

# Validation of the ESQ2 in a Brazilian Contact Center

## SIGMA Technical Report

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SIGMA ASSESSMENT SYSTEMS, INC.

## 1

# OVERVIEW

This Technical Report discusses the results of a study conducted to evaluate the criterion-related validity of the ESQ2 in a Brazilian contact center. A total of 287 employees took the Portuguese translation of the ESQ2 then anonymously reported several job attitudes and behaviors. Results showed a strong correlation ( $r = -.52$ ) between the ESQ2's Overall Hiring Recommendation and anonymous reports of counterproductive workplace behaviors. People who failed the ESQ2 reported engaging in significantly more counterproductive workplace behaviors than did people who passed the ESQ2, with most problematic employees being correctly flagged. Several significant relationships were also observed with job attitudes. Overall, results provide strong evidence supporting the validity of the ESQ2 in the Brazilian contact center.

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## 2

# METHODS

Participants were 287 front-line employees (66% female, 66% White) currently employed at a contact center in Brazil. Most participants (56%) were aged 26 to 34, with 33% under age 25, and 9% over age 35.

Participants were sent an invitation to participate by their employer. To protect participant anonymity, no identifying information was collected. Participation was entirely voluntary, with no rewards offered. Materials were presented online and consisted of: (1) the ESQ2 followed by (2) a 6-item measure of job satisfaction, (3) a 3-item measure of turnover intentions, (4) a 20-item measure of workplace safety attitudes and behaviors, and finally (5) Bennett & Robinson's (2001) 19-item measure of counterproductive workplace behaviors with 4 items added to tap behaviors predicted by the ESQ2 not on Bennett and Robinson's original scale.

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# 3

## RESULTS

Overall Hiring Recommendation was strongly correlated ( $r = -.52$ ) with overall number of counterproductive behaviors. For the ESQ2 outcomes, relationships with corresponding on-the-job behaviors generally ranged in size from moderate to strong (see Table 1).

**Table 1. Criterion-related validity coefficients (Pearson  $r$ ) for ESQ2 outcomes**

Job Satisfaction	.31**
Turnover Intentions	-.25**
Alcohol & Substance Abuse	.37**
Bogus Sick Days	.27**
Lateness	.29**
Loafing	.47**
Sabotage of Production or Property	.18**
Safety Infractions	.50** with carefulness .37** with safety attitudes
Theft	.05 <sup>1</sup>
Risk of Counterproductive Behavior	.51**
Overall Hiring Recommendation	-.52**

\*\* $p < .01$

<sup>1</sup> Correlation for theft is small because of low base rates.

Only 5 employees reported engaging in theft, leaving little variance for correlations.

## 3

## RESULTS

(continued)

These relationships compare favorably to results from other pre-employment integrity tests. In a meta-analysis on the validity of integrity tests, Ones, Viswesvaran, and Schmidt (1993) reported that the relationship between integrity tests and counterproductive workplace behaviors was  $r = -.33$  on average,  $-.22$  for the average covert measure (the ESQ2 is a covert measure), and  $-.41$  when admissions of counterproductive behaviors is the criterion (as in the current study). With a raw validity coefficient of  $-.52$  in the current study, the ESQ2 thus considerably outperformed other assessments.

## 3

## RESULTS

(continued)

The strong correlations are reflected in comparisons of people who pass versus fail the ESQ2. People who failed the ESQ2 engaged in more problem behaviors than those who passed.

Specifically, they engaged in:

- 3.5 times as many counterproductive behaviors
- 3 times more loafing
- 3 times more alcohol & substance abuse
- 2.7 times more lateness
- 3 times more safety infractions
- 2 times more false sick days
- and were 10% more likely to often think of quitting.

## 3

## RESULTS

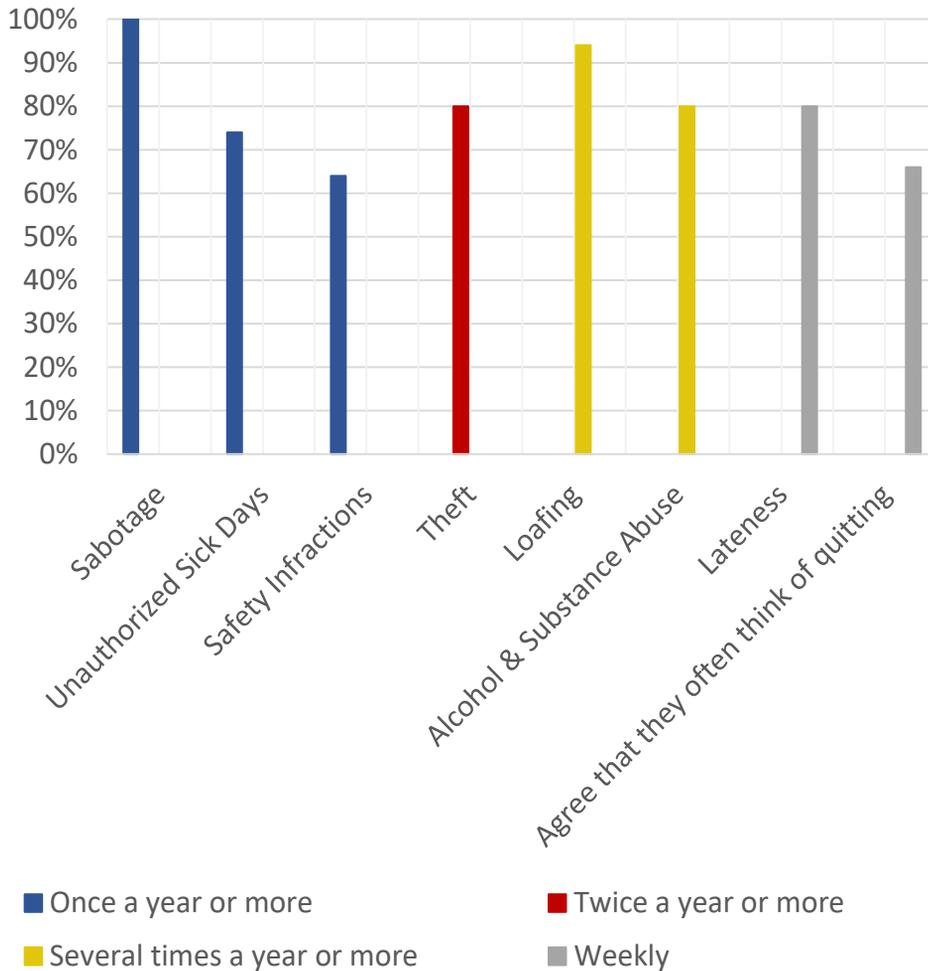
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To explore the benefits of applying the ESQ2, we examined the rate of false negatives. False negatives represent costly hiring mistakes – employees who should not have been hired. In applicant screening, a key goal is to minimize the number of problematic people hired. To examine the ESQ's ability to identify problematic employees, we examined the percentage of employees engaging in problematic levels of each behavior who were (correctly) flagged by the ESQ2 – i.e., scored below the 50th percentile on the corresponding scale. Figure 1 shows that most of the problematic employees were successfully identified by the ESQ2. For example, the ESQ2 flagged 32 of the 34 employees (94%) who loafed several times a year. It flagged 12 of the 15 (80%) people who reported alcohol and substance abuse problems, and 26 of the 35 people (74%) who admitted to ever calling in sick when actually healthy. Taken together, the analysis of false negatives / correct positives suggest that the ESQ2 is an effective screening tool.

# 3

## RESULTS (CONTINUED)

Figure 1. Percentage of Problematic Employees Flagged by the ESQ



## 4

## SUMMARY

The current validation study provided strong evidence in support of the validity of the ESQ2. Criterion-related validity coefficients were strong in size and considerably higher than those reported for other integrity tests (meta-analytic correlation reported of  $-.22$  for covert integrity tests; see Ones, Viswesvaren, & Schmidt, 1993). Results indicated that people who failed the ESQ2 engaged in considerably more problematic behaviors than those who passed. Moreover, the ESQ2 was able to correctly flag most employees who engaged in problematic levels of counterproductive behaviors. Available evidence supports the validity and utility of the ESQ2 at the Brazilian contact center.



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