

Sex Differences in Emotional Awareness: More than Just Words

Kimberly A. Barchard, April Contreras, and Caleb J. Picker
University of Nevada, Las Vegas



Reference: Barchard, K.A., Contreras, A., & Picker, C. J. (2017, Apr). *Sex differences in emotional awareness: More than just words*. Poster presented at the Western Psychological Association Convention, Sacramento, CA.

Contact Information: Kimberly A. Barchard, Department of Psychology, University of Nevada, Las Vegas, 4505 S. Maryland Parkway, P.O. Box 455030, Las Vegas, NV, 89154-5030, USA, kim.barchard@unlv.edu

Abstract

Emotional awareness is the ability to recognize and describe emotions in oneself and others. However, emotional awareness is a broad construct that includes at least four components: specificity, complexity, granularity, and perspective taking. Previous research showed that women have greater emotional awareness than men. However, women also have greater verbal ability and verbosity. Therefore, we compared the emotional awareness of men and women, while controlling for vocabulary and verbosity. Among 341 undergraduates, women scored significantly higher on three measures of overall emotional awareness ($d = .49-.54$) and all four components ($d = .31-.54$). Controlling for verbal ability and verbosity, sex differences remained for all variables except perspective taking. Perhaps perspective taking is not a fundamental emotion skill. Alternatively, verbosity may be more related to emotion skill than vocabulary. Future research should determine if perspective taking and verbosity are more closely associated with emotion skills or personality variables.

Introduction

The ability to recognize and describe emotional experiences in oneself and others is called emotional awareness (Lane & Schwartz, 1987). Emotional awareness includes at least four components.

Emotional specificity is the tendency to use specific emotion words rather than vague ones.

Emotional complexity is the tendency to use multiple distinct words to describe a single emotional response.

Emotional granularity is the ability to distinguish between emotions (e.g., Barrett, 1998, 2004, 2009, 2013; Barrett & Bliss-Moreau, 2009; Kashdan, Barrett, & McKnight, 2015).

Perspective taking (Batson, Early, & Salvarani, 1997; Decety & Jackson, 2004) is the ability to recognize that other people feel differently from the self.

On average, girls get higher scores than boys (Ciarrochi, Hynes, & Crittenden, 2005), and women get higher scores than men (Barrett, Lane, Sechrest, & Schwartz, 2000; Ciarrochi, Caputi, & Mayer, 2003). However, little is known about whether women and men differ on the components of emotional awareness. Moreover, women and men differ in ways that might be confounded with differences in overall emotional awareness. In particular, women often have stronger verbal skills. Therefore, when comparing the emotional awareness of women and men, we controlled for vocabulary and the number of words in their responses.

Sophia: If Josh left me, I'd be devastated. I'd feel anguish about what we had lost and scared about the future.

Josh: If Sophia left me, I'd feel pretty bad. I'd probably stay in bed all weekend.

Sophia: If I lost my job, I'd be shocked at first. What did I do wrong? After a while, I'd feel angry. Later, if I had trouble getting a new job, I'd become dispirited. I'd lose confidence in myself.

Josh: If I lost my job, I'd feel terrible. I'd probably stay in bed all weekend

Sophia: If I lost my job, Josh would be very supportive. He'd feel a lot of empathy for me, but then he'd calm me down. He'd encourage me to pursue my dreams. He's always so optimistic.

Josh: If I lost my job, Sophia would feel bad, too. She'd probably get upset.

Method

Participants

A total of 341 undergraduates (198 female) participated in this study in return for course credit. Participants ranged in age from 18 to 50 years. They completed the study on the internet, in two sessions, each approximately 90-minutes.

Measures

Levels of Emotional Awareness. The Levels of Emotional Awareness Scale (LEAS; Lane, Quinlan, Walker, Schwartz, & Zeitlin, 1990) contains 20 emotionally evocative scenarios that involve the self and another person. For each scenario, participants answer two questions: "How would you feel in this situation?" and "How would the other person feel?" Responses to each question are scored based upon the number and type of words that respondents used to describe emotions.

Calculating Overall Emotional Awareness. Overall emotional awareness was calculated using hand scores (see Figure 1), POES Highest-4, and POES Highest40-Unique.

Calculating Component Scores. Scores for emotional specificity, emotional complexity, emotional granularity, and perspective taking were also calculated using POES version 2.0.1 (Leaf & Barchard, 2013) and LEAS Wordlist 2.5 (Barchard, 2013).

Emotional Specificity. The emotional specificity score for each item was calculated as the maximum word score for all emotion words and phrases in the self-response. If a response contained no emotion words and phrases, then the response received a score of 0. After calculating scores for each of the 20 items, these item scores were summed to obtain an overall score for emotional specificity.

Emotional Complexity. For each item, emotional complexity was calculated as the number of unique emotion words for the self-response. These item scores were summed to obtain an overall score for emotional complexity.

Emotional Granularity. To calculate emotional granularity, we only used emotion words in the self-response. However, unlike the previous two scores, we calculated a single overall score for emotional granularity for the entire test. Specifically, we counted the number of unique emotion words across the entire set of 20 items.

Perspective Taking. For each item on the LEAS, we calculated perspective taking as the number of unique emotion words that occur in the other response that are not present in the self response. These item scores were summed to obtain an overall score for perspective taking.

Vocabulary. The Synonym Test (Barchard, 2004) measures vocabulary. It contains 60 multiple-choice items, arranged in increasing difficulty in each of two sections. Each item stem and response option is a single word.

Response Length. Response length was calculated as the total number of words across all LEAS items.

Figure 1
Word Scores Using the LEAS

Physical sensations
I feel cold (1).

Non-specific emotional responses
I feel upset (2).

Words used in emotional and non-emotional ways
I feel bad (2).

Words that describe behaviors accompanying emotions
I want to cry (2).

Words that describe personality characteristics
I feel optimistic (2).

Words that describe specific emotions
I feel devastated (3).

Table 1
Sex Differences in Emotional Awareness

Dependent Variable	Women		Men		Mean difference [95% confidence interval]	Independent samples <i>t</i> -test	Effect size
	Mean	SD	Mean	SD			
Overall Emotional Awareness							
Hand scoring	65.07	11.40	59.29	12.24	5.78 [3.25, 8.32]	$t(339) = 4.48, p < .001$.49
Highest-4	164.62	35.45	145.13	36.48	19.49 [11.74, 27.24]	$t(339) = 4.95, p < .001$.54
Highest40-Unique	93.74	18.00	83.14	21.79	10.60 [6.35, 14.84]	$t(339) = 4.91, p < .001$.53
Components of Emotional Awareness							
Specificity	53.14	4.98	50.50	6.54	2.64 [1.41, 3.87]	$t(339) = 4.23, p < .001$.45
Complexity	40.71	13.93	33.57	13.85	7.14 [4.14, 10.14]	$t(339) = 4.68, p < .001$.51
Granularity	29.58	9.28	24.52	9.47	5.06 [3.04, 7.08]	$t(339) = 4.92, p < .001$.54
Perspective taking	27.12	9.53	24.14	9.76	2.98 [0.90, 5.05]	$t(339) = 2.82, p = .005$.31
Verbosity	664.60	361.69	550.10	373.53	114.58 [35.37, 193.78]	$t(339) = 2.85, p = .005$.31
Vocabulary	0.49	0.12	0.50	0.12	-0.01 [-0.04, 0.01]	$t(339) = -1.04, p = .300$	-.11

Note. Independent sample *t*-tests used Bonferroni correction. Effect size was calculated using Cohen's *d*.

Adapted from Barchard, Picker, and Leaf (2016).

Results

To determine if the sex differences (see Table 1) were due to differences in emotional processing or some other variable (e.g., vocabulary or response length), we used hierarchical multiple regression to predict each of the seven emotional awareness variables (see Table 2). In step 1, we entered vocabulary and response length as control variables. The fifth column of Table 2 shows that the beta-weights for vocabulary were statistically significant for Highest-4, Highest40-Unique, emotional complexity, emotional granularity, and perspective taking, but not for hand-scoring or emotional specificity. The sixth column shows that the beta-weights for response length were statistically significant for all emotional awareness variables. In step 2, we entered sex to determine if sex differences remained after controlling for vocabulary and response length. The last column of Table 2 shows that, with only one exception, perspective taking, the beta-weights for sex were statistically significant. Thus, for most aspects of emotional awareness, sex differences are not entirely due to vocabulary and response length.

Table 2

Hierarchical Multiple Regression Analyses Showing Effect of Sex on Emotional Awareness, Controlling for Vocabulary and Response Length

Variable	Step: Predictors	ΔR^2	$\Delta \text{Adj-R}^2$	β_{vocab}	β_{length}	β_{sex}
Overall Emotional Awareness						
Hand scoring	1: vocab, length	.26**	.25	.04	.50**	
	2: vocab, length, sex	.03**	.03	.06	.47**	.17**
Highest-4	1: vocab, length	.62**	.61	.10*	.76**	
	2: vocab, length, sex	.02**	.03	.11*	.74**	.15**
Highest40-Unique	1: vocab, length	.51**	.51	.16**	.66**	
	2: vocab, length, sex	.03**	.02	.18**	.63**	.17**
Components of Emotional Awareness						
Specificity	1: vocab, length	.20**	.19	.05	.43**	
	2: vocab, length, sex	.02**	.03	.06	.40**	.17**
Complexity	1: vocab, length	.72**	.72	.09*	.83**	
	2: vocab, length, sex	.01**	.01	.10**	.80**	.13**
Granularity	1: vocab, length	.66**	.66	.12**	.78**	
	2: vocab, length, sex	.02**	.02	.14**	.75**	.15**
Perspective taking	1: vocab, length	.67*	.67	.11**	.79**	
	2: vocab, length, sex	.00	.00	.11**	.79**	.04

* $p < .05$. ** $p < .001$.

Discussion

The primary purpose of this study was to determine if these sex differences are due to differences in emotional processing or some other general difference variable such as verbal ability. Sex differences in perspective taking were fully explained by vocabulary and response length. This could indicate that response length says something important about emotional awareness: After all, when someone asks how you feel, providing a lengthy answer may in itself indicate emotional awareness.

Sex differences in overall emotional awareness and its components were largest for emotional complexity and emotional granularity. Perhaps emotional complexity and emotional granularity can explain sex differences on the other components of emotional awareness. Future research should examine this possibility.

References

- Barchard, K. A. (2004). *Synonym Test*. Unpublished test. Available from Kim Barchard, Department of Psychology, University of Nevada, Las Vegas, 4505 Maryland Parkway, Las Vegas, NV, 89154-5030, barchard@unlv.nevada.edu
- Barchard, K. A. (2013, Feb). *LEAS Wordlist 2.5* [File to be used with POES to allow scoring of the Levels of Emotional Awareness Scale]. Available from Kim Barchard, Department of Psychology, University of Nevada, Las Vegas, kim.barchard@unlv.edu
- Barrett, L. F. (1998). Discrete emotions or dimensions? The role of valence focus and arousal focus. *Cognition and Emotion, 12*, 579-599. doi:10.1080/026999398379574
- Barrett, L. F., Lane, R. D., Sechrest, L., & Schwartz, G. E. (2000). Sex differences in emotional awareness. *Society for Personality and Social Psychology, 26*, 1027-1035. doi:10.1177/01461672002611001
- Barrett, L. F. (2004). Feelings or words? understanding the content in self-report ratings of experienced emotion. *Journal of Personality and Social Psychology, 87*(2), 266-281. doi:10.1037/0022-3514.87.2.266
- Barrett, L. F. (2009). Variety is the spice of life: A psychological construction approach to understanding variability in emotion. *Cognition & Emotion, 23*(7), 1284-1306. doi:10.1080/02699930902985894
- Barrett, L. F., & Bliss-Moreau, E. (2009). Chapter 4 affect as a psychological primitive. (pp. 167-218) Elsevier Science & Technology. doi:10.1016/S0065-2601(08)00404-8
- Barrett, L. F. (2013). Psychological construction: The Darwinian approach to the science of emotion. *Emotion Review, 5*(4), 379-389.
- Batson, C. D., Early, S., & Salvarani, G. (1997). Perspective taking: Imagining how another person feels versus imagining how you would feel. *Personality and Social Psychology Bulletin, 23*, 751-758. doi:10.1177/0146167297237008
- Ciarrochi, J., Caputi, P., & Mayer, J. D. (2003). The distinctiveness and utility of a measure of trait emotional awareness. *Personality and Individual Differences, 34*(8), 1477-1490.
- Ciarrochi, J., Hynes, K., & Crittenden, N. (2005). Can men do better if they try harder: Sex and motivational effects on emotional awareness. *Cognition & Emotion, 19*(1), 133-141.
- Decety, J., & Jackson, P. L. (2004). The functional architecture of human empathy. *Behavioral and Cognitive Neuroscience Reviews, 3*(2), 71-100.
- Kashdan, T. B., Barrett, L. F., & McKnight, P. E. (2015). Unpacking emotion differentiation: Transforming unpleasant experience by perceiving distinctions in negativity. *Current Directions in Psychological Science, 24*(1), 10-16.
- Lane, R. D., Quinlan, D. M., Schwartz, G. E., Walker, P. A., & Zeitlin, S. B. (1990). The Levels of Emotional Awareness Scale: A cognitive-developmental measure of emotion. *Journal of Personality Assessment, 55*, 124-134. doi:10.1207/s15327752jpa5501&2_12
- Lane, R. D., & Schwartz, G. E. (1987). Levels of emotional awareness: A cognitive-developmental theory and its application to psychopathology. *American Journal of Psychiatry, 144*, 133-143. doi:10.1176/ajp.144.2.133
- Leaf, D. E. & Barchard, K.A. (2013). Program for Open-Ended Scoring version 2.0.1. [Unpublished computer program]. Available from Kim Barchard, Department of Psychology, University of Nevada, Las Vegas, kim.barchard@unlv.edu