Safe in the outdoors

 risk and safety related to outdoor education and recreation in the coastnear regions of Denmark

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Actuality 1

- Tragic accident in Præstø, febr. 11, 2011
- 13 young people (15 –
 16) at an "efterskole" and their two teachers
- Capsize, hypothermia, dead (teacher) and braindamage



Background

- A lack of research within risk and safety related to friluftsliv in Denmark.
- Accidents registered by different organizations but not subject to further analysis.
- General understandings and practices connected to risk and safety in the outdoors based on tradition, prejudices and common sense rather than on evidence.
- The general development in *friluftsliv* in Denmark taken into account, further studies are needed.

Vision

- Better understanding of risk and safety in the outdoors
- Improve practices and strategies according to safety
- Increase peoples participation
- Health perspective
 - (Ulrich 1984, Grahn 1996, Kapland & Kapland 2004, Hansen 2005)



The project – part 1 and 2

- The project "TRYG i naturen" ("Safe in the Outdoors") aims to identify patterns of accidents, including near-misses, within three areas of friluftsliv in the coastal regions
 - Seakayaking
 - Surfing
 - Smallboat fishing
- In order to identify and discuss the significance of
 - Perception of risk and safety
 - Organization, education and certification
 - Procedures, i-e. use of safety-gear etc.

Methods and design

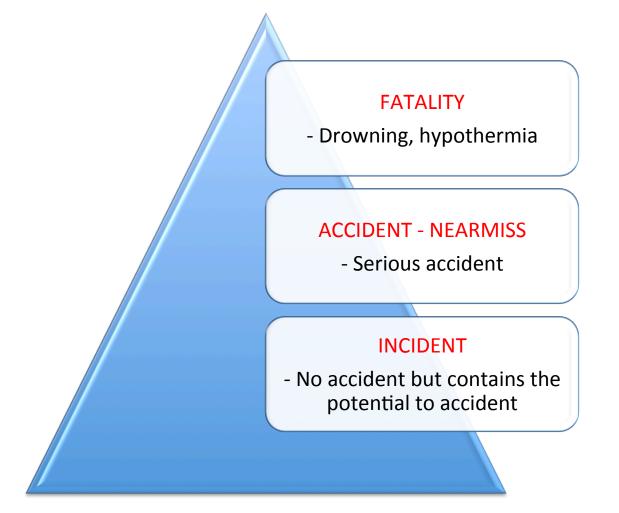
- Document-study (registration, documents and statistics
- Case-studies with use of survey and qualitative interviews
- Comparative international perspective

Different cultures related to friluftsliv in the coastnear regions

- Values, motives and attractions
- Socioeconomics, age etc.
- Ways of organizing activity
- Socialisation and education
- Gear and "lifestyle"
- Understanding of risk and safety – and practical riskmanagement



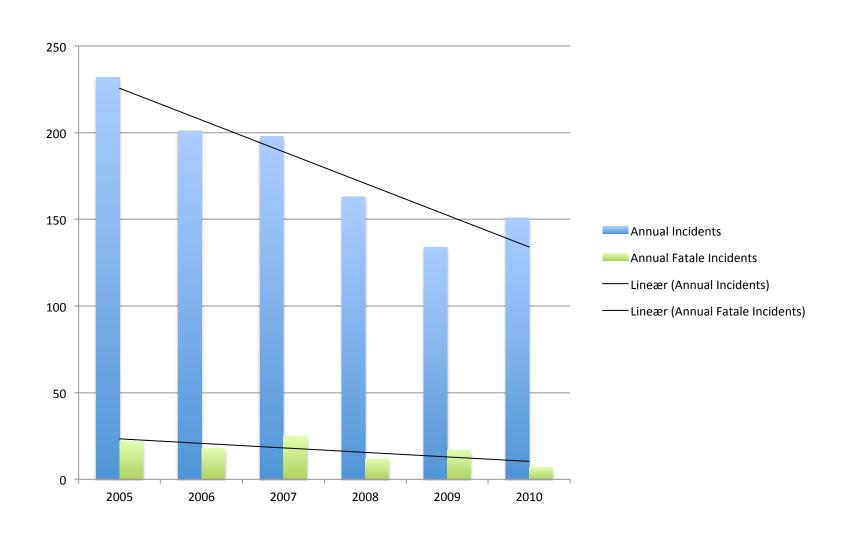
Different cathegories of incidents and accidents (based on Bird & Germaine 1989, Davidson 2004)



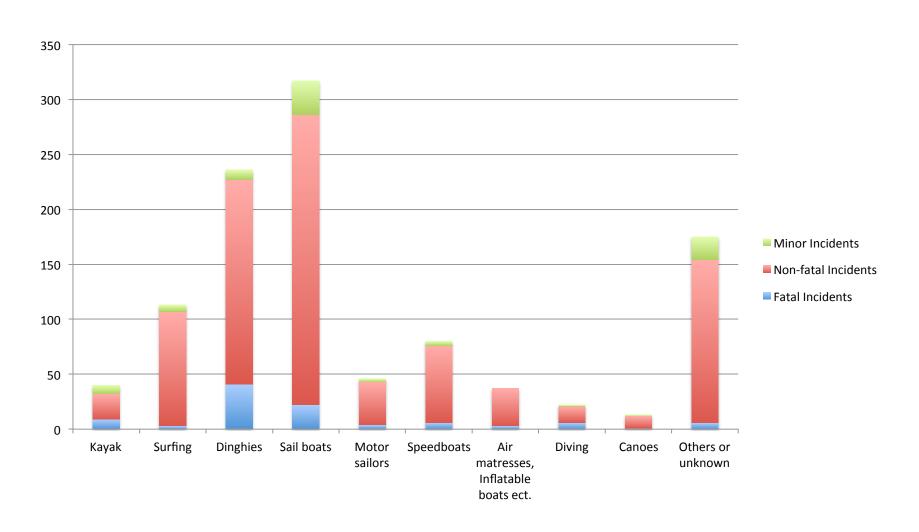
Results part 1

- Decline in number of incidents. Less significant decline in number of accidents
- Results from the study indicate that the development in accidents does not follow the general development in outdoor recreation and education - friluftsliv.
- Patterns of accidents seem to be rater complex, involving socio-economic standards and seem to be closely related to the culture of outdoor recreation and education - friluftsliv.

Development in the annual number of fatal and non-fatal incidents for all vessels in the period 2005-2010



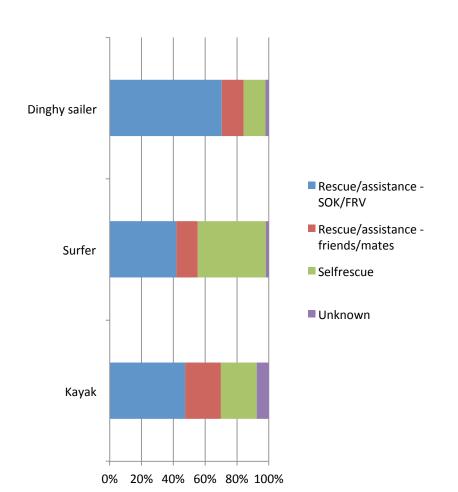
Total number of fatal, non-fatal and minor incidents by type of vessel - 2005-2010.



Fatal accidents 2005 – 2010 Coast-near friluftsliv in Denmark

- App. 20 % from other countries
- Men in 99% of all registered fatal accidents
- 61% of the victims were over the age of 50
- In 45 out of 82 fatal accidents the victims did not use PFD
- In 22 out of 82 fatal accidents the victims under the influence of drink

Rescues - activities



- Smallboat fishermen more frequently being rescued from authorities
- Kitesurfers more frequently selfrescued
- Seakayakers more frequently rescued by friends and mates

Methodological challenges

- Poor data from existing reports no incident database
- Unsecure countings of total numbers of participants and patterns of activity (fielddays, hours etc.)
- Different development in participation in the different activities within the period. Estimates:
 - Smallboat fishing + 5%
 - Seakayaking + 23%
 - Kitesurfing ?

Conclusions

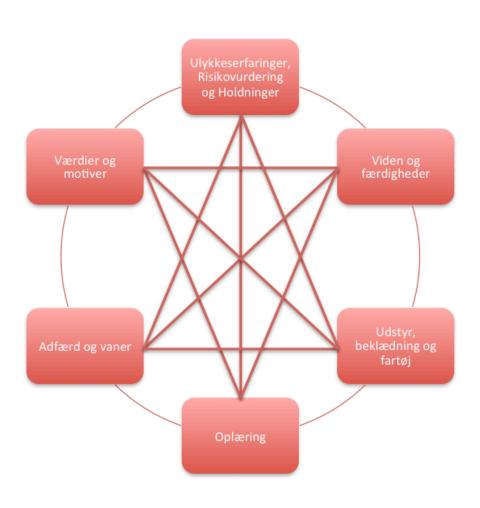
- Relatively few incidents in the chosen activities (esp. seakayak and kitesurfing)
- Small number of accidents (but big media attention)
- Many false alarms
- Many incidents and near-misses involving sailand smallboats
- Differences in the patterns of accidents/incidents between the chosen activities/cultures
- Differences in the rescue pattern

Results part 2

- The three selected activities of friluftsliv seakayaking, kitesurfing and smallboat sailing
 are different in a number of ways, i.e. age,
 gender, education, socioeconomic status.
- Results from survey and interviews show that the three groups seem to have different consciousness, focus and behavior related to risk and safety (different safety profile)

	Smallboat fishermen	Seakayakers	Kitesurfers
	"We simply dont dare falling out – cause we never get up again!"	"but as I see it - it is extremely safe!"	"So if something goes wrong, it happens so quick that You cant do anything out-there!"
Education	Apprenticeship – unformal. Practical skills and experience.	Courses in safety from club or comm. operator.	Different ways. Use of internet and YouTube
Safety procedures (equipment)	PFD is often not used (tradition)	Big focus on safety equipment.	Do not use PFD Some use helmet
Safety procedures (social)	Often alone	Often in a group Buddy rescue	Surfing together on a spot Taking care of each other
Safety procedures (selfrescue)	Very problematic technical and physical problems	Often master more methods (backup)	A question of getting out of the system (not about capsizing)
Risk relation	A real risk – cold and windy conditions. Knows how to manage – but they dont!	Generally experience of safety. Risk and safety can be controlled	Kitesurfing is risky – big consequences Risk can be controlled by technique and organising

The safety culture



Three levels of safety related to different cultures of friluftsliv

Management of accident

Management of incident

Normal procedures

Discussion

- Transport vs. Activity
- Being prepared for accident/incident physically, technical and mentally
- Tiger-effect ("This is risky I have to be careful!")
- The "Safety culture" weak elements?
- How to change habits and procedures which are part of tradition (i.e. use of PFD)
- Responsibility participant, organisation, state and authorities?

Levels of riskmanagement

Statsligt niveau lovgivning

- Offentligt og lovgivende myndighed
- •Regler og love for friluftsliv, godkendelse, forbud, m.m.

Organisationsniveau

- Interesseorganisationer
- •Information, uddannelse, certificering, database

Institutions niveau

- •Den enkelte organisation, institution eller firma
- •Ansættelse, procedurer, support, udstyr, database m.m.

Instruktør-/ aktør-niveau

- Den enkelte instruktør/underviser/guide eller aktør
- •Planlægning samt vurderinger, beslutninger og handlinger i situationen

Inspiration from NZ and Australia

- The "industry" many organisations
- Demand on courses and certificates
- Special license to operate in nationalparks
- Riskmanagement plan
- National Incident Database (NID)
- Safety Audit

Conclusions

- The study points out that safety related to friluftsliv in the coastal regions can not be related to or reduced to one single factor – but rather has to be understood as a complex pattern.
- The study points out the importance of taking a holistic or cultural approach to risk-management involving a deeper understanding of the traditions, the context and the taken for granted thinking and behaving related to a specific culture.
- The study discusses principles from riskmanagement in other countries and gives suggestions for improving safety strategies

Actuality 2

- Discussion about responsibility, education, certification
- Trial (leader of school)
- Danish Maritime
 Authority new
 regulations





Thank You for listening!

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Workshop – discussion!

I suggest we take this as a starting point and that we discuss different ways of dealing with risk and safety in the outdoors in our different countries:

- The importance of risk and challenge in the outdoors i.e. related to young peoples motivation
- Pedagogic ways of dealing with risk and safety how does risk/safety affect our didactic and pedagogic approach?
- Education, certification and riskmanagement as systems from organisations and institutions (the state?) to improve safety in the outdoors

These are large questions and we only have one workshop!

 I suggest that we all reflect on the suggested themes and try to prepare for a discussion on the role/meaning of risk/safety in outdoor activities (friluftsliv) in our home countries.

Questions

- Does OE (friluftsliv) has to involve real risk?
- How can (and do) we work pedagogically to make OE (friluftsliv) more safe?
- Who is responsible and what should be done?
 - The instructor, teacher, vejleder?
 - The institution, school or compagny?
 - The organisation
 - The state or government