

# A LINE ON LIFE

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## Objective Tests – Should You Stay with Your First Answers?

David A. Gershaw, Ph.D.

Academic "*folk wisdom*" has emphasized the accuracy of "*first impressions*." In other words, you typically should *not change* initial answers on an objective (true false or multiple choice) test. If you do, you are more likely to change to a *wrong* answer. Since we take objective tests even after we are out of school (driver's license or civil service exam), it is important for us to know – is this myth really true?

A psychological article\* summarized 33 studies that were conducted from 1928 to 1983. Although there are some differences in the findings of these studies, the evidence gives two uniform indications:

1. The *majority* of answer changes are from incorrect to *correct*.
2. Most students who change their answers *improve* their test scores.

Do students think that changing their answers will help their scores? In contrast to what actually occurs, between 68% and 100% do *not* expect changed answers to improve their scores. In fact, about 3 out of every 4 students believed that answer changes would *lower* their scores.

Why do students believe this? One possibility is that the myth is reinforced by their instructors. To test this hypothesis, a study was done of the Education, Liberal Arts and Science faculty at Texas A & M University. Of those faculty who used objective tests, most of them (55%) believed that changing initial answers would lower student scores. Only about 15% thought it would improve student scores. (The remainder either indicated "*no change*" or "*don't know*.")

About one-third of these instructors indicated that they gave their students instructions about changing answers. Of those who gave instructions, almost two-thirds (63%) warned students *not* to change answers, because they would get more wrong answers!

What proportion of students actually change their answers? Among the studies reviewed, anywhere from 57% to 96% changed their answers, with a median of 84%. What proportion of items were changed? Although the percentages ranged from 2% to 9%, it was typically just above 3%.

Did these changes hurt or help? On true-false items, you can change from "*wrong to right*" or "*right to wrong*." However, with multiple-choice items, you can also change

from one wrong answer to another. Below are the average (median) percentages for each category.

### **CHANGES**

#### **Multiple-Choice Studies (20 studies)**

Wrong to Right – 57.8%

Right to Wrong – 20.2%

Wrong to Wrong – 22.8%

#### **True-False Studies (5 studies)**

Wrong to Right – 66.6%

Right to Wrong – 33.5%

Thus – in spite of the myth about changing answers – the ratio of gainers (wrong to right) to losers (right to wrong) is 2/1 for true-false tests and almost 3/1 for multiple choice. You are 2-3 times more likely to get it right, if you make a change!

If this is so, why do students still believe the myth? One reason is that they have *not received information to the contrary*, (That is why I am writing this article.) Another possibility is **selective perception**. In other studies, students seldom remember items they changed to the correct response. In contrast, they seem to "*highlight*" in their memory those items that they change and get wrong.

However, it is not quite that simple. The success of your answer may depend on your *reason for the change*. If you mistakenly put down the wrong answer or misread the question (like missing the word, "*not*") – you are very likely to increase your score by changing your answer. However, if you are just unsure of your answer or merely guessing – for you, the myth may be no myth at all.

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\* Ludy T. Benjamin, Timothy A. Cavell and William R. Shallenberger III, "Staying with Initial Answers on Objective Tests" Is It a Myth?" *Teaching of Psychology*, October, 1984, pages 133-141.