

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO
Honorable Marcia S. Krieger**

Civil Action No. 11-cv-00256-MSK-KMT

**MARIAN G. KERNER; and
ROMONA J. LOPEZ, on behalf of themselves and all others similarly situated,**

Plaintiffs,

v.

CITY AND COUNTY OF DENVER,

City.

**OPINION AND ORDER DENYING MOTIONS
FOR SUMMARY JUDGMENT**

THIS MATTER comes before the Court on cross-motions for summary judgment. The first motion is the Defendant City and County of Denver's Motion for Summary Judgment (#159), the Plaintiffs Marian G. Kerner's and Romona J. Lopez's Response (#172), and the City's Reply (#173). The second is the Plaintiffs' Motion for Summary Judgment (#160), the City's Response (#166), and the Plaintiffs' Reply (#174). The Court exercises jurisdiction pursuant to 28 U.S.C. § 1331 and 28 U.S.C. § 1343(a)(4).

I. Material Facts

Having reviewed the record and the submissions of the parties, the Court finds the following underlying facts to be undisputed, or where the evidence is disputed, the Court construes it most favorably to the non- movant.

In 2007 and 2008, the City and County of Denver used the ACCUPLACER Reading Comprehension and WritePlacer tests (hereinafter, APT),¹ as part of its multi-step hiring process. The named Plaintiffs represent a class of over 900 African-American and Hispanic individuals who applied for a job with the City but who failed the test and therefore were not considered further for the position sought. The Plaintiffs contend that the APT was racially biased as evidenced by its disparate impact on minority applicants.

The City's hiring process included several steps. First, an applicant was evaluated for the education and experience required by the position. These minimum qualifications varied according to the job classification. If the applicant met the minimum qualifications, he or she would be invited to take the writing and/or reading skills tests.² Whether an applicant was required to take one or both tests depended on the job classification. Similarly, the scores needed to pass each test varied depending on job classification. If the applicant passed the skills test(s), the applicant was placed on an eligibility list for the particular job classification. But, if the applicant failed the required test, or either of two required tests, he or she was disqualified.

In 2007, Marian G. Kerner applied for a clerical position with the City. The position was classified as Administrative Support Assistant (ASA) IV. Ms. Kerner met the minimum qualifications required for the position and was invited to take the writing test. She did not achieve a passing score on the test, and was therefore disqualified from further consideration for positions within the ASA IV classification.

¹ The ACCUPLACER tests are published by the College Board, a non-profit organization. Generally, the APT is used for placing students in college-level courses. The test is not validated for use in making hiring determinations.

² The City began using the APT in 2004 in its career counseling center to assist employees who were interested in continuing education and advancing their careers. In 2005, it began using the test as part of the hiring process. The City stopped using the APT on March 8, 2008.

After exhausting her administrative remedies, Ms. Kerner commenced this action on behalf of herself and all similarly situated individuals, alleging that the APT was racially biased as demonstrated by its disparate impact on minority applicants. She contends that the City's use of the APT in its hiring process denied her and other class members employment opportunities on the basis of race. The case has been certified as a class action (**#103**). Like Ms. Kerner, each of the Plaintiffs in the class met the minimum qualifications of the particular job³ for which they applied, but were disqualified when they failed the APT. The Plaintiffs assert one claim of race discrimination by disparate impact in violation of Title VII of the Civil Rights Act of 1964, 42 U.S.C. §§ 2000e, *et seq.*, as amended.⁴

Both parties move for summary judgment in their favor.

II. Standard of Review

Although Rule 56 of the Federal Rules of Civil Procedure was recently restyled, its purpose remains the same — to provide for a summary determination when no trial is necessary. *See White v. York Int'l Corp.*, 45 F.3d 357, 360 (10th Cir. 1995). Accordingly, Rule 56(a) directs entry of a judgment on a claim or defense, or part thereof, when there is no genuine dispute as to any material fact and a party is entitled to judgment as a matter of law.

³ The positions that the Plaintiffs applied for comprise 21 different job classifications: 311 Customer Service Agent, Administrative Support Assistant I, Administrative Support Assistant II, Administrative Support Assistant III, Administrative Support Assistant IV, Administrative Support Assistant V, Agency Support Technician, Animal Control Investigator, Aviation Customer Service Agent, Contract Compliance Technician, Eligibility Technician, Executive Assistant I, Executive Assistant II, Fingerprint Identification Clerk, Hotline Operator, Human Resources Support Technician, Human Resources Technician, Maintenance Control Technician, Purchasing Technician, Vehicle Impound Clerk, Water Quality Investigator.

⁴ The Amended Complaint (**#26**) also asserts a Title VII claim of disparate treatment under a pattern and practice theory and requests punitive damages. The Plaintiffs represent in their Response (**#172**), however, that they are abandoning the disparate treatment claim and they concede that they are not entitled to punitive damages on their disparate impact claim. Based on these representations, the claims for disparate treatment and punitive damages are dismissed.

Substantive law governs which facts are material and what issues must be determined. It also specifies the elements that must be proved for a given claim or defense, sets the standard of proof, and identifies the party with the burden of proof. *See Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986); *Kaiser-Francis Oil Co. v. Producer's Gas Co.*, 870 F.2d 563, 565 (10th Cir. 1989). A factual dispute is “genuine” if the evidence presented in support of and in opposition to the motion is so contradictory that, if presented at trial, a judgment could enter for either party. *See Anderson*, 477 U.S. at 248. When considering a summary judgment motion, a court views all evidence in the light most favorable to the non-moving party, thereby favoring the right to a trial. *See Garrett v. Hewlett Packard Co.*, 305 F.3d 1210, 1213 (10th Cir. 2002).

If the movant has the burden of proof on a claim or defense, the movant must establish every element of its claim or defense by sufficient, competent evidence. *See Fed. R. Civ. P.* 56(c). Once the moving party has met its burden, to establish a genuine dispute that requires a trial, the responding party must present competent and contradictory evidence as to a material fact. *See Bacchus Indus., Inc. v. Arvin Indus., Inc.*, 939 F.2d 887, 891 (10th Cir. 1991); *Perry v. Woodward*, 199 F.3d 1126, 1131 (10th Cir. 1999).

When the moving party does not have the burden of proof on the pertinent issue, it may point to an absence of sufficient evidence to establish a claim or defense that the non-movant is obligated to prove. Once the movant has done so, the respondent must come forward with sufficient competent evidence to establish a *prima facie* claim or defense to justify a trial. If the respondent fails to produce sufficient competent evidence to establish its claim or defense, the claim or defense must be dismissed as a matter of law. *See Celotex Corp. v. Catrett*, 477 U.S. 317, 322–23 (1986).

This case involves cross-motions for summary judgment. Because the determination of

whether there is a genuine dispute as to a material factual issue turns upon who has the burden of proof, the standard of proof and whether adequate evidence has been submitted to support a *prima facie* case or to establish a genuine dispute as to material fact, cross motions must be evaluated independently. *Atlantic Richfield Co. v. Farm Credit Bank of Wichita*, 226 F.3d 1138, 1148 (10th Cir. 2000); *Buell Cabinet Co. v. Sudduth*, 608 F.2d 431, 433 (10th Cir. 1979); *In re Ribozyne Pharmaceuticals, Inc., Securities Litig.*, 209 F. Supp. 2d 1106, 1112 (D. Colo. 2002);.

III. Analysis

Title VII forbids not only intentional racial discrimination but also “practices that are fair in form, but discriminatory in operation,” most often referred to as “disparate impact” discrimination. *Tabor v. Hilti, Inc.*, 703 F.3d 1206, 1220 (10th Cir. 2013) (citing *Lewis v. City of Chicago*, 560 U.S. 205 (2010)); *see* 42 U.S.C. § 2000e-2(k). The disparate impact theory seeks to remove employment obstacles which create “built-in headwinds and freeze out protected groups from job opportunities and advancement,” unless those obstacles are required by business necessity, *Hilti*, 703 F.3d at 1220 (citing *EEOC v. Joe’s Stone Crab, Inc.*, 220 F.3d 123, 1274 (11th Cir. 2000)).

For a disparate impact claim, a plaintiff must establish that: (a) an employment practice (b) causes a disparate impact on a protected group. *Id.* At the summary judgment stage, a plaintiff must come forward with sufficient evidence to make a *prima facie* showing on each element. The Supreme Court has recently described a *prima facie* showing of disparate impact as “essentially a threshold showing of a significant statistical disparity . . . and nothing more.” *Ricci v. DeStefano*, 557 U.S. 557, 587 (2009). If the plaintiff succeeds, the burden shifts to the City to demonstrate that the challenged practice is “job related for the position in question and consistent with business necessity.” 42 U.S.C. § 2000e-2(k)(1)(A)(i); *Hilti*, 703 F.3d at 1220. If

the City shows business necessity, the plaintiff must show that the employer refuses to adopt an available alternative employment practice that serves the employer's legitimate needs but has less of a disparate impact. *Ricci*, 557 U.S. at 578; *see* 42 U.S.C. § 2000e-2(k)(1)(A)(ii).

A. The City's Motion for Summary Judgment

With these legal concepts in mind, the Court begins with the City's motion for summary judgment. The City does not dispute that use of the APT was an employment practice. Instead, the City focuses on the second element of the claim. It contends that the Plaintiffs cannot show that use of the APT caused a disparate impact on Black and Hispanic job applicants. Having reviewed the evidence presented, the Court finds that the Plaintiffs have met their initial burden.

1. Plaintiffs' Prima Facie Case

The Plaintiffs rely on statistical evidence to show that the APT caused a disparate impact on Black and Hispanic test takers. Statistical evidence is an acceptable and common means of proving disparate impact. *Carpenter v. Boeing Co.*, 456 F.3d 1183, 1196 (10th Cir. 2006). Although no specific mathematical formulation is required, statistical disparities between non-protected and protected groups must be sufficiently substantial in order to raise an inference of causation. *Watson v. Fort Worth Bank and Trust*, 486 U.S. 977, 995 (1988). Thus, to determine whether the Plaintiffs' statistical evidence is sufficient to make a prima facie case, the Court considers three issues: (1) the size of the disparity between the pass/fail rates of white and minority test takers; (2) the statistical significance of the disparity; and (3) whether the statistical evidence isolates the challenged employment practice. *Hilti*, 703 F.3d at 1222.

With regard to the size of the disparity, a plaintiff's statistical evidence must show a significant disparity between the rate of employees in the protected group received an employment opportunity (*e.g.*, further consideration in the hiring process) with the rate for the

non-protected group with the highest rate. *Carpenter*, 456 F.3d at 1202. The EEOC guidelines suggest that a disparity of 20% or more in selection rate will be considered evidence of adverse impact in a disparate impact claim. 29 C.F.R. § 1607.4(D) (“[A] selection rate for any group . . . that is less than four-fifths (4/5) (or eighty percent) of the rate for the group with the highest rate will generally be regarded . . . as evidence of adverse impact.”) Although not controlling on the courts, this guideline serves as a rule of thumb for courts. *Hilti*, 703 F.3d at 1223; *Watson v. Fort Worth Bank & Trust*, 487 U.S. 977, 995 (1988).

Here, the Plaintiffs submit the opinions of statistician Dr. Robert A. Bardwell. Dr. Bardwell conducted a study of the impact that the APT had on minority applicants. He used the following data: (1) of 1,394 white applicants who took the APT, 345 failed and 1,039 passed; (2) of 752 Black applicants who took the APT, 311 failed and 441 passed; and (3) of 1,463 Hispanic applicants who took the APT, 609 failed and 854 passed. Dr. Bardwell compared the failure rate of all white applicants with the failure rate of all Black applicants and all Hispanic applicants. He determined that 25% percent of white applicants failed the APT in comparison to more than 41% of Black and Hispanic applicants who failed. Based on these rates, Dr. Bardwell determined that minority applicants’ failure rate was 167% more often than that of white applicants. Although Dr. Bardwell formulated his opinions in terms of “fail rates,” as opposed to “pass rates,” these statistics show a sizable disparity between the test results among white applicants and minority applicants. By focusing on the inverse of these statistics, it appears that the pass rate of Black and Hispanic applicants is nearly 59% and the pass rate of white applicants is 75%. This means that the pass rate of minority applicants is approximately 78.67% of the pass rate of white applicants. This equates to a disparity of over 21%, which exceeds the EEOC guideline of 20%.

However, a significant disparity between groups is not enough. To be reliable, the result also must be statistically significant. *Hilti*, 703 F.3d at 1223. “Statistical significance is a term of art which describes the point at which a [probability, or p -value,] is low enough that the null hypothesis should be rejected.” *Apsley v. Boeing Co.*, 691 F.3d 1184, 1198 (10th Cir. 2012) (citing David H Kaye & David A. Freedman, “Reference Guide on Statistics,” in *Reference Manual on Scientific Evidence* (3rd ed. 2011)). Statistical significance is determined by comparing p to a preset value, called the significance level. The null hypothesis is rejected when p falls below this level. The significance level is typically placed at .05, or 5%. Standard deviations are another way of expressing p -values in certain situations. Generally, if a difference between the expected value and the observed number is greater than two or three standard deviations, then the hypothesis that the outcome was due to chance would be “suspect” to a social scientist. *Carpenter*, 456 F.3d at 1995 (quoting *Hazelwood Sch. Dist. v. United States*, 433 U.S. 299, 308 n.14 (1977)).

Here, the null hypothesis is that the differences observed in pass/fail rates between white and minority test takers is simply due to chance. Dr. Bardwell concluded that the probability that the observed differences in outcome were due to chance was at the 5×10^{-25} level, which is equivalent to 10.3 standard deviations. He opined that, in other words, the likelihood of seeing this distribution of test results if the test were race-neutral is five in one thousand trillion trillion. Similarly, when comparing the rates of white test takers to black test takers alone, Dr. Bardwell determined the probability level was 1×10^{-15} , or 7.9 standard deviations, and when comparing white test takers to Hispanic test takers alone, the probability level was 8×10^{-22} , or 9.5 standard deviations. Each of these conclusions far exceeds the two-to-three standard deviations threshold for showing a statistically significant disparity in outcomes between white and minority test

takers. This makes the null hypothesis – that the disparities in test scores are merely the result of chance -- highly unlikely under Dr. Bardwell’s model.

Finally, it is clear that the Plaintiffs have effectively isolated the employment practice that they are challenging. The APT is an objective, standardized test, and there are no other discretionary or subjective factors that weigh into whether applicants pass or fail the test. The evidence submitted by the Plaintiffs directly correlates to the disparity in outcomes on the APT for white test takers versus minority test takers. Accordingly, the Court finds that the Plaintiffs’ evidence is sufficient to establish a prima facie claim that the APT caused a disparate impact on minority test takers, and the City’s Motion for Summary Judgment is therefore denied.

2. City’s Arguments

The City dedicates most of its motion to arguing that Dr. Bardwell’s opinions are inadmissible under Fed. R. Civ. P. 702. The City argues that they are unreliable, and therefore inadmissible under Rule 702, because he did not take into account non-discriminatory factors for the differences in pass rates and because he viewed at the applicant pool as a whole, rather than by job classification. The Court addressed the admissibility of Dr. Bardwell’s opinions at the Rule 702 hearing and declines to revisit its ruling here. However, this Order serves as a supplement and further explanation of the Court’s oral ruling at the Rule 702 hearing.⁵

⁵ The Court observed at the Rule 702 hearing that Dr. Bardwell used an “aggregated” approach, in that he compared the test results of all applicants across all job classifications. He used a chi-square test and a one-tail approach. Conversely, the City’s expert witness, Dr. Mullin, used a “disaggregated” approach, in that he compared the test results of only those test takers in each job classification. Dr. Mullin used a Fisher’s exact test and a two-tail approach. Both experts agreed that there are many statistical tools available for this kind of analysis, but each believes that his method is the preferred approach. The Court found that there was no evidence of a clear consensus among statisticians and labor economists as to a single approach or method that must be used in a particular set of circumstances. Instead, the Court found that the methods used by both witnesses are accepted statistical methodologies and that both experts properly applied their chosen methods.

To the extent the City argues that the statistical evidence is insufficient to establish a prima facie case, the Court disagrees. The City relies on several cases for the proposition that to sufficiently establish an inference of discrimination, statistical evidence of discrimination must account for and eliminate all non-discriminatory explanations for disparity. *See, e.g., Fallis v. Kerr-McGee Corp.*, 944 F.2d 743 (10th Cir. 1991); *Rea v. Martin Marietta, Corp.*, 29 F.3d 1450 (10th Cir. 1994); *Cone v. Longmont United Hospital Ass'n, Inc.*, 14 F.3d 526 (10th Cir. 1994); *Doan v. Seagate Technology, Inc.*, 82 F.3d 974 (10th Cir. 1996).

These cases are not applicable. Each of the cited cases presents a question of whether statistical evidence presented by the plaintiff was sufficient to create an inference of discrimination in a *disparate treatment* case. In a disparate treatment case, an individual plaintiff must show that his or her employer has *intentionally* engaged in prohibited discrimination an adverse action by his or her employer. In each of the cited cases, the plaintiff submitted statistical evidence of a disparity in the employer's workforce on the basis of age, race, gender, etc., arguing that the statistical disparity alone was proof that the employer intentionally discriminated against a particular group. Such statistics are of little value in proving that the disparity was the result of *intentional* actions unless the statistics account for and exclude the possibility of all possible non-intentional factors that may be at play. Thus, in the context of disparate treatment cases, for statistical evidence to create an inference of discrimination, it must account for and eliminate non-discriminatory – that is, non-intentional -- explanations for the observed disparity. In disparate impact cases, however, the employer's intention is irrelevant

and the sole question to be considered is whether a statistical disparity between protected classes exists.⁶

The City also argues that the Plaintiffs' statistical evidence is unreliable (and therefore insufficient to establish a *prima facie* case) because Dr. Bardwell considered the applicant group as a whole, rather than separately analyzing the pass rates of white and minority test takers based on each job classification. Again, the Court disagrees. The City has not pointed the Court to any persuasive authority for the proposition that in a case challenging an employment test, the data cannot be viewed in the aggregate. The City's reliance on *Apsley v. Boeing Co.*, 722 F.Supp.2d 1218 (D.Kan. 2010), is of no help. In *Apsley*, the plaintiffs brought a class action alleging that the City discriminated against them on the basis of age during its execution of a reduction in workforce. They asserted a claim of disparate impact under the Age Discrimination in Employment Act (ADEA) and submitted statistical evidence that included both an aggregated and a disaggregated analysis of employee demographics with regard to hiring outcomes. In the aggregated analysis, the plaintiffs' expert analyzed the workforce as a whole and found significant statistical disparity, whereas in the disaggregated analysis the expert stratified the data into subgroups of employees based on which director ultimately made the employment decision and found significant statistical disparity in only four of the 21 subgroups. The witness did not offer any explanation for the observed differences. The district court considered *both* the aggregated analysis and the disaggregated analysis and ultimately concluded that the evidence

⁶ Certainly, an employer could prevail by showing that any statistical disparity between protected classes that exists is the result of some factor(s) other than the particular employment practice identified by the disparate impact plaintiff (*e.g.* peculiar demographic factors creating an atypical applicant pool or the cumulative effects of other employment practices, none of which alone would produce a statistically-significant disparity of its own). But the Court is aware of no authority that requires a plaintiff to affirmatively exclude the possibility of all alternative explanations for the disparity as part of the *prima facie* case in disparate impact claims.

did not show a significant disparate impact under either approach. The court made no mention that one analysis was preferred, or required, to the exclusion of the other.

To the contrary, many courts observe that aggregated statistical data may be used where it is more probative than subdivided, or disaggregated, data. *See, e.g., Paige v. California*, 291 F.3d 1141, 1148 (9th Cir. 2002); *Capaci v. Katz & Besthoff, Inc.*, 711 F.2d 647, 654-56 (D.C.Cir. 1983); *McReynolds v. Sodexo Marriott Services, Inc.*, 349 F.Supp.2d 1, 15 (D.D.C. 2004); *see also Apsley v. Boeing Co.*, 91 F.3d 1184, 1201 (10th Cir. 2012); *Bradley v. City of Lynn*, 443 F.Supp.2d 145, 164 (D.Mass. 2006) (considering both a statewide aggregated approach and a disaggregated municipality approach and finding both useful). Use of disaggregated data may be particularly appropriate where smaller sample sizes could distort the statistical analysis and render any findings not statistically probative. *See, e.g., Paige*, 291 F.3d at 1148. Here, the challenged employment practice is an objective test that was given to all applicants who met the minimum qualifications for the position applied for. The Plaintiffs allege that this uniform practice had a discriminatory impact on black and Hispanic test takers who applied for a position with the City and they argue that the applicants can be grouped together because each test taker was known to be otherwise qualified for the position. The Court finds that this method of proving their case is sufficient for purposes of making a *prima facie* showing, and although the City may disagree with the method, it is not *per se* improper under the circumstances.

B. Plaintiffs' Motion for Summary Judgment

Turning to the Plaintiffs' motion seeking judgment in their own favor, the Court notes that the City does not dispute that the Plaintiffs can establish that using the APT in hiring was an employment practice, and does not contend that its use of the test was justified by business necessity. The City challenges the Plaintiffs' case only with regard to their ability to prove that

the test had a disparate impact on the basis of race. As discussed above, however, the Plaintiffs have come forward with sufficient evidence (even when viewed in the light most favorable to the City) to establish a prima facie claim of disparate impact on the basis of race. Thus, to survive summary judgment, the City must come forward with sufficient evidence to create a genuine dispute of material fact, thus requiring a trial. The City has satisfied its burden.

The City relies on the opinions of its own expert witness, labor economist Dr. Charles J. Mullin, to challenge the opinions of Dr. Bardwell. Dr. Mullin criticizes Dr. Bardwell's opinions, particularly with regard to grouping together all applicants for all positions. In Dr. Mullin's view, the applicant data should be broken down into smaller groups based on the job classification they applied for. He states that the data should be analyzed in a "disaggregated" manner because (1) the applicant pool for each job classification would likely be different because of different educational backgrounds and experience required for each job, (2) the points required to pass the test varied depending on the job classification for the position sought, and (3) the number of tests required to pass varied by classification title. In Dr. Mullin's view, only those applicants that are "similarly situated" with respect to education, experience, and other qualifications should be grouped together for analysis of their pass rates. Applying a "disaggregated" analysis to the data here, Dr. Mullin concluded that for 13 of the job classifications there was no statistically significant difference in the pass rates of white versus minority test takers.⁷ Specifically, he found that the probability values ranged from .0712 to

⁷ Those job classifications for which Dr. Mullin found no statistical disparity were Administrative Support Assistant I, Administrative Support Assistant V, Agency Support Technician, Animal Control Investigator, Aviation Customer Service Agent, Fingerprint Identification Clerk, Hotline Operator, Human Resources Support Technician, Human Resources Technician, Maintenance Control Technician, Purchasing Technician, Vehicle Impound Clerk, and Water Quality Investigator.

1.0000, indicating that it cannot be concluded that the disparity in pass rates was due to race, as opposed to chance.⁸ Accordingly, the Court finds that the opinions of Dr. Mullin are sufficient to create a genuine dispute of material fact as to disparate impact and therefore the Plaintiffs' motion for summary judgment is denied.

IV. Conclusion

For the forgoing reasons, the City's Motion for Summary Judgment (**#159**) and the Plaintiffs' Motion for Summary Judgment (**#160**) are **DENIED**. The Plaintiffs' claims for disparate treatment and punitive damages are dismissed. The only claim to be tried in this case is the Plaintiffs' claim for disparate impact under Title VII.

The parties are directed to being preparation of a Proposed Final Pretrial Order and shall *jointly* contact chambers within 14 days of the date of this order for the purpose of scheduling a final pretrial conference.

Dated this 29th day of September, 2015.

BY THE COURT:



Marcia S. Krieger
Chief United States District Judge

⁸ The Court notes that the City concedes that Dr. Mullin's study shows a disparate impact on the basis of race as to eight job classifications. However, in light of the need for a trial as to the 13 remaining categories, the Court declines to enter summary judgment as to only a portion of the class. If, at the time of trial, the factfinder determines that Dr. Mullin's opinions are credible, it shall make the appropriate findings.