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## BETTER USE OF SPORTS FACILITIES DURING DAYTIME

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### Abstract

#### BETTER USE OF SPORTS FACILITIES DURING DAYTIME

##### BACKGROUND

Optimal use of sports facilities has been put on the agenda and is widely debated in Denmark. Sports facilities are funded almost exclusively by municipalities and provided for a minor fee or for free to sports clubs and schools.

The demand for sports facilities during daytime is more intense than ever due to changes in recent years:

1. Historically sports facilities have mostly been for and used by children. However, adults and elderly have become more and are increasingly interested in being active during daytime (8am-3pm) (Toft, 2013).
2. A major public school reform is being implemented in public schools in Denmark. A part of the reform is to expand the level of physical activity to at least 45 minutes of physical activity every day.
3. The economic crisis has put municipalities on strict budget restrictions and they focus on optimizing use of existing facilities rather than building new ones.

Different research and reports have shown that there is excess capacity especially during daytime (i.e. Høyer-Kruse and Forsberg, 2013). This abstract will elaborate our knowledge of whether the demand for more time slots can be met by a more efficient use of existing facilities or whether it might be necessary to build new facilities to meet demand.

##### DATA AND METHODOLOGY

The use of facilities during daytime is collected by observation of activities during two weeks across 2 municipalities and 15 sports halls.

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The dataset consists of information on whether halls are used or not; the amount of playing field used; and number of participants (Iversen, 2012).

## RESEARCH QUESTIONS

At present schools in many municipalities have an exclusive right to use sport facilities from early morning until the middle of the afternoon (typically 8am – 3pm) and schools have so far not been meet by requirements as to prove that they actually use the facility.

We want to address three research questions:

1. Firstly, we want to investigate whether the booked/capacity between 8am and 3pm (day time) is higher or lower than the amount of booked/capacity ratio for VSOs between 3pm and 8pm (peak time).
2. Secondly, we want to investigate whether the timeslots booked are actually used. We compare used/booked ratio during day time with peak time as this gives an indication of whether the space assigned is used
3. Finally, we want to assess the level of any differences in excess capacity and we therefore analyze the used/capacity ratio.

## RESULTS

There is almost no difference in Municipality 1 between booked/capacity ratios during daytime and peak time. However, the booked/capacity ratio is higher in Municipality 1 than in Municipality 2. In Municipality 2 the booked/capacity ratio is 18 percentage points lower during daytime indicating that fewer timeslots is actually assigned to schools than in Municipality 1. Hence, the sport halls in Municipality 2 seem to be busier during peak hours than during daytime.

The used/booked ratio results shows a substantial difference in how well booked time are used are substantial. In both municipalities the use of booked timeslots is much lower during daytime. As it is mainly schools, which use timeslots during daytime, this finding indicates that schools do not use the timeslots assigned to them.

Finally, we look at the overall use (the used/capacity ratio) to assess how much the sport facility is used in general. The main finding here is that particularly during daytime in municipality 2 there is ample space for increasing the use of the sport hall as only 34% of the total capacity is used. Also, excess capacity exists in municipality 1.

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## CONCLUSION

In conclusion the results show a clear segregation between daytime use by schools and primetime use by VSOs. As we have shown especially the used/capacity ratio indicates that it seems possible during daytime to optimize management. Even though the booked/capacity in some instances is lower during daytime than during primetime, what seems to be the most relevant ratio to attempt to increase is the used/capacity aim during both daytime and prime time for managing sport facilities efficiently. Hence, before building more sport facilities attempts at increasing the actual use of sport facilities should be made.

## References

Iversen, Evald (2012), "Public steering of privately owned non-profit sport facilities", University of Southern Denmark  
Høyer-Kruse, Jens and Peter Forsberg, "Report on capacity use in Municipality of Rudersdal", Danish Institute for Sport Studies  
Toft, Ditte (2013), "Report on trends in Senior Sport", Danish Institute for Sport Studies