









Is there hope beyond fear? Effects of social rehabilitation on unsocialized stray dogs

By Miriam Casaca | mirca489@student.liu.se Supervisors: Per Jensen, Anna Olsson, Ana Catarina Vieira de Castro

<u>Aim</u>: To determine if, with the implementation of rehabilitation and training protocols, unsocialized stray dogs can develop the skills needed to successfully interact with humans

Background

Depending on their origin, whether abandoned by their owners or born in the streets, stray dogs have different levels of fear/tolerance towards humans. Previous studies suggest that, with training, some stray dogs can adapt to a human home environment despite an initial state of shyness and fear. However, to date, no one assessed whether the same rehabilitation is possible with highly unsocialized stray dogs.

Strays: Oscar & Jack



★ x18 ➡ 3 Groups ▲ n=6 (★ x3 ★ x3) **Socialized Shelter Dogs** Sociability Test (ST) & Leash Test (LT): Control Group 1 (C1) **Overall Control** - Familiar Person: the person who performed the training Control Group 2 (C2) - Unfamiliar Person: one of the study's Social Rehabilitation supervisors & Leash Training Stray Group (S) Protocols 🔶 ST X3 Time Points - ST1 | ST2 | ST3 **Unsocialized Stray Dogs** Score(min-max): 0-26 LT X2 Time Points – LT1 | LT2 Based on systematic desensitization, counterconditioning Score(min-max): 0-6 and positive reinforcement of desired behaviours

Results

Sociability with Humans :

Intergroup Comparisons:

• C1 and C2 showed higher sociability scores than S for ST1, ST2 and ST3, for both the familiar and unfamiliar

Behaviour on Leash:

Intergroup Comparisons:

• C1 and C2 showed higher leash behaviour scores than S for LT1 and LT2, for both the familiar and unfamiliar

Body Posture during Social Rehabilitation and Leash Training:

- Fearful: decreased from T1 to T20-T40
- Neutral: increased from T1 to T20-T40
- Friendly/relaxed: increased from T1 to T40

Animals & Methods

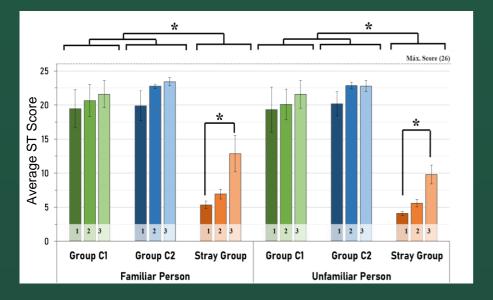
person.

Intragroup Comparisons:

· S showed an increase in the sociability score from ST1 to ST3, for both the familiar and unfamiliar person.

Familiar Person vs Unfamiliar Person:

• No significant differences were found for neither time point nor group.



Average sociability score at time points 1 (ST1), 2 (ST2) and 3 (ST3). Results are presented for C1, C2 and S, for the familiar and unfamiliar person. *p < 0.05; Vertical bars show the SEM.

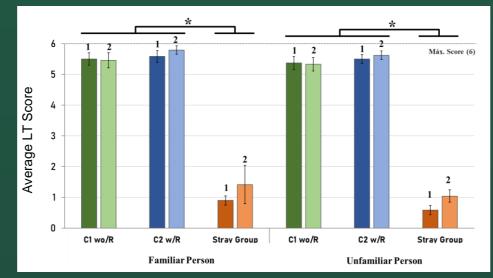
person.

Intragroup Comparisons :

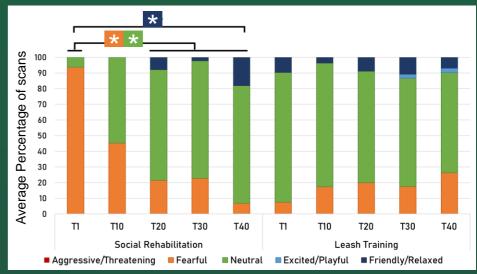
• No significance differences were found between LT1 and LT2 for C1, C2 and S, for neither the familiar nor the unfamiliar person.

Familiar Person vs Unfamiliar Person:

• No significant differences were found for neither time point nor group.



Average leash behaviour score at time points 1 (LT1) and 2 (LT2). Results are presented for C1, C2 and S, for the familiar and unfamiliar person. *p < 0.05; Vertical bars show the SEM.



Average percentage of scans in the different body postures during the daily 10 minutes of training. Results are depicted for both protocols (social rehabilitation – left; leash training – right) for training days 1 (T1), 10(T10), 20(T20), 30(T30) and 40(T40). **p* < 0.05;



Before

After

- Training improved stray dogs' sociability, but not behaviour on leash
- Stray dogs' body posture evolved across training from fearful to a more neutral stance.

Conclusions

The present study suggests that, at least for some unsocialized stray dogs, sociability towards humans can be improved with training!

