# Achieving Diversity and Reducing Discrimination in the Work Place Through Human Resource Management Practices: Implications of Research and Theory for Staffing, Training, and Rewarding Performance

# Achieving Diversity

- In Frontiers Series Title:  **The Psychological and Organizational Bases of Discrimination at Work**

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# HR Questions

- Can human resource (HR) practices be used to reduce discrimination and achieve diversity in organizations?

- Two questions really:
  - Can we reducing adverse impact?
  - Can we alter majority group behaviors?

# Reducing Adverse Impact

- The question arises as to whether HR practices can be altered or improved in ways that lead to reductions in adverse impact and, subsequently, increases in the representation of members of affected groups in organizations.

- Note this is a separate topic from discrimination.

- Also, reducing adverse impact may or may not lead to increases in representation.

- But our emphasis is on reducing adverse

# Protected Groups

- Did not limit groups looked at
- However, primarily,
  - Race
  - Sex
  - Age

# Defining Adverse Impact

- Primary definition – a scientific one
    - Mean differences
    - Standardized mean difference (d)
    - So, can we reduce mean differences from about 1 SD to 0
- Secondary definition – practical one
    - Significant differences in hiring, promotion, selection, or passing rates, or size of difference

# Alter Behaviors

- Can HR practices be used to alter the potentially discriminatory behaviours of majority group members in ways that are:
    - Practical
    - Legal
    - Ethical?

# 3 HR Areas

- **Staffing**
  - Selection
  - Recruitment
- **Human resource development**
  - Training
  - Career Development
- **Performance management**
  - Performance Appraisal
  - Compensation

# Selection (Assessment)

- **Executive Summary**
  - A variety of frequently used tests have adverse impact against various underrepresented groups.
  - For 40 years, researchers and consultants have looked for ways to reduce that adverse impact.
  - We have found that it is not that easy.
  - Best solution – alternative delivery formats that reduce reading demand.
  - Question – are we changing the construct? (are reliability and validity equivalent)

# Testing – the Problem

- Cognitively–loaded paper–and–pencil tests of knowledge, skill, and ability have been shown to be the most valid predictors of job performance

- Paper–and–pencil tests of cognitive ability generally display large racial subgroup differences with a widely cited one standard deviation difference in African–American/White performance.

- Unclear whether the observed differences are due to the construct being assessed (cognitive ability) or the method of testing (multiple–choice paper–and–pencil tests).

# Other Groups

- In addition, some aptitude tests, such as those of mechanical aptitude, may result in substantial adverse impact as a function of sex.

- Paper-and-pencil tests may also result in adverse impact toward older test takers.

- This has resulted in a search for ways of reducing the adverse impact associated with many traditional tests used in high-stakes testing.

# Our Goal

- Review the research to see if there are solutions.

- Review was largely qualitative. Why no meta-analysis?

- We hoped we would find already conducted meta-analyses.  Did not.

- One problem – we feel you have to assess independently the effects of the delivery medium and the construct, but the construct and the medium are often confounded.

# Approaches to Reducing Adverse Impact

1. Identifying and removing internal bias
2. Increasing test taking motivation
3. Altering the selection criteria (weighting of tests, random selection, race–based selection, banding)
4. Changing the construct (the use of non–ability–based constructs including personality variables, information processing skills and abilities, emotional intelligence, tacit knowledge)
5. Changing the method or using alternative test formats (in an attempt to alter test perceptions and attitudes and reduce non–job–related reading demands).

# Identifying and Removing Internal Bias

- Basic idea – some items are biased
- If we can eliminate those items we will reduce adverse impact
- Bias – DIF or Differential Item Functioning

# How to Assess DIF

- Differences in means after controlling for the total score (the ANOVA or Golden Rule technique)
- Differences in item–total correlations
- Differences in item characteristic curves as identified through item response theory
- Differences in the proportion of correct responses after controlling for the total score (chi–square methods including the Mantel–Haenszel technique)
- Differences in factor structures as identified through exploratory or confirmatory factor analysis

# Problems

- Better methods tend to be complicated and involve large sample sizes

- Use of different methods may not always lead to the identification of the same items as biased

- It is often difficult to determine why a particular item is identified as biased.

- Given the limited number of items identified as biased on current tests, the removal of biased items has only a small effect, if any, on subgroup differences.

# Recent JAP Study

- Stark, Chernyshenko, & Drasgow (2004, JAP)
- Examining the Effects of Differential Item Test Functioning on Selection Decisions......
- Found that although many items exhibited bias in analyses of large samples, the net effects were of little practical importance
- (I would agree)

# Two Personal Suggestions

- Suggestions from personal experience
- DIF often easier to understand for sex than for race (blueprint items, leadership and quarterbacks)
- DIF often easier to understand on personality tests than on ability tests (openness items)

# Increasing Test Taking Motivation

- Idea - minorities' less favorable test perceptions such as perceived fairness, perceived low face validity, perceived low job relatedness, test anxiety, and stereotype threat equals lower motivation

- Lower motivation leads to lower scores

- So, increase motivation

# Increasing Motivation

- Training
  - encourage an overall positive attitude toward the testing process
  - include some type of training on handling test anxiety
- Or, alternative testing method that leads to greater motivation (later)

# Altering the Selection Criteria

- Altering test weights
- Random selection after a specified cut score
- Race–based selection
- Banding

# Altering the Selection Criteria

- Altering test weights
  - Very large to have much of an effect
- Random selection after a specified cut score & Banding
  - Most effective when combined with race-based selection
- Race–based selection
  - Highly Questionable after CRA 1991

# Changing the Construct

The use of non-ability-based constructs:
- Personality variables
- Information processing skills
- Emotional intelligence

# Results

- Subgroup differences have been shown to be lower on some of these constructs

- However, the use of non-cognitive predictor constructs in reducing adverse impact has not been very successful and the lower validity resulting from the use of these constructs may result in a considerable reduction in utility

# Alternative Test Formats

- Work sample tests

- Video–based tests with an oral presentation of test items only (some require some degree of reading)

- Oral presentation of both items and responses

- Constructed response tests – any test where the test taker constructs the response (as opposed to selecting a response)

# Alternative Test Formats

- In addition to engendering more favorable attitudes and perceptions, the use of these non–multiple–choice test formats also minimizes the non–job–related reading demands (so for researchers – is it motivation or reading demands)

- At the present time, alternative formats do appear to be a practical method of reducing adverse impact.

- However, empirical research delineating the psychological mechanisms responsible for these reductions is needed.
    - Reading
    - Motivation
    - Anxiety or hatred over multiple choice

- Question of practical utility of alternative formats.

# Anxiety – Some Other Interesting Findings

- Two recent studies we have done

- Anxiety over my test performance reduces the validity of my test results – especially on personality tests (surprising, more so that aptitude tests)

# Alternative Tests – 3 Issues

- Is it the testing method or the construct – often confounded.
- Are tests equally reliable and valid.
- Are they practical.

# Conclusion to Adverse Impact issue

- We do seem to be making some progress.
- Alternative test formats do seem to offer some promise.
- Research is needed on:
  - Reliability
  - Validity
  - Construct issues

# Selection for Diversity

- Can selection and employment testing be used to identify majority group members who will be less likely to engage in discrimination and also, more likely to participate in diversity programs (i.e., pro–diversity majority group members)?

- In theory, yes—if there are characteristics associated with pro–diversity attitudes and behaviors, then tests can be used to select for these characteristics.

- The question then is what characteristics might be associated with pro–diversity orientations and attitudes in majority group members?

# Selection for Diversity

- Racism
- Modern Sexism
- Personality Traits – Cosmopolitan Personality
- Implicit Measures

# Racism & Sexism Measures

- Racism appears to be related to pro-diversity attitudes with correlations ranging from .19 for classic racism and opposition to affirmative action to -.38 for modern racism and support for affirmative action.

- Modern sexism has been found to be related to attitudes toward affirmative action

- Problem – easy to fake

# Cosmopolitan Personality Profile

- <u>Cosmopolitan</u> personality profile which is a combined knowledge structure–personality profile that has the effect of making a person more open to the acceptance of diversity programs, including affirmative action.

- Person more likely to be open to diverse efforts if the person has both a culturally–open personality profile and sufficient experience with a variety of cultures so as to have had the opportunity to develop multicultural knowledge.

- Research by others seems to support this idea.

# Implicit Racism Measures

- These measures seem to really interest people.
- Measure attitudes through reaction times.
- Some very interesting research results.
- Problem what is being measured.

# Web Site

- https://implicit.harvard.edu/implicit/demo/measuring.html

Implicit Association Test

# The End