

Catarina Vales

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EDUCATION

- 2010-2016 PhD Psychology. Indiana University, Bloomington, USA.
Cognitive Development Lab (P.I. Linda Smith)
- 2007-2009 MS Experimental Psychology. University of Minho, Braga, Portugal.
Animal Behavior Lab (P.I. Armando Machado)
- 2004-2007 BS Psychology. University of Minho, Braga, Portugal.

PROFESSIONAL APPOINTMENTS

- 2016-Present Post-Doctoral Research Associate. Department of Psychology, Carnegie Mellon University, USA. Cognitive Development Lab (P.I. Anna Fisher)
- 2009-2010 Research Associate. Epidemiology Department, Porto Medical School, Portugal.
Project “Explaining the decrease in coronary heart disease mortality rates in Portugal from 1987 to 2000”

PUBLICATIONS

Journal Articles:

- 2017 Benitez, V. L.*, Vales, C.*, Hanania, R. & Smith L.B. (2017) Sustained selective attention predicts flexible switching in preschoolers. *Journal of Experimental Child Psychology*, 156, 29-42. *Equal authorship contribution.
- 2015 Vales, C. & Smith, L.B. (2015). Words, shape, visual search and visual working memory in 3-year-old children. *Developmental Science*, 18(1), 65-79.
- 2012 Pereira, M., Carreira, H., Vales, C, Rocha. V, Azevedo, A., & Lunet, L (2012). Trends in hypertension prevalence (1990–2005) and mean blood pressure (1975–2005) in Portugal: A systematic review. *Blood Pressure*, 21(4), 220-226.

Conference Proceedings:

- 2017 **Vales, C.** & Smith, L.B. (2017). *Cake or Hat? Words change how young children process visual objects. Proceedings of the 39th Annual Conference of the Cognitive Science Society.* Austin, TX: Cognitive Science Society.
- Vales, C.**, Unger, L., & Fisher, A.V. (2017). *Looking for the cat and seeing the dog: Using visual search to study semantic knowledge in children. Proceedings of the 39th Annual Conference of the Cognitive Science Society.* Austin, TX: Cognitive Science Society.
- 2014 **Vales, C** & Smith, L.B. (2014). *How precise is the visual representation of a labeled target?* [Abstract]. In P. Bello, M. Guarini, M. McShane, & B. Scassellati (Eds.), *Proceedings of the 36th Annual Conference of the Cognitive Science Society.* Austin, TX: Cognitive Science Society.
- Benitez, V.B, **Vales, C.** & Smith, L.B. (2014). *Young children's activation and inhibition processes in a visual search task.* [Abstract]. In P. Bello, M. Guarini, M. McShane, & B. Scassellati (Eds.), *Proceedings of the 36th Annual Conference of the Cognitive Science Society.* Austin, TX: Cognitive Science Society.
- 2013 **Vales, C.** & Smith, L.B. (2013). *Linguistic cued attention in children: Words organize attention to shape in a visual search task.* In M. Knauff, M. Pauen, N. Sebanz, & I. Wachsmuth (Eds.), *Proceedings of the 35th Annual Conference of the Cognitive Science Society.* Austin, TX: Cognitive Science Society.
- Carvalho, P., **Vales, C.**, Fausey, C.M. & Smith, L.B. (2013). *An eyetracking study of children's relational thinking: The role of labels and sustained attention.* In M. Knauff, M. Pauen, N. Sebanz, & I. Wachsmuth (Eds.), *Proceedings of the 35th Annual Conference of the Cognitive Science Society.* Austin, TX: Cognitive Science Society.
- 2012 **Vales, C.**, & Smith, L. (2012). *Words cue children's attention in a visual search task.* *Journal of Vision*, 12(9), 482-482.
- 2010 Carreira, H., Pereira, M., **Vales, C.**, Rocha, V., Azevedo, A., Lunet, N. (2010). *Evolução da pressão arterial e prevalência de hipertensão arterial: Revisão sistemática na população Portuguesa* ["Blood pressure evolution and hypertension prevalence: Systematic review in the Portuguese population"]. *Arquivos de Medicina*, 24(5): 214.

Manuscripts Under Review:

Carvalho, P.F., **Vales, C**, Fausey, C.M., & Smith, L.B. (under review). Novel names extend for how long preschool children sample visual information.

Manuscripts in Preparation:

Vales, C & Smith, LB (in preparation). When a word is worth a thousand pictures: Words facilitate visual processing in young children.

Vales, C & Smith, LB (in preparation). Cake or Hat? Words change how young children visually encode objects.

Vales, C & Smith, LB (in preparation). Young children rely on local parts to visually recognize objects.

Vales, C & Smith, LB (in preparation). Words change what information children use to visually recognize objects.

Vales, C & Smith, LB (in preparation). The words you know: Individual differences in linguistically cued effects on visual processing.

***Vales, C, *Benitez, VL & Smith, LB** (in preparation). Young children's learning about targets and distractors during repeated visual search. **Equal authorship contribution*

GRANTS & FELLOWSHIPS

2011 PhD Fellowship, Portuguese Science Foundation.

2010 Graduate Fellowship, Indiana University

AWARDS

2017 Irving J. Saltzman Award for Outstanding Research Achievement. Department of Psychological and Brain Sciences, Indiana University.

2015 Provost Travel Award for Women in Science. Indiana University (twice).

Travel Award. Department of Psychological and Brain Sciences, Indiana University.

2013 Outstanding Graduate Teaching Assistant Award. Department of Psychological and Brain Sciences, Indiana University.

Provost Travel Award for Women in Science. Indiana University (thrice).

Research Excellence Award. Learning to Attend, Attending to Learn Workshop.

Travel Award for Women in Science. Department of Psychological and Brain Sciences, Indiana University.

2012 Commendation on Qualification Examination. Department of Psychological and Brain Sciences, Indiana University.

2009 Travel Award. Portuguese Science Foundation.

INVITED TALKS

- 2014 Developmental Discussion Group, Department of Psychology, Carnegie Mellon University, Pittsburgh, PA, USA.
- 2013 Cognitive Development Lab, Psychology Department, The Ohio State University, Columbus, OH, USA.

CONFERENCE ACTIVITY

Conference Organizing:

- 2017 **Vales, C.** (2017, April). Symposium Chair. *Individual differences in language: The role of in-the-moment processes*. Symposium presented at the Biennial Meeting of the Society for Research in Child Development, Austin, TX, USA.
- 2015 **Vales, C.** (2015, October). Symposium Chair. *Language matters for more than talking: How language influences cognitive development in childhood*. Symposium presented at the Biennial Meeting of the Cognitive Development Society, Columbus, OH, USA.

Conference Talks:

- 2017 **Vales, C.** & Smith, L.B. (2017, July). *Cake or Hat? Words change how young children process visual objects*. Communication to be presented at the 39th Annual Conference of the Cognitive Science Society, London, UK.

Vales, C., Unger, L & Fisher, A. (2017, July). *Looking for the cat and seeing the dog: Using visual search to study semantic knowledge in children*. Communication to be presented at the 39th Annual Conference of the Cognitive Science Society, London, UK.

Vales, C & Smith, L.B. (2017, April). *The words they know: Individual differences in how language affects visual processing*. Communication presented at the Biennial Meeting of the Society for Research in Child Development, Austin, TX, USA.

- 2015 **Vales, C.** & Smith, L.B. (2015, October). *Do you see the parts or the whole? Language influences object recognition in young children*. Communication presented at the Biennial Meeting of the Cognitive Development Society, Columbus, OH, USA.

Benitez, V.L., **Vales, C.** & Smith, L.B. (2015, October). *To focus or to ignore? Activation and inhibition in young children's selective attention*. Communication presented at the Biennial Meeting of the Cognitive Development Society, Columbus, OH, USA.

2013 **Vales, C.** & Smith, L.B. (2013, October) *How do words cue attention? Evidence from visual search with young children.* Communication presented at the Biennial Meeting of the Cognitive Development Society, Memphis, TN, USA.

Vales, C. & Smith, L.B. (2013, April). *Linguistically cued attention in children: Words facilitate performance in a visual search task.* Communication presented at the 2013 Society for Research in Child Development Biennial Meeting, Seattle, WA, USA.

Carvalho, P., **Vales, C.**, Fausey, C.M. & Smith, L.B. (2013, April). *What makes comparison work in real time? Evidence from eye-tracking.* Communication presented at the 2013 Society for Research in Child Development Biennial Meeting, Seattle, WA, USA.

2012 **Vales, C.** & Smith, L.B. (2012, May). *Words cue children's attention to shape in a visual search task.* Communication presented at the II Annual Midwest Cognitive Science Conference, Bloomington, IN, USA.

2010 Carreira, H., Pereira, M., **Vales, C.**, Rocha, V., Azevedo, A., Lunet, N. (2010, October). *Evolução da pressão arterial e prevalência de hipertensão arterial: Revisão sistemática na população Portuguesa* ["Blood pressure evolution and hypertension prevalence: Systematic review in the Portuguese Population"]. Communication presented at the II National Congress of Public Health, Porto, Portugal.

Conference Posters:

2015 **Vales, C.** & Smith, L.B. (2015, June). *Do you see the parts or the whole? Language plays a role in visual learning of objects.* Poster presented at the International Conference on Interdisciplinary Advances in Statistical Learning, San Sebastian, Spain

Vales, C. & Smith, L.B. (2015, May). *From parts to whole: Language influences object recognition in young children.* Poster presented at the 27th APS Annual Convention, New York, NY, USA.

2014 **Vales, C.** & Smith, L.B. (2014, July). *How precise is the visual representation of a labeled target?* Poster presented at the 36th Annual Conference of the Cognitive Science Society, Quebec City, Canada.

Benitez, V.B, **Vales, C.** & Smith, L.B. (2014, July). *Young children's activation and inhibition processes in a visual search task.* Poster presented at the 36th Annual Conference of the Cognitive Science Society, Quebec City, Canada.

2013 Carvalho, P., **Vales, C.**, Fausey, C.M. & Smith, L.B. (2013, November). *Information sampling in children's relational thinking: Effects of comparison and labeling.* Poster presented at the Annual Meeting of the Psychonomics Society, Toronto, Canada.

Vales, C. & Smith, L.B. (2013, November). *How do words guide attention? Evidence*

- from visual search with young children.* Poster presented at the Learning to Attend, Attending to Learn Workshop, San Diego, CA, USA.
- Carvalho, P., **Vales, C.**, Fausey, C.M. & Smith, L.B. (2013, November). *Building representations that can be used: How children sample information during relational thinking.* Poster presented at the Learning to Attend, Attending to Learn Workshop, San Diego, CA, USA.
- Vales, C.** & Smith, L.B. (2013, October). *Fast and Stable: Words create better target representations in a visual search task.* Poster presented at the Biennial Meeting of the Cognitive Development Society, Memphis, TN, USA.
- Carvalho, P., **Vales, C.**, Fausey, C.M. & Smith, L.B. (2013, October). *Information sampling in children's relational thinking: Effects of comparison and labeling.* Poster presented at the Biennial Meeting of the Cognitive Development Society, Memphis, TN, USA.
- Vales, C.** & Smith, L.B. (2013, August). *Linguistic cued attention in children: Words organize attention to shape in a visual search task.* Poster presented at the 35th Annual Conference of the Cognitive Science Society, Berlin, Germany.
- Carvalho, P., **Vales, C.**, Fausey, C.M. & Smith, L.B. (2013, August). *An eyetracking study of children's relational thinking: The role of labels and sustained attention.* Poster presented at the 35th Annual Conference of the Cognitive Science Society, Berlin, Germany.
- 2012 **Vales, C.** & Smith, L.B. (2012, May). *Words cue children's attention in a visual search task.* Poster presented at the 2012 VSS Annual Meeting, Naples, FL, USA.
- 2011 **Vales, C.** & Smith, L.B. (2011, October). *Words organize children's attention in a search task.* Poster presented at the Biennial Meeting of the Cognitive Development Society, Philadelphia, PA, USA.
- Pereira, M., Carreira, H., **Vales, C.**, Rocha, V., Azevedo, A., Lunet, N. (2011, April). *Trends in prevalence of hypertension and blood pressure level: a systematic review in the Portuguese population.* Communication presented at the EuroPREvent 2011 Congress, Geneva, Switzerland.
- 2010 **Vales, C.**, Rocha, V., Azevedo, A., Pereira, M., & Lunet, N. (2010, November). *Yielding of a systematic review process: inter-rater agreement, sensitivity, specificity and workload.* Communication presented at the EuroEpi 2010 Congress, Florence, Italy.
- 2009 **Vales, C.**, & Machado, A. (2009, September). *The role of Sensory Preconditioning in verbal labels acquisition by infants.* Communication presented at the 21.st Congress of the Spanish Society for Comparative Psychology, Salamanca, Spain.

Vales, C., & Machado, A. (2009, May). *Can Sensory Preconditioning account for the Baldwin Effect?* Communication presented at the Annual Meeting of Society of the Quantitative Analyses of Behavior, Phoenix, AZ, USA.

Vales, C., & Machado, A. (2009, April). *Associative processes in the Baldwin Effect.* Communication presented at the 4.th National Meeting of the Portuguese Association of Experimental Psychology, Lisbon, Portugal.

Vales, C., Carvalho, P., Magalhães, P., & Albuquerque, P. B. (2009, April) *Semantic Effects in the Stroop task: Rose, color or flower?* (April, 2009). Communication presented at the 4.th National Meeting of the Portuguese Association of Experimental Psychology, Lisbon, Portugal.

ADVISING EXPERIENCE

Honors Thesis Students:

2016 Taylor Abdon (BS Psychology)

2015 Elizabeth Clerkin (BA Psychology, Hutton Honors College, Cox Research Scholar).

Supervised Research:

2016- Supervised 2-5 undergraduate students per semester. Carnegie Mellon Univ.

2011-2016 Supervised 2-7 undergraduate students per semester. Indiana University.

Presentations with students as first author:

2015 Clerkin, E.C., Vales, C. & Smith, L. (2015, October). *Category effects on visual perception in 3-year-old children.* Poster presented at the Biennial Meeting of the Cognitive Development Society, Columbus, OH, USA.

2014 Davis, B., Vales, C. & Smith, L. (2014, October). *How do three-year-old children use features to recognize objects?* Poster presented at the 2nd Annual Black Doctoral Network Conference - Undergraduate Research Poster Competition, Philadelphia, PA, USA.

Davis, B. (2014, September). *The effects of visual search tasks on selective attention.* Poster presented at the 18th Annual MKN McNair Heartland Research Conference, Kansas City, MO, USA.

2012 MacKinnon, A., Vales, C. & Smith, L. (2012, March) *Words are attentional cues during a visual search task.* Poster presented at the Women in Science Research Day Conference, Bloomington, IN, USA

TEACHING EXPERIENCE

Instructor:

Developmental Psychology (Spring 2016). Indiana University.

Associate Instructor:

Research Methods in Psychology (Fall 2013). Indiana University.

Teaching Assistant:

Developmental Psychology (Fall 2010). Indiana University.

Laboratory in Developmental Psychology (Spring 2013). Indiana University.

PROFESSIONAL SERVICE

Ad-hoc reviewer:

Developmental Science, Journal of Experimental Child Psychology, Child Development, Cognitive Science Society, Society for Research in Child Development.

Departmental Service:

Psychology Faculty Search Committee, Indiana University (2015).

Community Involvement & Outreach:

“Secrets of the Brain: Visual Attention”, Consultant (science museum demo design). 2016, WonderLab, Bloomington, IN.

Reviewer for the “Journal of Undergraduate Research” (2016, Indiana University)

“Get you into IU”, Mentor (program for prospective underrepresented/minority students). (2015, Indiana University).

Laboratory Tours – Middle/High School Students. (2017, Carnegie Mellon University; 2012-2014, Indiana University).

PROFESSIONAL AFFILIATIONS

Society for Research in Child Development; Cognitive Development Society; Cognitive Science Society; Association for Psychological Science.