

Thanks to the CAWS travel grant, I was able to attend two international conferences this summer to present my research on the use of behavior coding methods in the study of human-animal interactions.

- 1) Guérin, N. A., Barton, A. K., & O’Haire, M. E. (2016). Social behaviors and positive emotional displays increase in typically-developing children in the presence of animals compared to toys. 25th International Society for Anthrozoology (ISAZ) Conference. July 7-10, Barcelona, Spain.

Introduction. Initial evidence suggests that animals may promote social interactions and improve mood in children. The purpose of this study was to examine the interactions of typically developing children and children with autism in the presence of animals (two guinea pigs) compared to toys. The results for the children with autism showed increased social approach behaviors and positive affect (O’Haire, McKenzie, Beck, & Slaughter, 2013). Here, we present the results of this study for typically developing children. **Methods.** Ninety-nine children aged 5.2 to 12.7 years participated in groups of three (one child with autism and two typically developing peers). For each child with autism, two typically-developing peers were randomly selected from the same classroom (15 classrooms total). Each group of children was video-recorded during three 10-minute sessions with toys and three 10-minute sessions with guinea pigs. A primary blinded observer coded 100% of 1,197 minutes of child behavior, and a secondary blinded observer coded 20% of the videos for reliability. Data were analyzed using hierarchical generalized linear modeling. **Results.** Overall inter-rater reliability was excellent ($\kappa = .81$). Results showed that participants demonstrated more social behaviors ($\beta = 0.187$, $SE = 0.025$, $t(1168) = 7.34$, $p < .001$), including more prosocial behaviors ($\beta = 3.41$, $SE = 0.14$, $t(1168) = 25.29$, $p < .001$) and less social withdrawal behaviors ($\beta = -1.421$, $SE = 0.079$, $t(1168) = -18.094$, $p < .001$) in the presence of animals compared to toys. Participants also displayed more positive emotions ($\beta = 0.151$, $SE = 0.038$, $t(1168) = 3.971$, $p < .001$), including smiling ($\beta = 0.200$, $SE = 0.040$, $t(1168) = 5.058$, $p < .001$), and laughing ($\beta = -0.183$, $SE = 0.085$, $t(1168) = -2.14$, $p < .05$) in the presence of animals compared to toys. **Conclusion.** The presence of animals appears to increase positive social behaviors and positive emotional displays among typically developing children. Thus the provision of animal-assisted activities may be a suitable enrichment strategy to enhance the social development of typically-developing children alongside their peers with autism in the inclusion classroom.

- 2) Guérin, N. A., Gabriels, R. L., Germone, M. M., & O’Haire, M. E. (2016). Inter-rater reliability, structure, and convergent validity of the Observation of Human-Animal Interaction for Research, version 2 (OHAIRE-v2). 14th International Association of Human-Animal Interaction Organizations (IAHAIO) Conference. July 11-13, Paris, France.

Introduction. The use of behavioral data is an objective and quantitative approach that can complement standardized questionnaires in human-animal interaction (HAI) research. The OHAIRE-M1 is a behavior coding system designed specifically for HAI. We investigated its psychometric properties through analyses of its inter-rater reliability, construct validity and convergent validity. **Methods.** Data were extracted from two studies investigating the outcomes of animal-assisted intervention. One study assessed the effect of animal-assisted activities with guinea pigs for children with autism ($n = 33$) and typically developing children ($n = 66$) ages 5 to 12. Another study assessed the effectiveness of therapeutic horseback riding for children with autism ($n = 16$) ages 6 to 15. A total of 1425 minutes of videos were coded using the OHAIRE-M1. Inter-rater reliability was calculated for a random subset of 20% of videos. Data analysis techniques for validity included an exploratory factor analysis and correlation of data from each study with standardized questionnaire data via Pearson’s r . **Results.** Preliminary results indicate excellent inter-rater reliability ($\kappa = 0.81$). Factor analysis data will be presented with a suggested three-factor structure, with main axes representing emotional display, social communication, and problem behaviors. Correlations between scores of the OHAIRE-M1 and matched questionnaire subscales will also be discussed. **Conclusion.** Initial analyses suggest that the OHAIRE-M1 is a reliable and valid tool to enhance the rigor and standardization of HAI research. Its use in future studies will allow confirmation of its structure on a larger sample, and explore its generalizability with a broader population.