

**S2 Table. Criteria used to select the behaviours included in the pre-refinement of the USAPS used for video analysis (S3 Table), based on content validity and behaviours reported in the literature.**

Variable	Criterion	Ev.1	Ev.2	Ev.3	Score	Ethogram	Literature
<b>Interaction</b>	<i>Active: attentive to the environment, interacts and/or follows other animals</i>	1	1	1	<b>1</b>	x	[5,20,36]
	<i>Apathetic: may remain close to other animals, but interacts little</i>	1	1	1	1	x	[20,36]
	<i>Very apathetic: isolated or does not follow other animals, not interested in the environment</i>	1	1	1	<b>1</b>	x	[20,36]
<b>Locomotion</b>	<i>Moves about freely, without altered locomotion; when stopped, the pelvic limbs are parallel to the thoracic limbs</i>	1	1	1	<b>1</b>	x	[5,20,34,36]
	<i>Moves about with restriction and/or short steps and/or pauses and/or lameness; when stopped, the thoracic or pelvic limbs may be more open and further back than normal</i>	1	1	1	<b>1</b>	x	[5,20,34-36]
	<i>Difficulty and/or reluctant to get up; not moving and/or walking abnormally and/or limping; walks backward or on knees; jumps like a rabbit, walks in a circle; may lean against a surface</i>	1	0	1	<b>0.66</b>	x	[5,20,34-36]
<b>Head position</b>	<i>Head above the withers or eating</i>	1	0	1	<b>0.66</b>	x	[20,34]
	<i>Head at the height of the withers</i>	1	0	1	<b>0.66</b>	x	[20,34]
	<i>Head below the withers (except when eating)</i>	1	0	1	<b>0.66</b>	x	[20,34]
<b>Posture</b>	Kicks and stamps the limbs on the ground	1	1	1	<b>1</b>	x	[20,34-36]
	<i>Extends the head and neck and/or one or more limbs</i>	1	0	1	<b>0.66</b>	x	[20,34]
	Body tremors (without considering the ears)	1	1	0	0	x	[20,36]
	The pelvic limbs may be more open and further back than normal	1	1	1	1	x	[5,20,36]
<b>Posture in recumbence</b>	Lying down, relaxed	1	1	1	<b>1</b>	x	[20,36]
	<i>Extends neck and body forward</i>	1	1	0	<b>0.66</b>	x	[5,20,36]
	<i>Lying down with the head resting on the ground or close to the ground.</i>	1	1	1	<b>1</b>		[5,20,34,36]
<b>Miscellaneous behaviours</b>	<i>Moves the tail quickly and repeatedly (except when breastfeeding) or keeps the tail straight (except when defecating or urinating)</i>	1	0	1	<b>0.66</b>	x	[5,20,36]
	<i>Arched back</i>	1	1	1	<b>1</b>	x	[5,20,34,36]
	Rotates body partially or totally, without getting up	1	0	0	0	x	[20,36]
<b>Activity</b>	<i>Moves normally</i>	1	1	1	<b>1</b>		[5,20,34,35]
	<i>Restless, moves more than normal or lies down and gets up frequently</i>	1	1	1	<b>1</b>		[5,20,34,36]
	<i>Moves less frequently or only when stimulated using a stick or does not move</i>	1	1	1	<b>1</b>		[20,36]
<b>Appetite</b>	<i>Normorexia and/or rumination present</i>	1	1	1	<b>1</b>	x	[5,20,36]
	<i>Hyporexia</i>	1	0	1	<b>0.66</b>		[5,20,36]
	<i>Anorexia</i>	1	1	1	<b>1</b>		[5,20,36]
<b>Attention to the affected area</b>	Does not look	1	1	1	<b>1</b>	x	[20,36]
	Turns the head and looks	1	1	1	<b>1</b>	x	[5,20,36]
	Licks or tries to lick or avoids contact of the area with surfaces or other animals	1	1	1	<b>1</b>	x	[5,20,36]

USAPS: Unesp-Botucatu sheep acute composite pain scale; Ev. = Evaluator; each item was classified as relevant (+1), not known (0), or irrelevant (-1), the values were added and divided by the number of experts. Score: final score of content validation. In bold are the items approved in content validation, because the mean score was  $\geq 0.5$  and because the specific pain-related behavior had been reported in the ethogram (marked with "x") and literature [number of the references in the list of references]; in italics are the behaviors that remained on the scale after refinement.