observasjon av prosessen relatert til ARK intervensions program
- En PhD-stilling utlyst (finansiert av NTNU)
- En forsknings assistent ferdig (Eyvind Helland)- empowering leadership
- Midler til to nye forsknings assistenter – validering, nye mål? (jobbusikkerhet)
- Master- og doktorgradsoppgaver
- Symposium og oral presentasjoner ved EAWOP – Oslo 20-23 Mai





ARK prosessen: Fra forskning til praksis





Publikasjoner

RAPPORT
RAPPORTSERIE FRA
SENTER FOR HELSEFREMMENDE FORSKNING
HIST/NTNU
RAPPORT 2014/04

Udebakke, KG, Innstrand ST, Anthun KS, Christensen M.

ARK
Arbeidsmiljø- og klimaundersøkelser
Hjem - Hva - Hvordan

Trondheim, september 2014

Kunnskapen du trenger
 NTNU **Kunnskap for en bedre verden**

RAPPORT
SERIES OF REPORTS FROM
THE CENTRE FOR HEALTH PROMOTION RESEARCH
HIST/NTNU
REPORT 2015/01

Udebakke KG, Innstrand ST, Anthun KS, Christensen M.

ARK
The ARK Intervention Programme

Who – What – How

Trondheim, January 2015

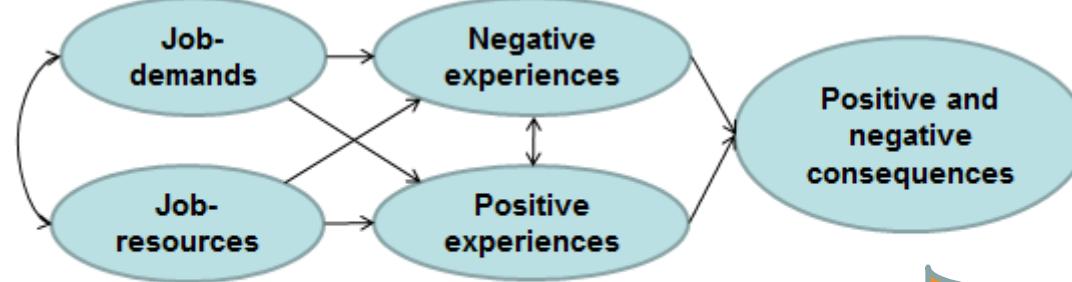
Kunnskapen du trenger
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JD-R modellen

Motivasjon til å stå i jobb; aldersgrupper
(Innstrand et al. 2015)

Arbeidsnarkomani i akademia
(Lysfjord, 2015)



Developed from the Job Demands-Resources model (JD-R)
Bakker & Demerouti 2006

Happy productive workers (Christensen, et al 2015).

Empowering leadership
(Helland et al 2015)



Motivasjon for å stå i jobb

- Jobb krav og ressurser betydning for mening og tilknytning til jobben
- 3 alders grupper: unge(\leftarrow 30 år), middelaldrende (30-49 år) og eldre arbeidstakere (50 år \rightarrow)

Resultat:

- ANOVA: de eldste rapporterte mest mening og tilknytning
- Multippel regresjon: både krav og ressurser betydning for mening og tilknytning, men hva som er viktigst varierer på tvers av gruppene:

Unge:

- Rollekrev, wfc \rightarrow mening,
- Sosialstøtte medarb. \rightarrow tilknytning

Middelaldrende og eldre:

- Jobb autonomi \rightarrow mening
- Anerkjennelse \rightarrow tilknytning



Publikasjoner

- **Innstrand, ST., Christensen, M., Undebakke, KG., & Svarva, K. (2015).** The presentation and preliminary validation of KIWEST using a large sample of Norwegian university staff. *Scandinavian Journal of Public Health*. Minor revision
- **Helland, E., Christensen, M., & Innstrand, S. T. (2015).** The power of empowering leadership: The relationship between empowering leadership and work engagement and its mediators. *Journal of Occupational Health Psychology*. Submitted
- **Undebakke, KG., Innstrand, ST., Anthun, KS., & Christensen, M. (2014).** ARK. The ARK intervention Programme. Who-What-How. Series of reports from The center for health promotion research Hist/NTNU. Report 2015/01
- **Undebakke, KG., Innstrand, ST., Anthun, KS., & Christensen, M. (2014).** ARK. Arbeidsmiljø- og klima undersøkelser, Hvem – Hva – Hvordan. *Rapportserie fra Senter for helsefremmende forskning HiST/NTNU*, Rapport 2014/04
- **Christensen, M., Dyrstad, J.M. & Innstrand S.T (2015).** Happy productive workers in knowledge intensive organizations. In preparation
- **Innstrand, S.T., & Anthun, K.S.** (preperation). Motivation to stay in work. The predictive value of job demands and resources on Meaning of work and Organizational commitment across different age groups
- **Anthun, K.S., Innstrand S.T., & Undebakke K.** (preparation): "Participants' experiences from a workplace Health promotion intervention"
- **Undebakke, K., & Anthun K.S.** (preparation): "Helsefremmende tiltak utviklet av arbeidstakere i universitetssektoren" - under skriving og tittel kun tentativ (Undebakke og Anthun)
- **Anthun, K. S.** (preparation): "The Meaning of Co-workership among academics in Norway»
- **Fjeld, A. (2015).** Co-workership in institutions for higher education: A qualitative comparative study of Norwegian and Hawaiian knowledge workers. Masteroppgave i arbeid og organisasjons psykologi, NTNU
- **Lysfjord, L.I. (2015).** Arbeidsnarkomani i akademia - En kvantitativ studie av arbeidsmiljø, arbeidsnarkomani og jobb-familiekonflikt blant norske akademikere, Masteroppgave Høgskolen i Buskerud og Vestfold, Fakultet for helsevitenskap



Snapshot ARK:

- ARK prosessen:
 - Kirsti Undebakke: Tiltak
 - Martine Townsend og Katrine Listau: Observasjon
ARK prosessen
- JDR modellen:
 - Eyvind Helland: Myndiggjørende ledelse
 - Linda Iren Lysfjord: Arbeidsnarkomani i akademia
 - Marit Christensen: Produktivitet





Table 2. Predicting job demands and job resources on meaning and commitment across different age groups.

Step	<30 year				30-49 year				50 years →			
	Meaning		Commitment		Meaning		Commitment		Meaning		Commitment	
	Beta ^a	ΔR ²	Beta	ΔR ²								
1. Control variables												
Sex	-.06		.03		-.04		-.04		-.03		.01	
Job category	-.07		-.07		-.08**		-.06*		-.06*		-.05	
Terms of empl.	.02	.01	-.04	.00	-.00	.01**	-.04	.00	.02	.01	-.05	.01
2. Demands												
Role overload	.23***		.03		.18***		.08***		.16***		.05	
Competency demands	.10*		.08		.16***		.11***		.13***		.08**	
WHC	-.23***	.17***	-.11*	.13***	-.17***	.18***	-.17***	.19***	-.07*	.11***	-.08**	.11***
3. Resources												
Social support co-workers	.10		.30***		.09***		.19***		.05		.14***	
Emp. leadership	.20***		.14**		.10***		.08**		.03		.08*	
Recognition	.10		.20***		.17***		.33***		.26***		.38***	
Job autonomy	.20***	.15***	.10*	.25***	.29***	.19***	.14***	.28***	.33***	.27***	.16***	.31***
<i>R</i> ² =.31		<i>R</i> ² =.36		<i>R</i> ² =.37		<i>R</i> ² =.46		<i>R</i> ² =.37		<i>R</i> ² =.42		

Note: ^aThe (standardised) beta values are the coefficients from the finale stage of the analysis. $\Delta R^2 = R^2$ change; represents the incremental proportion of variance accounted by the set of variables entered at that step. R^2 = adjusted R Square. Terms of empl; Terms of employment, WHC; Work-home conflict, Emp. Leadership; empowering leadership.

p* < .05. *p* < .01. ****p* < .001 .



KIWEST

(Knowledge Intensive Work Environment Survey Target)

- KIWEST is developed in close collaboration with practitioners, researchers, and end users
- 30 different scales of psychosocial work environment;
 - **Job resources** related to interpersonal relations and leadership (i.e., *inclusiveness, mutual trust between employees, empowering leadership*)
 - **Job resources** related to the organization and job content (i.e., *job autonomy, goal clarity, task completion clarity*)
 - **Job demands** (i.e., *interpersonal conflicts, role overload, competency demands*)
 - **Motivational and health-related outcomes** associated to these demands and resources (i.e. *engagement, commitment, work-home conflict*).



Validation

Both validity and reliability of the measurement model were tested. Confirmatory Factor Analysis (CFA) . AMOS 18 (N= 3066).

Each item was specified to load onto a single factor representing its intended underlying construct.

Results

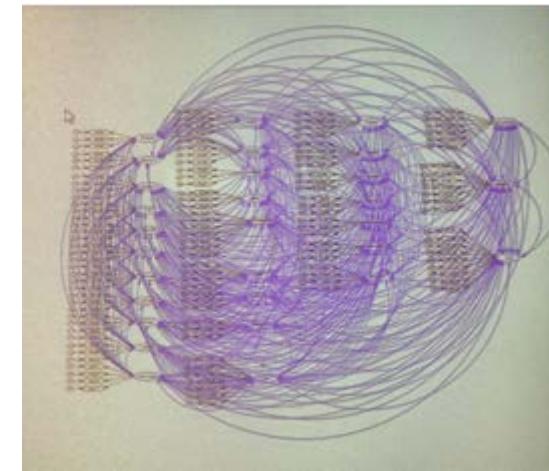
The evidence provides initial support for the **convergent validity** of the KIWEST measure, with significant factor loadings and acceptable AVE (average variance extracted) estimates in most of the scales.

The **construct reliability** estimates all exceeded .7, suggesting adequate internal consistency.

The absolute fit measure (RMSEA) suggests **excellent fit** of the model. However, the Incremental fit indices (CFI and NFI) are somewhat low: (χ^2 (6704) =32235.1, $p < 0.000$, RMSEA = 0.038, CFI / NFI = 0.886 / 0.860).

The **discriminant validity** test indicating that some of the factors overlap. The factors which overlap the most were *social climate*, *innovative climate*, *justice*, *procedural justice* and *trust regarding management*.

Innstrand, ST., Christensen, M., Undebakke, KG., & Svarva, K. (2015). The presentation and preliminary validation of KIWEST using a large sample of Norwegian university staff. *Scandinavian Journal of Public Health*. Submitted



The «Monster model»



ARK fremover

- Gjennomført i 18 universitet og høyskoler– nasjonale sammenligninger , longitudinelle data
- Oversatt til Nederlands – internasjonale sammenligninger
- Test anvendbarhet i andre sektorer, andre land?
- Nye skalaer?
 - Co-workership (masteroppgave kvalitativt studie av Anette Fjeld, data samlet inn av bachelor studenter psykologi)
 - Job insecurity

For mer informasjon:

Hjemmeside: <http://www.ntnu.no/ark>

ARK Facebook gruppe

Kontakt: ark-kontakt@ntnu.no