

Technical Affairs

If I Retake the Exam, Will I Score Better?

A question often asked by applicants or students failing an exam is, “If I retake the exam, will I score better?” The answer to this question depends on three factors: test taking conditions, attempts to improve, and the test’s standard error of measurement.

Test Taking Conditions

It may be that applicants believe their test scores are low due to circumstances surrounding the test. For example, applicants who were ill, unusually tired (e.g., “ I hadn’t slept in two days”), or distracted (e.g., going through a divorce, grieving over the death of a family member) may legitimately believe that had they been thinking more clearly, they would have scored better on the test. A related explanation for a poor test score is that an applicant might be taking a certain type of test for the first time and was confused by the format.

For such applicants, retaking the test might indeed significantly increase their test scores. This is especially true if the applicant has a history of doing well on similar tests. For example, if an applicant scored well on the a college admissions test (e.g., SAT), had excellent grades in college, yet scored poorly on a civil service exam, one would be inclined to attribute the low score to unusual circumstances surrounding the test. If, however, the applicant has a history of poor performance on cognitive tests, the excuse of being sick may not explain the low score on the employment test.

Attempts to Improve

If applicants don’t have an identifiable reason for their low test-score, we must look at what they have to improve their scores. In academia, it is not uncommon for students to do poorly on the SAT or GRE the first time they take the test, and then be puzzled when they do poorly the next time they take the test. For students or applicants to expect an improvement in test scores, they must take steps to improve their knowledge or skills. For example, a student who takes algebra and geometry classes in the semester after doing poorly on the GRE should have a reasonable expectation of higher scores. Likewise, a police applicant who sought counseling after failing the psychological exam or a fire applicant who lifted weights for 3 months after failing the physical exam might have a reasonable expectation of passing the exam the next time around.

Obviously, some KSAOs are easier to improve than others. Basic math, grammar, physical strength, and knowledge of employment laws are KSAOs on which an applicant can make substantial improvement. Such

KSAOs as honesty, personality, and severe psychopathology are not likely to be improved through additional coursework or training.

Standard Error of Measurement

If applicants have no excuses related to testing conditions and have done nothing to improve their knowledge or skills, their only hope for getting a higher score is the unreliability of the test. The standard error of measurement for a test is determined using the following formula, where SD is the standard deviation for the test and reliability is the test-retest reliability for the test.

$$SE = SD \sqrt{1 - reliability}$$

For example, if a test has a mean of 70, a standard deviation of 5, and a test-retest reliability of .80, the standard error would be:

$$SE = 5.0 \sqrt{1 - .80}$$

$$SE = 5.0 \sqrt{.20}$$

$$SE = 5.0 * .447$$

$$SE = 2.24$$

A standard error of 2.24 would mean that we are 68% confident that the person’s “true score” is within 2.24 points of the score they received and 95% confident that the “true score” is within 4.44 points of the score they received.

To relate the standard error back to the question about retaking a test, let’s use the following example. Suppose that the passing score for the test was 70 and Joey scored 55 and Ross scored 68. Joey is 15 points below the score needed to pass, which is well outside the standard error. Ross, however, is only 2 points below passing, which is within the standard error of measurement. Thus, we might advise Ross that retaking the test might result in his passing the test. Our advice to Joey would be to learn some new skills before retaking the test. Keep in mind that with the standard error of measurement, applicants retaking a test are as likely to decrease their scores, as they are to increase their scores. The standard error just tells us how much of a change one might expect by chance.

When considering the standard error, one must also keep in mind the concept of the regression to the mean. Generally, scores of applicants who retake a test will move toward the mean. That is, a student with an initial GRE score of 1,500 would expect his score to decrease, whereas a student with an initial GRE score of 700 would expect his score to increase.

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HR HUMOR

The following piece of HR Humor was contributed by ACN reader Amanda Morgan.

1943 Guide to Hiring Women

The following is an excerpt from the July 1943 issue of Transportation Magazine. This was serious and written for male supervisors of women in the work force during World War II. Obviously, the intent was not to be “funny,” but by today’s standards, this is hilarious!

Eleven Tips on Getting More Efficiency Out of Women Employees:

There is no longer any question whether transit companies should hire women for jobs formerly held by men. The draft and manpower shortage has settled that point. The important things now are to select the most efficient women available and how to use them to the best advantage.

Here are eleven helpful tips on the subject:

1. Pick young married women. They usually have more of a sense of responsibility than their unmarried sisters. They are less likely to be flirtatious. They need the work, or they would not be doing it. They still have the pep and interest to work hard and to deal with the public efficiently.
2. When you have to use older women, try to get ones who have worked outside the home at some time in their lives. Older women who have never contacted the public have a hard time adapting themselves and are inclined to be cantankerous and fussy. It is always well to impress upon older women, the importance of friendliness and courtesy.
3. General experience indicates that “husky” girls—those who are just a little on the heavy side—are more even-tempered and efficient than their underweight sisters.
4. Retain a physician to give each woman you hire a special physical examination—one covering female conditions. This step not only protects the property against the possibilities of lawsuit, but reveals whether the employee-to-be has any female weaknesses which would make her mentally or physically unfit for the job.
5. Stress at the outset, the importance of time; the fact that a minute or two lost here and there makes serious inroads on schedules. Until this point is gotten across, service is likely to be slowed up.
6. Give the female employee a definite day-long schedule of duties so that they will keep busy without bothering the management for instructions every few minutes. Numerous properties say that women make excellent workers when they have their jobs cut out for them, but that they lack initiative in finding work themselves.
7. Whenever possible, let the inside employee change from one job to another at some time during the day. Women are inclined to be less nervous and happier with change.
8. Give every girl an adequate number of rest periods during the day. You have to make some allowances for feminine psychology. A girl has more confidence and is more efficient if she can keep her hair tidied, apply fresh lipstick and wash her hands several times a day.
9. Be tactful when issuing instructions or in making criticisms. Women are often sensitive; they cannot shrug off harsh words the way men do. Never ridicule a woman—it breaks her spirit and cuts off her efficiency.
10. Be reasonably considerate about using strong language around women. Even though a girl’s husband or father may swear vociferously, she will grow to dislike a place of business where she hears too much of this.
11. Get enough size variety in operator’s uniforms so that each girl can have a proper fit. This point cannot be stressed too much.