



IMPROVING SAFETY-RELATED BEHAVIOR IN THE WORKPLACE

# 0 SAFETY 1 REPORT 20 OUTCOME 2 HIGHLIGHTS



## BACKGROUND

Hogan Assessment Systems (Hogan) is a world-renowned expert in providing personality-based solutions for multiple applications (e.g., selection, development). Drs. Robert and Joyce Hogan founded the company in 1987 after spending more than 15 years accumulating evidence showing how personality predicts job performance. Hogan has over 30 years of experience helping businesses reduce turnover and increase productivity by hiring the right people, developing key talent, and evaluating leadership potential.

Safety is critical to organizational success as workplace accidents and injuries adversely affect a company's reputation, profitability, and the livelihood of its employees. An important part of creating a safe workplace is hiring employees who can think and act safely. To help organizations improve safety through selection and development efforts, Hogan identified personality characteristics predictive of at-risk work behaviors such as accidents, injuries, and rule violations.

## SAFETY REPORT OVERVIEW

The Hogan Safety Report is based on results from the Hogan Personality Inventory (HPI), which is the industry standard for assessing normal personality and predicting job performance among working adults. Thousands of companies, including nearly 60% of Fortune 100 companies, use the HPI as part of their solutions for essential human resource management functions.

The Hogan Safety Report evaluates applicants and job incumbents on six safety-related competencies:

- **Compliant** – A person's inclination to adhere to rules and policies; high scores will conform to organizational guidelines and will be less likely to defy organizational authorities or ignore company rules.
- **Strong** – An individual's tendency to effectively manage stress; high scores will exhibit confidence in their work and will be less likely to make mistakes by panicking under pressure.
- **Cheerful** – A person's ability to remain emotionally stable when under pressure; high scores will display emotional control while working and will be less likely to make a mistake by losing their tempers.
- **Vigilant** – A person's tendency to remain focused when performing mundane or repetitive tasks; high scores will remain attentive while performing monotonous tasks and will be less likely to make mistakes because of boredom.
- **Cautious** – An individual's inclination to avoid risk-taking; high scores will perform work carefully and will be less likely to make mistakes by taking excessive risks.
- **Trainable** – A person's tendency to use and enjoy training; high scores will remain open to new training and development opportunities and will be less likely to overestimate their own competence due to arrogance.

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## RESEARCH METHODOLOGY

To demonstrate the value of the Hogan Safety Report, the Hogan Research Division (HRD) conducted a series of studies examining the results of applying the Safety Report to real-world business contexts. Comprised of doctorate- and masters-level Industrial-Organizational Psychology professionals, HRD applies rigorous standards when conducting client research studies and communicates results in concise, easily-understood business language.

Studies included several steps:

- Clients provided objective safety data, such as reported injuries, accidents, or workers' compensation claims.
- Job incumbents completed the HPI either prior to or during employment.
- HRD calculated the six scale-level safety scores and an overall safety score based on incumbents' HPI scores.
- HRD classified incumbents as either "above average" or "below average" according to their overall safety scores.
- Because individuals on the job longer have greater opportunities for displaying at-risk behavior, it is important to evaluate the effects of tenure on safety-related outcomes. Thus, HRD examined tenure when clients made these data available.

**The Hogan Research Division applies rigorous standards when conducting client research studies and communicates results in concise, easily-understood business language.**



## OVERALL FINDING

### **Safety Improves When Using Hogan Safety Report**

HRD conducted multiple safety studies across several industries (e.g., transportation, manufacturing) and job titles (e.g., bus operator, assembly worker). We found that employees with above average safety scores on the Hogan Safety Report were less likely to exhibit at-risk work behaviors resulting in accidents, on-the-job injuries, workers' compensation claims, rule violations, and traffic citations. We summarize results from each study on the following pages.

**Employees with above average safety scores on the Hogan Safety Report were less likely to exhibit at-risk work behaviors.**

## STUDY 1

### Greater Number Of Accidents For Employees Who Panic

Hogan partnered with a large Midwestern freight company to identify the drivers of workplace accidents for hourly employees. These individuals occupied different hourly jobs, primarily associated with loading, transporting, and delivering freight. Using the Hogan Safety Report, we found that employees who appear to panic under pressure (low Strong) were more likely to be involved with at least one major accident than those who tend to remain calm when in stressful situations (high Strong). Across all six safety scales, employees with above average safety scores recorded 20% fewer major accidents than employees with below average scores. For those on the job for three years or longer, employees with above average safety scores reported 50% fewer accidents compared to those with below average scores.

## STUDY 2

### Sidetracked & Hard-to-Train Postal Workers Unsafe

Hogan collected safety data from 789 employees in a national postal and parcel delivery organization. These employees worked in jobs that involved receiving, transporting, and delivering packages. Our findings showed that employees who tend to be easily sidetracked (low Vigilant) and hard to train (low Trainable) were more likely to have citations for “unsafe work behaviors” than those who tend to stay focused on the task at hand (high Vigilant) and enjoy learning (high Trainable). Across all scales, employees with above average safety scores had 25% fewer citations for “unsafe work behaviors” compared to those with below average safety scores. By hiring only individuals with above average safety scores, the company could have reduced its number of citations by 15%.

## STUDY 3

### Bus Operator Personality Related to Multiple Safety Outcomes

We collaborated with a large West Coast metropolitan transportation company to examine how bus operator personality related to safety. Hogan found that bus operators who tend to become easily angered (low Cheerful) were more likely to have accidents compared to those who tend to control their tempers (high Cheerful). Additionally, those who tend not to follow company rules (low Compliant), become easily distracted (low Vigilant), and take careless risks (low Cautious) were more likely to have documented rule violations than bus operators who appear rule-abiding (high Compliant), focused (high Vigilant), and tend to weigh the consequences before taking risks (high Cautious). Finally, those with above average safety scores had 31% fewer accidents and 20% fewer rule violations compared to bus operators with below average safety scores.

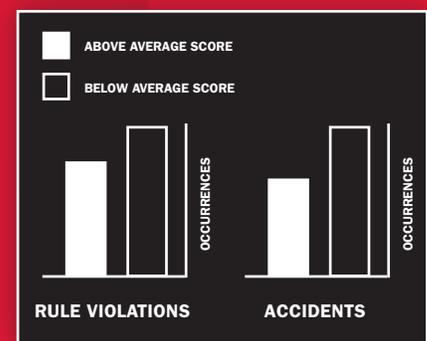
#### 50% FEWER ACCIDENTS



#### 25% FEWER CITATIONS



#### ACCIDENTS AND RULE VIOLATIONS



VISIT [HOGANASSESSMENTS.COM](http://HOGANASSESSMENTS.COM) FOR THE FULL TEXT OF THESE STUDIES

## STUDY 4

### Distracted Risk-Takers More Likely to File Claims

We worked with assembly workers from a small Midwestern manufacturing company to identify the personality characteristics related to workers' compensation claims filed over a two-year period. Assembly workers build small appliances by tightening bolts, aligning components, and connecting electrical wires. Hogan found that employees who tend to be easily distracted (low Vigilant) and take unnecessary risks (low Cautious) were more likely to have filed workers' compensation claims in the past two years compared to employees who tend to stay focused (high Vigilant) and evaluate risks (high Cautious). Additionally, 63% of individuals with below average safety scores filed a workers' compensation claim, compared to only 28% of those workers with above average safety scores. For this manufacturing organization, using the Hogan Safety Report to hire only those individuals with above average safety scores would have resulted in a 40% decrease in workers' compensation claims.

## STUDY 5

### Volatile Rule-Breakers Injured More Frequently

Hogan collected data from truck drivers in a national freight transportation company. Results revealed that drivers who tend to ignore authority and company policies (low Compliant) and lose their tempers (low Cheerful) were more likely to have on-the-job injuries compared to drivers who tend to follow company rules (high Compliant) and control their tempers (high Cheerful). Furthermore, 29% of individuals with below average safety scores had a recorded on-the-job injury, compared to only 8% of those with above average safety scores. Drivers with below average safety scores were over four times more likely to be injured on the job compared to those with above average safety scores. Overall, the company could see a 52% reduction in driver injuries by hiring only those individuals with above average safety scores.

## STUDY 6

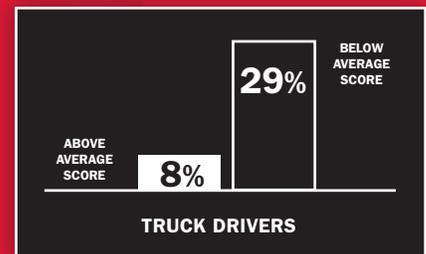
### Fewer Citations for Alert and Receptive Truckers

As truck drivers spend a large amount of time on the road, Hogan examined if personality influenced whether drivers in a national freight transportation company received traffic citations. Hogan found that drivers who tend to be more alert and attentive (high Vigilant) and listen to advice (high Trainable) were less likely to have a citation compared to those who tend to be sidetracked (low Vigilant) and overestimate their competency (low Trainable). In addition, 74% of employees with below average safety scores received traffic citations, compared to 67% of those with above average safety scores.

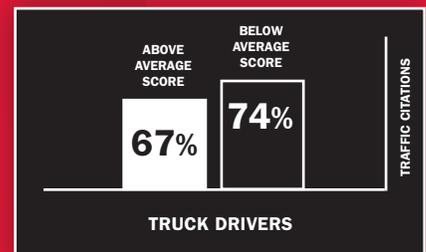
### WORKERS' COMPENSATION CLAIMS



### ON-THE-JOB INJURIES



### TRAFFIC CITATIONS



## STUDY 7

### Hazardous Risk-Takers More Likely to Have Accidents

Hogan collected supervisor safety ratings from 129 employees and accident data on over 2,000 employees in a large consumer foods manufacturing company. Employees who tend to make mistakes because they panic (low Strong) and lose their tempers (low Cheerful) were more likely to have accidents than those who tend to remain calm and steady (high Strong) and control their anger (high Cheerful). Individuals with higher than average overall safety scores were rated as less likely to engage in unsafe behaviors, and more likely to both follow rules and promote safety among coworkers. In addition, as compared to those with below average safety scores, employees with above average scores were 10% less likely to have one or more accidents over a 3-year period and 36% less likely to have two or more accidents over this time.

## STUDY 8

### Fewer Lost Days Due to Hogan Safety Report

We collaborated with a national food manufacturer to examine the Hogan Safety Report's impact on reducing new employee safety incidents. Over a 16-month period, the company compared 400 employees hired before the implementation of the Safety Report to 178 employees hired after its implementation. Those hired with the Safety Report not only had 40% fewer accidents, but their accidents resulted in only 3 days lost or restricted compared to 159 days for those hired without the report.

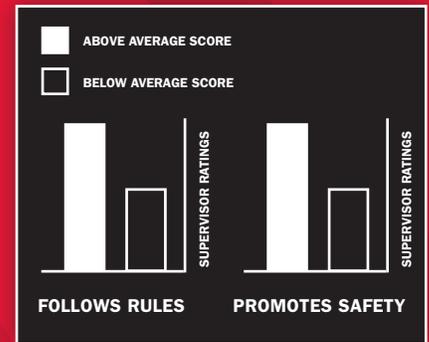
## THE BOTTOM LINE

To be profitable, companies must address workplace safety because injured employees cost organizations nearly \$1 billion per week in direct and indirect costs, such as medical expenses, workers' compensation payments, and lost productivity.

As shown in these case studies, the Hogan Safety Report can help organizations improve safety by identifying rule-abiding, trainable, controlled and focused individuals who make calculated decisions and remain steady under pressure. Across industries and jobs, our research demonstrates that employees with these characteristics are less likely to engage in unsafe behaviors that lead to expensive on-the-job accidents and injuries. Hiring safe individuals will likely contribute to an organization's safety culture and bottom line results.

Safety training can help employees become safer, but without insight into how individuals contribute to the safety climate, even the most extensive safety program will have limited success. The Hogan Safety Report helps raise awareness by targeting specific developmental areas for current employees.

### FOLLOWS RULES AND PROMOTES SAFETY



### DAYS LOST OR RESTRICTED



**The Hogan Safety Report helps raise awareness by targeting specific developmental areas for current employees.**