

# Proceedings of the Iowa Academy of Science

---

Volume 47 | Annual Issue

Article 84

---

1940

## A Study of Compensation

Miriam G. Zugmeier  
*Iowa State College*

A. R. Lauer  
*Iowa State College*

Copyright ©1940 Iowa Academy of Science, Inc.

Follow this and additional works at: <https://scholarworks.uni.edu/pias>

---

### Recommended Citation

Zugmeier, Miriam G. and Lauer, A. R. (1940) "A Study of Compensation," *Proceedings of the Iowa Academy of Science*, 47(1), 302-303.

Available at: <https://scholarworks.uni.edu/pias/vol47/iss1/84>

This Research is brought to you for free and open access by the Iowa Academy of Science at UNI ScholarWorks. It has been accepted for inclusion in Proceedings of the Iowa Academy of Science by an authorized editor of UNI ScholarWorks. For more information, please contact [scholarworks@uni.edu](mailto:scholarworks@uni.edu).

in one class in biology and the revised test. The results are offered only as preliminary to a more complete study being carried out.

DEPARTMENT OF PSYCHOLOGY,  
IOWA STATE COLLEGE,  
AMES, IOWA.

---

## AN APPARATUS FOR MEASURING TOLERANCE TO LIGHT AND VISUAL EFFICIENCY UNDER DIF- FERENT CONDITIONS OF ILLUMINATION

GLENN O. MARTINSON

Illumination in relation to automobile driving is considered one of the most important problems of highway safety. Because of contrast between source of light and background, lights which give sufficient illumination are considered blinding. An apparatus is described which makes possible the accurate measurement of tolerance to light under different atmospheric conditions.

Calibration of the light falling on the test object and the light impinging on the retina makes possible measurement of the optimal conditions of illumination under different degrees of darkness. The light measurements are made by electrometric methods.

DEPARTMENT OF PSYCHOLOGY,  
IOWA STATE COLLEGE,  
AMES, IOWA.

---

## A STUDY OF COMPENSATION

MIRIAM G. ZUGMEIER AND A. R. LAUER

Although pages have been written in psychological text books on compensation, a survey of the literature shows an extremely meagre amount of experimental data. The present study is an attempt to formulate some of the problems of compensation into experimental form.

Forty subjects were given a series of laboratory tests in which accuracy and speed were compared under normal conditions and under conditions of distraction. Thirty-one of the same subjects were given a written test of the questionnaire type which was

divided into three arbitrary categories; traffic compensation (T), social compensation (S), and industry or ambition (I). The following correlations were obtained:

$$r_{ST} + .210$$

$$r_{SI} - .221$$

$$r_{TI} + .309$$

There was no significant correlation between grade discrepancies as a measure of compensation and laboratory or written-test measures of compensation. The latter two correlated + .12 which was not as high as intercorrelations between categories of the written test. The tentative conclusion is that compensation is a more or less specific function. Further data are being obtained.

DEPARTMENT OF PSYCHOLOGY,  
IOWA STATE COLLEGE,  
AMES, IOWA.

---

## A STUDY OF PROGRESS IN READING AT GRADE FIVE LEVEL

MAXWELL F. SMITH

Reading tests were given to a ten-year-old fifth grade girl for a period of six weeks. Two types of material were used: (1) material from a text book of the fifth grade level was used in daily tests; (2) tests were given two days each week from material used at the college level.

Instructions as to the proper reading technique were an integral part of the administration of the daily practices and checks on the fifth grade material. The exercises with college grade material were preceded by discussion and clarification of vocabulary.

The subject progressed, in the daily tests, from an initial reading rate of 160 words per minute to a final rate of 620 words per minute. A corresponding effect was noted in school reading and regular class work. The inference is drawn that individualized instruction in reading would tend to solve many of the problems of elementary and grade school level.

DEPARTMENT OF PSYCHOLOGY,  
IOWA STATE COLLEGE,  
AMES, IOWA.