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PREFERRED BODY AREAS OF PHYSICAL AFFILIATIVE INTERACTIONS IN CAPTIVE *INIA GEOFFRENSIS HUMBOLDTIANA*

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INTRODUCTION

Physical interactions, indicating social balance development and maintenance, support the achievement of strong relationships in several dolphin species including Orinoco river dolphins (*Inia geoffrensis humboldtiana*). The aim of this study was the recognition of the body areas preferentially involved during physical affiliative interactions.

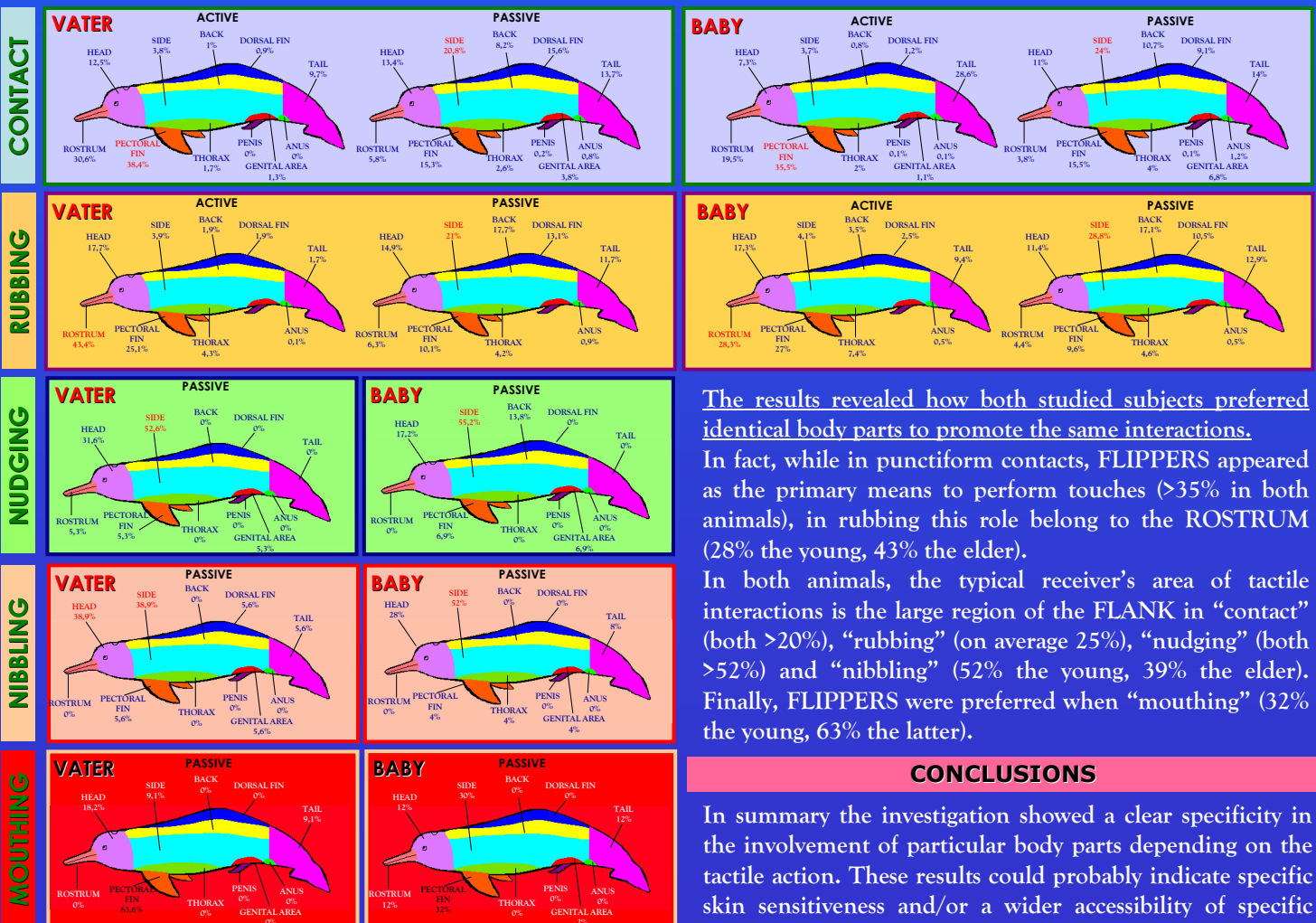
METHODS

An opportunity to investigate such behavioural aspects in this species – which occurs in turbid river waters – was provided by observation of two adult male (approx. 35 and 55 years old) hosted at Duisburg Zoo, Germany. Data were collected in May 2006 in a total of 120 observation sessions, lasting one hour each (60 hours/subject). Observer 5.0 (Noldus) software was applied to estimate the involvement frequency of the different body parts of 5 tactile units: “contact”, “rubbing”, “nudging”, “nibbling” and “mouthing”.

After schematically dividing the body of the dolphin in eleven areas, interactive behaviours were registered both by the part of the body used for establishing contacts as well as by the area where the interacting animal received them.

ENVIRONMENT	Surface: 900 m ²	
	Capacity: 650 m ³	
	Built in: 2005	
SUBJECT 1	VATER	
	MALE	
	55 YEARS	
SUBJECT 2	BABY	
	MALE	
	30 YEARS	

RESULTS



The results revealed how both studied subjects preferred identical body parts to promote the same interactions.

In fact, while in punctiform contacts, FLIPPERS appeared as the primary means to perform touches (>35% in both animals), in rubbing this role belong to the ROSTRUM (28% the young, 43% the elder).

In both animals, the typical receiver's area of tactile interactions is the large region of the FLANK in “contact” (both >20%), “rubbing” (on average 25%), “nudging” (both >52%) and “nibbling” (52% the young, 39% the elder). Finally, FLIPPERS were preferred when “mouthing” (32% the young, 63% the latter).

CONCLUSIONS

In summary the investigation showed a clear specificity in the involvement of particular body parts depending on the tactile action. These results could probably indicate specific skin sensitiveness and/or a wider accessibility of specific areas of the Inia body, as well as potentially different objectives/“meanings”/intensities of the interactions.