



---

**RELY**

---

---

## EXECUTIVE SUMMARY

### RELY Validation Report

Prepared by

Kurt G. Helm, Ph.D.  
Helm and Associates, Inc.  
Helmsburg, Indiana

## **Purpose of the Executive Summary**

The Executive Summary of the RELY validity study was designed to be an overview, in non-technical terms, of the research, development and validation of the RELY. Every effort has been made to present this material free from the specialized jargon of statistics and research. The purpose of such jargon is to increase the precision of language used to describe technical work. Avoiding it will, therefore, at times result in our making more general statements than would otherwise be the case. We accept this difficulty in order to clarify the research findings for the non-technical reader. A more in-depth, technically precise explanation of the issues presented here is available in the full validation report on the RELY (technical report # 1409).

## **Description of the RELY**

RELY is a self-report test of an individual's attitudes and likely behavior with regard to absenteeism, tardiness, and work ethic. The attitudes that are assumed to be related to reliable job behavior are:

- it is important to come to work on time every day;
- it is important not to miss a day of work except in a serious emergency;
- it is important to work hard, do the best work you can, take the initiative to look for extra work and special projects.

RELY further assumes that these attitudes will be manifested in an employee's behavior in the following ways:

- they will be at work, on time or before, more often than not;
- they will not take days off if they can help it at all;
- they will be more conscientious and effective workers.

## **Development**

RELY was constructed by developing test questions, or items, for each of the three factors

assumed to be manifestations of work ethic. Test items either ask about a respondent's attitudes toward the factor, or about a respondent's past behavior with regard to that factor. Additional items were included to provide an index of the respondent's positive response bias, or willingness to distort his or her answers in order to form a favorable impression (Motivation to Distort). Finally, a section of open-ended questions that were not included in the validation study and do not contribute to the scale scores were written. These questions, in section III of the RELY, are intended to serve as the basis of a structured, pre-hire interview that is conducted after the RELY is administered.

Criterion data were gathered for the first three months of each respondent's job tenure. Punctuality data consisted of the total number of times an employee reported for work late. Attendance data consisted of the total number of times an employee missed a day of work. Work ethic data consisted of the supervisor's overall rating of the employee's quality of work.

Success on the criterion measure for absenteeism was operationally defined as two or fewer days absent during the first three months of employment. Success on the criterion measure for punctuality was operationally defined as two or fewer instances of being late during the first three months of employment. Success on the criterion measure for work ethic was operationally defined as a supervisor's rating of average or above.

Criterion measures showed no unacceptable restriction of range. There was wide dispersion of the scores on each criterion, with variability within each range. The hypothesis that punctuality and attendance are specific aspects of work ethic was supported by the fact that groups with lower overall rating of work ethic consistently had significantly more absences and late arrivals than those groups with higher ratings.

Each item's predictive power for the work ethic factor was checked, and the items with the greatest predictive power for each factor were combined to form scales that would have the most predictive power. Nine scales (three for each factor) were formed. Attitude and self-report scales

were formed logically, and items that correlated strongly with a criterion measure were combined to form an empirical measure of the factor.

**Data Collection**

A nation-wide retail full-service grocery store chain was chosen as the source for subjects. Eighteen stores in a large metropolitan area in the southwestern U.S. provided the subjects. To retain the “applicant” mind-set, as opposed to the different perspective on the questions an “employee” might reflect, RELY was administered to applicants for entry-level positions after the decision to hire the applicant had been made but before that decision had been communicated to the applicant.

RELY was administered to over 300 applicants. A total of 282 subjects were included in the validation study after eliminating subjects with

missing or contaminated data. Too few blacks were available in the original sample to address the subject of whether blacks would score significantly differently than whites, and so the RELY was subsequently administered to thirty black and thirty white subjects who were recruited for experimental purposes from a large southwestern state university. These sample sizes exceed American Psychological Association standards for test research and design.

Scatterplot distributions of the total scale score for each of the three empirical scales with their respective criterion measures were analyzed. Each scale was divided into three regions: high, moderate, and low likelihood of success on the respective criterion. For each factor, or scale, on the RELY, the tables in this report show the relationship between an individual’s raw score on each scale and the probability of his or her success (a rating of “good”) on the criterion.

**Absenteeism:**

Probability of Good Attendance	20%							75%				90%			
Raw Score	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

**Punctuality:**

Probability of Being Punctual	33%				80%				97%						
Raw Score	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

**Work Ethic:**

Probability of Good Work Ethic	1%				73%						87%				
Raw Score	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

## **Validity**

Content validity is the extent to which a sample of the items, tasks or questions are representative of some defined domain of content. RELY meets the criterion for content validity because the content of the items specifically addresses the respondent's attitudes toward punctuality, attendance, and the value of working hard.

Construct validity is a way of determining how well a tool, or test, measures the construct, or characteristic, it has been designed to measure. There are three constructs that the RELY measures: attitudes toward attendance, punctuality, and work ethic. RELY reflects the three constructs by asking questions specifically addressing those constructs as they would be reflected in on-the-job behavior.

Criterion validity is a way of comparing the results of the tool, or test, with other, independently gathered measures of the same construct or behavior that the test measures. The data gathered on almost 300 subjects supported the relationship between performance on the RELY TEST and the criteria of number of days missed, number of times late, and supervisor's rating of work ethic.

## **Reliability**

Split-half reliabilities of the logically derived scales range from .67 to .80, indicating a more than adequate degree of internal consistency within the overall instrument.

## **EEOC Concerns**

When the RELY TEST was developed and validated, U.S. employment law and EEOC guidelines required that scores be adjusted to equalize significant differences in scores for targeted subgroups of the population. The Civil Rights Act of 1991 directs that all adjustment of scores, based on race, color, sex, religion, or national origin, of employment-related tests immediately stop. The scoring procedure for the RELY TEST was revised, therefore, to eliminate all adjustment of scale ranges and scores. The scoring procedure for the RELY Test is in compliance with section 106 of the Civil Rights Act of 1991. The

RELY TEST meets both the "job-related" standard and the "business necessity" standard defined by the Americans with Disabilities Act (ADA) of 1990. Use of the RELY TEST as part of a pre-employment process is in compliance, therefore, with U.S. employment law.

## **Summary of Results**

RELY is a valid psychometric instrument that measures attitudes toward punctuality, attendance, and work ethic. The attitudes measured in the RELY correlate significantly with behavior on the job, establishing the RELY as an instrument with valid predictive power with respect to attendance, punctuality and work ethic.

RELY is designed to be used as part of the pre-employment evaluation of prospective applicants at all levels of employment. It is intended to give an employer an indication of an applicant's attitudes toward punctuality, attendance, and work ethic. It may be used to identify applicants whose attitudes can lead to costly behavior for the employer before they are hired so that remedial measures may be taken. The RELY is intended to be used as part of a selection process that includes interviews, background and reference checks, and other relevant pre-employment screening procedures.

## **FOR MORE INFORMATION, PLEASE CONTACT:**

HELM AND ASSOCIATES, Inc.

P. O. Box 130

Helmsburg, IN 47435

(812) 988-0999

(800) 886-4356

[information@helmtest.com](mailto:information@helmtest.com)

[www.helmtest.com](http://www.helmtest.com)