

Beyond Selection System Improvements

*Overcoming the “Applicant Pool
Problem” to Reduce Adverse Impact*



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 - University of Maryland and BellSouth
- Thank you to PBJC for the opportunity to collect this data.



Background

- Adverse Impact Ratio =

SELECTED_{Group1}

APPLIED_{Group1}

> .80

SELECTED_{Group2}

APPLIED_{Group2}



Past: 'It's a Selection Issue'

- Adverse Impact Ratio =

SELECTED_{Group1}

APPLIED_{Group1}

SELECTED_{Group2}

APPLIED_{Group2}

Sackett & Ellingson (1997); Sackett & Roth (1996); Hattrup, Rock, & Scalia (1997); Hakel (1998); Chan & Schmitt (1997)

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Future: 'It's an Applicant Pool Problem'

- Adverse Impact Ratio =

SELECTED_{Group1}

APPLIED_{Group1}

SELECTED_{Group2}

APPLIED_{Group2}

Murphy, Osten, & Myors (1995); Ryan, Ployhart, & Friedel (1998)



The 'Applicant Pool Problem'

- Poor applicant pool quality can make adverse impact virtually inevitable, thereby negating improvements in other aspects of selection testing
 - Murphy, Osten, & Myors (1995)
 - Ryan, Ployhart, & Friedel (1998)
- Applicant pool quality
 - Number and qualifications of majority and minority candidates



Causes of the 'Applicant Pool Problem'

- HR's good intentions
 - Recruiting unqualified minority applicants
- Unequal access to information about the job
 - Limited access to informal networks
 - Lack of comparable experience
 - Fewer relatives and friends in the position
- Social support from friends and family
- Positions require minimum qualifications only



Purpose

- Explore the applicant pool problem in a recent entry-level firefighter examination.



About PBJC

- Responsible for testing for all public jobs
- Serves 17 independent municipalities, the JC Commission, the Health Dept, Emergency Management, and the public hospital
- Develops eligibility lists

Operates under consent decree



PBJC Firefighter Candidates

- Entry level position
 - Only requirement is over 18 years old
- Multiple hurdle process
 - Biodata, structured interview
- Extreme background and educational differences
 - Recent high school graduates
 - Current volunteer firefighters
 - Retired firefighter officers

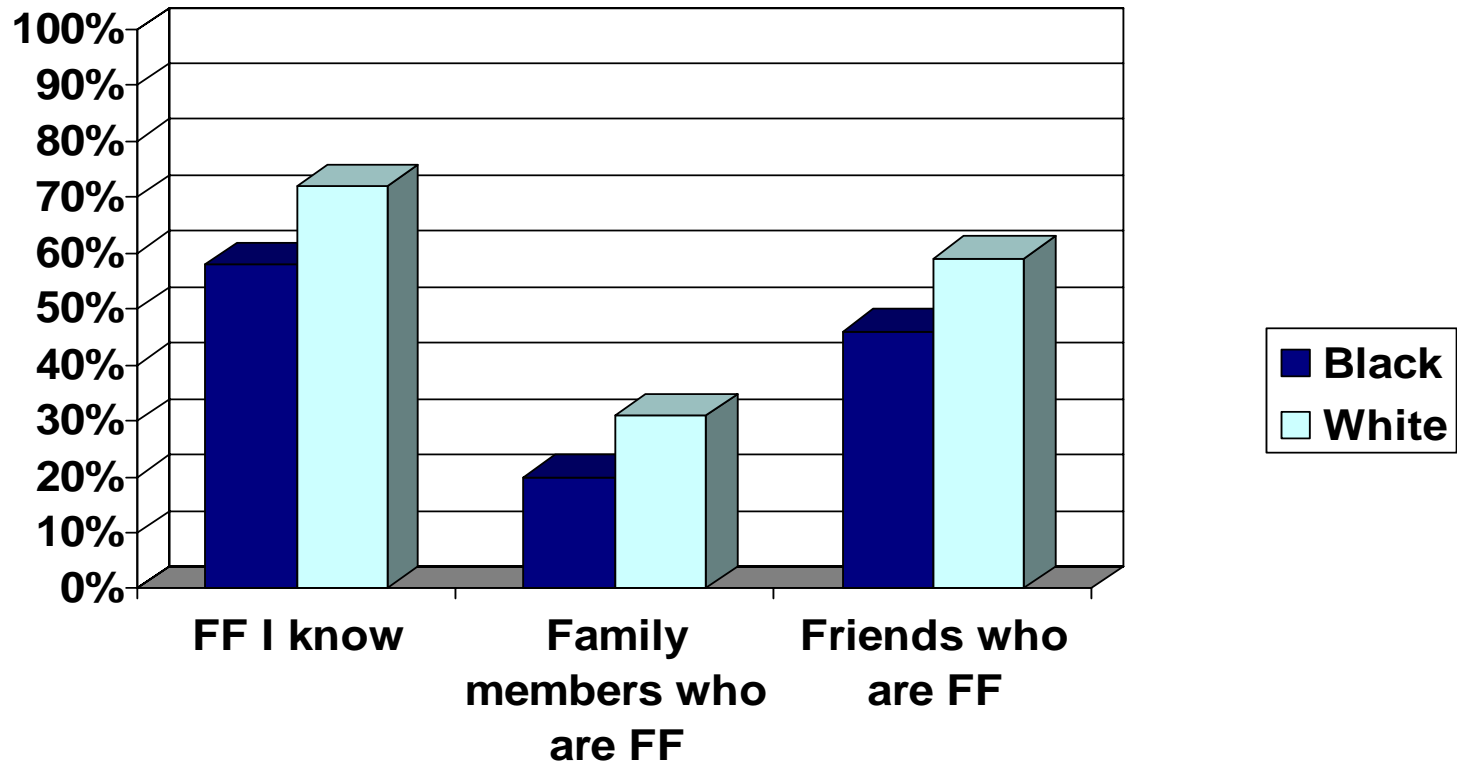


Sample

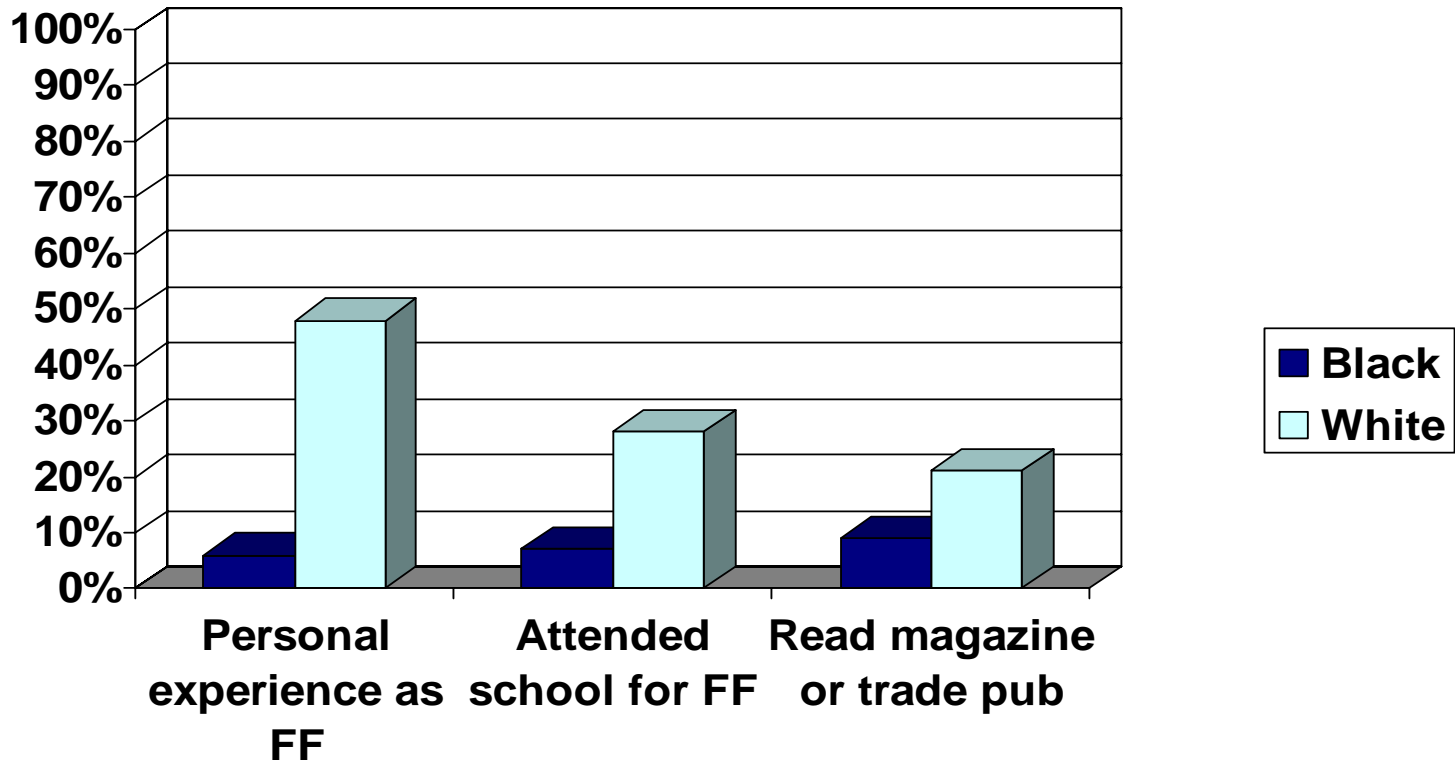
- N = 675 firefighter candidates
 - 1095 present
 - 62% response rate
- Survey administered during first hurdle
- Average age = 27 years
 - s.d. = 7
- Gender
 - 85% male
 - 9% female
 - 6% don't know
- Race
 - 46% African American
 - 43% White
 - 9% don't know
 - 2% other



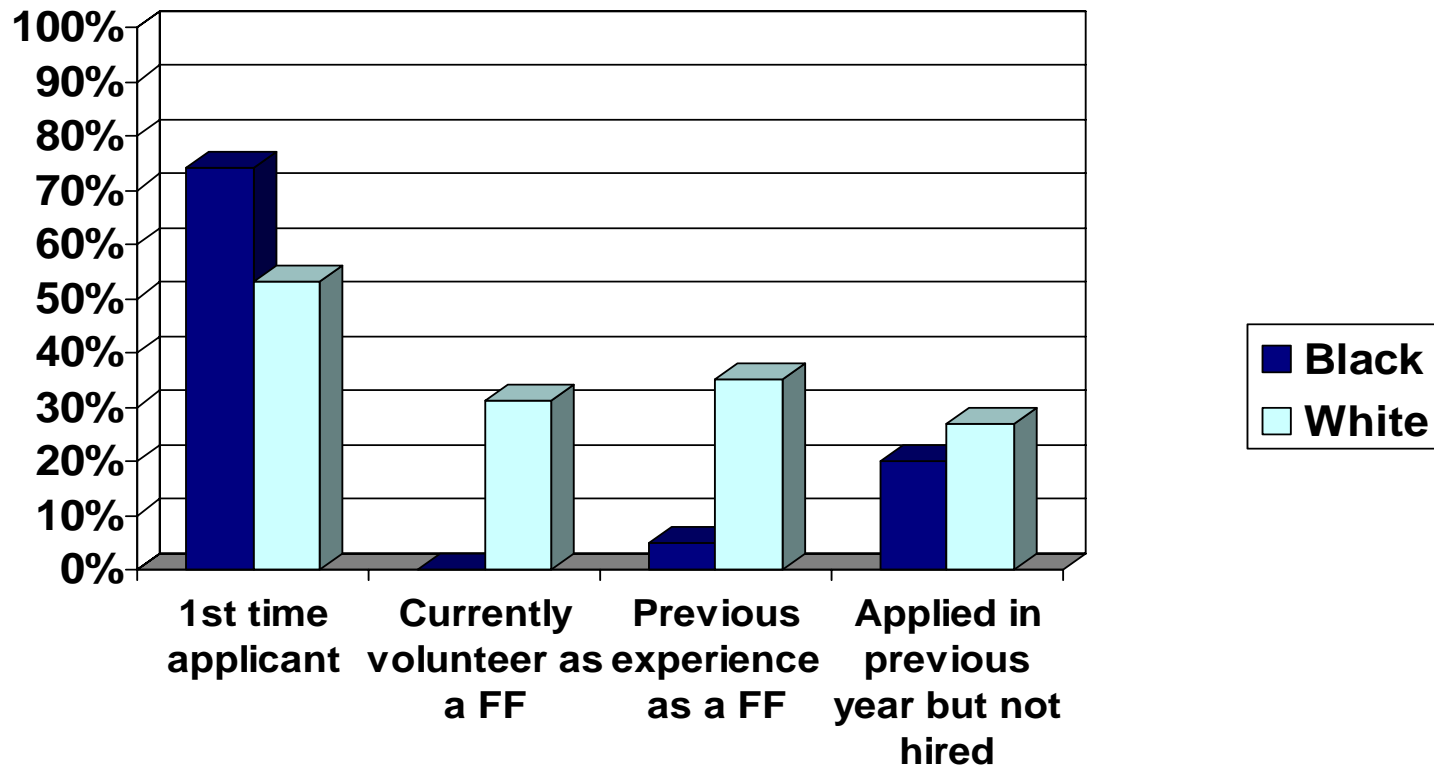
Who did you talk to about FF?



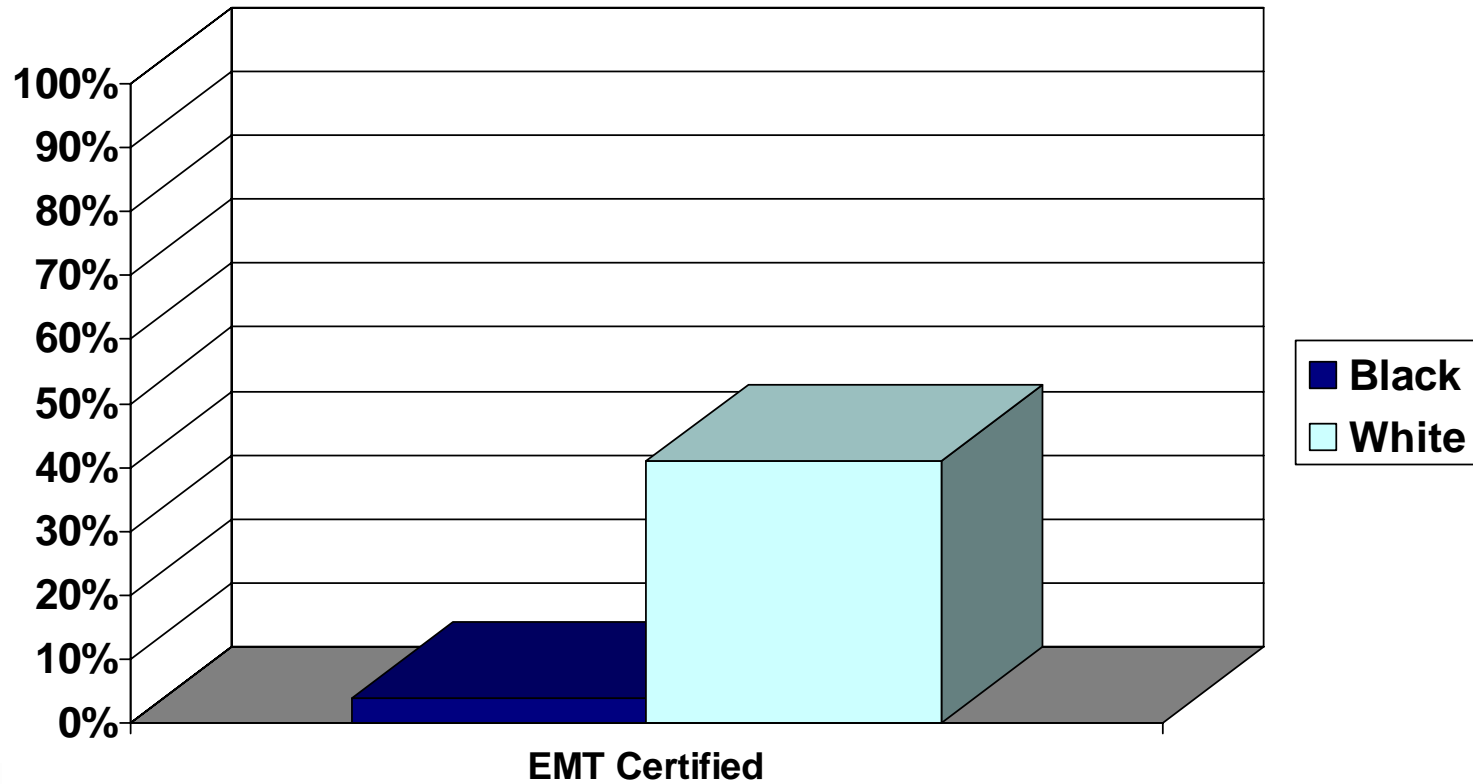
How did you learn more about FF?



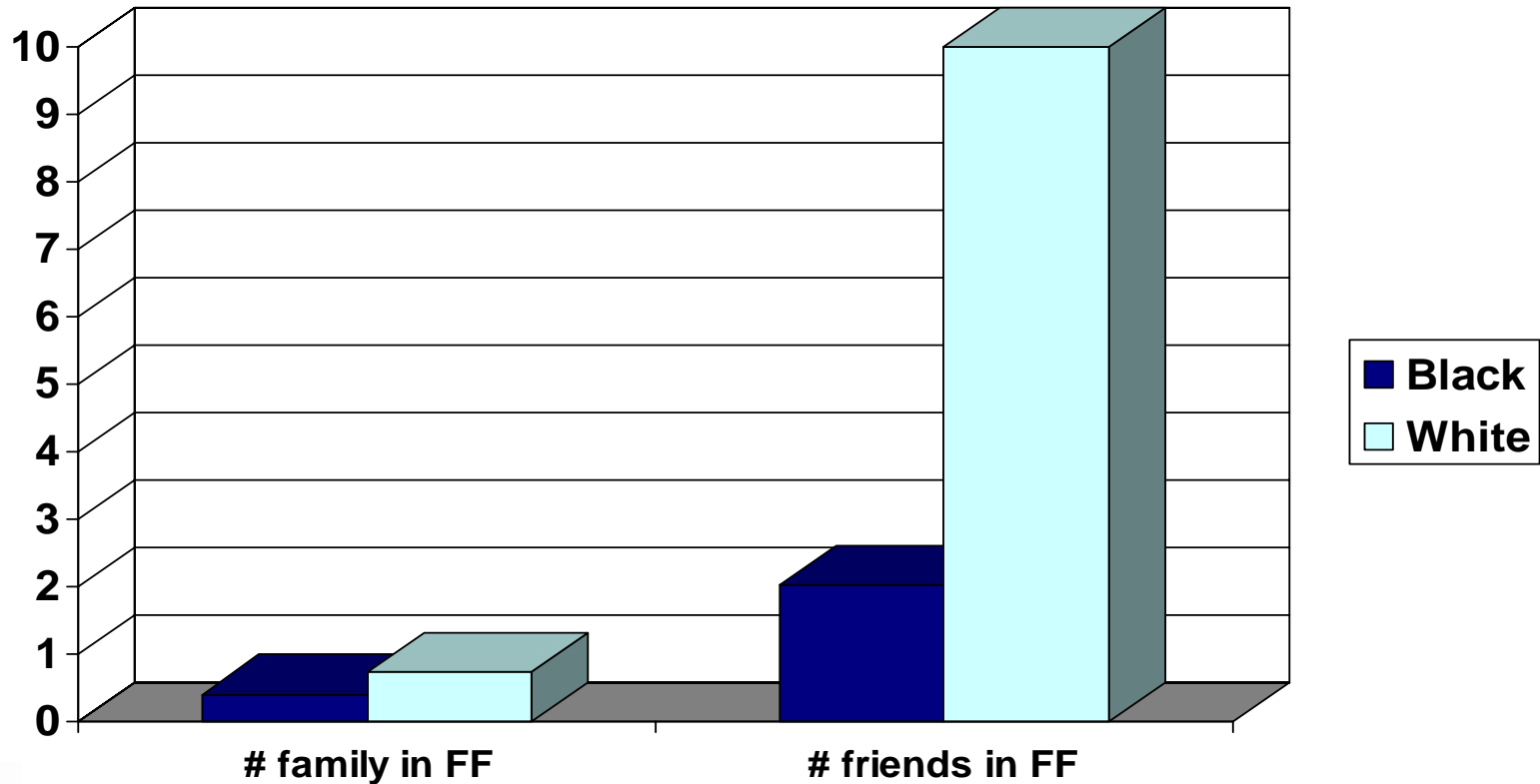
Applicant Status



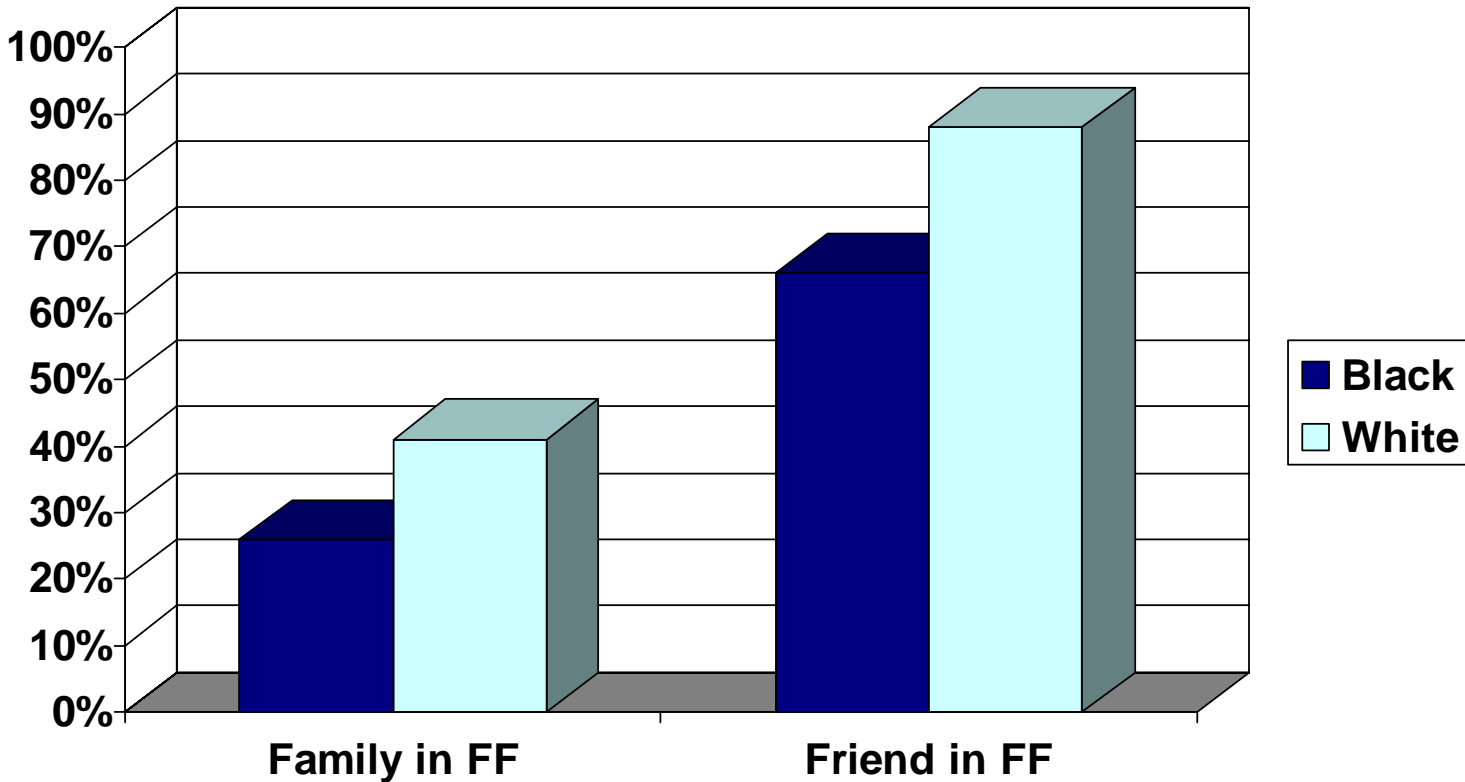
EMT Certification



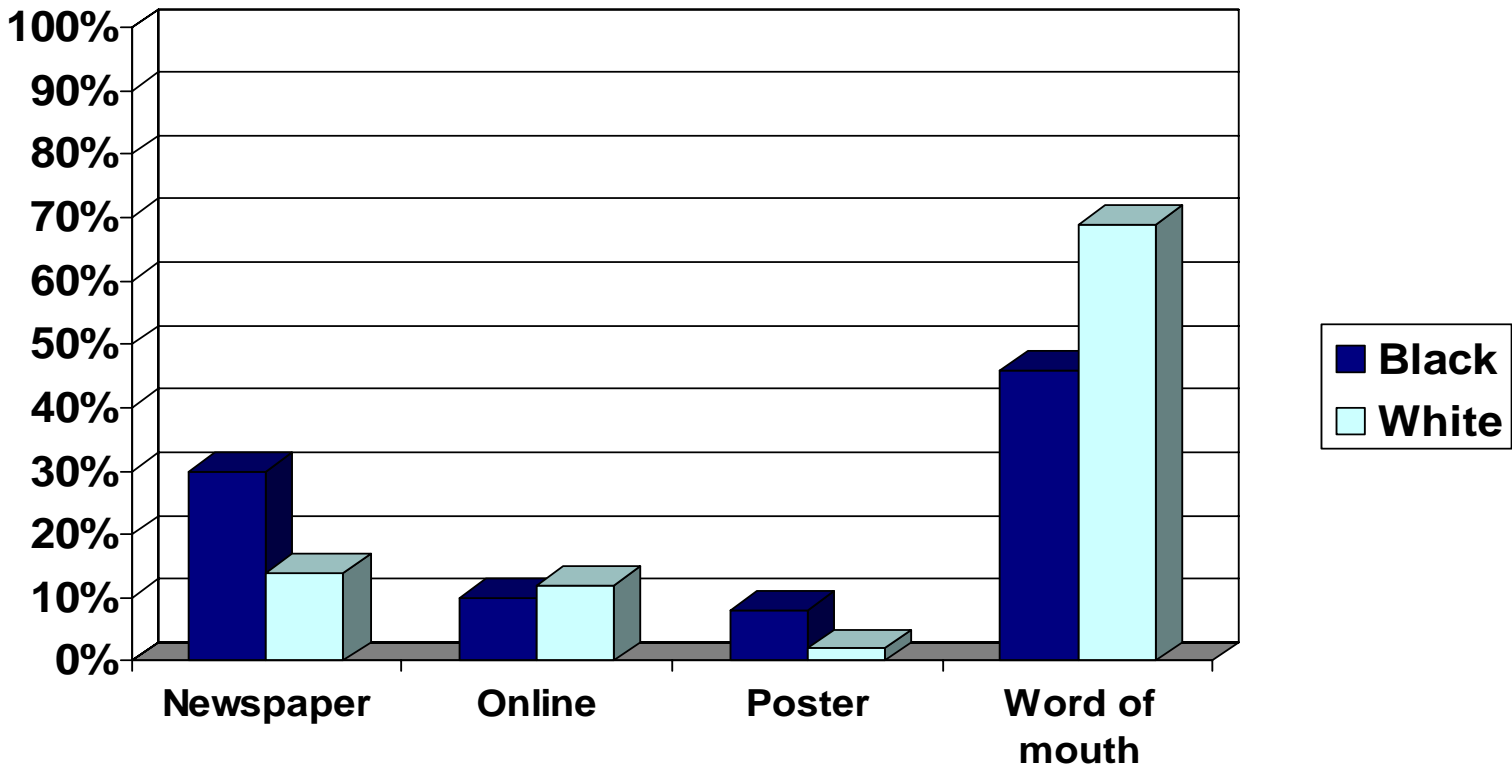
Number of family and friends in firefighting



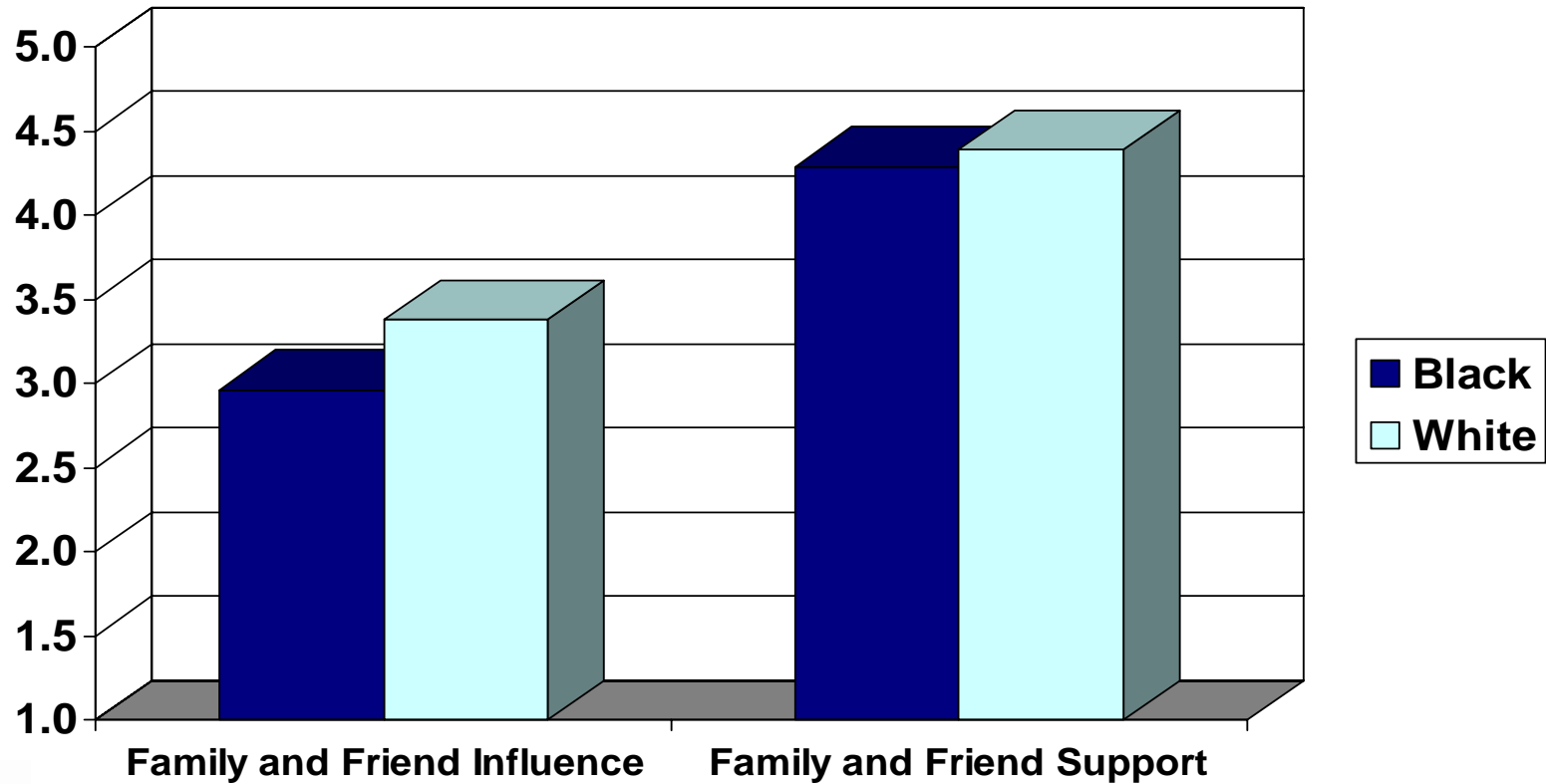
At least one family member or friend in firefighting



Recruitment Source



Family and friend support



Summary of Results

- Whites had **more experience** in firefighting than Blacks.
- Blacks were more likely to be **first time candidates** than Whites.
- Whites had a greater number of **family and friends** in firefighting.
- Whites were more likely to be recruited from an **informal source** (e.g., word-of mouth) than Blacks.
- Blacks were more likely to be recruited from a **formal source** (e.g., newspaper ad) than Whites.

Whites report greater **family and friend influence and support** than Blacks.



Reducing Adverse Impact: Selection System Solutions

- Reduce the cognitive load of the tests
 - Video-based interviewing
 - Reduce reliance on paper-and-pencil measures (e.g., reading comprehension)
- Test on variety of dimensions (e.g., teamwork, customer service orientation)
- Biodata
- Statistical solutions
 - Banding
 - Many-facet IRT to capture bias



Reducing Adverse Impact: Applicant Pool Solutions

- Targeted recruiting
 - Targeted recruitment messages
 - Encourage informal recruiting (e.g., word-of-mouth) by minority firefighters
 - Active recruiting by organizational members
- Realistic job previews
 - Pre-test seminars
 - Community outreach
- Mentoring programs
 - Encourage volunteer firefighting



Future Directions

- Job perception accuracy
 - Are these applicant pool factors related to job perception accuracy?
 - Does job perception accuracy lead to higher test performance?
 - Is race just a proxy for experience or job perception accuracy?



Audience Discussion

- What advice do you have for solving the ‘applicant pool problem’?



Thank You!

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