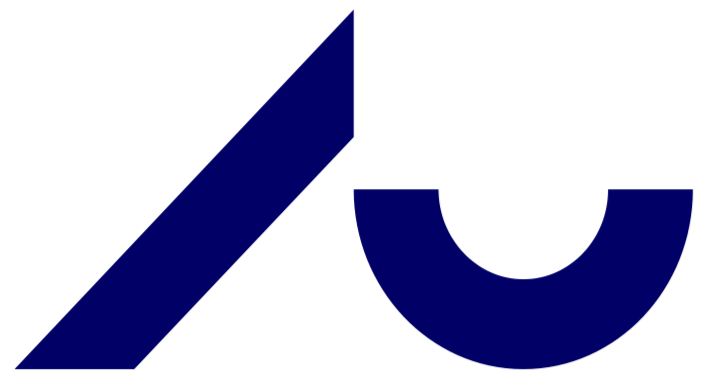


Genetic variation in choice consistency for cows accessing automatic milking units

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Issues and questions

Many dairy herds have groups of cows sharing two milking boxes

- Do some cows have a favourite milking box?
- Is consistency repeatable over longer time periods?
- How heritable is *choice consistency*?



Cohort study

5 herds, 1231 cows

713.772 milkings

Lactations 1-4, 5-305 DIM, divided into segments of 15 days

Choice Consistency Score

Percent of milkings without change of box within any 15 day segment

Analysis

Repeatability Animal model (DMU)

Results

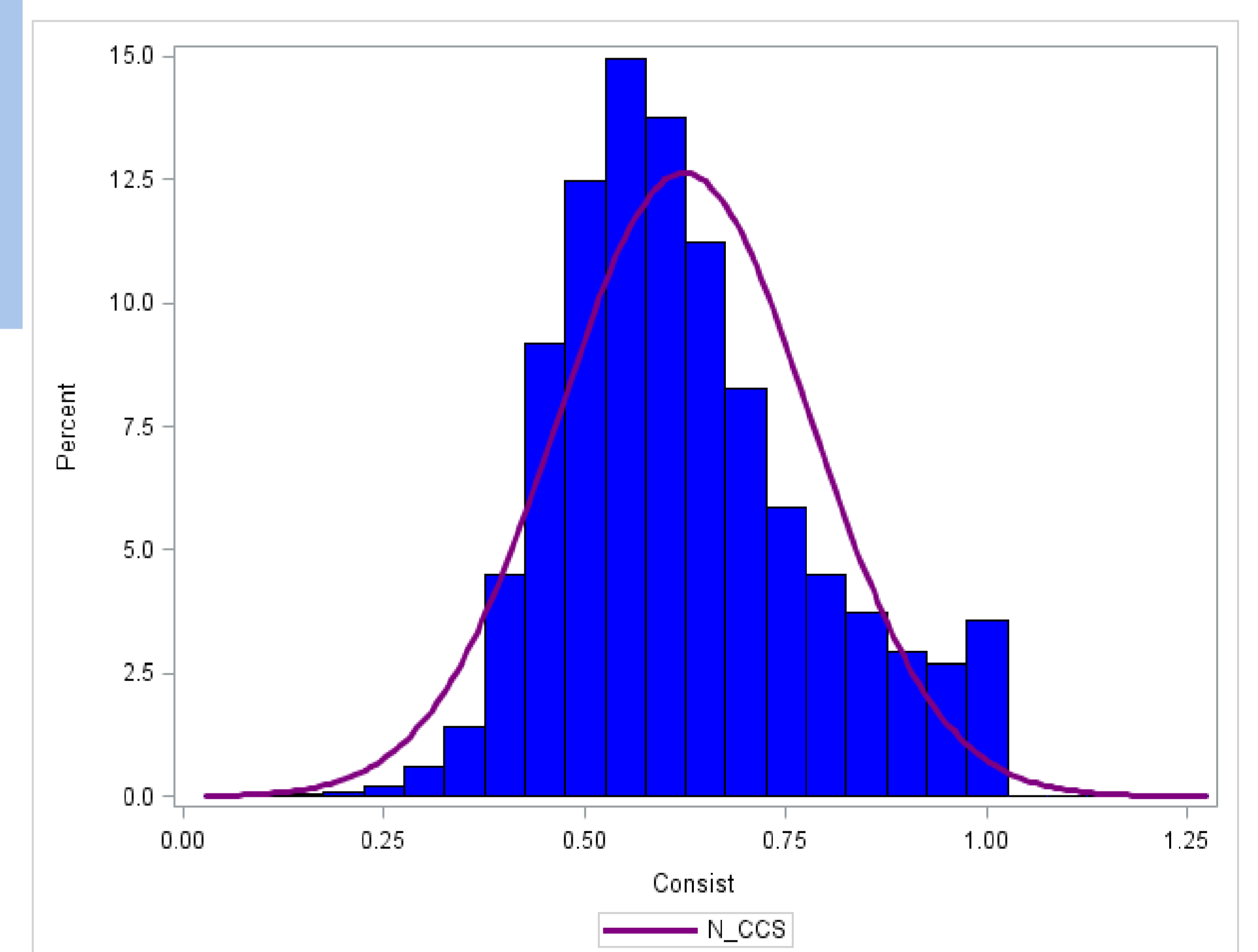
Cows choose consistently – some more than others

Choice consistency is repeatable within lactation

Heritable effects are relatively small

Results	DIM-part	5-50	51-110	111-215	216-305
Cows, N	N	873	883	990	854
Segment records	n	2449	3225	5756	4247
Choice_consistency	Score mean	0.66	0.63	0.61	0.61
Repeatability,	<i>t se 0.02</i>	0.53	0.56	0.53	0.51
Heritability,	<i>h² se 0.05</i>	0.05	0.07	0.07	0.02

Distribution of consistency scores



Conclusion

Choice consistency cannot be ignored – but the heritable part of variation is small

Discussion

Is the permanent individual part indicating a learnt behaviour ?

Does choice consistency relate to other milking traits ?