Abstract

Understanding how emotions are represented by others is an important, even critical, skill for success in social interactions. The lack of these skills has been associated with decreased social competence and poor interpersonal relationships (Shimokawa et al., 2001). In extreme cases, it may be considered a symptom of psychopathology.

Furthermore, there is a large and rapidly growing literature examining the neural substrates of emotional processing. Studies have examined the processing of individual, presumably discrete, emotions. They have also investigated how emotions conveyed through different modalities are processed.

Whether the research explores personal functioning or the relationship of brain and behavior, the accuracy of emotional perception judgments is commonly a dependent variable. There are, however, few standardized instruments for quantifying this ability. Those which do exist account for only a small proportion of these research studies. The New York Emotion Battery (NYEB; Borod, Welkowitz, & Obler, 1992) includes tests for the perception of eight discrete emotions across three communication channels (facial, prosodic, and lexical). The NYEB has been used to study a broad variety of psychiatric and neurological conditions, as well as normal aging.

Data has been collected from more than 122 healthy, right-handed adults, ages 20-89. Each participant has completed emotion perception tasks from the NYEB. Perceptual tasks included both identification and discrimination of emotions. Non-emotional perception tasks were performed as control measures. All participants completed a screening process which included measures of cognitive, perceptual, and affective functioning.
It is proposed that analysis of these data may provide insight into several questions regarding the assessment of emotional perception. Such questions include whether emotional perception is a general ability or a collection of separable abilities, and whether this ability is separable by different channels or different emotions. Whether facial expression deserves its current pre-eminence among channels as a measure of perception will also be explored. Statistical tests will be performed that examine (1) whether abilities in emotional perception are consistent across emotions, (2) whether they are consistent across communication channels (i.e., facial, prosodic, and lexical), (3) which channel might be the best estimator of overall ability, (4) whether the items in the NYEB are internally consistent, and (5) whether the unique taxonomy of primary emotions in the NYEB can be confirmed with factor analysis.