Gerrymandering in personnel selection: A review of practice

Michael A. McDaniel *

Department of Management, School of Business, Virginia Commonwealth University, PO Box 844000, Richmond, VA 23284-4000, United States

**Abstract**

Gerrymandering personnel selection systems is defined as those practices explicitly intended to improve the outcomes of individual applicants or groups of applicants to the detriment of other individuals and groups. Gerrymandering can serve a variety of purposes, such as enhancing demographic diversity, rewarding political allies, or giving hiring preference to specific individuals. This paper reviews eleven strategies for gerrymandering personnel selection systems. The strategies fall into three categories of decisions: decisions in choosing or designing personnel selection tools; decisions in scoring personnel selection tools; decisions in selecting among passing applicants. Perspectives on the appropriateness and ethics of gerrymandering are then reviewed.

© 2009 Elsevier Inc. All rights reserved.

Keywords: Gerrymandering, Personnel selection, Race, Sex, Political affiliation, Banding, Quota

The term gerrymandering originated in politics and referred to the redrawing of electoral districts, which served the advantage of one group and the disadvantage of another group. In this review, gerrymandering is defined as those organizational practices explicitly intended to improve the outcomes of an individual applicant or groups of applicants in personnel screening situations to the detriment of other individuals or groups of applicants. The organizational practices may reflect organizational policy or may be actions pursued by an individual in the organization that may or may not be consistent with organizational policy. In this review, the author first explores the motivations for gerrymandering. Then, eleven strategies for gerrymandering are presented in the context of three categories of decisions. Finally, perspectives on the practice of gerrymandering are reviewed.

Although gerrymandering can be used to benefit a specific individual (e.g., manipulating the system to get one's cousin hired), gerrymandering is often designed to benefit a group of applicants. For example, a group of applicants might be defined with reference to race (e.g., minorities), sex (e.g., females), political affiliation (e.g., Democrats), family associations (e.g., children or spouses of current employees) or type of applicant (e.g., applicants who currently work for the organization versus external applicants).

Gerrymandering is typically in conflict with the goals of a merit-based personnel selection system which seeks to hire the most qualified applicant for a job. Gerrymandering efforts focused on groups are typically an attempt to subvert merit-based personnel selection in favor of some other goal such as racial or gender diversity. The author knows of no example where gerrymandering efforts focused on groups were consistent with the goal of a merit-based personnel selection practice. It is suggested that gerrymandering focused on the hiring of individuals is typically, but not always, a subversion of merit based selection. Although gerrymandering is usually in conflict with merit-based goals, it is consistent with other goals, such as increasing the demographic diversity of organizations or promoting the growth and stability of political organizations.

This review is a description of practice and is not, primarily, a review of research literature. Because some gerrymandering practices in personnel selection are illegal and because most of these practices are seldom transparently applied or openly discussed, it is difficult for the author to estimate how frequently a given practice is used. However, this paper offers documented examples to illustrate how gerrymandering strategies have been used. Some of the strategies are documented in news accounts of gerrymandering (Associated Press, 2008; Blumenthal, 1974; Draffen, 1998; Loerzel, 2003; Topping, 1998; Wilgorenm, 2006) and others are discussed in the personnel selection literature (Dettling, 2007a,b; Fields, 2007a,b; Gottfredson, 1997; Miller & Barrett,

---

* Tel.: +1 804 827 0209.
E-mail address: mamcdani@vcu.edu.
Additional examples have been observed by the author or are based on observations of others whose statements are trusted by the author. Thus, although the author cannot estimate the frequency of occurrence of gerrymandering practices, the author suggests that these practices are used by many employers and hiring managers.

1. Gerrymandering practices for the benefit of one group and the detriment of another

In the United States, most employers, when asked, will express an interest in developing or maintaining a racially and gender diverse workforce. In fact, many U.S. employers are required to file yearly affirmative action reports with the Office of Federal Contract Compliance Programs and/or have faced legal scrutiny over the fairness of their hiring practices. For these reasons, employers may be motivated to promote racial and gender diversity in their workforce. In addition, because employers typically are concerned about their public image, many employers desire racial or gender diversity to avoid accusations of employment discrimination. Such allegations may harm the company’s image, which has financial consequences for the company, such as reduced revenue. For example, when Coca-Cola was charged with racial discrimination, there was a call for a boycott of their products (Nader, 2000). Likewise, Texaco was threatened with boycotts over alleged racial discrimination (Mulligan & Kraul, 1996). Also, many employers value a racially and gender diverse workforce because management believes it is socially responsible. They may also pursue a diverse workforce because they believe that diversity results in improved organizational performance.

Employers motivated to have a racially diverse workforce encounter challenges because minorities are frequently underrepresented, especially in middle to higher level jobs. In addition, females are also frequently underrepresented, particularly in upper management positions (Blau & Devaro, 2007; Helfat, Harris, & Woffson, 2006; Powell & Butterfield, 1994). When personnel selection procedures show mean group differences disfavoring minorities or females, or when minority or female applicants are scarce, employers may gerrymander their organizations’ personnel selection process to increase the hiring rates for minorities and/or females.

It is argued that employers often face difficulties in hiring minorities because there are mean Black–White differences in cognitive ability in the population favoring Whites. The mean difference between Hispanics and Whites is somewhat smaller, again favoring Whites (Jensen, 1998; Roth, BeVier, Bobko, Switzer, & Tyler, 2001). These mean racial differences affect hiring decisions based on cognitive ability tests, as well as decisions based on other selection procedures. For example, cognitive ability is correlated with educational achievement and thus minimal qualifications, such as high school diplomas or college degrees, will likely result in lower hiring rates for minorities. Cognitive ability is also correlated with job-related knowledge. Thus, personnel selection decisions based on the knowledge or expertise of applicants can be expected to show mean racial differences.

Ignoring the cumulative evidence to the contrary, United States employment regulations and some case law are based on the false assumption that minority-White differences in personnel selection tests are uncommon. Specifically, when the use of a personnel selection test results in a lower percentage of minorities hired than Whites, the disparity in hiring rates is termed “adverse impact” under the Uniform Guidelines for Employee Selection Procedures (Equal Employment Opportunity Commission, Civil Service Commission, Department of Labor, & Department of Justice, 1978). When adverse impact is present (and it typically is), it becomes the responsibility of the employer to defend the job-relatedness of the personnel selection system. Defending job-relatedness in an adversarial setting is a time consuming and expensive process. Thus, employers seeking to avoid validation and litigation expenses have substantial motive to gerrymander their selection process to hire more minorities.

Gerrymandering for group preferences may be more likely with some selection measures than others. Because of the mean race differences in cognitive ability tests and cognitively-loaded measures (i.e., measures with substantial correlates with cognitive ability), gerrymandering practices designed to promote racial diversity may occur more frequently when cognitive or cognitively-loaded selection practices are used. Although there has been recent debate about the magnitude of mean sex differences in cognitive ability (Deary, Irwing, Der, & Bates, 2007; Jackson & Rushton, 2006; Johnson & Bouchard, 2007), the cognitive ability literature consistently shows that the variance of cognitive ability in the population is larger in males than females (Deary et al., 2007). This variance difference results in more males at both very high levels and very low levels of cognitive ability relative to females. Thus, when screening applicants for cognitive skills at the extreme high end of cognitive ability, such as for scientists or academics, cognitive or cognitively-loaded assessments may motivate employers to gerrymander the selection system to increase the number of females hired. Also, there are mean sex differences in muscular strength, power, and endurance favoring males (Ployhart & Holtz, 2008). Thus, when screening for physical demands, one might find gerrymandering practices used to enhance the hiring rates of females.

In addition to defining groups by race or sex, an applicant group might be defined as a political party. In the United States, local, state, and Federal government organizations are typically headed by an elected leader (e.g., mayor, county executive, governor, President). These governmental organizations usually operate under civil service laws such that the organization is required to screen applicants without respect to the applicant’s political party membership or tendency to work on behalf of political candidates. Elected officials often place their political supporters into jobs exempt from civil service rules. However, some elected officials seek to place their political supporters into jobs that are covered by civil service rules. This creates the motivation to engage in political gerrymandering of the personnel selection system and examples of such actions are plentiful (Associated Press, 2008; Blumenthal, 1974; Loerzel, 2003; Wilgoren, 2006).
Gerrymandering practices can be divided into the following categories:

- decisions in choosing or designing personnel selection tools
- decisions in scoring personnel selection tools
- decisions in selecting among scored individuals.

Each will be discussed in turn.

6. Decisions in choosing or designing personnel selection tools

Gerrymandering strategies that focus on choosing or designing personnel selection tools are primarily oriented toward gerrymandering to benefit one group over another. As such, these methods may be used for racial and gender-based
gerrymandering. They might also be used for the advocacy of members of a political party or a type of applicant (internal vs. external).

Strategy 1: remove cognitively-loaded tests from the selection system. A highly effective method for improving the scores of minority applicants is to remove cognitively-loaded personnel selection tools from the selection system (Ployhart & Holtz, 2008). Cognitively-loaded tests would include job knowledge measures and any test assessing technical skills or other learned expertise.

Thus, an employer may stop using tests of job knowledge and instead use a measure with less cognitive loading. For example, the author observed that a county government stopped using a job knowledge test to screen librarians due to the poor test performance of minority applicants. A measure of training and experience was substituted based on the assumption that minorities would obtain higher scores. Training and experience measures (Ash, Levine, Johnson, & McDaniel, 1989; McDaniel, Schmidt, & Hunter, 1988) that permit substitution of experience for education might be particularly useful for racial gerrymandering because it helps to avoid the mean differences associated with cognitively-loaded educational credentials. As another example, the author attended a human resource association meeting where the speaker noted that her employer, a major department store chain, stopped using all standardized testing as part of an initiative to increase diversity.

Although the evidence on mean sex differences in cognitive ability is a matter of debate, there is substantial evidence for large gender differences in mean spatial ability tests (Maccoby & Jacklin, 1974; Voyer, Voyer, & Bryden, 1995) likely linked to sex differences in testosterone production (Puts, McDaniel, Jordan, & Breedlove, 2008). Removing spatial ability tests from a selection battery can be expected to improve the mean scores of females.

The effectiveness of removing cognitively-loaded tests from a battery for the purpose of political, type of applicant (e.g., internal applicants), and individual-based gerrymandering would be situationally specific. For example, if internal applicants have lower cognitive ability than external applicants, on average, the removal of a cognitive ability test would benefit the internal applicants.

Strategy 2: add a test that shows lower mean group differences to a test battery that shows larger mean group differences. When seeking to enhance the demographic diversity of a workforce, employers may seek to add employment tests, such as personality tests (Foldes, Duehr, & Ones, 2008; Hough, Oswald, & Ployhart, 2001; Tate & McDaniel, 2008) with lower mean racial differences to a personnel selection system containing valid cognitively-loaded tests (De Corte, Lievens, & Sackett, 2007). This practice has also been described as “assess the full range of KSAOs” (Ployhart & Holtz, 2008, p. 159) because adding tests with lower cognitive-loading typically broadens the domain of the job-related skills assessed. Thus, there is the potential of reducing mean group differences while increasing validity. However, the gerrymandering efficacy of this practice may be far less than anticipated (Potosky, Bobko, & Roth, 2005).

The author observed an application of this method used for political gerrymandering where a test consisting of a single biodata item favoring politically-active Democrats was added to supplement a job knowledge test. In a large city, Democratic ward committee members were charged with getting out the Democratic vote on election day. These ward committee members were often hired as city building inspectors, in part, because the jobs paid well. In addition, building inspectors have been alleged to enhance their income through accepting bribes (Coen & Mihalopoulos, 2008). A civil service law was passed that required that the incumbent building inspectors pass a civil service examination to be eligible to retain their jobs. The employer was concerned that the external job applicants had substantially better job knowledge than the internal job applicants which would result in the Democratic ward committee members losing their jobs (this concern proved justified because most of the external applicants scored higher than the internal applicants). The employer supplemented the job knowledge test with a single biodata item. This item asked whether the applicant had job experience as a building inspector in the city government. To be placed in the highest selection band, the applicants had to have experience as a city building inspector in the jurisdiction where the employment screening was taking place. The passing point of the job knowledge test was set below the lowest scoring incumbent. The addition of the one item biodata test coupled with a low cut-off score, permitted the city to retain all the incumbent building inspectors (see Strategy 5: Use low cut-off scores).

Strategy 3: create requirements that are more associated with one group but not another and are not job-related. At least two requirements fall into this category: residency requirements and English-language fluency. Concerning residency requirements, many local governments require their job applicants to live in the local jurisdiction when applying for a job (e.g., Chicago Board of Education, 2007). This requirement favors locals to the disadvantage of outsiders. When the local jurisdiction is predominantly of one race or another, the requirement favors the race of the local residents. When the local jurisdiction (e.g., Chicago) has more voters of one political party (e.g., Democrats) than areas outside of the jurisdiction (e.g., Republican suburbs of Chicago), the residency requirement favors members of one political party over another. The other requirement in this category is fluency in English when this fluency does not contribute to job performance. The author acknowledges that English fluency is job related for many jobs, but here we refer to requirements where English fluency is not job related. English fluency requirements place Hispanic, Asians, and other English as a second language immigrants at a disadvantage. In contrast with many group-oriented gerrymandering practices designed to favor minorities, English fluency requirements create obstacles for the hiring of immigrants.

Strategy 4: use selection measures requiring human judges. Select human judges motivated to hire specific groups or individuals. Assessment centers are often favored by those seeking to reduce demographic-related adverse impact (Dean, Roth, & Bobko, 2008). For example, local government jurisdictions may use an assessment center to hire candidates for police positions in hopes of obtaining minimal adverse impact. This practice may be a response to alleged federal government agency pressure to enforce more equal outcomes in hiring for public safety positions. To gerrymander the selection system, the assessment center can be staffed with raters who are motivated to ensure the hiring of more minorities.

Interviews conducted by individuals motivated to hire group members or specific individuals can also be an effective method of gerrymandering. Although structured interviews can be subject to gerrymandering, unstructured interviews can be more readily gerrymanded due to the greater latitude given to the interviewer in terms of the questions asked and the evaluation of responses.
The author observed a possible example of gerrymandering using an interview that took place in a large city jurisdiction that had been unable to promote anyone into vacant Fire Battalion Chief positions due to a court order stemming from a U.S Department of Justice lawsuit. The employer convened an oral interview panel that rated minority candidates somewhat higher than majority candidates, on average. Because the minority candidates obtained substantially lower scores than Whites on the objectively-scored job knowledge test, one might infer that the interview raters evaluated candidates in a race-conscious manner that resulted in higher mean minority scores. When a composite of the interview and the knowledge test was formed, the interview was given sufficient weight (see Strategy 7: adjusting selection component weights) such that the composite score showed near equal means between minority and White applicants. The court overseeing the hiring permitted the city to hire Fire Battalion Chiefs using the composite test score.

7. Decisions in scoring personnel selection tests

Regardless of which tests are used in a selection system, the scoring of the tests can be manipulated. These methods seek to reduce the weighting of the components of the selection system that show mean group differences or by grouping applicants into score bands where all applicants in a band are asserted to be equally qualified. Typically, these strategies serve to minimize the weighting of cognitively-loaded selection tests. As such, these methods are primarily used in racial gerrymandering. The following five strategies are used to gerrymander the scoring of personnel selection tests.

Strategy 5: use low cut off scores. Many selection batteries are scored so as to classify the applicants into two groups: those eligible for hire and those not eligible (“banding and score adjustments”, Ployhart & Holtz, 2008, p. 160). The lower one sets the cut-off score, the more minorities will be in the hiring-eligible group. To be most effective as a racial gerrymandering method, the test scores of those in a band are not presented to those making the hiring decisions. If the scores were available to the hiring decision maker, they could be used to select the most qualified candidates who, on average, would less likely be the minority applicants.

Often large companies belong to industry-specific consortiums that offer consortium-developed employment tests conditional upon the company following the rules of the consortium with respect to how test scores are used. The author is aware of one such consortium that requires the setting of a cut-off score, albeit not necessarily a low cut-off score, and then forbids the test scores of the passing applicants to be shared with the hiring manager. This decision most likely reflects an attempt to promote the hiring of minorities by hiding the score differences between the minority and majority applicants.

Strategy 6: race or gender-conscious banding. In banding, applicants are rationally or statistically (Bobko, Roth, & Nicewander, 2005; Schmidt & Hunter, 2004) segmented into groups and all members of a group are asserted to be of equivalent eligibility for hire. Because employment tests are linearly related to job performance (Coward & Sackett, 1990; Hawk, 1970; Robie & Ryan, 1999), the assumption is clearly false and the low cut off scores can substantially compromise the merit selection process. The problem is not solely one of hiring less-qualified minority candidates, but also one of not hiring the most qualified non-minorities. When scores are withheld from the hiring manager, it also impairs the ability of the hiring manager to differentiate among the non-minority applicants.

In race or gender-conscious banding, the bands are set to ensure that there is at least one minority (or female) in the band. For example, the author observed that a county government would set the cut score for the highest band immediately below the highest scoring minority and then pressured hiring managers with vacancies to consider the minority applicant (see “Influence hiring managers…..” Strategy 10).

Strategy 7: adjust selection system component weights. Personnel selection systems often contain more than one test and the tests will likely vary in their extent of mean group differences. One may adjust the score weights in hopes of reducing group differences (Ployhart & Holtz, 2008). Decisions concerning weights may be made before or after the test is administered. Setting the weights after test administration will likely be the more effective approach. After administering the tests, an employer can determine which selection tests have the least mean racial differences and give them the largest weights in the selection composite. In a Nassau County, New York police selection test, the cut-off score of the reading component was set to correspond to the lowest one percent of readers on the police force (Gottfredson, 1997). This scoring strategy sharply reduced the weighting of the reading test, the sole cognitive test in the battery. The reader is directed to a set of commentaries debating the legal propriety of adjusting weights after the test is administered (Dettling, 2007a,b; Fields, 2007a,b).

Strategy 8: give some applicants the answers to the employment test or complete a test for an applicant. Another strategy for raising scores on employment tests is to give the applicants the test answers in advance of the test. For example, fifty-five police officers in Nassau County, New York, including many who started their police career in a minority police cadet program, were investigated for giving false statements on autobiographical test items. It was alleged that the answer key for the test was obtained and used to coach applicants (Drafen, 1998; Topping, 1998). Miller and Barrett (2001) described the coaching program conducted by a police sergeant involved in the test validation. The sergeant would offer hypothetical questions and preferred answers. Example questions and answers, as reported by Miller and Barrett (2001), were:

Q: How many of your relatives work in law enforcement? A: Three.
Q: Which hobbies do you engage in at least once a year? A: Hunting.

All of the police cadets passed.

Because releasing an answer key to applicants might be considered fraud, employers who use this strategy need to know the applicants well enough to trust that one or more applicants will not publicize the release of the answer key. Therefore, this strategy is likely to be primarily used in promotional settings.
Sharing the answer key is also an effective strategy for individual-specific gerrymandering. The author is aware of a jeweler whose employees interviewed applicants prior to the applicants taking a standardized integrity test. The employees did not like it when their preferred applicant was not hired due to the applicant’s performance on the integrity test. Although the employees did not have the answer key to the test, they had enough information to coach preferred applicants (e.g., never admit to theft or knowing anyone who steals; endorse strong punishment of those who steal) such that all coached respondents passed the test.

Concerning completing a test for an applicant, the author is aware of an insurance office that was required to administer an insurance consortium biodata test to applicants. As with the jeweler example above, the employees did not like it when their preferred applicants failed the test and could not be hired. To gerrymander the selection process, the employees kept a copy of the answer sheet from a past applicant who did well on the test. The office employees then used the answers from the successful past applicant to serve as the answers for all future applicants they wanted to hire.

Finally, the sharing of the answer key sometimes has a financial motive. The author worked in the same organization as a personnel analyst who allegedly charged $2,000 per applicant to alter the scores on a physical abilities test for firefighters. The analyst was eventually imprisoned for the gerrymandering.

Strategy 9: adding points to applicant test scores. Minority test performance improves if one gives minority, but not majority applicants, extra points. Although this might seem an extreme practice to some, the U.S. Department of Labor used this strategy with the General Aptitude Test Battery (GATB) for several years. The typical application of this strategy is race norming (Gottfredson, 1994) where points are added to minority applicants’ scores so that the minority group mean is equal to the mean of the White applicants. This strategy was made illegal in the United States with passage of the 1991 Civil Rights Act.

8. Decisions in selecting among scored applicants

Once a selection system has been administered and applicants evaluated, there are two additional methods to gerrymander the selection process.

Strategy 10: influence hiring managers to select group members or specific individuals for hire. Those making hiring decisions may be influenced to select some individuals over others. Some employers pressure hiring managers to select a minority or female applicant for hire if there is one in the pool of applicants judged eligible for hire. For example, if a minority applicant scored high enough to be considered eligible for hire, the information on the applicant would be submitted to all hiring managers with a vacancy. The hiring managers would be reminded of the organization’s commitment to diversity and that they should seriously consider the minority applicant for hire. Formalized efforts to influence managers to hire minorities are often referenced in human resource documents. For example, one state university recruiting manual encourages applying a set of minimum standards as an initial screen (see Strategy 5: setting a low passing score) and then considering ethnicity as a “plus factor” when evaluating remaining applicants. Another recruiting manual encourages selection decision makers to: “Assess ways the applicants will bring rich experiences and diverse backgrounds and ideology to the university community.”

An example of individual-specific gerrymandering includes an associate of the hiring manager who tries to influence the hiring manager to hire a specific individual whom the associate perceives to be the best applicant or with whom the associate has a personal relationship (e.g., a spouse, a daughter, a neighbor). Hiring decisions on specific applicants, such as the hiring of a U.S. Department of Justice attorney, might be heavily influenced by the political affiliation of the applicant (Associated Press, 2008).

Strategy 11: create a position for a specific individual receiving a passing score. Employers often have flexibility in determining when to hire and how many people to hire. Some employers create a position when a highly qualified minority applies. For example, the author observed an international consulting firm create an internship position when a minority applicant with excellent qualifications sought employment. In family-controlled organizations, positions may be created for family members. Employers have been known to create positions for the spouse of a desired applicant.

9. Perspectives on gerrymandering

This paper does not argue that many minorities, females or other applicant groups (e.g., Republicans, incumbents) cannot compete successfully in a selection process free of gerrymandering. However, on average, some groups have more job-related abilities, skills and knowledge than other groups. The more valid and reliable the employment tests, the more likely that these differences become apparent. Given legal and public relations pressure to achieve a diverse workforce, employers might simply acknowledge that they will hire more members of a group even if the group members are not the most qualified applicants available. However, the U.S. Federal civil rights laws and many U.S. state laws make it illegal to explicitly use race and sex in the hiring process. Thus, employers seeking a diverse workforce may need to engage in gerrymandering of personnel selection systems.

Without gerrymandering of personnel selection systems, there would likely be far fewer minorities hired for jobs of medium and high cognitive complexity. Thus, one might argue that gerrymandering is ethically justified in order to promote racial diversity at all levels of the occupational hierarchy. However, when racial gerrymandering results in a lower-qualified minority being hired instead of a higher-qualified White or Asian, the higher-qualified individual has been excluded because of their race. Thus, one might argue that racial gerrymandering is an unethical practice because it harms individuals because of their race.

Consumers of services or products of an organization might also be considered when evaluating the ethics of racial or gender-related gerrymandering. For example, minority citizens might have a clear preference for minority police officers in their city. Thus, racial gerrymandering might be considered ethical and consistent with social goals. However, victims of crime whose criminal
cases are incompetently handled because the city did not emphasize cognitive skills in its racially gerrymandered police selection process (c.f., Zelnick, 1996) may adopt the ethical position that they deserve to be served by the best and brightest.

Ethical issues are seldom resolved in scientific forums. It is argued that some gerrymandering practices occur with sufficient frequency that many personnel selection practitioners no longer consider the ethical ramifications of their efforts to compromise merit principles. Participants in gerrymandering are encouraged to consider the ethical ramifications of their practices.

Acknowledgements

The author thanks James Braeugh and an anonymous reviewer for their helpful feedback on the manuscript.

References


