# The Interconnectivity of Word Interpretation and Emotional State

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## Abstract

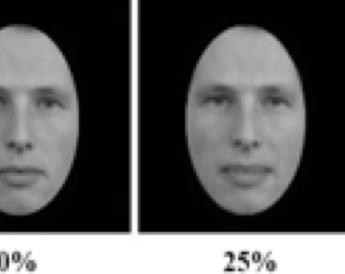
The power of words to persuade, degrade, and implicate others is undeniable. Previous research (e.g. Lindquist, Satpute, & Gendron, 2015; Schnuerch et. al., 2016) support the hypothesis that emotions impact situational interpretation through studies of perception of facial expression and tone of voice. The current study focused on the role of emotion in influencing word perception, specifically the perception of neutral words apparently void of positive or negative connotation. Sixty-two undergraduate students from the University of North Carolina at Charlotte, aged 18-53, took part in this study. In an online survey, participants completed the Oxford Happiness Inventory quantifying their emotional state. They then rated the positivity of 25 neutral words on a scale where 1= extremely negative and 6= extremely positive. This study found a significant, moderate positive correlation in the expected direction, supporting the hypothesis.

## Introduction

#### **Projection, Communication Interpretation, and Emotion**

Past research suggests that projection of a person's mood onto the recipient of communication influences that person's perception of the state of being of the other. A study that explains this was conducted by Niendenthal and colleagues in 2000. In this study, emotions of happiness, sadness, or neutrality were induced using film clips that had previously been shown to strongly illicit these emotions in college students. Participants then watched 100-frame movies in which a person's emotional expression changed either from happiness to neutrality or sadness to neutrality. Participants were asked to indicate when in the movie the expression switched to neutral. When watching the movie that started with the emotion they had been primed for, participants took longer to identify an expression as neutral. In other words, feeling an emotion led participants to see that emotion for a longer period of time in another's expression than when the emotions experienced and the emotions displayed were incongruent (Niendenthal, et al. 2000). Humans project emotions onto others in conversations as well as in the interpretation of facial expressions.

neutral











full intensity

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## Hypothesis

Few studies have explored whether or not this proves true in the interpretation of written, ambiguous words (e.g., neutral words). The current study was conducted to address this deficit in research.

Hypothesis: The number of words a participant identifies positively or negatively from a list of neutral words is positively related to their emotional state at the time of the study.

## Method

Oxford Happiness Inventory	Neutral Word List
I am intensely interested in other people	Book
1 = strongly disagree	1 = extremely negative
2 = moderately disagree	2 = moderately negative
3 = slightly disagree	3 = slightly negative
4 = slightly agree	4 = slightly positive
5 = moderately agree	<ul> <li>5 = moderately positive</li> </ul>
6 = strongly agree	6 = extremely positive

#### Measures

Participants answered four demographic questions before proceeding to take the Oxford Happiness Inventory (Hills & Argyle, 2001), a 29-question survey previously used in studies to quantify current happiness. This survey scored current happiness by adding together the ratings participants gave of how much they agreed or disagreed with a statement on a Likert scale (1=strongly disagree, 6=strongly agree) and then dividing this number by 29. Some of the statements, marked (R), were measured in reverse meaning that if participants rated an (R) question as 1, that question would be counted as a 6. Items presented to participants in this section ranged from "I don't have particularly happy memories of the past" to "I feel fully mentally alert." Higher scores indicated higher happiness at the time of the study. Following the happiness inventory, participants were presented with a list of 25 neutral vocabulary words adapted from Scott, O'Donnell, Leuthold, & Sereno (n.d.). They were asked to rate on a six-point scale how positively or negatively they viewed each word (1=extremely negative, 6=extremely positive). Examples of items presented to participants in this section included "nonsense" and "book." Higher scores indicated that a participant rated the neutral word presented more positively.

#### Results

Correlation was used to test the hypothesis. Means, standard deviations and intercorrelations among study variables are reported in Table 1. There was a moderate positive correlation of .31 between participants' emotional states and their ratings of neutral words. The hypothesis was supported as the correlation was statistically significant and in the correct direction.

Means, Standard Deviations and Intercorrelations among Study Variables

	Variables	М	SD	1	2	
1.	Perceived Happiness	3.98	.83	-		
2.	Word Rating	3.77	.47	.31*	-	

*Note.* N = 62. \*p < .05.

# Discussion and Implications

This study investigated mood's role in biasing participant interpretation of written, neutral words. The results showed a significant, moderate relationship between emotional state and neutral word rating in a positive direction.

#### **Practical Implications**

The current study begins a necessary exploration of the relationship between emotion and perception of written words. The results indicate that for this sample, emotional state influenced perception of written words. More startlingly, they indicate that even neutral words undergo the perceptual influences of emotion. Words void of positive or negative connotations can still impact how positively or negatively a written message is perceived. This raises questions concerning whether or not words can ever be considered neutral. Instead, are "neutral" words actually "ambiguous," depending entirely on context and emotional state for connotation? Answering this and other similar questions has many implications for the course of human interaction. In particular, this information could be used by advertising companies, politicians, and nonprofits to convince the general public to support their position or buy their products. Companies could work to induce happiness in their clients (e.g. through a pleasant hook rather than a startling statistic) in their written advertisements. From there, this study indicates even neutral words would be perceived as more positive than if happiness was not induced, increasing the reader's positive interpretation of the message. The findings of this study also speak volumes about conflict management. With the influx of high speed written communication (texting, email, etc.), it is imperative to be aware of how emotion affects understanding of written communication.

