Pueblo Community College

# PSYCHOLOGY 101: Evaluating the Validity of Media Reports

**Department/Program: Psychology/Social Sciences**
**Project Dates: 2014-15 · Project Leader: Donna Fitzsimmons**

## Problem

Due to the abundance of psychological research presented to the general public via media reports, it is often difficult for students to discriminate between valid research reporting and articles that contain only a small element of accurate data. In particular, test results and general in-class observations have revealed that students confuse the concepts of correlation and causation, as these are often misrepresented in the press. Being able to accurately evaluate sources and recognize the valid implications of research results are fundamental critical thinking skills in the field of psychology. It is important for students to be able to sift unsound reporting of experimental results from legitimate, peer-reviewed findings, and to recognize the dangers of misrepresenting psychological findings.

## Plan

Methods for improving students' learning included extending lectures on evaluating psychological research and providing multiple examples of both legitimate reporting as well as unsound reporting. Additionally, students spent time in class working in small groups to analyze samples of popular media articles. Faculty provided detailed feedback and support during this time to assist students in actively working with and understanding the concepts and applying the ideas.

**Each group reported the following:**

- Summary of the article
- False assumptions presented as fact
- Examples of correlation and variables of causation
- Possible dangers if people believe the misrepresentations
- New title for the article that more accurately represents the findings

## Assessment Activity

Each student enrolled in PSY 101 on the Pueblo campus read a selected popular media article and then completed a written assignment in response to three questions about the article.

**Students were asked to identify:**

- False assumptions presented as fact and correlation and variable of causation
- Possible dangers if people believe the misrepresentations presented in the article
- A new title to more accurately represent the findings

**Rubric used to grade student papers:**

- Analyzes key information, questions, and problems clearly and precisely
- Uses inference to reason carefully from clearly stated premises to important implications and consequences
- Answers/addresses questions completely and accurately
- Grammar

## Results and Data

The average overall score for all Pueblo campus sections of PSY 101 in fall of 2014 and spring of 2015 was 80%. I was pleased with these results, as they demonstrate continued success and overall improvement - up significantly from 68.5% during the first semester in which all faculty on the Pueblo campus participated. Results for specific questions (and concepts) are listed on the table. We continue to demonstrate success with the concept students struggled with the most when we began assessing this SLO – identifying the possible dangers if people believe the misrepresentations presented in the article.

| Question | Average Score |
|---|---|
| False assumptions, correlation/causation | 74% |
| Dangers of misrepresentations | 78% |
| New, more accurate title | 87% |

## Closing the Loop & Next Steps

In reviewing the results, I am confident we have identified teaching methods to help students understand correlation and causation and become more discerning consumers of psychological research in the media. Additionally, we have a quality assignment to assess these concepts. All faculty will continue to incorporate more in-class examples as well as exercises requiring students to identify possible real world problems if example articles were taken seriously. While this is our last year directly assessing this SLO, faculty will continue to emphasize these concepts in class, provide examples, and practice working with the concepts in action and applying critical thinking to media articles which present results of psychological research.