Gender Stereotypes Influence Emotion Attribution Despite Clear Cues to Emotion

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**Abstract**

How do gender stereotypes of emotion affect attribution of emotion from facial expressions? Does the nature of the cue (whether the facial expression clearly displays one emotion, or whether it displays several emotions simultaneously) affect these attributions? Participants were presented with faces displaying clear cues to a single emotion. For half of the participants, the poser appeared male, for the other half, female. More participants judged the ‘male’ four expression as fearful than the identical ‘female’ four expression. More participants judged the ‘female’ anger expression as angry than the identical ‘male’ anger expression. These judgments show that, when evaluating emotion from facial expression, participant gender influences perception of emotion: Given clear cues to gender and emotions, participants’ stereotypes of emotion result in stereotype contrast effects.

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**Introduction**

- Some emotions are stereotypically masculine (anger) whereas others are stereotypically feminine (sadness, fear) (Condy & Condy, 1976; Plant, Hyde, Kelmer, & Devine, 2000; Plant, Kling, & Smith, 2004).
- These stereotypes are illustrated in a classic study on gender and emotion, in which participants were shown videos of a baby’s reaction to different emotion-evoking stimuli (Condy & Condy, 1976).
- Condy and Condy found that observers attributed more anger to a boy than to a girl (shown via videotape) even to a jack-in-the-box, while attributing more fear to a girl.
- The interesting twist was that the observers were actually shown an identical videotape.
- The ‘boy’ and the ‘girl’ were the same infant simply labeled differently by the experimenter.
- Differences in the attributed emotion were in the eye of the beholder, not in the infant’s reaction.
- The differences came from their expectations based on their beliefs about the baby’s gender.
- And since the baby’s reaction contained a mix of emotions (Condy & Condy, 1976), perhaps the ambiguity of these cues led the observer to evaluate emotion in gender stereotype ways.

- In fact, ambiguous cues to emotion result in stereotypic judgments of adult models as well:
  - Plant et al. (2000) used ambiguous cues consisting of angry-sad blends, where both the female and male poses displayed 2 expressions:
  - The upper half of an angry expression combined with the lower half of a sadness expression, and the upper half of a sadness expression combined with the lower half of an anger expression.
  - Participants who were shown these ambiguous expressions judged the female’s blended expression as more sad than the male’s, and the male’s blended expression as more angry than the female’s (Plant et al., 2000).

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**Fear Expression**

- When the poser was ‘female’, participants judged her anger expression as angry more frequently, and as more intensely angry, than when the poser was ‘male’. When the protagonist was ‘male’, his happiness was more intensely happy, than when the poser was ‘female.’
- An important difference between the Plant et al. (2000) and the Hess et al. (2004) studies was in the nature of the stimuli they used:
  - Plant et al. used ambiguous cues to emotion and found stereotype assimilation effects.
  - Hess et al. used clear cues to emotion and found stereotype contrast effects.
- Thus, facial expression cue clarity may be a determining factor in how we use our gender stereotypes in attributing emotion.

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**The Study**

- In the current study, participants selected from a list of 10 emotions the label that best described each of either ‘male’ or ‘female’ expressions.
  - The facial expressions were clear cues to emotion.
  - Each emotional facial expression was computer generated and was identical for each gender.
  - The faces appeared ‘male’ or ‘female’ due to the addition of gender appropriate hairstyles, using the methods developed by Widen and Russell (2005).
- We predicted that, given these clear cues to emotion, participants’ attributions of emotion would reveal with gender stereotype contrast effects.

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**One difficulty in Plant et al.’s (2000) study was that participants were presented with faces displaying clear cues to a single emotion. For half of the participants, the poser appeared male, for the other half, female. More participants judged the ‘male’ four expression as fearful than the identical ‘female’ four expression. More participants judged the ‘female’ anger expression as angry than the identical ‘male’ anger expression. These judgments show that, when evaluating emotion from facial expression, participant gender influences perception of emotion: Given clear cues to gender and emotion, participants’ stereotypes of emotion result in stereotype contrast effects.**

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**References**


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**Fear Expression**

- Percentage

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**Anger Expression**

- Percentage

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**Stories**

- Stories describing either a male or a female protagonist (Timothy or Sophia) experiencing an emotion eliciting situation were presented.
- Participants were asked to circle the word that best described the protagonist.

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**Figure 1:** Sig. more (p < .05) judged the ‘male’ as scared than the ‘female.’

**Figure 2:** Sig. more (p < .001) judged the ‘female’ as angry than the ‘male.’

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**Results**

- In a repeated-measures ANOVA (alpha = .05), protagonist gender and participant gender were between-subjects factors; mode of presentation (face, story) and the 10 facial expressions were within-subjects factors.
- The dependent measure was whether or not participants chose the target emotion label for each stimulus (scored 1 or 0, respectively).
- The emotion x protagonist gender interaction was significant (F[9, 730]= 2.59, p < .05), but it was mediated by a three way emotion x protagonist gender x mode of presentation. F[9, 730]= 2.13, p < .05.
- The “boy” and the “girl” were the same infant based on their beliefs about the baby’s gender.
- Hess et al. used clear cues to emotion and found stereotype contrast effects.
- These stereotypes are illustrated in a classic study on gender and emotion, in which participants were shown videos of a baby’s reaction to different emotion-evoking stimuli (Condy & Condy, 1976).
- Condy and Condy found that observers attributed more anger to a boy than to a girl (shown via videotape) even to a jack-in-the-box, while attributing more fear to a girl.
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**Legend**

- See Table 1, Poser Gender, for the gender of the protagonist.
- The faces appeared ‘male’ or ‘female’ due to the addition of gender appropriate hairstyles, using the methods developed by Widen and Russell (2005).
- We predicted that, given these clear cues to emotion, participants’ attributions of emotion would reveal with gender stereotype contrast effects.

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**Discussion**

- This study demonstrated that, when making attributions of emotion from facial expressions, people consider information beyond the emotions displayed in the face.
- In particular, people use the gender of the expression in making emotion attributions.
- The current study presented participants with clear cues to both gender and emotion.
- Contrast effects in gender stereotypes of emotion were significant: ‘male’ were judged as more fearful, while ‘female’ were judged as more angry.
- These results support prior research using clear cues to emotion and gender (Hess et al., 2004), and provide further evidence of the effect of gender stereotypes on attributions of emotion.
- When cues are ambiguous (e.g., Plant et al., 2000), gender stereotypes aid us in making gender-congruent attributions about another’s emotion.
- When cues are clear, these same stereotypes focus our attention on stereotype-inconsistent information.