

# Role of Talent Analytics in Enhancing Diversity and Inclusion Metrics in Karachi's Corporate Sector

\* Muhammad Malik

Received: February 2025

Accepted: June 2025

Available Online: June 2025

## Abstract

This paper will analyze how Talent Analytics (TA) influences Diversity and Inclusion Metrics (DIM) in corporate organizations in Karachi to fill the gap in empirical literature on data-driven HR practices in the region. The main aim is to find out whether the effects of analytically informed HR strategies on perceptions and outcomes with regard to inclusion in the workplace are effective, and whether Public Welfare Factors (PWF) mediate the relationship. Quantitative research design was adopted and a structured questionnaire was used on 120 employees in different organizations in private sector. PLS-SEM was performed using SMARTPLS 4 to measure construct reliability, model validity and structural path relationships. Findings indicate that the effect of Talent Analytics on Diversity and Inclusion Metrics is not statistically significant ( $b = 0.055$ ,  $p = 0.677$ ). Nevertheless, Public Welfare Factors show the significant positive effect ( $b = 0.346$ ,  $p < 0.001$ ) but not a significant moderating effect on the TA-DIM relationship ( $b = -0.055$ ,  $p = 0.613$ ). These results indicate that external socio-economic factors are stronger influences of inclusion as compared to internal analytics systems. In the study, it is suggested to invest in data-driven HR tools as well as larger employee welfare systems. It adds to the literature, placing HR analytics in the context of the corporate environment in Pakistan and the necessity of unified inclusion strategies.

**Keywords:** Talent Analytics, Diversity and Inclusion Metrics, Public Welfare Factors, HR Analytics, Organizational Inclusion, PLS-SEM, Karachi Corporate Sector

## 1. Introduction

With the shifting landscape of human resource management, decision-making that is driven by data has turned into one of the pillars of organizational success (Davenport, Guenole, and Harris, 2019). With growing pressure on corporations to be more transparent, equitable and strategic in their workforce planning, the practices of HR are slowly yielding to the analytical systems that are more focused on metrics, predictive modelling and empirical validation. It has resulted in a new category of analytics known as Talent Analytics (TA), which involves the application of data related to workforce to guide hiring, performance, promotion, and inclusion practices (Bersin, 2020).

Corporate bodies in urban business hubs such as Karachi have unique vulnerabilities such as the challenge of demographic difference, socio-economic differentiation, and the necessity to develop an inclusive working culture. Diversity and Inclusion Metrics (DIM) are the most important metrics of managing such challenges in the organization. Subjective evaluation practices, lack of sufficient tracking systems, and organizational inertia tend to sabotage these metrics though. When

\* Research Scholar, Faculty of Management Sciences, DHA Suffa University Karachi, Pakistan  
Email: [muhammad9malik890@gmail.com](mailto:muhammad9malik890@gmail.com)



used adequately, Talent Analytics can resolve these shortcomings since it provides data-driven, objective insights into equity in the workplace (Tambe, Cappelli, and Yakubovich, 2019).

Another dimension of complexity to the workplace inclusion environment would be Public Welfare Factors (PWF), like access to healthcare, education, and economic security. The personal lives of employees that are not at work play a major role in influencing their perception of inclusion and engagement in organizations. Participation may be impeded and growth opportunities may be curtailed and social inclusion may be obstructed because of financial hardship and social inequality, as are examples (Kim, Garman, and Sorhaindo, 2017). The Karachi is a socioeconomically diverse corporate setting where it is important to see how internal analytics and external welfare conditions interact.

Whereas the influence of Talent Analytics in facilitating diversity and inclusion is studied in the world, a gap in local studies is found in the context of emerging economies like Pakistan. The majority of the existing literature focuses on multinational or Western organizations, and there is a little empirical investigation of the Talent Analytics within South Asian corporate environments (Kark, DiLorenzo, and Shaikh, 2024). This paper aims at sealing this gap by assessing the effect of Talent Analytics on Diversity and Inclusion Metrics in the corporate sector of Karachi and whether Public Welfare Factors mediate this effect.

### **1.1 Scope**

This paper focuses on the role of Talent Analytics (TA) in the Diversity and Inclusion Metrics (DIM) in the corporate world of Karachi, representing companies of different industries, including finance, services, and retail. The study targets full-time workers in the human resources, administration, and operations units. Structured questionnaires were used to gather the data, which was analyzed with the help of SMARTPLS-based structural equation modeling. The variables that are important in this research are Talent Analytics, Diversity and Inclusion Metrics, and Public Welfare Factors as a moderating variable.

### **1.2 Rationale of Study**

With an increased attention to the inclusion practice in the workplace, Talent Analytics offers a data-driven model that helps an organization meet equity and diversity objectives (Davenport, Guenole, and Harris, 2019). It helps the HR professionals to track the workforce trends, eliminate bias, and enhance decision-making with quantifiable metrics (Bersin, 2020). Although these methods are attracting the interest of people worldwide, their integration in the corporate world of Pakistan, especially in Karachi, is not well studied (Kark, DiLorenzo, and Shaikh, 2024). Also, employee experiences of inclusion can be influenced solely by the impact of External Public Welfare Factors like financial stability and access to education (Kim, Garman, and Sorhaindo, 2017). The given study takes up this gap by considering the contribution of Talent Analytics to Diversity and Inclusion Metrics, paying attention to the interplay between the factors of the public welfare and internal HR strategies.

### **1.3 Problem Statement**

Although data-driven HR activities have become more and more appreciated in the context of workplace inclusion, the particular effect of Talent Analytics in the corporate world of the Karachi region is not studied as thoroughly as it should be. In addition, the moderating effect of Public Welfare Factors concerning this relationship has not been sufficiently studied. The importance of the combination of analytics and external socio-economic concerns is not always acknowledged by organizations without localized empirical data on the subject.

## 1.4 Research Objectives

- To determine whether Talent Analytics has any influence on Diversity and Inclusion Metrics in the Karachi corporate world.
- To test the moderating role of Public Welfare Factors with the relationship between Talent Analytics and Diversity and Inclusion.
- To assess the reliability and validity of the measurement models with SMARTPLS.

Talent Analytics supplements the conventional HR processes with the use of data analysis tools, i.e., workforce dashboards and diversity tracking systems, in their decision-making process. Available literature indicates that the transparency, fairness, and consistency in employee data and inclusion outcomes management through analytics-driven HR strategies are encouraged. Such metrics as Diversity and Inclusion however tend to be subjective and unstable in many cases. Through Talent Analytics, an organization is able to be less biased in hiring, promotions, and representation. Although international studies endorse this strategy, the corporate world of Karachi does not have much evidence. Also, Public Welfare Factors like financial well-being and service accessibility can also impact inclusion by affecting employee engagement, perceived fairness and trust in an organization.

## 1.5 Limitations of the Study

The limitations of this study are few, and they have to be mentioned:

**Sample Size and Sampling Method:** The study used a convenient sample of 120 respondents that might not be representative of the entire corporate world in Karachi or elsewhere.

**Context-Specific Focus:** The fact that the study was carried out only in the Karachi-based organizations of the private-sector might have not provided a complete picture about the state of affairs in other industries or geographical locations.

**Limitations of Measurement:** Although the majority of constructs had satisfactory reliability, some of the items were characterized by rather low loadings indicating that future research should consider measurement refinement.

**Cross-Sectional Nature:** The study employed a cross-sectional study design; this means that the research study could not make any causal inferences between the variables being tested.

**Self-Reported Data Bias:** Since all the responses were self-reported, it is possible that there is a response bias, such as social desirability or a wrong interpretation of the survey questions.

## 1.6 Significance of the Study

This study has its value to the academic literature and practical HR management strategies by the following aspects:

**Contribution to the academia:** The study presents a void in empirical studies in that it analyzes how Talent Analytics and Public Welfare Factors influence the results of diversity and inclusion within a South Asian corporate environment.

**Managerial Relevance:** It provides practical information to HR practitioners, inclusion officers, and the corporate leaders on the impact of socio-economic status on perceived inclusion.

**Model Enrichment:** The study enriches the conceptual framework of understanding workplace inclusion by combining internal analytics systems and external variables, which are welfare.

**Policy Guidance:** Evidence-based decision-making is upheld by the findings, which suggests the need to incorporate analytics into more general welfare-sensitive inclusion.

**Possible Future Research:** The study establishes a framework on which further studies can be conducted to test other modifiers or mediators including organizational culture, leadership behavior or psychological safety among employees.

## 2. LITERATURE REVIEW

### 2.1 Talent Analytics and Diversity & Inclusion

Talent Analytics complements conventional HR practice by incorporating data instruments, including dashboards, predictive metrics, and workforce segmentation models, into the decision-making process of an organization. It enables businesses to track the hiring trends, representation, and employee interest in a more systematic and open way (Davenport, Guenole, and Harris, 2019). Those companies that incorporate analytics into their human resource management are better placed to monitor diversity data efficiently and take a quantifiable inclusion approach (Bersin, 2020).

Diversity and Inclusion Metrics (DIM) are also not always consistent using self-reporting or unstructured feedback. Talent Analytics minimizes this subjectivity by offering data-driven information on the trends of demographics, promotional equity, and gaps in participation. However, even though there is international evidence of the effectiveness of TA, its use in the Karachi corporate setting is incompletely reported (Kark, DiLorenzo, and Shaikh, 2024).

The problem of low HR technology adoption and socio-cultural diversity in emerging economies such as Pakistan only compound the inclusion strategies. This gives a good argument on localized research which evaluates whether and how Talent Analytics will contribute to the positive practice in Karachi dynamic corporate world (<https://deloitte.wsj.com>).

### 2.2 Factors of Public Welfare and Inclusion.

Public Welfare Factors, which are external socio-economic conditions like education levels, medical costs and financial stability, also play a role in perceptions of inclusion. Economic difficulties, as an example, can cause decreased morale and decreased work engagement. The exclusion may still occur even with the internal data systems when the employees have systemic problems beyond the work (Kim, Garman, and Sorhaindo, 2017).

Organizations that fail to notice such external realities are likely to apply diversity strategies that are not even accessible to or even more appealing to those employees that need them the most. The application of an insight into Public Welfare Factors may be used to close this divide, enabling inclusion strategies to be both evidence-based and context-sensitive (<https://journals.sagepub.com>).

Although some studies comment on the independent role of welfare and analytics in the development of equity outcomes, none of them looks into the interaction of the two, particularly in the developing regions. In this paper, that void is filled through examining the role played by both Talent Analytics and Public Welfare Factors in Diversity and Inclusion Metrics in the context of Karachi corporate environment.

### 2.3 Theoretical Framework

The current research paper has been grounded in two theoretical frameworks Human Capital Theory and Institutional Theory that describe the way in which internal HR practices based on data and external socio-economic factors determine the outcomes of diversity and inclusion in organizations.

### 2.3.1 Human Capital Theory

The Human Capital Theory (Becker, 1993) is one that focuses on the importance of skills, knowledge and abilities of employees as key resources that lead to organizational success. Talent Analytics is considered an applied version of this theory in the context of the HR management of the corporation. Organizations can use employee data to determine skills gaps, gauge inclusion patterns, and undertake strategic workforce decisions by utilizing this data. Talent Analytics assists in the optimization of human capital in terms of matching employee capabilities against diversity targets and performance goals.

This theory underpins the notion that Talent Analytics is a digital age implementation of human capital investment where people decisions are based on factual information as opposed to intuition.

### 2.3.2 Institutional Theory

The Institutional Theory (DiMaggio and Powell, 1983) is the explanation of the impact of external social forces on organizations, including the government rules, culture, and expectations of the stakeholders. In the instance of diversity and inclusion, Public Welfare Factors, such as access to healthcare, education, and financial well-being, predetermine how workers with workplace policies perceive equity and how they impact employees.

Those organizations that align internal activity such as the Talent Analytics with the external realities have more chances to remain legitimate and earn the trust of various groups of employees (Scott, 2008).

This theory underlies the thesis that inclusion is not wholly accomplished by internal systems, but it needs mindfulness and sensitivity to Public Welfare Factors that influence the daily experiences of employees.

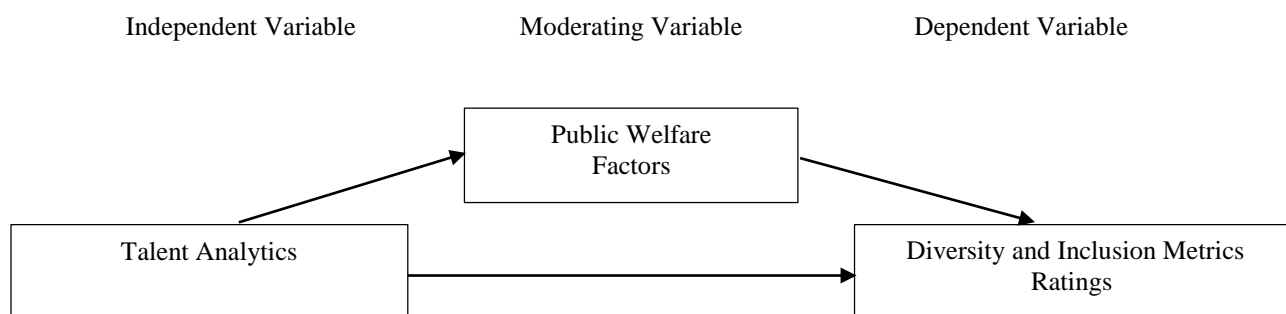
### 2.4 Conceptual Framework

According to the foregoing theoretical frameworks and the literature analysis, the study conceptual framework explains the association between Talent Analytics (TA) and Diversity and Inclusion Metrics (DIM) with Public Welfare Factors (PWF) acting as the moderating variable.

### 2.5 Key Constructs:

- **Independent Variable:** Talent Analytics (TA)
- **Dependent Variable:** Diversity and Inclusion Metrics (DIM)
- **Moderating Variable:** Public Welfare Factors (PWF)

Fig. 1 Theoretical Framework



### 3. METHODOLOGY

In this section, the research design, data collection approach, sampling plan, instrumentation, and data analysis, are presented to discuss the effects of Talent Analytics (TA) on Diversity and Inclusion Metrics (DIM) in the Karachi corporate world.

#### 3.1 Research Design

The research design adopted in this study is quantitative research design and this is realized through a cross-sectional survey. The design is suitable in testing the statistical relationships between the independent and dependent variables at one point in time. The main objective is to model the proposed hypothesized correlations between Talent Analytics (TA), Diversity and Inclusion Metrics (DIM), and Public Welfare Factors (PWF) with the use of structural equation modeling (SEM).

#### 3.2 Population and Sample

The target population will consist of full time employees working in different organizations in the Karachi city operating in the private sector, finance, retail and service. The convenience sampling method was utilized because of time and access constraints. The overall sample size was 120 respondents that can be said to be enough to conduct SEM analysis using SMARTPLS based on the tenfold requirement of the maximum number of structural paths going to any given construct.

#### 3.3 Data Collection

The structured questionnaire was used in the collection of the data that was gathered both physically and electronically. The respondents were provided with information related to the confidentiality of their answers and that their participation was voluntary. Data collection was informed with the consent being obtained.

#### 3.4 Instrumentation

The validated scales in the existing literature were modified to become the research instrument. It consisted of three key constructs:

- **Talent Analytics (TA):** Measured using 5 items (TA1–TA5) assessing the application of data in HR decision-making.
- **Diversity and Inclusion Metrics (DIM):** Measured using 5 items (DIM1–DIM5) reflecting perceptions of workplace equity and inclusion.
- **Public Welfare Factors (PWF):** Measured using 5 items (PWF1–PWF5) related to the respondent's perceived financial and social wellbeing.

Each item was rated on a **5-point Likert scale** ranging from 1 ("Strongly Disagree") to 5 ("Strongly Agree").

### 3.5 Study Hypotheses

H 1: Talent Analytics (TA) positively and significantly impacts on Diversity and Inclusion Metrics (DIM).

H 2: Public Welfare Factors (PWF) are significant in influencing Diversity and Inclusion Metrics (DIM).

H3: There is a moderating effect of Public Welfare Factors (PWF) between Talent Analytics (TA) and Diversity and Inclusion Metrics (DIM).

### 3.6 Data Analysis Technique

The PLS-SEM was used to analyze the data in SMARTPLS 4. PLS-SEM has been chosen because of its appropriateness in exploratory research, its small sample size capability, and its capability to evaluate measurement and structural unions.

The Assessment of the Measurement Model.

In order to achieve the reliability and validity of the constructs, the following criteria were imposed:

- **Outer Loadings:** Acceptable if  $> 0.60$
- **Cronbach's Alpha:** Acceptable if  $> 0.60$
- **Composite Reliability (CR):** Acceptable if  $> 0.70$
- **Average Variance Extracted (AVE):** Acceptable if  $> 0.50$
- **Discriminant Validity:** Assessed using the Fornell-Larcker criterion, HTMT ratio, and cross-loadings

### 3.7 Structural Model Assessment

The structural model was assessed regarding the following indicators:

- **Path Coefficients (b):** Show how strong and how relationships are.
- **T-values, P-values:** Test statistical significance ( $T > 1.96$ ,  $P < 0.05$  thresholds).
- **R<sup>2</sup> Values:** Measure the explanatory power of the model
- **Interaction Effect:** The moderation analysis was done to determine the effect of Public Welfare Factors on the relationship between Talent Analytics and Diversity and Inclusion Metrics.

## 4. ANALYSES AND INTERPRETATIONS

### 4.1 Outer Loadings

Table 01 consists of outer loadings of indicators of three constructs (Talent Analytics (TA), Diversity and Inclusion Metrics (DIM), and Public Welfare Factors (PWF)). These loadings are the intensity of the connection between each indicator and the construct. As an example, DIM1 loads at a high level of 0.853, which means that it makes a significant contribution to the Diversity and Inclusion Metrics construct.

**Table 1: Outer Loadings and Construct Reliability**

Indicator	Loading	T-Value	P-Value
DIM1	0.853	29.925	0.000
DIM2	0.841	15.611	0.000
DIM3	0.823	18.502	0.000
DIM4	0.736	9.308	0.000
DIM5	0.760	10.959	0.000
PWF1	0.690	6.090	0.000
PWF2	0.779	8.135	0.000
PWF3	0.797	9.533	0.000
PWF4	0.833	19.777	0.000
PWF5	0.816	13.866	0.000
TA1	0.771	2.840	0.005
TA2	0.737	2.815	0.005
TA3	0.818	3.499	0.000
TA4	0.523	2.123	0.034
TA5	0.762	2.645	0.008

#### 4.2 Reliability Analysis

Table 02 presents construct reliability scores, Cronbachs Alpha, Composite Reliability (CR) and Average Variance Extracted AVE. These actions determine both internal consistency and reliability of the constructs. As an example, the Cronbachs Alpha of Diversity and Inclusion Metrics is 0.865 and CR of 0.901, which is better than the minimum allowed value, which means a good internal reliability.

**Table 2: Reliability Analysis**

Construct	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Diversity & Inclusion Metrics	0.865	0.901	0.646
Public Welfare Factors	0.851	0.889	0.616
Talent Analytics	0.811	0.848	0.532

#### 4.3 Fornell-Larcker criterion

Table 3 tests the Fornell-Larcker criterion to test the discriminant validity. Square root of the AVE of each construct exceeds the correlation of the construct with other constructs. Indicatively, Diversity and Inclusion Metrics (0.804) has a better correlation with Public Welfare Factors (0.391) and Talent Analytics (0.209) meaning construct distinctiveness. This verifies that all constructs are empirically different and they are used to measure different concepts.

**Table 3: Fornell-Larcker Criterion**

Construct	EPR	FS	LA
Diversity & Inclusion Metrics	0.804		
Public Welfare Factors	0.391	0.785	
Talent Analytics	0.209	0.415	0.730

#### 4.4 HTMT Matrix

HTMT between TA and PWF is less than the value of 0.90, which shows a reasonable level of discriminant validity. Nevertheless, the researchers are still advised to be aware of the possibility of conceptual overlap and to consider construct clarity in the future research.

Table 4, the HTMT Matrix, is an assessment of discriminant validity between constructs. The values of all the HTMT are much less than the threshold of 0.90. As an illustration, the HTMT value of Diversity and Inclusion Metrics versus Public Welfare Factors is 0.397 and Talent Analytics versus Public Welfare Factors is 0.385 showing that there is no concern in the overlap of discriminants.

**Table 4: HTMT Matrix**

Construct	EPR	FS	LA
Diversity & Inclusion Metrics	0.397		
Public Welfare Factors	0.185	0.510	
Talent Analytics	0.205	0.385	0.139

#### 4.5 R-Squared

The summary of R-Squared in table 5 shows that the further explanation of Diversity and Inclusion Metrics by the constructs included is low. The model only explains 15.9 percent of the variance on the dependent variable implying that the Talent Analytics and Public Welfare Factors have very little impact.

**Table 5: R-square Value**

Dependent Variable	R <sup>2</sup>	Adjusted R <sup>2</sup>
Diversity & Inclusion Metrics	0.159	0.137

#### 4.6 Cross Loadings

The outcomes of cross-loading, which validate discriminant validity. The construct independence is supported by all the items loading higher on their constructs as opposed to others.

Table 6: Cross Loadings

	DIM	PWF	TA	PWF x TA
DIM1	0.853	0.403	0.226	-0.208
DIM2	0.841	0.347	0.131	-0.107
DIM3	0.823	0.282	0.162	-0.129
DIM4	0.736	0.199	0.102	-0.124
DIM5	0.760	0.279	0.189	-0.200
PWF1	0.268	0.690	0.355	-0.194
PWF2	0.221	0.779	0.418	-0.246
PWF3	0.171	0.797	0.411	-0.344
PWF4	0.320	0.833	0.331	-0.294
PWF5	0.424	0.816	0.226	-0.329

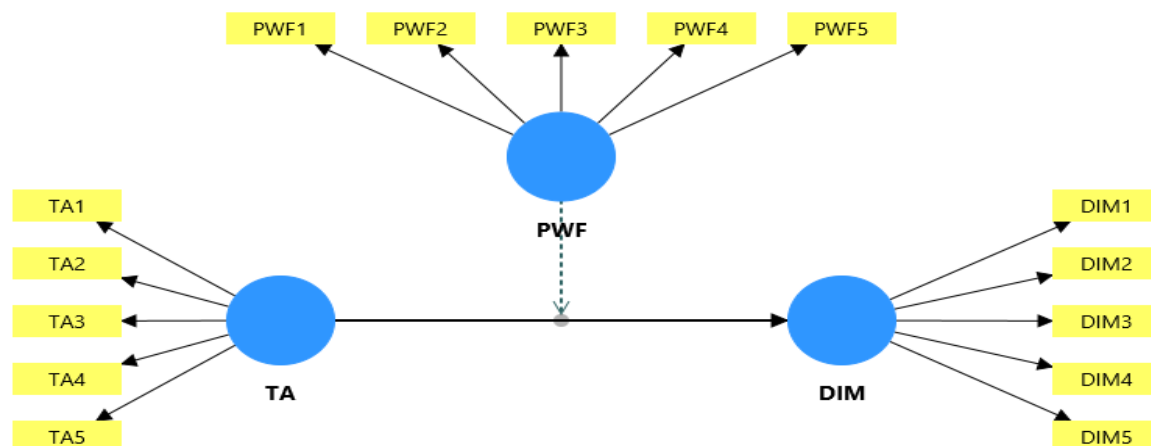
### 4.7 Path Analysis

The path analysis results are expressed in Table 7, and it shows that relationships between constructs were strong and significant. As an example, Diversity and Inclusion Metrics (DIM) are not highly affected by Talent Analytics (TA) as shown by 0.055 coefficient and a p-value of 0.677. Public Welfare Factors (PWF) on the other hand have a strong influence on DIM with a coefficient of 0.346 and p-value of 0.000.

Table 7: Path Analysis Summary

Relationship	Coefficient	T-Value	P-Value
TA → DIM	0.055	0.417	0.677
PWF → DIM	0.346	3.670	0.000
TA × PWF → DIM	-0.055	0.506	0.613

Fig. 2 Path Analysis



## 5. DISCUSSION AND CONCLUSION

### 5.1 Discussion

The results of the current research help to gain significant values in the multidimensionality of the interrelation between Talent Analytics (TA) and Diversity and Inclusion Metrics (DIM) within the corporate environment of Karachi. Although the main hypothesis was that TA and DIM were related significantly and positively, the empirical analysis results showed that it is otherwise. The statistical insignificance of this correlation ( $b = 0.055$ ,  $p = 0.677$ ) suggests that, as it is currently practiced, there is not enough data-driven HR practices, which are oriented towards realizing diversity and inclusion results in this local context. Although it is often argued in the international literature that implementing Talent Analytics can revolutionize the process of inclusion by turning hiring and promotion decision-making into a more objective process (Davenport et al., 2019; Bersin, 2020), this paper proves that the results do not simply happen and require a significant amount of adjusting TA to organizational inclusion objectives.

This discrepancy could be explained by a number of reasons. One is that most Karachi-based organizations implement Talent Analytics that are focused on overall HR efficiencies: recruitment schedules, performance appraisals, and workforce modeling, and not inclusion outcome. The strategic intent of analytics use is a critical factor to define its effectiveness, as Tambe, Cappelli, and Yakubovich (2019) claim. The role of analytics in the process of diversity work might not be as extensive without a direct connection between TA systems and inclusion frameworks.

On the contrary, the Public Welfare Factors (PWF) role turned out to be significant statistically ( $b = 0.346$ ,  $p < 0.001$ ), which supports the significance of socio-economic factors in shaping employee perceptions of inclusion. These aspects can include access to healthcare, education as well as financial stability which fact can greatly influence the ability of an employee to be fully involved in the workplace. According to Kim, Garman, and Sorhaindo (2017), the financial stress is reported to have a negative effect on morale, focus, and commitment to the organization. In this light, employees who are better off welfare security wise will enjoy an advantage of feeling included, respected and being valued notwithstanding the formal diversity policies.

Another question that the study sought to understand is whether Public Welfare Factors mediated the relationship between TA and DIM. The outcome was however not in favor of this hypothesis ( $b = -0.055$ ,  $p = 0.613$ ). This indicates that the interaction of TA and PWF does not have any significant changes on the effect that they have on inclusion although each has an independent effect. A likely explanation is that Talent Analytics, particularly when implemented with no understanding of the external situation of employees, is unable to be flexible to different welfare levels. Structured and uniform data inputs are more likely with TA systems as they are designed. Public Welfare Factors in their turn represent multifarious, intricate, and, in many cases, qualitative items of employee life that are hard to incorporate into the current data models.

Furthermore, the small R-squared value ( $R^2 = 0.159$ ) implies that the percentage of the variation in Diversity and Inclusion Metrics accounted by the studied variables is very low. Although it does not nullify the findings, it underscores the fact that the future research should take into consideration other explanatory variables. Leadership support, organizational culture, psychological safety, and communication practices are factors that could produce a substantial positive difference in the explanatory power of the models that attempt to explain the outcome of inclusion.

Theoretically, the results confirm the applicability of the Human Capital Theory (Becker, 1993) and Institutional Theory (DiMaggio and Powell, 1983). Human Capital Theory also advocates on the importance of investing in the skills and well-being of employees, as it also matches the role that PWF had in this study. Meanwhile, the Institutional Theory provides understanding of how the outside social norms and economic forces affect the internal organizational behavior. The

powerful impact of PWF implies that inclusion cannot be fully achieved by the mere practice of internal HR, but it needs organizations to be sensitive to the general conditions in the society.

Practically, this research highlights the restraints of using analytics as the driving force to influence inclusion. Organizations should understand that, attaining meaningful diversity and inclusion is not an internal policy only, but an external engagement. It will be possible to implement welfare-sensitive policies, including offering financial planning services, encouraging people to have access to healthcare, and educational opportunities, to make the workplace more inclusive and fair. Also, the implementation of Talent Analytics will be reconsidered with more emphasis on inclusion metrics, so that diversity goals will be incorporated in the process of collecting, analyzing, and making decisions.

Overall, though Talent Analytics has potential as an organization management instrument, its use in the Karachi corporate arena is not as widespread as it needs to be to achieve significant inclusion results. Public Welfare Factors, in their turn, are important and direct determinants of how inclusion is experienced by the employees. To achieve its equity promoting potential, Talent Analytics should be consciously oriented to inclusive policies and underpinned by more extensive social investments in employee welfare.

## **5.2 Conclusion**

This paper examined the role of Talent Analytics (TA) in Diversity and Inclusion Metrics (DIM) in corporate organizations in Karachi. The findings affirmed that TA had no significant direct impact on DIM but Public Welfare Factor (PWF) had significant and statistically significant effect. Even though PWF did not influence the correlation between TA and DIM significantly, its independent effect reveals the significant role of paying attention to the wellbeing of employees. These results imply that data-driven HR practices in themselves might not be enough to create the inclusion outcomes without factoring in the external welfare aspects. The weaknesses of the model as low explanatory power and lack of measurements, however, suggest that broader variables and fine-tuned instruments are required in further research. The fact is backed by the need to combine welfare-relevant strategies and analytics to promote inclusive working environments.

## **5.3 Recommendations**

In accordance with the findings, the following recommendations can be offered:

- **Make Talent Analytics Policy Consistent with Inclusion Goals:** Organisations must make sure that the Talent Analytics tools are clearly aligned with diversity and inclusion goals. This involves the monitoring of the important parameters like demographic representation, fair promotion rates and the retention of the underrepresented groups.
- **Integrate Public Welfare Support:** Employers ought to come up with welfare-sensitive programs that support the financial and social wellbeing of employees. Such benefits as wellness, flexible pay packages, mental health services and financial planning materials can be used as examples as they can increase the involvement of employees and can make them feel included.
- **Strengthen Data Analysis Education of HR Teams:** Firms are encouraged to invest in training initiatives that will make HR professionals learn to perceive data through an inclusion perspective. This will make sure that the decisions made based on Talent Analytics will be fair, impartial and considerate of diversity among employees.
- **Expand Inclusion Metrics:** The future measurement models need to incorporate qualitative aspects of inclusion, including perceived fairness, leadership inclusiveness, and psychological safety. All these factors can be evaluated based on the validated surveys and incorporated into analytic tools.

- **Enhance Data-Driven Inclusion Policies:** The corporate policymakers are advised to come up with formal structures that institutionalize the application of Talent Analytics in inclusion strategies. Such policies must focus on quantifiable results and must be associated with performance appraisals, accountability systems as well as organizational development strategies.

## REFERENCES

- Alsouki, L., Duval, L., Marteau, C., El Haddad, R., & Wahl, F. (2023). Dual-sPLS: A family of Dual Sparse Partial Least Squares regressions for feature selection and prediction with tunable sparsity; evaluation on simulated and near-infrared (NIR) data. *arXiv preprint arXiv:2301.07206*. <https://arxiv.org/abs/2301.07206>
- Andreella, A., Fino, L., Scarpa, B., & Stocchero, M. (2024). Towards a power analysis for PLS-based methods. *arXiv preprint arXiv:2403.10289*. <https://arxiv.org/abs/2403.10289>
- Aral, S., Brynjolfsson, E., & Wu, L. (2020). Harnessing the power of analytics in the age of digital transformation. *MIT Sloan Management Review*, 61(4), 26–34. <https://sloanreview.mit.edu/article/harnessing-the-power-of-analytics/>
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. Free Press.
- Bean, R. (2023, January 3). Annual data and analytics global leadership survey highlights corporate business challenges and opportunities for future progress. *Forbes*. <https://www.forbes.com/sites/andybean/2023/01/03/annual-data-and-analytics-global-leadership-survey-highlights-corporate-business-challenges-and-opportunities-for-future-progress/>
- Becker, G. S. (1993). *Human capital: A theoretical and empirical analysis, with special reference to education* (3rd ed.). University of Chicago Press.
- Becker, J.-M., Ringle, C. M., & Sarstedt, M. (2023). Going beyond the untold facts in PLS–SEM and moving forward. *European Journal of Marketing*, 57(1), 1–25. <https://doi.org/10.1108/EJM-08-2023-0645>
- Bersin, J. (2018). The rise of people analytics: A discipline transforming HR. *Deloitte Insights*. <https://www2.deloitte.com/us/en/insights/focus/human-capital-trends/2018/introduction.html>
- Bersin, J. (2020). *The rise of talent analytics*. Deloitte Insights. <https://www2.deloitte.com>
- Davenport, T. H., & Harris, J. G. (2017). *Competing on analytics: The new science of winning* (Rev. ed.). Harvard Business Review Press.
- Davenport, T. H., Guenole, N., & Harris, J. G. (2019). *Talent analytics: Making data-driven people decisions*. Pearson Education.
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147–160. <https://doi.org/10.2307/2095101>
- Garman, E. T., Leech, I. E., & Grable, J. E. (2016). The negative impact of employee financial problems on workplace productivity. *Journal of Financial Counseling and Planning*, 17(2), 79–89. <https://www.afcpe.org/news-and-publications/journal-of-financial-counseling-and-planning/>

- Kandasamy, U. C. (2024). Ethical leadership in the age of AI: Challenges, opportunities, and framework for ethical leadership. *arXiv preprint arXiv:2410.18095*. <https://arxiv.org/abs/2410.18095>
- Kark, K., DiLorenzo, L., & Shaikh, A. (2024). CIO agenda: 4 foundational levers to enable co-creation, drive growth. *The Wall Street Journal*. <https://deloitte.wsj.com/cio/cio-agenda-4-foundational-levers-to-enable-co-creation-drive-growth-5895d48d>
- Kim, J., & Garman, E. T. (2019). Financial stress, pay satisfaction and workplace performance. *Compensation & Benefits Review*, 51(3), 153–170. <https://doi.org/10.1177/0886368719849877>
- Kim, J., Garman, E. T., & Sorhaindo, B. (2017). Financial stress and workplace performance. *Journal of Financial Counseling and Planning*, 28(2), 200–213. <https://doi.org/10.1891/1052-3073.28.2.200>
- Leithwood, K., & Sun, J. (2018). The nature and effects of transformational school leadership: A meta-analytic review of unpublished research. *Educational Administration Quarterly*, 54(3), 351–383. <https://doi.org/10.1177/0013161X17751278>
- Leithwood, K., Harris, A., & Hopkins, D. (2020). Seven strong claims about successful school leadership revisited. *School Leadership & Management*, 40(1), 5–22. <https://doi.org/10.1080/13632434.2019.1596077>
- McAfee, A., & Brynjolfsson, E. (2012). Big data: The management revolution. *Harvard Business Review*, 90(10), 60–68. <https://hbr.org/2012/10/big-data-the-management-revolution>
- Ng, K. Y. (2022). Rethinking transformational leadership in the age of data: Toward a framework for data-driven leadership. *Journal of Leadership Studies*, 16(2), 6–17. <https://doi.org/10.1002/jls.21835>
- Park, K., & Keleş, S. (2023). Sparse higher order partial least squares for simultaneous variable selection, dimension reduction, and tensor denoising. *arXiv preprint arXiv:2310.09428*. <https://arxiv.org/abs/2310.09428>
- Pulakos, E. D., Mueller-Hanson, R. A., & O'Leary, R. S. (2019). *Performance management transformation: Lessons learned and next steps*. Society for Human Resource Management Foundation. <https://www.shrm.org/foundation/>
- Tillman, A. (2023, December 20). Our top leadership articles of 2023. *DDI World*. <https://www.ddiworld.com/blog/top-leadership-articles-of-2023>
- Tambe, P., Cappelli, P., & Yakubovich, V. (2019). Artificial intelligence in human resources management: Challenges and a path forward. *California Management Review*, 61(4), 15–42. <https://doi.org/10.1177/0008125619867910>
- Valls Martínez, M. del C., Montero, J.-M., & Martín Cervantes, P. A. (Eds.). (2023). *Recent Advances and Applications in Partial Least Squares Structural Equation Modeling (PLS-SEM)*. MDPI. <https://doi.org/10.3390/books978-3-0365-9593-1>
- Wamba, S. F., Gunasekaran, A., Akter, S., Ren, S. J. F., Dubey, R., & Childe, S. J. (2021). Big data analytics and firm performance: Effects of dynamic capabilities. *Journal of Business Research*, 124, 381–392. <https://doi.org/10.1016/j.jbusres.2020.10.030>
- Zafar, S. A., Shakir, A., & Naz, F. (2024). Leadership in the digital age: Implications for educational performance management. *Pakistan Journal of Management Research*, 41(1), 55–70.