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Plum Summary of Results



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plum



SUMMARY OF RESULTS FOR PLUM'S PLATFORM

For New York City Local Law 2021/144 – Title: A Local Law to amend the administrative code of the city of New York, in relation to automated employment decision tools.

August 23, 2023

**Legislation:** [NYC LL 144](#)**Distribution Date:**

November 7, 2023

Protected Attributes:

Ethnicity, Gender

AEDT: Plum Platform**Audit Date:** August 23, 2023

Plum Platform Description: Plum's assessment platform aims to match human potential to jobs by evaluating people on their cognitive and personality traits while minimizing the potential for candidates to skew results in their favor. Through results from the Plum Discovery Survey, the platform creates personalized profiles based on ten key Talents. Employers can then use these profiles to find the best match for their open roles, considering the top five Talents crucial for success in those positions. Validated by the science of Industrial Organizational psychology, this method successfully predicts job performance four times more accurately than a resume. The platform's development is grounded in thorough reviews, ensuring its reliability and validity through rigorous testing and adherence to best practices in psychological assessments.

Key information used by Plum Platform: In order to comprehend the audit results and analysis outlined in this document, it's essential to understand Plum's three-step process, which was created to help power the entire spectrum of an organization's talent operations.

It begins with the Match Criteria Survey, which functions as the initial role analysis. During this process, three to eight subject matter experts are asked to take an eight-minute survey where they choose the behaviors most and least important to succeed in the job. Their results are then aggregated, and the five most highly-ranked Talents are identified. These five Talents become the Match Criteria for the role.

Next, candidates or employees take the Plum Discovery Survey. The Discovery Survey is a 25-minute assessment with five sections: two focus on personality, two on problem-solving, and one on social intelligence. Upon completion, each assessment taker will receive a personalized Plum Profile highlighting their most driving and draining Talents. Their Plum Profile will also include examples of tasks they may be more driven or drained by and developmental tools tailored to their specific needs.

Finally, each individual's Plum Profile will be compared for compatibility with the Match Criteria determined in step one. A Match Score is calculated based on their scores and the order ranking of the five identified Talents.

This document audits all possible permutations of Match Criteria and the variation of scores associated with these across various populations to ensure no significant differences between groups.

Data Provided. Information provided by Plum:

- Data type: historical
- Data Period: September 7, 2016 to August 23, 2023
- Region: Global
- Pre-cleaning sample size: 22807902
- Number of missing values: 2801682
- Sample size after removing missing values: 20006220

Additional Data Details. Plum provided data for 22493 candidates across 1014 categories (Assessments). These columns were then melted in order to create a singular score column resulting in each candidate appearing 1014 times (once for each Assessment).

Table. Standalone impact ratios – Gender

Gender	Scoring Rate	Impact Ratio	Sample Size
Female	0.5	0.99	8991138
Male	0.5	1.0	10781862

–Group represents less than 2% of individuals, impact ratio can be excluded from analysis.

Table. Standalone impact ratios – Ethnicity

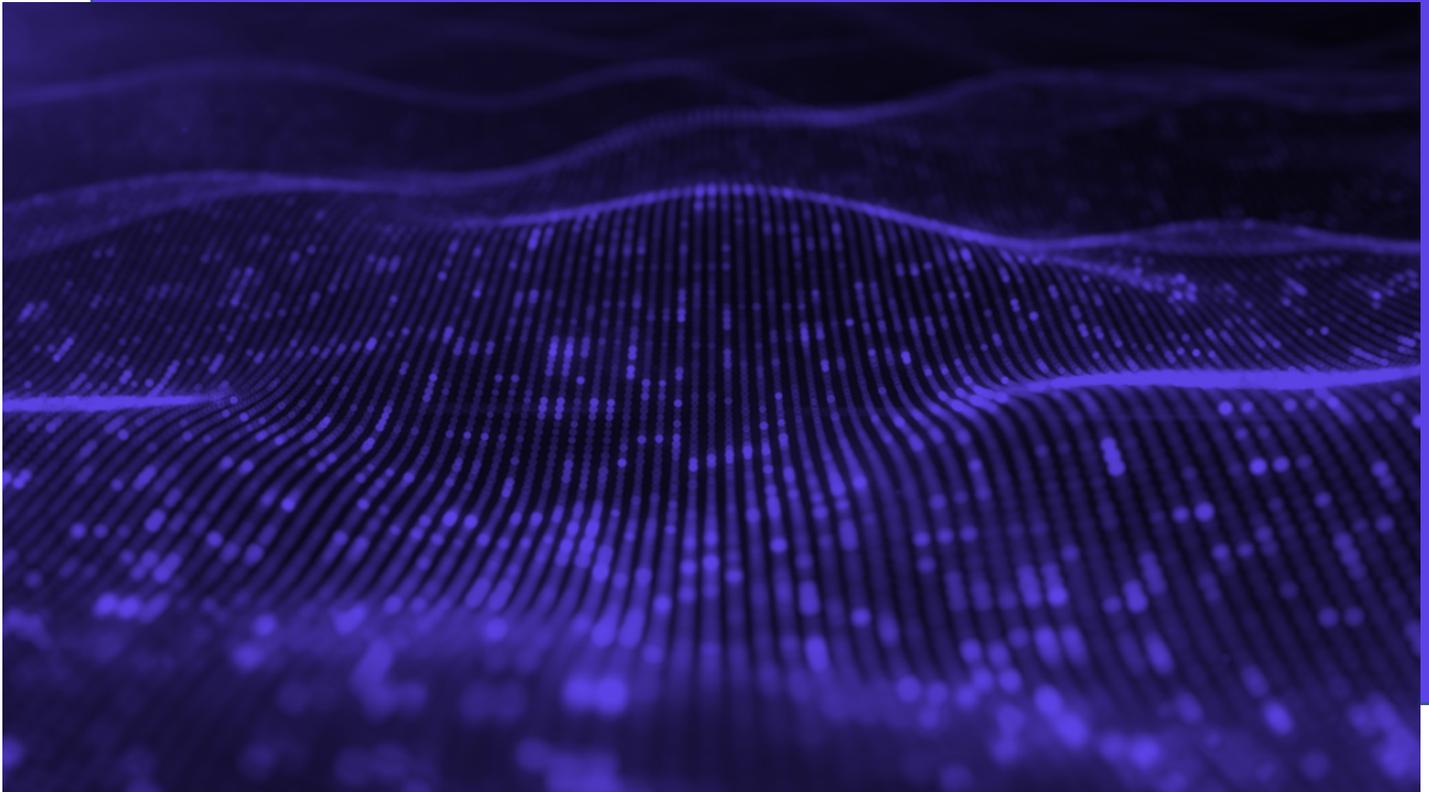
Ethnicity	Scoring Rate	Impact Ratio	Sample Size
American Indian Or Alaskan Native	0.44	–	41574
Asian	0.51	0.98	2416362
Black Or African American	0.48	0.92	790920
Hispanic Or Latino	0.49	0.94	890292
Native Hawaiian Or Other Pacific Islander	0.48	–	15210
Two Or More Races	0.52	1.0	406614
White	0.49	0.94	3599700

–Group represents less than 2% of individuals, impact ratio can be excluded from analysis.

Table. Intersectional impact ratios – Gender/Ethnicity

Gender	Ethnicity	Scoring Rate	Impact Ratio	Sample Size
Female	American Indian Or Alaskan Native	0.39	–	10140
Female	Asian	0.58	1.0	1060644
Female	Black Or African American	0.48	0.84	354900
Female	Hispanic Or Latino	0.52	0.89	361998
Female	Native Hawaiian Or Other Pacific Islander	0.37	–	7098
Female	Two Or More Races	0.56	–	156156
Female	White	0.52	0.91	1798836
Male	American Indian Or Alaskan Native	0.43	–	29406
Male	Asian	0.46	0.8	1285752
Male	Black Or African American	0.48	0.84	403572
Male	Hispanic Or Latino	0.48	0.83	501930
Male	Native Hawaiian Or Other Pacific Islander	0.58	–	8112
Male	Two Or More Races	0.49	0.86	235248
Male	White	0.47	0.81	1713660

–Group represents less than 2% of individuals, impact ratio can be excluded from analysis.



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