Should Employers Use Polygraphs to Screen Prospective Employees?

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SHOULD EMPLOYERS USE POLYGRAPHS TO SCREEN PROSPECTIVE EMPLOYEES? 1/

Joe Smith applies for the job of janitor at a day care center. At a preemployment polygraph examination he is asked the following question: "Have you ever molested a child?" Joe says, "no". The polygraph examiner claims he is lying.

Assume that 1% of applicants have molested children (a high estimate). Further assume that the polygraph is 80% "accurate" (a high estimate). Note: 80% accurate means that the polygraph can correctly identify as positive 80% of all individuals tested who have the tested-for trait (sensitivity) and can correctly identify as negative 80% of all individuals who do not have the tested-for trait (specificity).

If 1,000 applicants were given a polygraph, the results would be as follows:

<table>
<thead>
<tr>
<th>Subjects</th>
<th>No. with Positive Test</th>
<th>No. with Negative Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 child molesters</td>
<td>8 (true positives)</td>
<td>2 (false negatives)</td>
</tr>
<tr>
<td>990 not child molesters</td>
<td>198 (false positives)</td>
<td>792 (true negatives)</td>
</tr>
</tbody>
</table>

Of the 206 individuals with a positive test result, only 8 would actually be child molesters. The predictive value of any positive result is 8/206 or 3.88%. Therefore, even if Joe has a "positive" test result, the odds of him actually being a child molester are only 1 in 25.

1. You are an attorney who has been called by Joe. He really needs the job and feels terribly that people think that he might be a child molester. He knows that the administrator of the

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day care center is considering whether to accept the polygraph findings. You schedule a meeting with the administrator to argue that the polygraph is unreliable. What arguments would you make?

2. Suppose you were counsel to the day care center. Using the polygraph is 4 times more accurate than not using anything. In addition, if you find another applicant who "passes" the polygraph, the predictive value (negative) is 792/794 or 99.7%. Thus, you would be 99.7% sure that the person you hired would not be a child molester. What responsibility does the day care center owe to the children and their parents? What do you recommend?

This scene shows the contrast of the old and new New Orleans. In the background, Place St. Charles is shown, a new structure in the central business district. The foreground depicts a typical old French Quarter structure.