

1 **AGREEMENT AMONG EXPERTS IN RATINGS OF EMOTION IN DOGS**

2 *M. Wan*, F.A. Champagne*
3 *Columbia University, Department of Psychology*
4 *406 Schermerhorn Hall*
5 *1190 Amsterdam Ave., MC5501*
6 *New York, NY 10027*
7 **Corresponding author: msw2111@columbia.edu*
8 *Phone: (212) 854-3608*
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10 To determine whether experienced dog behavior professionals would agree in their ratings of emotion in
11 dogs, we asked eight professionals with a mean of 20 years of experience to view 30 short
12 video clips of dogs of various breeds and ages. The professionals were mostly certified pet dog trainers
13 (CPDT-KA), diplomates of the American College of Veterinary Behaviorists (DACVB), or certified
14 applied animal behaviorists (CAAB). First, the experts rated on a nine-point bipolar scale how
15 safe/unsafe it would be to approach each dog. In addition, they rated each dog's arousal (calm/excited,
16 loose/tense) and stress level (stressed/relaxed), as well as the emotional valence (positive/negative) and
17 basic emotions experienced by each dog (happy/unhappy, sad/cheerful, angry/peaceful, fearful/bold).
18 The midpoint of each scale was designated as "neutral." Kendall's coefficient of concordance (*KCC*), the
19 intraclass correlation coefficient, and Krippendorff's alpha were calculated as measures of agreement and
20 were consistent with each other. Excellent overall agreement among experts ($KCC > 0.7$) was obtained in
21 ratings for 12 of 30 dogs (40%), moderate agreement for 11 dogs (37%), and poor agreement ($KCC < 0.4$)
22 for 7 dogs (23%). The 10 dogs rated with highest agreement received more extreme ratings on the nine-
23 point scales than the 10 dogs rated with lowest agreement. In addition, among the high-agreement dogs,
24 there were more ratings at the positive than negative ends of the scales (e.g. happy end of
25 happy/unhappy). Selected videos have been included in a larger, ongoing study of individual differences
26 in interspecific emotion discrimination in dogs and humans.

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28 **Keywords:** interrater agreement, interrater reliability, behaviorist, trainer, emotion