

Foster v. City of Pittsburgh
Overview – Evaluation & Recommendations
Related to Pittsburgh Bureau of Police Entry-Level Hiring Practices

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Goals: Answer Following Questions:

1. What candidate characteristics should be measured in the selection system?
2. How well does the current system measure those characteristics?
3. What is the impact on protected classes, specifically, African Americans?
4. What changes would improve the selection system?

Work Undertaken to Answer Question 1 – What candidate characteristics should be measured? What officer characteristics enable a person to perform effectively as a police officer?

- Reviewed BOP mission and value statements, job descriptions, police officer evaluation forms, and training documents.
- Reviewed formal job analyses – EB Jacobs work and other formal job analyses of police work.
- Conducted interviews with BOP leadership, psychologists who evaluate police applicants, and community members.
- Reviewed prior validity studies that document the job-relatedness of applicant/officer characteristics for effective police performance.

Work Undertaken to Answer Question 2 – How well does the current system measure those characteristics?

- Learned about the tests, processes, and procedures of the current selection system.
 - Conducted interviews with a) BOP leadership involved in hiring, b) civil servants knowledgeable about BOP's selection system, c) police applicants, d) psychologists involved in evaluating applicants, e) community members involved in the selection process, and f) EB Jacobs staff members.
 - Reviewed EB Jacobs' technical reports and appendices describing the selection system.
 - Examined documentation in applicant oral board files.
 - Examined background investigation files
 - Observed a mock polygraph exam.
- Evaluated job relatedness (validity) of tests, processes, and procedures for predicting effective police performance.
 - Evaluated technical processes and procedures undertaken to document validity of system.
 - Evaluated strengths and weaknesses of each process and procedure using my own practical experience, expertise, and knowledge of the published scholarly literature.

Work Undertaken to Answer Question 3 – What is the impact on protected classes, specifically, African Americans?

- Conducted interviews with a) applicants affected by the system, b) officers and community members involved in the system.

- Examined raw and processed data to conduct adverse impact analyses at each stage of the selection system as well as an overall adverse impact analysis of the entire selection system.

CONCLUSIONS:

1. No one stage of the selection system produces adverse impact that meets the 4/5th rule – the commonly used criterion to label a procedure or process as having adverse impact.
2. Nonetheless, the adverse impact analyses indicate that *overall* the selection procedures and processes produce adverse impact against African Americans.
3. There is some evidence to support the validity of some parts of the selection system. However, close inspection of the technical evidence indicates issues and problems that likely make those parts of the system hard to defend.
4. Overall, the selection system lacks evidence to support its job-relatedness.

RECOMMENDATIONS:

1. **Update the job analysis.**
 - Take into account the changing make-up of the City's citizens.
 - Consider community involvement in identifying the needed skill set of police officers.
 - Develop a job analysis questionnaire that is easy for participants to complete and which produces more easily interpreted results.
 - Use an importance rating format that produces more absolute levels of KSAO importance allowing for better understanding of the requirements of the job.
 - Identify all work outcomes that are important to predict. For example, include counter-productive criteria (such as disciplinary actions, citizen complaints, absenteeism, tardiness, and driving accidents) that Integrity and Dependability are likely to predict.
2. **Develop a construct-oriented measurement plan for entire selection process.**
 - Develop a plan for what, where, and how to measure each required characteristic (construct/KSAO).
 - Identify constructs (KSAOs) amenable to evaluation in written exam, oral board, background investigation, and Chief's Roundtable.
 - Ensure that the measurement plan includes measurement of all constructs (KSAOs) that are important for effective performance as a police officer.
 - Avoid measuring characteristics that are unimportant.
 - Include KSAOs that are relevant even if they are hard to measure.
 - Avoid measuring the same construct with the same measurement method multiple times in the selection process.
 - Negotiate with the Municipal Police Officers' Education & Training Commission (MPOETC) to allow Pittsburgh BOP to administer the Nelson-Denny Reading test apart from the physical abilities test. Perhaps partner with another city or a group of cities to increase the chances of persuading MPOETC to allow the reading test to be administered apart from the physical abilities test.
 - Instead of measuring Reasoning and Comprehension in the Oral Board, consider measuring interpersonal and practical judgment constructs.
 - Stream-line the selection system to eliminate some of the multiple-hurdles now included. (Multiple-hurdles exacerbate the negative effect on protected classes.)
 - Measure only the cognitive abilities that are important to reduce negative effect on protected classes. For example, for reasoning, consider a measure of pure reasoning ability.

3. **Improve Existing Tests.**

- Investigate the latest research about the predictors of characteristics of individuals that are not likely to be involved in aggressive shooting behavior. In particular learn about Kleider and her colleagues' research on working memory and its relationship to judgment and aggressive shooting.
- Investigate item characteristics of items in existing non-cognitive scales (i.e., LEAB) and new non-cognitive scales to ensure protected classes score on average similarly to Whites when prior research with large data bases suggests their mean scores are similar.
- Investigate item-level validities of new items in non-cognitive scales to ensure validity of new scales for appropriate (targeted) criteria/outcomes.
- Increase the reliability and construct validity of the LEAB Work Styles Questionnaire (WSQ) and Life Experience Survey (LES) scales.
- Reconsider how "missing data" affects the LEAB WSQ and LES scale scores. Consider changing how the scales are scored.
- Eliminate items in the written test that are not scored.
- Revise the Oral Boards to focus on interpersonal effectiveness and motivation rather than cognitive ability.
- Increase the number of items and amount of time spent on testing for non-cognitive characteristics.
- Develop strategies to address intentional distortion in the self-description parts of the written tests.

4. **Develop new tests, procedures, and processes.**

- Develop new tests that measure applicant/officer characteristics that are important for effective performance but not currently measured.
- Identify strategies for measuring required cognitive abilities that have smaller mean score differences between Whites and protected classes and similar levels of criterion-related validity.
- Investigate new technologies and strategies to measure previously hard-to-measure characteristics such as Working Memory/Memorization.

5. **Improve the rating processes.**

- Develop rating scales for the Oral Boards that more fully capitalize on the rich information such testing methods generate. Develop rating scales specify that specify standards and guidelines to ensure a structured, objective, and systematic evaluation that is reliable and valid.
- Develop a monitoring system to check on the quality with which the Oral Boards and Chief's Roundtable sessions are being conducted.
- Consider bringing in outside subject matter experts to evaluate applicants during the Oral Boards. Consider "trading" subject matter experts with other police departments to reduce the cost. Consider using some community representatives as examiners.
- Develop a construct-oriented interview form for the Background Interviews.
- Develop a construct-oriented form to summarize information in the Background File.
- Develop construct-oriented rating scales with definitions and standards/guidelines for evaluating information contained in the applicant files (e.g., Background File) to increase objectivity, inter-rater reliability, and validity of the rating process during the Chief's Roundtable.
 - Develop a set of guidelines to evaluate drug and alcohol use, employment history, and other background information.

- The BOP licensed psychologists have considerable expertise in interpreting and predicting behavior and could help develop a set of standards/guidelines.
 - Consider using the Chief's Roundtable to evaluate the candidate using all the data gathered during the selection process. Develop appropriate rating procedures, forms, and standards using a construct-oriented approach.
 - Work with Civil Service to eliminate the Rule of Three. Perhaps partner with the Mayor's Office and other police departments in other cities to change the Civil Service Statute that mandates the Rule of Three. (Perhaps a reinterpretation of how to apply the statute would suffice.)
 - Improve training of examiners/evaluators/raters for the Oral Board and Chief's Roundtable.
 - Train them on the new rating processes, standards and forms.
 - Include more practice sessions with feedback.
 - Conduct refresher training just before the Oral Boards and Chief's Roundtable are scheduled.
 - Include more in-depth diversity and cultural awareness training.
 - If community members are included, create a welcoming, non-threatening atmosphere during the training.
6. **Conduct validity studies for all components of the system.**
- When possible, conduct criterion-related validities.
 - Consider a consortium study involving several police departments to reduce the cost (time and effort) for any one department.
 - Examine mean score differences between Whites and protected ethnic groups as well as between men and women to reduce adverse impact.
 - Use only those components that have documented validity.
7. **Improve applicant preparation materials and classes.**
- Provide more practice time to applicants – more hands-on, practice-with-feedback experience.
 - Provide interviewing tips, practice, and feedback to applicants.
 - Provide more information to applicants about how examiners during the Oral Board will evaluate them. Inform them specifically about the standards examiners will use to evaluate applicants.
 - Provide information to applicants about the standards that will be used to evaluate their background information. Let (encourage) applicants select out early in the selection process if their backgrounds and prior experiences are such that they will receive low scores when the standards are applied to their life experiences.
 - Provide information and practice about the strict timing requirements of any testing component.
8. **Conduct continuous validation and monitoring of system.**
- Examine mean score differences between Whites and protected ethnic groups, as well as between men and women.
 - Investigate complaints.
 - Revise components to ensure job-relatedness and minimize adverse impact.